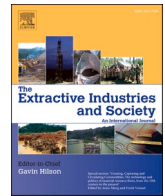


Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

The Extractive Industries and Society

journal homepage: www.elsevier.com/locate/exis

Original article

Mining struggles in Argentina. The keys of a successful story of mobilisation

Mariana Walter^{a,*}, Lucrecia Wagner^b

^a Institut de Ciència i Tecnologia Ambientals, Universitat Autònoma de Barcelona, Edifici C Campus de la UAB, 08193 Bellaterra (Cerdanyola del Vallès), Barcelona, Spain.

^b Institute of Nivology, Glaciology and Environmental Science - National Scientific and Technical Research Council (IANIGLA-CONICET), Av. Ruiz Leal s/n Parque General San Martín, Mendoza - CP 5500, Argentina

ARTICLE INFO

Keywords:

Environmental justice
Mining conflicts
EJAtlas
Political opportunity structures
Multi-scalar networks

ABSTRACT

This paper explores an intriguing case of environmental mobilisation in the world, Argentina's anti-mining movement. This movement has contributed to the cancellation or suspension of about half of the contentious projects they have opposed and has led to the approval of regulations and laws restricting large-scale mining activities in 9 out of 23 national provinces. This process of mobilisation and institutional change is quite unique when compared to other Latin American and worldwide environmental mobilisation processes. This paper studies how the actors and the strategies mobilised in Argentinean mining conflicts have led to these and other mobilisation outcomes. With this aim we have developed, in collaboration with the Environmental Justice Atlas (www.ejaltas.org), a systematic identification and analysis of all public large-scale mining conflicts in the country from 1997 (when large scale mining began) to 2018. We conclude signalling three key interrelated features of anti-mining contention in Argentina: the diversity of actors and their strategies, some political opportunity structures (i.e. decentralised mining governance to provinces, mobilisation at early stages of projects) and the role of multi-scalar environmental justice networks acting on local, provincial and national scales.

1. Introduction

This paper explores an intriguing case of environmental mobilisation, Argentina's anti-mining movement. This movement has contributed to the cancellation or suspension of about half of the contentious projects they have opposed and has been a key actor in larger socio-environmental transformations in the country. Argentina is a country with national governments that have openly supported mining activities as a strategic activity for more than two decades. Nevertheless, actors critical to mining activities have led to the approval of regulations/laws restricting large-scale mining activities in 9 out of 23 national provinces (including two restrictive laws that were later reverted). This process of mobilisation and institutional change is quite unique when compared to other Latin American and worldwide environmental mobilisation processes (Scheidel et al., 2020). In this paper, we aim to unravel some of the keys behind Argentina's story of successful anti-mining mobilisations.

According to the Latin American Observatory of Mining Conflicts, in 2019, Mexico, Chile, Peru and Argentina had, in this order, the largest number of mining disputes in the Region (OCMAL, 2019). In comparison with the other countries in this ranking, mining is quite recent in

Argentina, especially when we consider large-scale extraction techniques. Between 1997 and 2017, the extraction of metal ores (in tonnes) multiplied by 10 in Argentina (UNRP, 2019). Nevertheless, the high increase of ore material extraction is part of a larger Latin American (and global) trend (UNEP, 2013). Mining booms started in the context of (regional and global) economic liberalisation reforms and skyrocketing metal ore prices that fostered a shift of the international geography of mining investment towards the developing world during the 1980 and 1990s (Bridge, 2004). A trend that remains to date (Karl and Wilburn, 2017).

While mining activities have a long history in the Latin American region, the size of material extraction pressures and exports, particularly regarding mineral ores, has no historical precedent (León et al., 2020). Since the 2000s, Latin America has been the first ore mining investment destination of the world (Ericsson and Larsson, 2013; Karl and Wilburn, 2017). This mining exploration and exploitation pressure has been accompanied by a growing number of mining conflicts in the region (Walter and Urkidi, 2017; Svampa, 2009) and (deadly) violence against environmental defenders (Global Witness, 2019). Global Witness reports an increase in environmental defenders' assassinations and the use of laws, arrests, intimidation and smear campaigns to silence them (Global

* Corresponding author.

E-mail addresses: marianawalter2002@gmail.com, mariana.walter@uab.cat (M. Walter), lucrewagner@gmail.com (L. Wagner).

<https://doi.org/10.1016/j.exis.2021.100940>

Received 9 February 2021; Received in revised form 11 May 2021; Accepted 11 May 2021

2214-790X/© 2021 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license

(<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Witness, 2020).

The significant and accelerated territorial, social, environmental, political and economic transformation that these processes have triggered during the past two decades in Latin America have attracted the attention of local and international scholars (Bebbington, 2012). Argentina's metal and mineral mining contestation is fostering significant research, especially in the country's scholarly community. Most existing research has focused on single in-depth case studies or regional processes of contestation (e.g. Patagonia region, Mendoza province, the Esquel case) and only few studies have analysed multiple cases (Svampa and Antonelli, 2009; Delgado Ramos, 2010; Alimonda, 2011; Machado Araoz et al., 2011; Bottaro and Sola Álvarez, 2018; Alvarez Huwiler and Godfrid, 2018). This research offers the first national-level systematic analysis of mining conflicts in Argentina.

Another approach to large-scale mining conflicts in Argentina has addressed the role of political opportunity structures facilitating or limiting the outcome of social mobilisation (Christel, 2015, 2020; Denoel, 2019). These studies have, so far, analysed and compared some provinces (e.g. Mendoza, Córdoba, Catamarca, San Juan, Jujuy), highlighting provincial political, economic and social features. We claim that these studies are relevant to understanding the outcome of anti-mining contention in different Argentinean provinces. However, we propose to broaden the scalar approach to capture the role of multi-scalar networks of activism developing and supporting strategies to gain leverage at local, provincial and national scales, sometimes bypassing local limited opportunity structures.

The development of multi case-study analysis on mining (Özkaynak et al., 2021; Özkaynak et al., 2015; Haslam and Tanimoune, 2016; Rodríguez-Labajos and Özkaynak, 2018; Walter and Urkidi, 2017; Bebbington et al., 2008; Neyra, 2020), and environmental conflicts (Latorre et al., 2015; Delamaza et al., 2017; Napadensky and Azocar, 2017; Pérez-Rincón et al., 2019; Temper et al., 2020; Del Bene et al., 2018) has grown during the past decade in different countries (e.g. Peru, Ecuador, Colombia, Chile, Mexico) and worldwide (Scheidel et al., 2020; Özkaynak et al., 2021) with the development of the EJAtlas and other datasets. However, most of these studies examine a sample of cases, in our case we identify and analyse all public large-scale mining conflicts in a country.

In this paper we study how the actors and the strategies mobilised in Argentinean mining conflicts have contributed to cancel/suspend about half of the contentious mining projects and have restricted mining extraction throughout the country. The paper adopts a complex approach, studying anti-mining mobilisation across time and space, combining qualitative and quantitative methodologies. We have conducted a literature review and in-depth study of key mining conflicts in the country. And we have developed, in collaboration with the Environmental Justice Atlas (2019) (www.ejaltas.org) a global database on environmental justice struggles, a systematic identification and analysis of all large-scale mining conflicts in the country from 1997 (when large scale mining began) to 2018. We examined in particular trends related to mobilised actors, their strategies and the outcomes of their struggles.

We conclude that in order to understand the outcomes of socio-environmental mobilisation a multi-scalar and temporally sensitive approach is needed. An approach attentive to both political structures and mobilisation features and dynamics. We highlight the role played by multi-scalar networks, not only as spaces of learning, strategising and support but also as a collective actor able to move across scales bypassing and challenging structural limitations and producing change. The paper develops a complex methodological and conceptual approach that puts into dialogue social mobilisation features, political opportunity structures and scalar interplays across time to understand the outcomes of mining contestation in Argentina. Our research also points to the role of mining actors and struggles fostering broader social, political and institutional changes. Contention has transcended mining concerns to engage in debates over institutional change, justice, democracy, environmental protection and alternative development paths.

This research has also produced a detailed and open access dataset (available in the EJAtlas website) about ongoing processes of mining contestation in Argentina, their actors, grievances, strategies, claims and outcomes. These results are available to activists, researchers and policy makers.

After this brief introduction, section 2 presents our conceptual framework to approach mining conflicts, mobilised groups and their outcomes. Section 3 explains our methodological approach. Section 4 outlines the results that we discuss in section 5. Section 6 concludes.

2. Mining struggles

2.1. Mining struggles and environmental justice movements

Mining is among the most conflictive activities in the world (Scheidel et al., 2020). Literature examining mining struggles around the world identifies different concerns mobilising communities against mining activities. Environmental impacts and risks are usually central in these disputes (Conde, 2017). According to the US EPA, mining is one of the main sources of heavy metals and pollutants to the environment (EPA, 2020). However, communities mobilising against large scale mining are not only reacting to perceived or visible environmental impacts but also to their lack of information, representation and participation in decision making processes concerning their development path, lack of monetary compensation or distrust of the state (e.g. lack of independence, control capacity) and mining companies. Mining struggles are transversal by different discourses that range from compensation and other market embedded measures, to broader claims regarding post-material and socio-ecological alternatives (Conde, 2017). As signalled by Bebbington et al. (2008), the defence of livelihood in mining conflicts should not be understood only as the protection of a source of subsistence and income, but also as the protection of its embedded meanings, values and identities. In Latin American contentious politics, there is an inseparable relationship between the material and the cultural in livelihoods (Escobar, 2001).

Based on an extensive literature review, Conde and Le Billion (2017) identified key factors that affect the likelihood that local communities will mobilise against mining activities. Case study evidence, they conclude, suggests that dependency on mining companies, political marginalisation, and trust in institutions tend to reduce resistance likelihood. However, severe environmental impacts, lack of participation, extra-local alliances, and distrust towards state and extractive companies tend to increase resistance.

Many of the factors leading to resistance signalled by Conde and Le Billion (2017) are present in Latin America (Bebbington et al. 2008). Many communities distrust governments and companies. The notion of the "right to decide" has been raised as a key concern of communities where projects are seen as imposed (Muradian et al., 2003; Vela-Almeida et al., 2021). It has become common for anti-mining groups to prevent or boycott public hearings, as these are seen as an empty requisite for project approval (Jahncke Benavente and Meza, 2010; Walter and Urkidi, 2017). Vela-Almeida et al. (2021) conclude that large mobilisations, legal actions, calls for binding consultation, and forms of blockades are successfully used by affected communities to shape decision-making. But, they emphasise, whilst these actions from below achieve certain outcomes, they are only temporarily successful as long-term decisions surrounding extractive governance and underlying structural inequalities remain unaffected. Nevertheless, these actions can create a path for questioning political participation outside the existing structural constraints for questioning established social orders and building emancipatory tools.

If we consider the aims, grievances and discourses of the movements that mobilise against mining activities, these can be framed as Environmental Justice Movements (EJM) (Özkaynak et al., 2021). In the case of Latin America, and Argentina in particular, resource extraction conflicts (mining, fossil fuels, forestry, intensive agriculture, etc.) are at the

core of environmental networks. “Plunder” is one of the key words of Latin American EJMs that do not necessarily self-define as EJM but do address the relation between social inequalities and the environment. Latin American EJMs frame mining struggles in terms of (eco)territorial defense against sacking, anti-dispossession and anti-colonialism (Urkidi and Walter, 2011), appealing to Latin American social justice sensibilities (Carruthers, 2008).

Mining activities and the Environmental Justice struggles these trigger require scale-sensitive approaches (Urkidi and Walter, 2018). Large scale mining is an activity that involves large translational capitals and is a highly industrialised activity (open cast, chemical and mechanical processes, large energy and water requirements) that can lead to conflicts at different temporal stages of a mining project development (prospection, exploration, extraction, post-mining closure). Conflicts can even emerge at early stages of the activity due to problems of access to resources such as land or water, that are claimed by a company fostering processes of speculation and dispossession, or later on as the activity is deployed (Bebbington, 2012; Perreault, 2013).

Moreover, while not all countries in Latin America have the same environmental legacies and impacts due to mining activities, the Internet and supra-local activist networks are making them visible within and beyond borders (Keck and Sikkink, 1998; Evans and Rodríguez-Garavito, 2018). As anti-mining activists jump scales (Smith, 1993, 1996), they learn from other experiences and get closer to other movements and networks. EJMs scale up or jump scales when they successfully engage in networks with social actors from different geographical locations and/or appeal to supralocal regulatory institutions. Indeed, multi-scalar activist networks have had a central role spreading knowledge and strategies of resistance among anti-mining local groups across Latin America (Walter and Urkidi, 2017).

The Environmental Justice Atlas, used and co-developed as part of this research, is an online repository of environmental justice struggles worldwide (3353 cases as of January 2021). This database offers a singular tool to approach EJ struggles from a multi-scalar and activist-oriented perspective. The Atlas offers both individual and collective uptakes to processes of mobilisation against environmental injustices (Scheidel et al., 2020; Temper and Martinez Alier, 2015).

2.2. Outcomes of mining struggles

The study of the outcomes of social mobilisation and more precisely the factors or conditions under which social mobilisation is able to emerge and enact (successful) collective action is a key enquiry of social movement studies (e.g. McAdam et al., 2001; della Porta and Rucht 2002; Heijden and van Der, 2006; Tarrow, 2011; Bosi and Uba, 2009). However, what “successful” mobilisation means depends on diverse factors (Ozkaynak et al., 2021).

The concept of “political opportunity structures” has been proposed to study the features of a political system that facilitate or constrain collective action. In this vein, political opportunity structures allow us to understand some strategies and outcomes of mobilisation, as well as different levels of mobilisation (Heijden and van Der, 2006). Tarrow (1996) pointed to the “intrastate and dynamic” nature of political opportunity, in which social movements work to change the actions of the state creating their own political opportunities.

Argentina presents some particular political opportunity structures that have been studied in the context of mining conflicts. There are laws regulating mining activities and environmental protection at the national and provincial levels. However, the constitutional reform adopted in 1994 established that provinces have the original domain over their natural resources. In this vein, Argentina is a federal country where the environmental authority is national, but the jurisdiction over mining activities and environmental permits is provincial. This means that, while in most Latin American countries the technical and political daily management of mining is centralised in national ministries located in the capital of the country, in Argentina it takes place at the provincial

level (Chaparro, 2002). Furthermore, this political decentralisation also fostered the development of semi-direct democratic instruments for provinces and municipalities. These government bodies can conduct local plebiscites or referenda on environmental issues. These instruments have allowed social movements to promote such events (e.g. Esquel and Loncopue in Argentina).

However, we claim that while political opportunity structures are relevant to understand some outcomes of social mobilisation, additional insights on the mobilisation process, its actors and scalar interplays are needed to understand the local, provincial and national outcomes led by anti-mining movements in Argentina. As a social movement, environmental justice has distinctive collective actors (Martinez Alier, 2021). In the conflicts registered in the EJAtlas, they display several forms of mobilisation or “repertoires of contention”. The “repertoires of contention” refer to the different forms of protest or action mobilised by social movements which are often influenced by national and local contexts and trajectories (Tilly, 2002). The outcomes and consequences of mobilising a certain repertoire of action in a certain way is complex. Issues such as the movement interaction and dynamics, in terms of their claims, actions and context have to be considered (Tilly, 1999).

We highlight two studies based on the EJAtlas that explore the outcomes of mobilised groups. In their analysis of the EJAtlas global dataset, Scheidel et al. (2020) find that if the mobilised groups combine strategies of preventive mobilisation, diversification of protest and litigation they can significantly increase the success rate to up to 27% (ability to stop projects). Özkaynak et al. (2021) studied 346 cases of mining struggles from the EJAtlas (including construction materials) and found that stopping a project relates to the timing of mobilisation and institutional contexts. They also observed that projects were less likely to be halted when the company’s relevance was higher.

The concept of “conflict productivity” (Melé 2007; Merlinsky, 2013) has been proposed to examine the outcomes of socio-environmental controversies in terms of the changes these foster in the political system, territorial consequences, social ties, the construction of knowledge and the development of new environmental protection devices (Merlinsky, 2020). In this sense, environmental justice struggles are seen as a potential source of social innovation. In a similar vein, Temper et al. (2018) developed a conceptual framework to approach the transformations led by EJ movements. They propose to consider the different forms of power and the multi-dimensional and intersectional spheres (ecological, social, economic, cultural and democratic) that are transformed adopting a multi-scalar approach that is mindful of impacts across place and space. In this vein, we can consider the outcomes of mobilisation and their success from a case by case approach but different insights can emerge from a broader multi-scalar and multi-dimensional perspective. What is considered as an unsuccessful struggle locally can trigger powerful processes of organisation and institutional changes that go beyond space, time or specific issues of contention.

3. Methodological and conceptual approaches

Our methodological approach combines an analysis of general trends - based on the EJAtlas dataset - with a review and analysis of mining conflicts and their history in the country. This is possible given the manageable size of the sample and the authors’ research background. Both authors’ PhD theses and more than 17 years of research have focussed on mining conflicts in Argentina and Latin America.

The identification and analysis of large-scale mining struggles in Argentina was conducted in collaboration with the Environmental Justice Atlas (Temper et al., 2015). Each EJAtlas case has been developed by activists, scholars, journalists, etc. following a structured form. Before publication, the EJAtlas team (a small team of researchers based at the Environmental Sciences and Technologies Institute of the Autonomous University of Barcelona) reviews the cases and asks for changes/clarifications if necessary (Temper et al., 2015; Temper and Del Bene, 2016).

This research follows the definition of socio-environmental conflict adopted by the EJAtlas, as: “mobilizations by local communities, social movements, which might also include support of national or international networks against particular economic activities ... whereby environmental impacts are a key element of their grievances” (www.ejatl.org). The EJAtlas documents social conflicts related to claims against perceived negative social or environmental impacts that follow these criteria. There has to be, first, an economic activity or legislation with actual or potential negative environmental and social outcomes; second, claim and mobilisation by environmental justice organisation(s) that such harm occurred or is likely to occur as a result of that activity; and third, reporting of that particular conflict in one or more media stories (in some cases where such media coverage is difficult exceptions can be made). For each case information is given regarding the location, features of the contested activity, the commodity at stake, the mobilised actors, their grievances, their strategies and the outcomes of the conflict.

In order to conduct this research the authors of the paper conducted a review and update of all public large-scale mining conflicts registered in the Atlas in Argentina regarding gold, copper, lead, iron, lithium and uranium until December 2018. Moreover, a review of scholarly literature, media (national, provincial and local newspapers) and Non-Governmental Organisation (NGO) sources was conducted in order to identify missing cases. New cases were identified, documented and added to the EJAtlas dataset. As a result, a total of 38 cases were identified. A final review of all cases was conducted in order to have consistent and comparable categories among cases (e.g. how indigenous, ethnic/racial groups or women groups were coded). The EJAtlas data-form structure provided an analytical structure, identifying different types of actors, strategies, impacts, outcomes that were used for the analysis.

4. Mining struggles in Argentina

In this section we address the history and features of mining struggles, their actors, strategies and outcomes in Argentina from two approaches. Firstly, [section 4.1](#), presents a general overview of the mining conflicts identified and their key trends. [Section 4.2](#) presents a narrative account of the emergence and spread of mining contestation in Argentina, highlighting key moments, EJM, cases and outcomes. [Section 5](#) discusses these results.

4.1. Characterisation and trends

Argentina does not have a long history (of small or) large scale metal mining. Historically, the largest mines in Argentina were Famatina and Capillitas, located in the northern provinces of La Rioja and Catamarca

that were exploited between 1850 and 1914. Low workers' wages and the exploitation of natural resources influenced the crises of these historic mines. These crises led to the abandonment of ore-rich sites for decades and even did away with regional economic approaches that were based on large-scale mining ([Rojas and Wagner, 2017](#)). In the 1990s, the approval of new mining legislation boosted the development of open-pit mines with the use of new technologies (e.g. cyanide leaching). The first three large-scale mines in the country started activities in the 1990s. Between 1997 and 2017, the extraction of metal ores (in tonnes) multiplied by 10 (see [Fig. 1](#)) ([UN Resource Panel, 2018](#), see [Fig. 1](#)). In 2002, in Esquel, large scale mining contestation emerged and spread across the country.

Our research identified 38 large scale mining conflicts in Argentina from 2002 (first ore mineral extraction conflict) to December 2018. These are not necessarily *all existing* conflicts, but those that meet EJAtlas criteria (for instance, labour or private conflicts are excluded). All public (environmental) mining conflicts related to our selected commodities at the time of the research are included. [Fig. 2](#) presents the geographical location of the identified conflicts, distinguishing those conflicts that led to cancel or suspend (temporarily) mining projects. The map also signals those provinces where mining activities were restricted as a result of social mobilisation.

Most conflicts are related to gold and copper mining projects (12 cases each), followed by uranium and lithium projects (4 conflicts each), lead (3 cases), iron, silver and potassium with one each. This distribution resonates with the weight of these metals in the economy. In 2017, gold was the main metal exported by Argentina (3.7% of total exports value), followed by silver, zinc, copper, iron and lead ([OECD, 2019](#)).

Argentina is currently the third worldwide lithium exporter and there is an increasing pressure to open new mines in the north of the country (7 projects proposed according to the national mining chamber in 2019). Lithium carbonate is a key element to build phone and electric car or bus batteries. However, lithium mining is a poorly known activity for the general public and indigenous communities are rejecting it in their territories ([Göbel, 2013](#); [Schiaffini, 2013](#); [Ruiz Peyré and Dorn, 2020](#)).

More than 50% of the mining conflicts in Argentina registered until December 2018 were of high or medium intensity (28 cases). Meaning that there were public and visible mobilisations that in 4 cases resulted in violence or arrests (against protestors). Furthermore, 23 of the 38 conflicts were identified as preventive, meaning that mobilisation started before the development of the mining project, and 8 as the result of a reaction to the implementation of mining activities (during the construction or operation).

While each conflict identified and registered in the database is unique with its own history, geographical setting, and contexts, looking

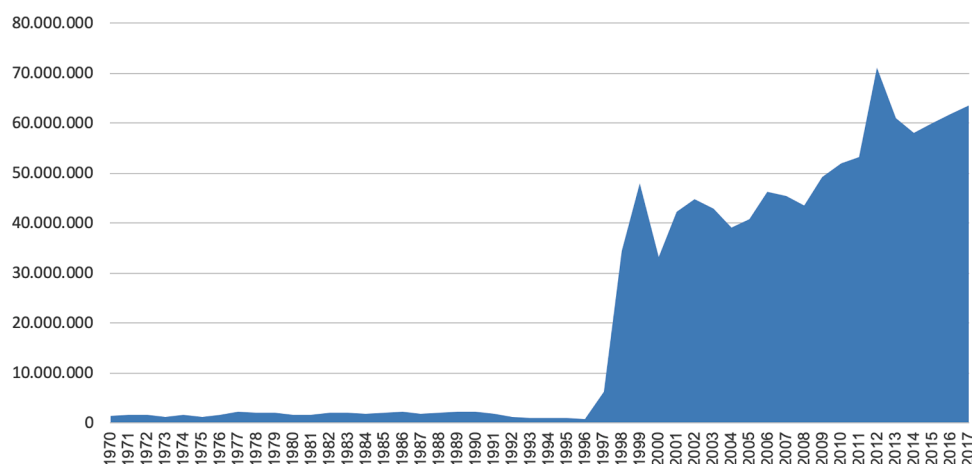


Fig. 1. Domestic extraction of metal ores in Argentina (1970-2017). Source: based on UN Resource Panel (2018). Note: 2015 to 2017 are projections.

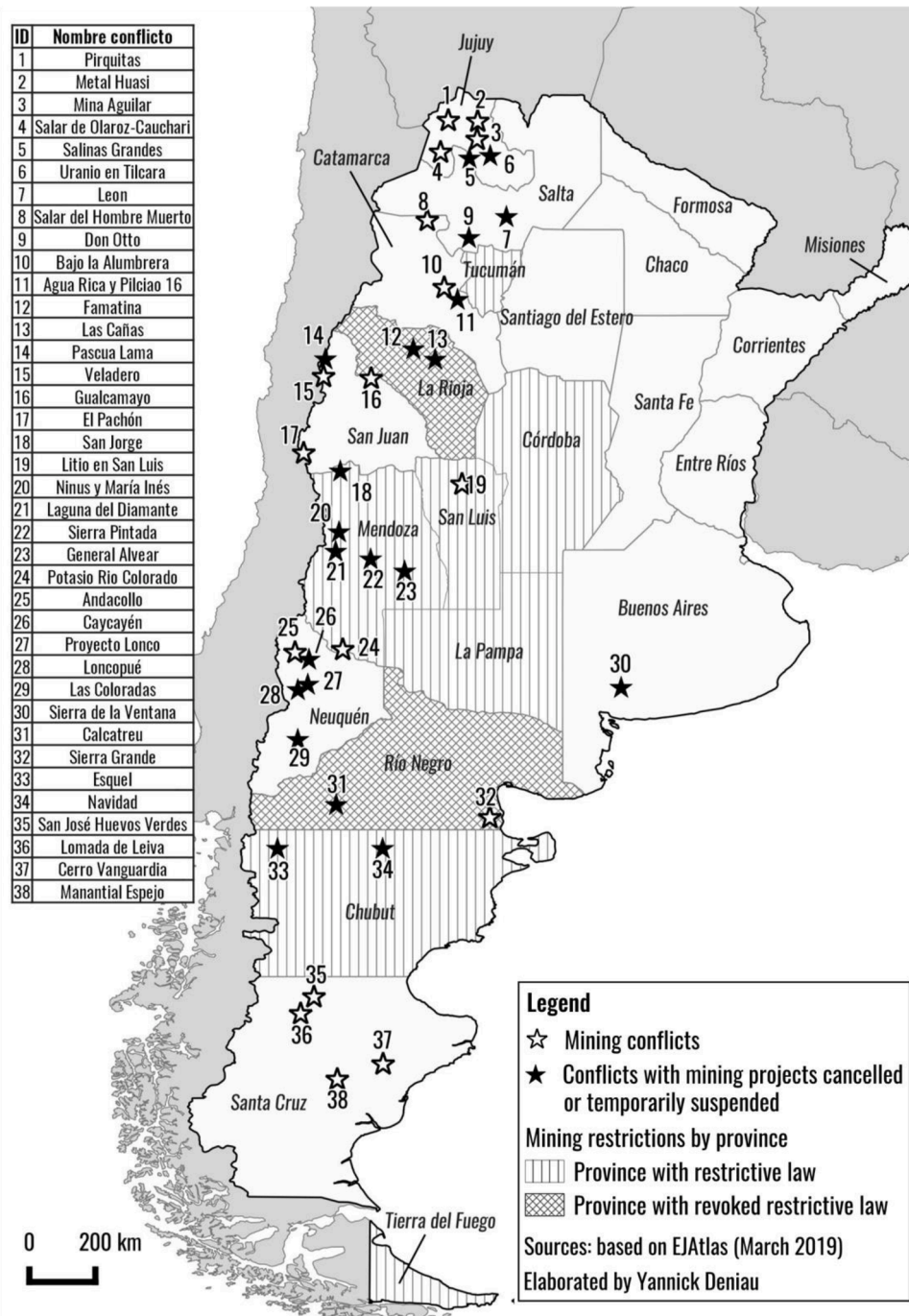


Fig. 2. Main large-scale mining conflicts in Argentina (2003-2018). Note: conflicts are identified by the name with which they are publicly known.

at them together offers an opportunity to identify patterns across localities in resistance movements. This approach complements the historical and interconnected approach that is offered in section 4.2. Here we present in an aggregated manner the main outcomes (4.1.1), actors (4.1.2) and strategies (4.1.3) identified in Argentina's mining conflicts.

4.1.1. Main outcomes of conflicts

Fig. 3 presents the frequency of the different outcomes registered in the database. There is usually more than one outcome per conflict but some are more frequent than others. We have grouped outcomes to highlight those related to a) public engagement (i.e. increase in public participation); b) institutional outcomes, such as those related to judicial decisions, application or changes in formal institutions (regulations, laws) and corruption affecting public institutions, their actors and

procedures; c) modifications affecting the development of mining projects, and; d) violent outcomes for mobilised actors and communities, such as criminalisation, repression, assassinations or displacements.

As we will discuss further in section 5, the level of public engagement, the ability to affect the development of projects and foster institutional changes is very high when compared to other global studies on environmental conflicts (Scheidel et al., 2020).

4.1.2. The protagonists of mining conflicts

Fig. 4 dissects the frequency of participation of different social actors in mobilisations against mining projects in Argentina (following the EJAtlas form options). We note that categories of actors are not mutually exclusive, these are actor characteristics. For example, indigenous farmers can be counted under both groups, showing intersectionality

Type of outcome	Outcomes of mining conflicts in Argentina	Frequency	
		Cases	Percentage
Public engagement	Strengthening of participation	23	61%
Institutional outcomes	Application of existing regulations	22	58%
	Institutional changes	14	37%
	New legislation	12	32%
	Corruption	6	16%
	Successful Court decision	8	21%
	Failed Court decision	5	13%
	Court decision (undecided)	3	8%
Project modifications	Project cancelled	11	29%
	Project suspended	9	24%
	Land demarcation	5	13%
	New EIA	4	11%
	Environmental improvements	3	8%
	Technical solutions	2	5%
	Compensation	2	5%
Violent outcomes	Criminalization of activists	5	13%
	Violent targeting of activists	3	8%
	Repression	3	8%
	Migration/displacement	1	3%
	Assassinations	0	0%

Fig. 3. Main outcomes of large-scale mining conflicts in Argentina. Source: own elaboration based on EJAtlas (2019).

Characteristics		Actors mobilised against mining activities in Argentina	Frequency of involvement	
			Cases	Percentage
Local grassroots organizations/groups	Neighbors		36	95%
	Local organizations		32	84%
	Social movements		23	61%
	Recreational users		7	18%
Professionalized actors	Scientists and other professionals		18	47%
	International NGOs		10	26%
Institutionalized groups	Government and political parties		22	58%
	Religious groups		8	21%
	Trade unions		7	18%
Vulnerable groups	Highly exposed to intersectional discrimination	Indigenous communities	18	47%
		Women collectives	5	13%
		Ethnically discriminated groups	1	3%
	Rural context	Farmers	19	50%
		Landless peasants	3	8%
		Pastoralists	7	18%
		Artisanal miners	2	5%
		Fisher people	-	0%
	Urban context	Informal workers	3	8%
		Industrial workers	2	5%

Fig. 4. Social actors mobilised in mining conflicts in Argentina. Source: own elaboration based on EJAtlas (2019) and in Scheidel et al. (2020) proposed grouping of actors.

between different actor characteristics. We have grouped the actors (characteristics) registered in the database in four categories. The first category includes local grassroots actors and organisations. These are the most frequent actors. The second category groups professionalised actors given their high level of activist organisation (international NGOs) or professional formation (e.g. lawyers, chemists). The third category lists institutionalised groups, such as political parties, unions or the church. Finally, we have grouped vulnerable groups, considering those highly exposed to intersectional discrimination (e.g. women, indigenous groups) and those vulnerable groups that are directly affected in their (urban or rural) livelihoods by mining projects.

4.1.3. Forms of mobilisation

Fig. 5 presents the different forms of mobilisation identified (or not) in each case. We have ordered the different strategies registered in the database in non-violent and potentially violent strategies. Among non-violent strategies we distinguish those strategies that aim to a) make visible public mobilisation; b) create/expand networks; c) engage with formal institutions and regulations (formal allegations to EIAs, local referenda/consultations, etc.) and; d) develop counter-knowledge that challenges hegemonic discourses and official expert accounts. We present the potentially violent strategies coded in the database even if these were not registered in the studied cases. These violent strategies are

Characteristics		Strategies against mining in Argentina	Frequency	
			Cases	Percentage
Non-violent actions	Public mobilization (making visible)	Media-based activism	35	92%
		Street protests	25	66%
		Public campaigns	24	63%
		Blockades	18	47%
		Artistic actions	7	18%
		Strikes	5	13%
		Land occupation	2	5%
		Occupation of public spaces	1	3%
	Networking - alliances	Development of networks	30	79%
		Involvement of national and international NGOs	15	39%
	Institutional strategies	Formal petitions	26	68%
		Lawsuits	21	55%
		EIA objections	16	42%
		Referenda	3	8%
	Counter-knowledge strategies	Alternative knowledge creation	26	68%
		Arguments for the rights of mother earth	5	13%
Participative research		4	11%	
Appeals to economic valuation of environment		3	8%	
Development of alternatives		3	8%	
Potentially violent actions	Boycotts of companies-products	-	0%	
	Hunger strikes	-	0%	
	Threats to use arms	-	0%	
	Property damage	-	0%	
	Sabotage	-	0%	

Fig. 5. Forms of mobilisation. Source: own elaboration based on EJAtlas (2019).

however present in 3-4% of the global database registered cases (Scheidel et al., 2020).

4.2. Emergence and spread of mining contestation in Argentina

We have presented in section 4.1 a general characterisation of mining struggles in Argentina. In this section we want to provide more details on the process of emergence and spread of these struggles. The spread of anti-mining mobilisations in Argentina has been related to a cascade effect of two key conflicts: Esquel (gold mine conflict in Patagonia) and La Alumbrera (copper and gold mine in Catamarca, one of the poorest provinces of the country related to environmental accidents). These key cases triggered a learning process about the impacts of mining activities and the power of social mobilisation (Svampa et al., 2009).

The Esquel mining conflict and its “No to the mine” movement in Chubut province (Patagonia), is considered the birth of the anti-mining movement of Argentina. This conflict emerged in the midst of a national political, economic and social crisis. Esquel Municipality had a 25% unemployment rate and 20% of the population was under the poverty line. In this context, national, provincial and local governments were highly supportive of new investments (Walter, 2008). Esquel conflict placed the discussion of mining – its environmental, social and economic impacts, as well as the question of the right of local populations to choose their own development path – on the national political agenda (Walter and Martínez Alier, 2010). A municipal plebiscite was held in March 2003, the second vote of the kind in Latin America after Tambogrande local consultation in Perú, in 2002. Esquel plebiscite resulted in an 81% rejection of the gold and silver mining project located seven kilometres from the city. Esquel was also the first public mining conflict that reached the national media and led to the formation, in 2003, of a National Network of Communities Affected by Mining with the participation of communities from six provinces in Argentina, all opposed to mining projects in their areas (Walter and Martínez Alier, 2010). Another result of the Esquel conflict was the sanction of a provincial law that restricts mining activities. The Esquel movement also engaged in the task, that remains today, of systematising and disseminating national and international information related to large-scale mining impacts, especially regarding the use of cyanide. They created a website (noalamina.org) and have published materials and books on the matter. These resources were very important in other conflicts that followed, for

instance, for the anti-mining mobilisation that emerged in Ingeniero Jacobacci, a very small town in Río Negro province where a gold mining project planning to use cyanide was proposed. This project was rejected by the local population and thanks to this social mobilisation a provincial law restricting metalliferous mining was also sanctioned in Río Negro province in 2005.

That same year, in 2005, a conflict against mining appeared on the streets of another province, Mendoza. The neighbours of San Carlos, an agricultural town located in the central oasis of this province, rejected a metalliferous mining project planned near the Diamante lagoon, a natural-protected area also considered a hydric reserve. After that, other neighbours from different towns of Mendoza province rejected other metalliferous mining projects, including the reopening of an uranium mine, Sierra Pintada. These processes led to the organisation of a provincial network of neighbourhood assemblies called Mendocinian Assemblies for Pure Water (AMPAP), one of the strongest organisations against mega-mining in Argentina. In 2007, a coordinated demonstration in different locations in Mendoza was key to the sanctioning of provincial law 7722 that protects Mendoza water from metalliferous mining activities (Wagner, 2014). The same year, similar laws were sanctioned in La Rioja, Tucumán and La Pampa provinces. La Rioja province has one of the most important local movements against mining: the neighbourhood assemblies of Famatina and Chilecito. With the slogan “El famatina no se toca” (Don’t touch Famatina), the neighbours organised a road blockade on the way to the mine, blocking the arrival of supplies to the mining camp (see Sola Alvarez, 2016). One year later, Córdoba and San Luis provinces also sanctioned laws restricting mining, driven by local mobilisations in rejection of mining activities. Finally, a law restricting mining was sanctioned in Tierra del Fuego province, in 2011. Currently, out of the nine laws restricting mining approved in Argentina, seven remain. The laws of Río Negro and La Rioja were rescinded or cancelled under pressure of private and public mining promoters (see Fig. 2).

Strong mobilisation also emerged in Catamarca province, where the first metalliferous-mega mine of the country, La Alumbrera, started activities in 1997. The lack of benefits perceived by local communities (Mastrangelo, 2004) and the negative environmental impacts of this project drove the organisation of the neighbours of Andalgalá and other towns, who prevented the opening of other new projects like “Agua Rica”.

As mining and other environmental struggles were spreading in the

country, several neighbourhood assemblies from Argentina got together to form the “Citizens Assemblies Union” (Unión de Asambleas Ciudadanas), recently renamed as the Community Assemblies Union (UAC) (aiming to make clear the inclusion of indigenous and peasant groups). This network was created in 2006 to promote the gathering of a diversity of struggles, not only against mining, but also against plunder and contamination (“contra el saqueo y la contaminación”). The UAC became a central place for grassroots groups to meet, discuss and shape local and supra-local collective strategies to challenge the advance of mining activities as well as other contentious activities (UAC, 2018).

UAC members have successfully worked with other environmental organisations and foundations in the country to develop provincial and national environmental regulations and laws. Besides provincial mining restrictions these networks led to approve some - largely delayed - laws that aim to establish national minimum environmental standards (“Leyes de presupuestos mínimos”). Two laws were sanctioned thanks to environmental mobilisations and the involvement of scientists: the Glaciers Law that catalogues and protects glaciers (from mining activities in particular) and the Native Forest Law that aims to stop deforestation and indigenous and peasant communities’ displacement. Currently, the environmental movement in Argentina is struggling to set a law to protect wetlands, the frontier of urban development near Buenos Aires and other sites (Langbehn et al., 2020).

In this sense, we would like to stress the role of anti-mining movements in the formation of a larger national environmental movement that has fostered the transformation of (formal and informal) environmental institutions that go beyond mining particular concerns to address larger environmental and development issues as well as alternatives (Alvarez, 2017; Aranda 2008).

5. Discussion

One of the most significant outcomes of mining struggles in Argentina has been the stopping of projects (in the form of cancellations or temporal suspensions) in 20 out of the 38 cases. This means 52.6% of mining struggles. This effect at the project level is very high when compared to mining struggles in Latin American countries and the world. Table 1 presents the number of projects stopped as an outcome of mining struggles (excluding construction minerals) in other Latin American countries (9-30%) and the world (26.5%) (based on the EJAtlas database in October 2020).

Different factors could be considered to understand why a company or state stops a mining project. For instance, international metal price fluctuations, speculation, national political and social policies and stability etc. However, when we consider regional and global trends (Table 1, Özkaynak et al., 2021; Scheidel, et al., 2020), the percentage of project cancellations/suspension occurred in mining conflicts in Argentina clearly stands out.

Another unique outcome of Argentina’s mining conflicts has been the approval of new regulations limiting mining activities. This is

Table 1

Mining conflicts in Latin American countries and the world where projects where stopped (cancelled or suspended)

Country	Number of mining cases registered in the EJAtlas	Cases where the extractive project was stopped
Argentina	38	20 (53%)
Bolivia	13	2 (15%)
Chile	25	7 (28%)
Ecuador	14	2 (14%)
Mexico	22	2 (9%)
Peru	44	13 (30%)
EJAtlas worldwide mining conflicts	647	172 (26.5%)

Source. Based on EJAtlas database in October 2020. Notice that the level of coverage of mining conflicts varies across countries.

certainly an outcome of mobilisation that does not create an incentive for private investment in some areas of the country. Since the beginning of mining contestation, nine provinces have approved laws restricting mining activities (two were reverted). Moreover, as shown in Fig. 4.1.1 mining mobilisations have led to diverse institutional outcomes. EJMs have not only fostered new regulations but also have demanded the application of existing environmental regulations. In some cases, regulations were applied for the first time as a result of mobilisation strategies. Gutiérrez (2015) highlights that environmental organisations legitimised and revitalised environmental rights that were not put into practice before the environmental mobilisation started at the beginning of the 2000s. In this vein, Merlinsky (2013) underlines the institutional and judicial productivity of environmental conflicts in Argentina. Furthermore, as we argue (section 4.2) mining mobilisation has contributed to relevant institutional outcomes that go beyond specific mining controversies (i.e. approval of broader environmental laws).

In this paper we argue that the high occurrence of stopped projects and institutional reforms -among other relevant outcomes of mining controversies - in Argentina were the result of different political opportunity structures that were made possible by a large bottom up, diverse and interconnected network of actors and strategies. We highlight the role played by the multi-scalar networks in the creation, spread and support of key strategies of mobilisation. These networks were especially central in contexts of limited political opportunity structures.

5.1. Navigating and shaping opportunity structures

Previous research has pointed out that socio-environmental contestations starting at early stages of a project development are more likely to stop these activities (Conde, 2017; Scheidel et al., 2020; Özkaynak et al., 2021). This is the case in 23 out of the 38 cases registered in Argentina that are preventive (60.5%). Usually small capital junior companies are involved at early stages of project development, as is the case in most cases identified in Argentina. Junior companies usually do not have the experience or resources to deal with potential resistance negotiation with local communities leading to more conflict and distrust (Conde and Le Billion, 2017; Özkaynak et al., 2021).

Moreover, the approval of laws restricting mining activities can be seen as the result of the work of social mobilisation that was able to navigate the particularities of provincial politics and contexts (Christel, 2015). The political organisation of Argentina locates mining decision makers closer to the sites of conflict and forces them to face more political accountability. This has provided a key political opportunity for movements to push for legal compliance, project modifications and institutional change. Civil society actors can present non-binding allegations to environmental impact assessment reports and express their views in a public hearing where the technical document is presented and discussed for approval. The relevant involvement of local political elites is in part reflected by the large participation of local parties and governments in mining conflicts that appears in 58% of our registered cases. For comparison, this actor appears in 36% of the global dataset (Scheidel et al., 2020). And, also reflects in the successful mobilisation of legal and administrative strategies by anti-mining movements (i.e. stopping projects, institutional outcomes).

However, these same decentralised institutional structures have also made local movements located in conservative and repressive provinces more vulnerable (poorest provinces located in the North of the country). Events related to violence and criminalisation are registered mainly in the poorest and most unequal provinces of the North of Argentina (Jujuy, Catamarca, San Juan, La Rioja) (Cerutti, 2017; Möhle, 2018). These provinces have a low political party rotation tradition and a high mining support by provincial governments. Although, in other provinces like Mendoza, in moments of high conflict intensity activists were beaten and criminalised as well. This phenomenon is not new but is increasing in Latin America (and Argentina).

Studies conducted in Argentina have shown that the plurality of the

political system and the development and diversification of the economic matrix has favoured the incidence of social resistance to mining legislation in provinces like Mendoza and Córdoba, and limited it in Catamarca and San Juan (Christel, 2020). The mobilisations against large-scale mining in Mendoza (wine, oil, fruits producer) and Córdoba (strong tourism and agriculture sectors) showed the relevant participation of capitalised economic actors and sectors of the local or regional productive apparatus in the formation of a broad solidarity space in defense of the environment (Delamata, 2019). The approach to environmental issues depended on the interests, potential to raise support, build alliances and produce solidarity of economic actors (Delamata, 2019). In Mendoza, San Juan and Jujuy, territories were not passive to the arrival of transnational capital, but rather, they shaped, co-produced and conditioned the extractive pressures arriving from the global scale. Local elites and other organisations acted as intermediaries and were fundamental to the access - or not - of transnational actors to the exploitation of natural resources (Denoeil, 2019).

Basualdo (2012) estimated that one of the largest functioning mines in Argentina, La Alumbrera, located in Catamarca, one of the poorest provinces of Argentina, distributed 5% of its rents to the province - that then redistributed some of these funds to municipalities. The company and the National government received 54% and 41% of mining rents. In this vein, there is a disenchantment of Catamarca inhabitants with "large mining" and its unfulfilled expectations (Mastrangelo, 2004). This could explain, in part, the resistance that subsequently arose against other mining projects in this province, such as Agua Rica, and the development of a national EJM discourse sceptical about the local benefits of mining rents (Svampa and Antonelli, 2009).

There are mining struggles and cases of stopped projects in all mining provinces. The only province without stopped or cancelled projects is Santa Cruz (See Fig. 2). Studies have pointed to some features that explain this exceptional case. This province has an extensive territory with low population density and mining projects are located far from inhabited areas, hindering resistance and making environmental conflicts and risks less visible (Torunzyk Schein, 2015; Valiente, 2017). Moreover, Santa Cruz has an hegemonic and closed political regime that has successfully isolated the demands of the socio-environmental movement. The repercussion of the Esquel conflict (in 2003) led to the reformulation of corporate strategies to legitimate mining and to avoid the possible emergence of conflicts, creating and funding, for example, development agencies involving private and public actors (Bechtum, 2018). Furthermore, studies point to how mining companies have developed strategies that reduce union action capacities (Gomez Lende, 2016).

However, we claim that while political opportunity structure studies offer valuable insights, it would be misleading to only focus on these to understand the local, provincial or national outcomes of mining controversies. There are successful and influential resistances in provinces with limited political opportunity structures. In this paper, we postulate for the consideration of the features of both the political opportunity structures and the socio-environmental mobilisations and how these interplay, enter into tension and shape each other producing certain multi-dimensional (e.g. institutions, identities, discourses) and multi-scalar outcomes. Moreover, we claim, the focus on structures tends to overlook the role that supra-local networks of activism are playing on political opportunity structures over space and time.

As this paper was reviewed, in early 2021, the anti-mining assembly of Andalgalá (Catamarca), that succeeded to stop a mining project, was facing state repression and the incarceration of local protestors. In this context, national EJ networks organised a national and international campaign to denounce ongoing events and force the liberation of local activists, something they accomplished. This is an example of how networks allowed local EJ groups to jump over inaccessible provincial political structures, creating multi-scalar paths of action. The national network UAC issued a public statement claiming: "if they touch one of us, they touch us all" (one of its motos), conveying a deep sense of

collective spirit (UAC, 2021).

In the following sections we discuss some particularities of the mobilisation process in Argentina. We highlight the high levels of participation of actors from the local scene and the heterogenous strategies they mobilise, including the widespread participation in supra-local networks of action and support.

5.2. High local participation

As signalled in Fig. 4.1.1., one of the most significant outcomes of mining struggles has been the strengthening of participation. While in the overall EJAtlas dataset this outcomes was flagged in 29% of cases (Scheidel et al., 2020) in Argentinean mining conflicts it appears in 60.5% of cases. Previous research (Schiaffini, 2003; Walter and Martinez Alier, 2010; Sola Álvarez, 2012; Wagner, 2014), including fieldwork conducted by the authors, highlights how local assemblies mobilised against mining were spaces of gathering and exchange between actors with previous political militancy (political parties, human rights organisations, unions, teachers, cultural and artistic collectives) and actors with no previous experience in social organisations. The use of the terms "autoconvocados" (i.e. self-summoned) and "assemblies" chosen by the members of local movements to name themselves reflects their intention to establish horizontal structures of participation and decision-making.

This is also reflected in the examination of the protagonists of mining struggles (Fig. 4). There is a clear prominence of actors coming from the local scene, both organised movements (Environmental Justice Movements - EJM) and neighbours who mobilise or support the struggle without being nucleated in an organisation. In contrast to this, only 10 of the 38 cases involving the presence of international organisations have been noted. This indicates that the participation of these actors is lower than local actors. In the largest global analysis of environmental conflicts to date and based on the overall EJAtlas database, Scheidel et al. (2020), show that both local organisations (involved in 69% of cases) and neighbours (67%) are the two most frequent actor groups mobilising to defend their environment. However, in Argentina these actors are identified in up to 95% and 84% of cases, indicating a significantly higher relevance of local actors.

The third most frequent actors in Argentinean mining controversies are local governments and political parties. These actors are the first to receive pressure from the EJMs. In some cases, the mayors (local executive power) initially tend to assume a favourable position to extractive projects, but when the social opposition increases, they change their position and align themselves with the rejection expressed by the local population - even when this has led them to confront the provincial or national government (Walter and Urkidi, 2017). Recent research on institutional transformations driven by social movements mobilised against mega-projects in Latin America has highlighted the importance of networks generated between civil society actors and different sectors of government, along with active mobilisation (Silva et al., 2018).

In her study of environmental demands related to mining extractivism in Argentina, Delamata (2013: 87) states that these demands have put in tension, and sometimes have been able to align, the general antinomy that transverses states between their dependence on investments and businesses and the construction of political power of governments based on their popularity.

Another relevant actor are scientists or professionals who provide technical and scientific support to mobilised communities. One of the major debates is around environmental impacts of mining projects, where scientific or technical knowledge becomes central to the legitimisation - or rejection - of mining projects. This group is present in almost half of the cases and has been key to the development of legal and technical strategies. Furthermore, as mentioned in section 4.2., scientists and EJM have collaborated at the national level to foster broader environmental regulatory reforms.

Based on our results regarding actors in mining conflicts, it is possible to refute the arguments put forward by governments and

companies that international organisations - or organisations external to the local scene - had a key role in promoting anti-mining mobilisations. Other research carried out in Argentina and Latin America also indicates the growing importance of movements born from below (grassroots movements) in anti-mining mobilisations and the importance of their networks, both at local and supra-local levels (Svampa et al., 2009; Walter and Urkidi, 2017; Silva et al., 2018).

We have identified national and international environmental organisations involved in mining conflicts, but they are actors who have taken part in specific moments of the conflicts or related to some issues, like the company involved. For instance, Greenpeace supported the Esquel mobilisation, and there are supporting networks to affected people around the world, like PARTIZANS - People against Rio Tinto and its Subsidiaries - or the international articulation of those affected by Vale (“Articulação Internacional dos atingidos e atingidas pela Vale”), who participated in the conflict of the Potasio Río Colorado project, in Mendoza province. These organisations support networks when a specific company appears in the local territory.

2.5.1. Local vulnerable groups

Fig. 4 provides some evidence of the diversity of vulnerable groups involved in mining controversies. For instance, those actors whose livelihood can be directly affected by mining projects, such as farmers, indigenous communities, pastoralists, trade unions, and recreational users. In Argentina, the category “farmers” includes different kinds of “farmers” ranging from the farmer who produces on a small scale to large agricultural entrepreneurs, depending on each conflict, the regional configuration and the kind of predominant agricultural activity. The tension between agricultural activity and metalliferous mining is one of the main topics of debate related to mining impacts, and this is evidenced by the fact that, in half of the conflicts, the agricultural sector plays an important role.

Indigenous communities also have a relevant role in environmental conflicts (present in 47% of cases). Since the conflict over the gold mine in Esquel (province of Chubut) and Jacobacci (province of Río Negro), the presence of Mapuche communities has been relevant. They also played a central role in mining conflicts in the province of Neuquén, especially in Loncopué, where the second community consultation on mining (after Esquel) of Argentina occurred (Wagner, 2019). Another example is the conflict related to Navidad project, on the Patagonian plateau, where Mapuche-Tehuelche communities participated in the conflict. Indigenous communities are also having a relevant role in conflicts over lithium mining in the north of the country.

Religious groups are also relevant in mining conflicts, mainly the Catholic Church. Some parish priests have integrated EJM, and others have collaborated in denouncing the situation of inequality and injustice experienced by local communities who have rejected large-scale mining. The Papal Encyclical Letter called “Laudato SI: on care for our common home” was an important document in order to support these actions by parish priests in communities affected by mining projects.

Mining conflicts place a key issue at the centre of disputes: land tenure. Actors such as goat herders or small farmers suffer the consequences of land privatisation. For instance, people that raise animals (goats, among others) need to move these animals to places with better pastures (known as “transhumance”) in the summer season. In many cases, they have precarious land tenure, and the enclosures carried out by mining projects affect their subsistence.

Regarding trade unions, workers in mining or construction companies often question EJM, concerned about the loss of jobs - real or potential - if the companies decide to leave the projects. However, in some conflicts, both EJM and unions make different, but complementary, demands in relation to problems generated by mining activity: unions make claims for improvements in safety and health conditions in the project area, while EJM highlight environmental pollution and social impacts in nearby localities. There are no registered alliances between mining unions and environmental movements in mining conflicts in

Argentina.

5.3. Diversity of strategies

Scheidel et al. (2020) concluded, based on their analysis of the global EJAtlas dataset, that if EJM combine strategies of preventive mobilisation, diversification of protest and litigation they can significantly increase their success rate to up to 27% (Scheidel et al., 2020). In this line, we discuss how actors mobilised against mining activities in Argentina have mobilised a large diversity of strategies, including litigation, with successful outcomes.

Fig. 5 presents the different forms of mobilisation identified (or not) in each case. We claim that the diversity of strategies mobilised by anti-mining movements (repertoire of contention) is possible given the diversity of actors involved in these struggles, where neighbours, lawyers, chemists, professors, journalists, farmers, indigenous groups, and many others came together to mobilise their knowledge, resources and networks in these highly uneven power struggles (against corporate interests that usually have the support of national governments).

We highlight four types of strategies deployed to oppose mining activities in Argentina. The first relates to strategies that aim for public outreach and dissemination of local conflicts (media activism, street protests, public campaigns, etc.). The second refers to the work within and among actors and movements to create networks, learn collectively and coordinate support actions. The third strategy is about the development of counter-knowledge that challenges hegemonic discourses and official expert accounts. The fourth addresses strategies to formally act upon decision making institutions and procedures (in coordination with press releases and public activities to denounce the lack of official information).

The use of alternative media, blogs and social networks is a key strategy of local actors contesting mining activities in Argentina. It is present in 92% of our cases, but in only 47% of the global EJAtlas dataset (Scheidel et al., 2020). Most of these alternative media channels were created in the context of the conflicts. A key case is the creation of the “No a la Mina” website (“no to the mine”) by the Asamblea de vecinos autoconvocados (Community-based Assembly) of Esquel, as a central outcome of the first large-scale metal mining conflict in Argentina. This is currently a key source of information nationally and internationally. Moreover, the approval in 2009 of the National Law 26,522 of audiovisual communication services, in the context of a national debate about freedom of expression and less information monopolies, allowed for the spread of local and alternative communication media. This law facilitated the creation of alternative local radios and communication channels that gave voice to social movement concerns, in contrast to existing media channels. Moreover, in the context of many conflicts, local assemblies were the ones creating and managing these alternative media channels (like radio La Paqueta, in Uspallata, Mendoza), or were given spaces to voice their narratives and information (like radio Kalewche, in Esquel). The existence of a national network of community radios also allowed circulation of information among different radios of the country, connecting distant places and mobilisation processes. These dissemination strategies were among the activities that aimed to make visible local claims, such as marches, protests and public campaigns (e.g. to support regulatory reforms).

Another central feature of the anti-mining movement in Argentina has been the construction of networks of support and collaboration across the country and, more recently, across different issues of environmental mobilisation (as reflected in the creation of a network of local assemblies involved in different environmental struggles that meet regularly in different places of the country, the Union of Community Assemblies - UAC). This strategy appears in 79% of our cases and in 49% cases in the global EJAtlas dataset (Scheidel et al., 2020). Networks have broadened the reach of local collective action, upscaling and coordinating actions. For instance, in 2011 different local assemblies organised a coordinated blockade of mining trucks transporting inputs to the La

Alumbra mine located in the province of Catamarca. Local assemblies coordinated intermittent blockades in routes and streets, accompanied with the handing of brochures and information about the mobilisation to drivers and pedestrians. These blockades were called “cortes de rutas informativos” or informative shortcuts. It is only in moments of high pressure that movements have conducted permanent blockades. Activist networks have also allowed the spread of other strategies such as consultations/referendums, or the creation and circulation of counter-hegemonic knowledge, among others (Walter and Martinez Alier, 2009).

EJMs also generate and systematise alternative knowledge, also referred as “independent expert wisdom” or “counter-expert wisdom” (we are translating *saberes* – in Spanish - as wisdom) related to local knowledge (Svampa and Antonelli, 2009; Machado et al., 2011). This strategy is present in 68% of our cases and in only 36% of the global EJAtlas dataset (Scheidel et al., 2020). Similar to the processes of activism mobilising science studied by Conde (2014 in uranium conflicts in Niger) where local organisations and scientific experts co-produce new knowledge. Mining conflicts are spaces of dispute about scientific knowledge. Local organisations usually have members that are scholars or scientists or have the support of “certified” experts. EJMs have placed large efforts in systematising information about the environmental and social impacts and experiences of large-scale mining in Argentina and other countries. This information has been widely circulated among EJMs challenging hegemonic expert knowledge. Since the Esquel conflict in 2003, the claim that there is a technical rationale that is inaccessible to non-experts, has been a central argument held by companies and governments against communities. In this framework, local movements are labelled as irrational or led by political intentions (Walter, 2008). As a response, “knowledge” has become a central field of dispute. Documents such as technical reports, critical studies of mining Environmental Impact Assessments and publications by critical scholars become central elements in the struggle. EJ actors demand to access EIAs to conduct reviews of the technical documents.

In parallel, legal strategies are also becoming a common strategy used by EJMs to stop or slow the advancement of mining activities. As projects are approved even when EIA observations are made, judicial strategies have gained force among EJOs that have received the support of engaged lawyers (Wagner, 2019). Formal petitions, lawsuits and EIA objections were presented in 68%, 55% and 42% of our registered cases and in 58%, 44% and 26% of the cases registered in the global EJAtlas dataset (Scheidel et al., 2020).

As we have discussed in this section, different factors and processes have allowed EJMs to stop mining activities in about half of contentious cases and foster regulatory changes. Nevertheless, this approach partially captures the reach of the social and cultural transformations that this ongoing horizontal, interconnected and intersectional process of mobilisation is triggering among and across EJMs in the country.

6. Conclusions

This work is aimed at generating a systematic identification and review of mining conflicts, mainly, but not only, metalliferous mining in Argentina (38 cases studies were identified, updated or added to the EJAtlas database, including gold, copper, silver, lead, iron, lithium, potassium and uranium mining). From the methodological point of view, we built and analysed an original qualitative and quantitative methodology in collaboration with the EJAtlas. This research is the first national-level systematic study of mining conflicts conducted for Argentina. We analysed the history of mining struggles in the country and the general trends of these struggles. The paper offers some keys to understand how the majority of the large-scale mining conflicts in Argentina in the last few years resulted in the cancellation or temporal suspension of controversial mining projects (20 out of 38) and how these movements led to national and local institutional changes.

Previous studies have pointed to the relevance of preventive

mobilisation and multiple strategies for environmental justice movements to succeed (Conde, 2017; Scheidel, 2020). Our study concludes that the majority of the mining conflicts are preventive (the reaction against the project is previous to its installation, succeeding to stop the advance of mining exploitation), but not all. We argue that in order to understand the mobilisation process and its outcomes we need to consider the diversity and multi-scalar nature of its actors and their strategies and the particular political opportunity structures (i.e. decentralised mining governance to provinces) that have allowed for successful local and provincial activism and institutional change. Moreover, we claim that the multi-scalar networks have played a central role in the formation, dissemination and support of local and supra-local strategies that allowed Environmental Justice movements to gain leverage at local, provincial and national scales over and beyond contentious mining issues.

Mining struggles in Argentina are marked by a large heterogeneity of actors and strategies, features that are closely related. In particular there is a high presence of local actors that usually organise in the form of local Assemblies that give to these struggles a strong local identity approach. However these Assemblies are coordinated at the national level (UAC network), creating a complex structure of collective learning and support of local and national struggles. Moreover, scientists and professionals are usually collaborators and/or members of these movements bringing different kinds of knowledge to develop strategies and counter-expertise in mining debates. Other actors who are relevant in mining conflicts are the affected groups, like farmers, indigenous communities or traditional groups.

The study also found that the Catholic Church is very important to put mining conflict on the public agenda, especially in small villages. This actor and its role remains poorly studied in the literature. Another relevant actor in mining struggles that has also been addressed in recent Latin American mining studies are local governments (Walter and Urkidi, 2017; Silva et al., 2018). The involvement of local governments is key to enable the institutional changes led by local mobilisation. Local movements pressure local governments to make transparent and public decisions about mining activities. In several cases, local governments support the local Environmental Justice movements from the beginning of the conflict, or they change their initial position due to the pressure from local actors.

Strategies are also diverse and peaceful. The most frequent strategies show the importance that the spreading of the conflict has for EJ movements to make visible the complaints and the struggle against mining (e.g. media-based activism, street protest, blockades, and strikes). Outreach strategies were combined with strategies aiming to change institutional frameworks: official complaint letters, judicial activism, objections to Environmental Impact Assessments, referendum and other local consultations. These types of strategies are very important in Argentina where provinces own and manage natural resources. Hence, the provincial government is nearer than the national government, and it is more possible to put pressure on its representatives, and participate in decision making.

We also stress the importance of the diversity of actors and strategies employed by Environmental Justice movements and their capacity to create networks and alliances to understand their ability to stop or slow mining activities. We also want to underline the effect of local resistances and multi-scalar networks in formal institutions, putting into practice “dormant” legislation (i.e. not in use), opening spaces for debate and participation, driving the creation of new laws, and introducing environmental issues to judicial courts.

We conclude that in order to understand the outcomes of socio-environmental mobilisation, a multi-scalar and temporally sensitive approach attentive to both political structures and mobilisation features and dynamics is needed. We underline the role played by multi-scalar networks, not only as spaces of learning, strategising and support but also as a collective actor able to move across scales, bypassing and challenging structural limitations to foster change. The paper puts into

dialogue social mobilisation features, political opportunity structures and scalar interplays across time, to understand the social and institutional changes that mining contestation is triggering in Argentina. Finally, we emphasise that mining contention has evolved into something more, a space to rethink socio-environmental relations, democracy, justice, development and re-imagine individual and collective ways of doing and thinking.

Acknowledgements

This research was supported by the ENVJust and ACKnowl-EJ projects, and CONICET. ENVJustice is an European Research Council (ERC) project granted to professor Joan Martínez Alier. The international ACKnowl-EJ project was funded by the Transformations to Sustainability Programme (T2S) of the International Science Council (ISC) and the International cooperation agency of Sweden (SIDA). The CONICET funded the postdoctoral scholarship that allowed Lucrecia Wagner to conduct this research. We would like to thank Dr. Iva Pesa and Prof. Corey Ross and the participants of the Workshop “Extractive industries and the Environment” (Oxford, December 2019), as well as the EJAtlas team for their support and comments on early drafts of this paper.

References

- Alimonda, H., 2011. La naturaleza colonizada. Ecología política y minería en América Latina. CLACSO-CICCUS.
- Alvarez, L., 2017. Asambleando el mundo. La experiencia de la Unión de Asambleas de Comunidades en las luchas socioambientales en Argentina. *Debates en Sociología* 45, 113–140. <https://doi.org/10.18800/debatesensociologia.201702.005>.
- Alvarez Huwiler, L., Godfrid, J., 2018. Megaminería en América Latina: Estados, empresas transnacionales y conflictos socioambientales. CCC-Universidad Nacional de Quilmes, Buenos Aires.
- Aranda, D., 2008. A cinco años del grito de Esquel. Página 12, 24 de marzo. <https://www.pagina12.com.ar/diario/sociedad/3-101200-2008-03-24.html>.
- Basualdo, F., 2012. Regular la minería. *Le Monde Diplomatique* 10–11.
- Bebbington, A., 2012. Underground political ecologies: the second annual lecture of the cultural and political ecology specialty group of the Association of American Geographers. *Georum* 43, 1152–1162.
- Bebbington, A., Humpreys Bebbington, D., Bury, J., Langan, J., Muñoz, J.P., Scurrah, M., 2008. Mining and social movements: struggles over livelihood and rural territorial development in the Andes. *World Dev* 36 (12), 2888–2905.
- Bechtum, A., 2018. El caso de Cerro Vanguardia y la localidad de Puerto San Julián. *Santa Cruz. Identidades* 14 (8), 154–174.
- Bosi, L., Uba, K., 2009. Introduction: the outcomes of social movements. *Mobil.: Int. Q.* 14 (4), 409–415.
- Bottaro, L., Sola Álvarez, M. (Eds), 2018. Agua y Megaproyectos mineros en América Latina. UNGS-WATERLAT/GOBACIT, Los Polvorines.
- Carruthers, D., 2008. Environmental Justice in Latin America: Problems, Promise, and Practice. MIT Press, Cambridge, MA.
- Cerutti, D., 2017. Comunidades en resistencia frente a violencias (en)tramadas en América Latina. Megaminería y control social en un espacio subnacional: San Juan, Catamarca y La Rioja. Tesis de Doctorado. CEA-Universidad Nacional de Córdoba, Córdoba.
- Chaparro, E.A., 2002. Actualización de la compilación de leyes mineras de catorce países de América Latina y el Caribe (Vol. D). Serie Recursos Naturales e Infraestructura. ECLAC/UN. Santiago de Chile. Available at: https://www.cepal.org/sites/default/files/publication/files/6403/S025392_es.pdf (15/04/2021).
- Christel, L., 2020. Resistencias sociales y legislaciones mineras en las provincias argentinas. Los casos de Mendoza, Córdoba, Catamarca y San Juan (2003-2009). *Política y Gobierno*. XXVII (1), 1–22.
- Christel, L., 2015. Resistencias sociales y legislaciones mineras en las provincias argentinas: los casos de Mendoza, Córdoba, Catamarca y San Juan (2003-2009). Tesis de Doctorado, Universidad Nacional de San Martín, Buenos Aires.
- Conde, M., 2017. Resistance to mining. a review. *Ecol. Econ.* 132, 80–90. <https://doi.org/10.1016/j.ecolecon.2016.08.025>.
- Conde, M., 2014. Activism mobilising science. *Ecol. Econ.* 105, 67–77. <https://doi.org/10.1016/j.ecolecon.2014.05.012>.
- Conde, M., Le Billon, P., 2017. Why do some communities resist mining projects while others do not?. *Extract. Ind. Soc.* 4 (3), 681–697.
- Delamata, G., 2013. Actualizando el derecho al ambiente. Movilización social, activismo legal y derecho constitucional al ambiente de «sustentabilidad fuerte» en el sector extractivista megaminero. Entramados y perspectivas 3 (3), 55–90. <https://publicaciones.sociales.uba.ar/index.php/entramadosy perspectivas/article/view/150>.
- Delamata, G., 2019. ¿Intereses económicos en la protesta ambiental? Marcos de interpretación y coaliciones sociales en las movilizaciones ambientales contra sectores extractivos de recursos naturales en Argentina. *Política y Sociedad* 56, 127–144. <https://doi.org/10.5209/poso.61676>.
- Delamata, G., Mailet, A., Martínez Neira, C., 2017. Socio-territorial conflicts in Chile: configuration and politicization (2005-2014). *Eur. Rev. Latin Am. Caribb. Stud.* 104, 23–46. <https://doi.org/10.18352/erlacs.10173>.
- Del Bene, D., Scheidel, A., Temper, L., 2018. Hydroelectric dams, violence, extractivism, ecological distribution conflicts, renewable energies, co-production of knowledge. *Sustain. Sci.* 13, 617–663.
- Delgado Ramos, G. C., 2010. Ecología política de la minería en América Latina: aspectos socioeconómicos, legales y ambientales de la mega minería. CEIICH-UNAM, México.
- della Porta, D., Rucht, D., 2002. The dynamics of environmental campaigns. *Mobil.: Int. Q.* 7 (1), 1–14. <https://doi.org/10.17813/maiq.7.1.a2p473545718n577>.
- Denoe, M., 2019. Rapports de pouvoir dans l'activité minière: entre modèle néo-extractiviste et variations territoriales. Le cas des provinces de Jujuy. Université Toulouse 2 - Jean Jaurès, Toulouse. San Juan et Mendoza en Argentine. Phd Thesis.
- EJAtlas (Environmental Justice Atlas), 2019. <https://ejatlas.org/> (accessed on June, 2019).
- EPA, 2020. TRI National Analysis 2019. Environmental Protection Agency, U.S.
- Escobar, A., 2001. Beyond the search for a paradigm? Post-development and beyond. *Development* 43 (4), 11–14. <https://link.springer.com/article/10.1057/palgrave.development.1110188>.
- Evans, P., Rodríguez-Garavito, C., 2018. Translational Advocacy Networks. Twenty Years of Evolving Theory and Practice. Colección Dejusticia, Bogotá.
- Global Witness, 2020. Environmental activists. <https://www.globalwitness.org/en/campaigns/environmental-activists/> (accessed 6 July 2020).
- Göbel, B., 2013. La minería del litio en la Puna de Atacama: interdependencias transregionales y disputas locales. *Iberoamericana* XIII 49, 135–149. <https://www.jstor.org/stable/24369447>.
- Gomez Lende, S., 2016. Del Mito a la Realidad: Minería Metalífera, Psicoesfera y mercado de trabajo en la provincia de Santa Cruz (Argentina). *Perspectiva Geográfica* 11 (14), 13–26.
- Gutiérrez, R., 2015. Teoría y praxis de los derechos ambientales en Argentina. *Temas y Debates* 30, 13–36. <https://doi.org/10.35305/tyd.v0i30.320>.
- Haslam, P.A., Tanimoune, N.A., 2016. The determinants of social conflict in the latin american mining sector: new evidence with quantitative data. *World Dev.* 78, 401–419. <https://doi.org/10.1016/j.worlddev.2015.10.020>.
- Heijden, H. A., Van, Der, 2006. Environmental movements and international political opportunity structures. *Organ Environ.* 19, 28–45. <https://doi.org/10.1177/1086026605285452>.
- Jahncke Benavente, J., Meza, R., 2010. Derecho a la participación y a la consulta previa en Latinoamérica. Fedepaz Muqui Miserer CIDSE.
- Karl, N.A., Wilburn, D.R., 2017. Annual review 2016: exploration review. *Min. Eng.* 69 (5), 28.
- Keck, M.E., Sikkink, K., 1998. *Activists Beyond Borders*. Cornell University Press, Ithaca.
- Langbehn, L., Schmidt, M., Pereira, P., 2020. Las leyes ambientales en el ojo de la tormenta. Un análisis comparativo en torno a la legislación sobre glaciares, bosques y humedales en Argentina. *Cartografías del Conflicto Ambiental en Argentina* 3. CLACSO-CICCUS, Buenos Aires, pp. 187–213.
- Latorre, S., Farrella, K.N., Martínez-Alier, J., 2015. The commodification of nature and socio-environmental resistance in Ecuador: an inventory of accumulation by dispossession cases, 1980–2013. *Ecol. Econ.* 116, 58–69. <https://doi.org/10.1016/j.ecolecon.2015.04.016>.
- León, M., Lewinsohn, J.L., Sánchez, J., 2020. Balanza comercial física e intercambio, uso y eficiencia de materiales en América Latina y el Caribe. Serie Recursos Naturales y Desarrollo, N° 200 (LC/TS.2020/150). Comisión Económica para América Latina y el Caribe (CEPAL). Santiago de Chile.
- Machado, H., Svampa, M., Viale, E., Giraud, M., Wagner, L., Antonelli, M., Giarracca, N., Teubal, M., 2011. 15 Mitos y Realidades de la minería transnacional en la Argentina. Editorial El Colectivo-Ediciones Herramienta.
- Martínez Alier, J., 2021. Mapping Ecological Distribution Conflicts: The EJAtlas. *Extractive Industries and Society* (in press).
- Mastrangelo, A., 2004. Las niñas Gutiérrez y la mina Alumbra. La articulación con la economía mundial de una localidad del Noroeste Argentino. *Antropofagia*, Buenos Aires.
- McAdam, D., Tarrow, S., Tilly, C., 2001. *Dynamics of Contention*. Cambridge University Press, Cambridge.
- Melé, P., 2007. Identifier un régime de territorialité réflexive. *Colloquium Communication Territoires, territorialité, territorialisation: et après?* 7 and 8 de June.
- Merlinsky, G., 2013. Introducción. La cuestión ambiental en la agenda pública. In: Merlinsky, G. (Ed.), *Cartografías del Conflicto Ambiental en Argentina*. CLACSO-CICCUS, Buenos Aires, pp. 19–60.
- Merlinsky, M., 2020. The productivity of environmental conflicts and their contribution to social innovation. *Agrocienc. Urug.* 1–12. Available from: <http://agrocienciaurug.uy/ojs/index.php/agrociencia/article/view/358>.
- Möhle, E., 2018. ¿Cómo se decide sobre el territorio? Gobernanza de conflictos mineros. Los casos de Andalgalá, en Catamarca, y Famatina, en La Rioja (2005-2016). Tesis de Maestría. Universidad Nacional de San Martín - Georgetown University, Buenos Aires.
- Muradian, R., Martínez-Alier, J., Correa, H., 2003. International capital versus local population: the environmental conflict of the Tambogrande mining project. *Peru. Soc. Nat. Resour.* 16, 775–792.
- Napadensky, A., Azocar, R., 2017. Espacios globales y espacios locales: en busca de nuevos enfoques a los conflictos ambientales. *Panorámica sobre Sudamérica y Chile, 2010-2015*. Revista de Estudios Sociales 61, 28–43. <https://doi.org/10.7440/res61.2017.03>.
- Neyra, R., 2020. Conflictos Socioambientales en el Perú. *Violencia y Extractivismo*, Abya-Yala, Quito.

- OCMAL (Observatorio de Conflictos Mineros de América Latina), 2019. <https://www.ocmal.org/accessible> (on June, 2019).
- OEC (Observatory of Economic Complexity), 2019. Exports. Argentina, <https://oec.world/en/profile/country/arg/#Exports>.
- Özkaynak, B., Rodríguez-Labajos, B., Erus, B., 2021. Understanding activist perceptions of environmental justice success in mining resistance movements. *Extr. Ind. Soc.* <https://doi.org/10.1016/j.exis.2020.12.008>.
- Özkaynak, B., Rodríguez-Labajos, B., Aydın, C.I., Yanez, I., Garibay, C., 2015. Towards environmental justice success in mining conflicts: An empirical investigation. *EJOLT Rep.* 14, 96. <http://www.ejolt.org/2015/04/towards-environmental-justice-success-mining-conflicts/>.
- Pérez-Rincón, M., Vargas-Morales, J., Martínez-Alier, J., 2019. Mapping and analyzing ecological distribution conflicts in Andean Countries. *Ecol. Econ.* 157, 80–91. <https://doi.org/10.1016/j.ecolecon.2018.11.004>.
- Perreault, T., 2013. Dispossession by accumulation? mining, water and the nature of enclosure on the Bolivian Altiplano. *Antipode* 45 (5), 1050–1069.
- Rodríguez-Labajos, B., Özkaynak, B., 2018. Environmental justice through the lens of mining conflicts. *Geoforum* 84, 245–250. <https://doi.org/10.1016/j.geoforum.2017.06.021>.
- Rojas, F., Wagner, L., 2017. Desarrollos fallidos en la minería histórica. *Famatina y Chilecito, apuntes para pensar el presente socio-ambiental. Trabajo y Sociedad* 28, 281–307.
- Ruiz Peyré, F., Dorn, F., 2020. Aprovechamiento del litio en el noroeste argentino: realidades, desafíos y perspectivas en un mundo globalizado. *Scripta Nova.* XXIV 632. <https://doi.org/10.1344/sn2020.24.22466>.
- Scheidel, A., Del Bene, D., Liu, J., Navas, G., Mingorría, S., Demaría, F., Avila, S., Roy, B., Ertör, I., Temper, L., Martínez-Alier, J., 2020. Environmental conflicts and defenders: a global overview. *Glob. Environ. Change* 63. <https://doi.org/10.1016/j.gloenvcha.2020.102104>.
- Schiaffini, H., 2003. El agua vale más que el oro: la constitución de fuerzas sociales en torno al conflicto minero en Esquel. 2002-2003. Tesis de Licenciatura, Departamento de Ciencias Antropológicas-UBA, Buenos Aires.
- Schiaffini, H., 2013. Litio, llamas y sal en la Puna argentina: Pueblos originarios y expropiación en torno al control territorial de Salinas Grandes. *Entramados y perspectivas* 3 (3), 121–136. <https://publicaciones.sociales.uba.ar/index.php/en-tramadosy perspectivas/article/view/152>.
- Silva, E., Akchurin, M., Bebbington, A., 2018. Policy effects of resistance against mega-projects in latin america: an introduction. *Eur. Rev. Latin Am. Caribb. Stud.* 106, 23–46. <https://doi.org/10.32992/erlacs.10397>.
- Smith, N., Bird, J., Curtis, B., Putnam, T., Robertson, G., 1993. Homeless/global: scaling places. In: Tickner, L. (Ed.), *Mapping the Future. Local Cultures. Global Change*, Routledge, London, pp. 87–119.
- Smith, N., 1996. Spaces of vulnerability: the space of flows and the politics of scale. *Critiq. Anthropol.* 16, 63–77.
- Sola Álvarez, M., 2012. Conflictos socioambientales en torno a la megaminería metalífera a cielo abierto. El caso de Famatina, La Rioja, Argentina. Tesis de Maestría, FADU-UBA, Buenos Aires.
- Sola Álvarez, M., 2016. Estados subnacionales, conflictos socioambientales y megaminería. Reflexiones a partir del análisis de la experiencia del Valle de Famatina, Argentina. *Sociedad y ambiente* 9. <https://doi.org/10.31840/sya.v0i9.1632>.
- Svampa, M., Antonelli, M., 2009. Minería transnacional, narrativas del desarrollo y resistencias sociales. Editorial Biblos.
- Svampa, M., Sola Álvarez, M., Bottaro, L., 2009. Entre el efecto Esquel y el efecto La Alumbra. Los movimientos contra la minería metalífera a cielo abierto: escenarios y conflictos. In: Svampa, M., Antonelli, M. (Eds.), *Minería Transnacional, narrativas del desarrollo y resistencias sociales*. Biblos, Buenos Aires, pp. 123–180.
- Tarrow, S.G., 2011. *Power in Movement: Social Movements and Contentious Politics*. Cambridge University Press.
- Tarrow, S.G., 1996. State and opportunities; the political structuring of social movements. In: D.McAdamMcCarthy, J.D., Zald, M.N. (Eds.), *Comparative perspectives on Social Movements: Political Opportunities, Mobilizing structures and Cultural Framings*. Cambridge University Press, Cambridge, pp. 41–61.
- Temper, L., Del Bene, D., 2016. Transforming knowledge creation for environmental and epistemic justice. *Curr. Opin. Environ. Sustain.* 20, 41–49. <https://doi.org/10.1016/j.cosust.2016.05.004>.
- Temper, L., Del Bene, D., Martínez-Alier, J., 2015. Mapping the frontiers and front lines of global EJ: the EJAtlas. *J. Polit. Ecol.* 22, 255–278. <https://doi.org/10.2458/v22i1.21108>.
- Temper, L., Avila, S., Del Bene, D., Gobby, J., Kosoy, N., Lebillion, P., Martínez Alier, J., Perkins, P., Roy, B., Scheidel, A., Walter, M., 2020. Movements shaping climate futures: a systematic mapping of protests against fossil fuel and low-carbon energy projects. *Environ. Res. Lett.* 15 (12).
- Temper, L., Walter, M., Rodríguez, I., Kothari, A., Turhan, E., 2018. A perspective on radical transformations to sustainability: resistances, movements and alternatives. *Sustain. Sci.* 13 (3), 747–764.
- Tilly, C., 2002. *Stories, Identities, and Political Change*. Rowman and Littlefield, Lanham.
- Tilly, C., 1999. From interactions to outcomes of social movements. In: Giugni, M., McAdam, D., Tilly, C. (Eds.), *How Social Movements Matter*. University of Minnesota Press, Minneapolis, pp. 253–270.
- Unión de Asambleas de Comunidades (UAC), 2021. Andalgalá: ¿Cuántas veces hay que decir no? 14 April. <https://asambleasciudadanas.org.ar/2021/04/andalgalacuantas-veces-hay-que-decir-no/> (accessed 29 April 2021).
- Unión de Asambleas Ciudadanas (UAC). 2018. Construyendo caminos colectivos en defensa de nuestros territorios. <https://asambleasciudadanas.org.ar/wp-content/uploads/2018/04/CuademilloUACAbril2018.pdf>.
- UNRP, 2019. Global resources outlook. 2019: natural resources for the future we want. Available at: <https://www.resourcepanel.org/reports/global-resources-outlook>.
- UN Resource Panel, 2018. International Resource Panel (by CSIRO. Dr James West and Mirko Lieber). <http://www.resourcepanel.org/global-material-flows-database>.
- Urkidi, L., Walter, M., 2018. EJ and large-scale mining. In: Holifield, R., Chakraborty, J., Walker, G. (Eds.), *The Routledge Handbook of Environmental Justice*. Routledge, NY, pp. 374–387.
- Urkidi, L., Walter, M., 2011. Dimensions of environmental justice in anti-gold mining movements in Latin America. *Geoforum* 42, 683–695.
- Valiente, S., 2017. Disputas en y por el territorio. El caso del macizo del Deseado. *Geograficando* 13 (1), e018. <https://doi.org/10.24215/2346898Xe018>.
- Vela-Almeida, D., Gonzalez, A., Gavilán, I., Fenner Sánchez, G.M., Torres, N., Ysunza, V., 2021. The right to decide: a triad of participation in politicizing extractive governance in Latin America. *Extr. Ind. Soc.* <https://doi.org/10.1016/j.exis.2021.01.010>.
- Wagner, L., 2019. Propuestas de inversiones chinas en territorio mapuche: resistencias a la minería metalífera en Loncopué. *Estudios Atacameños* 63, 315–339. <https://doi.org/10.22199/issn.0718-1043-2019-0028>.
- Wagner, L., 2014. Conflictos socioambientales: la megaminería en Mendoza. *Editorial de la Universidad Nacional de Quilmes, Buenos Aires*, pp. 1884–2011.
- Walter, M., 2008. Nuevos conflictos ambientales mineros en Argentina. El caso Esquel (2002-2003). *Revista Iberoamericana de Economía Ecológica* 8, 15–28. <https://redibec.org/ojs/index.php/revibec/article/view/280/152>.
- Walter, M., Martínez-Alier, J., 2010. How to be heard when nobody wants to listen: community action against mining in Argentina. *Revue Canadienne d'Études du Développement/Can. J. Dev. Stud.* 30 (1-2), 281–301. <https://doi.org/10.1080/02255189.2010.9669292>.
- Walter, M., Urkidi, L., 2017. Community mining consultations in Latin America (2002-2012): The contested emergence of a hybrid institution for participation. *Geoforum* 84, 265–279. <https://doi.org/10.1016/j.geoforum.2015.09.007>.