RESISTANCE AGAINST MINING EXTRACTIVISM IN CHILE

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Introduction

The process of globalization in the past two decades has opened up, on the one hand, possibilities to expand business networks and, on the other, possibilities for civil organizations and local communities, Indigenous groups, and farmers to denounce atrocities and human rights violations (including violations of international human rights laws). One of the sectors that has had the worst human rights impact is extractivism. Mining, gas, oil, and agro-industry have affected not just agricultural production and access to clean water (Bottara, Latta, & Sola, 2015; Larraín, 2006), they have also had disastrous consequences in the form of displacement of communities (Renfrew, 2011; Salcito et al., 2014), destruction of the natural environment (Shelton, 2011; Thorp, 1998; Veltmeyer, 2013), and criminalization of protest (Chérrez, Padilla, Otten, & Yumbla, 2011; Machado Araoz, 2009). This situation has led to increasing resistance from communities demanding the protection of their

rights (Özkaynak, Rodriguez-Labajos, Aydın, Yanez, & Garibay, 2015).

Contemporaneous to this increasing mobilization in the past two decades is the international trend toward liberalizing markets. In the early 1990s, more than 90 countries introduced neoliberal economic policies in order to increase the investment of the extractive sector in their economies (Bridge, 2004). In Latin America, and particularly in the Southern Cone, this trend began earlier, as neoliberalism was implemented under the military dictatorships that arose in the 1970s and 1980s (Garretón, 2012). An important characteristic of this model is that natural resources are managed by the rules of the market. This meant greater amounts of foreign investment and a loss or weakening of control of states over their resources.

This growth in investment also came with a growth in social mobilization in Latin America (Bebbington, 2011). Several studies have documented the emergence of a broad resistance from communities in the context of extractivism in the region.[1] Also, during the past five years, a growing group of scholars has acknowledged that a new wave of social mobilization has emerged in opposition to extractivism in the region (see, for example, Bebbington, Abramovay, & Chiriboga, 2008; ECLAC and UNASUR, 2013; Gudynas & Acosta, 2011; Svampa & Sola Alvarez, 2010). Civil society organizations and scholars alike recognize that, even though extractivism is a regional phenomenon, the forms, intensity, and effects of these grievances differ depending on the actors involved, the affected territory, and the kind of rights violated, among other factors.

Chile was the first country to liberalize its economy in the Latin American region. The coup lead by the dictator Augusto Pinochet in 1973 and the influence of the Chicago school of economics led to the use of Chile as a laboratory in which neoliberal experiments could be tested (Silva, 1991). In particular and related to mining, Pinochet eradicated the processes of nationalization of copper that were promoted by former presidents Eduardo Frei and Salvador Allende and created incentives for international investment. Persecuting, torturing, and even killing political opponents supported this model, as did the creation of legal models that promoted fiscal benefits and complete security to concede and administrate private mining concessions (Machado Araoz, 2009).

By the end of the 1980s and coinciding with the beginning of the end of the

1. See, for example, OCMAL (www.conflictosmineros.net); MICLA (http://micla.ca/conflicts); No a la Mina (www.noalamina.org); and EJOLT (http://www.ejolt.org).

military dictatorship, we can observe the rise of the first generation of environmental organizations that, during the 1990s, worked as political actors in line with new democratically elected governments (Ulianova & Estenssoro, 2012, pp. 195–196).[2] The 1990s coincides with the celebration of the 500th anniversary of the colonization of America and with a new wave on the regional level of Indigenous mobilizations.[3] The rise of these environmental organizations and the experience of Indigenous peoples in the country shape what can be described as a socioenvironmental protest in Chile, a movement that shares patterns of identity and solidarity and that employs unconventional means to protest against this extractive expansion.

Taking Chile as a case study, this work attempts to describe how economic neo-liberalization and political opportunities shape the increasing socioenvironmental resistance to mining extractivism. I suggest that resistance in the context of extractivism arises from the tension generated from a neoliberal regulatory body on the one hand and from supposed opportunities for the protection and promotion of rights on the other. The economic and political model imposed during the dictatorship and the increasing catalogue of rights recognized during democratically elected administrations shape socioenvironmental resistance in Chile. But, as it will be shown, the inherent tensions between the economic and political models are not sufficient to explain the rise of social contention around mining extractivism. The support given by a network of socioenvironmental organizations has been fundamental to

2. This process was supported by the return of political exiles and academics, who had been involved in the Unidad Popular (Popular Unity) coalition, but after living in Europe and North America arrived with an environmental influence. Such was the case of Manuel Baquedano, who in 1987 created the Instituto de Ecología Política, and with the creation of the Centro Canelo de Nos in 1985. That was also the case with Alejandro Rojas, Bernardo Zentilli, and Manfred Max-Neef, among others. The consolidation of this process likely occurred with the institution of the network Acción Ecológica, or "Renace," created in 1988 and led by Sara Larraín. For more information see Ulianova & Estenssoro, 2012.

3. The Indigenous peoples' movement to defend the land has been classified by some scholars as a form of socioenvironmental protest, a process that has been accelerated with the antagonism to the economic model. Piñeda (2012, p. 145) argues that it is important to highlight the coordination and network creation between the Mapuche Indigenous people with environmental and non-Mapuche organizations, which is expressed as a combination of multiple resistances, strategies, and political ideals. Especially important for the socioenvironmental movement is a network of activists and Indigenous Pehuenche people who defended the Biobío River from the construction of hydroelectric dams by Endesa in 1991.

opposing mining projects in the country.[4]

To test this hypothesis, I will analyze the effects of a neoliberal regulatory framework, the progressive recognition of human rights in the context of extractivism, and the support given by a network of organizations in Chile.[5] For the analysis of the effects of a neoliberal regulatory framework, I analyze five political and macroeconomic features that define extractivism: scale (of volume and intensity), dependence on foreign direct investment (FDI), the forms of control over extractivism, the dependency on international markets, and the diversification of the economy. To do this, I primarily take into consideration the information provided by the Ministry of Mining in Chile (Comisión Chilena del Cobre, 2014a). For the analysis of socioenvironmental contention and network creation, I will take into account the Map of Socioenvironmental Conflicts in Chile, a study carried out by the *Instituto Nacional de Derechos Humanos* (INDH), an analysis of 97 socio-environmental conflicts that occurred in the country between January 2010 and June 2012. The map is a database that allows one to filter socioenvironmental movements by region, year in which a conflict started, human rights violations, whether the conflict is located in Indigenous territory, and the conflict stage (INDH, 2012).[6]

After analyzing the 97 socioenvironmental conflicts, I have concluded that 53 of them have a direct or indirect relationship with mining extractivism.

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4. I use the expressions "resistance," "protest," and "social contention" rather than "social movements" because the data source I use (INDH, 2012) prefers the expression "socioenvironmental conflicts" ("socioambiental" in Spanish), which it defines as "disputes between stakeholders—individuals, organizations, private and public companies, and the State—with a public expression of differences of opinions, positions, interests, and approaches caused by the infringement (or potential infringement) of human rights, arising from access to and use of natural resources, as well as by the environmental impacts of economic activities" (INDH, 2012, p. 5; translation, author).

5. For a detailed discussion concerning the definition of extractivism, see Acosta, 2011; Escobar, 2012; Gudynas, 2011; and Maristella Svampa, 2013, among others. Models in which these features scored highly had been categorized as predatory extractivism (Gudynas, 2013). I argue that they are more likely to have impacts on human rights and the environment and so create more incentives for social mobilization. An extractive model that promotes forms of extractivism carried out on a small or medium scale, still dependent on FDI but with facilities toward regional or national investment, with environmental, fiscal, and social controls in a still-undiversified economy, can be categorized as reasonable extractivism. Finally, an extractivism that is developed with its only intention being the subsistence and proper use of natural resources has been referred to as indispensable extractivism (Gudynas, 2013). This distinction is important because postdevelopment or alternatives to development theories—which (as will be shown) have influenced the emergence of social and environmental conflicts—are not necessarily against all forms of extraction but seek instead to avoid the impacts of the predatory extractivism.

6. Temuco is the capital of the Araucanía region in southern Chile and a historical center of the Mapuche territory, Wallmapu.

A more detailed study of these 53 conflicts allowed me to study 177 network organizations that support local contention against 49 mining companies and 63 government agencies participating as actors in specific conflicts. I crossed this information with the data provided by the Ministry of Mining in Chile to understand how the macropolitically and macroeconomically analyzed features induce social conflicts.

Mining Extractivism in Chile

On April 26, 2016, a national assembly and subsequent march brought together several socioenvironmental organizations in southern Chile. The assembly attracted more than 350 individuals, representing a range of local movements concerned with the impacts of extractivism in the country. The manifestation that followed comprised more than 4,500 people, who marched through the streets of Temuco, representing the plurinational emphasis of these claims. I highlight this assembly for being a clear example of the focus that some organizations maintain on building a national socioenvironmental network, involving the actions of both socioenvironmental and Indigenous groups. At the assembly, different voices stressed the importance of a common diagnostic: the negative consequences of neoliberalism and the current political intentions to expand the extractive frontier in areas such as mining, forestry, and energy. Of particular help in understanding the motivations of different movements were crosscutting themes that stressed the idea of derogating the neoliberal framework governing natural resources in the country.[7] The assembly concluded that this model of exploitation of natural resources (that has governed the country for over 30 years) has generated clear threats to the environment and specifically to local communities, threats that have become incentives to mobilize.

Historically, the neoliberal legal framework appears as part of the economic strategy developed by Pinochet, who ruled until 1989. Before the civil and military coup, state-led control regulated the extraction of minerals. Extraction enterprises were consolidated through the process known as *nacionalización del cobre*, starting in 1971 during Salvador Allende's regime (Caputo & Galarce, 2008). From 1973 on, Chile witnessed a liberalization of the markets. There were structural transformations in the Chile of Pinochet, marked by experimentation with institutional reforms that would then be partly replicated in other Latin American countries in the 1980s and early 1990s. The regulatory framework of market liberalization was—and is—characterized mainly by Decree Law (DL) 600 of 1974, which regulates

7. See http://olca.cl/articulo/nota.php?id=106171

the status of foreign investment; the Constitutional Organic Law for Mining Concessions of 1981 (Law 18.097); and the 1983 reform of the Mining Code. These institutional transformations resulted in the legal security of property on the mining concession, tax benefits, and a flexible legislation on environmental matters, which allowed Chile to be seen as an attractive country for investment by international large-scale mining companies (Machado Araoz, 2009).

A. Scale (Volume and Intensity)

Chile is well known for being a highly extractive country, mainly from mining, but also to some extent from the agricultural and fishery sectors (Banco Central de Chile, 2014). Within the mining sector, copper has become the most important mineral in terms of extraction in the region. In 2011, 32.4% of the global extraction of copper took place in Chilean territory (Comisión Chilena del Cobre, 2015), maintaining a trend that, since 1982, has made Chile the largest copper extractor in the world (CEPAL & UNASUR, 2013). Chile also occupies third place in the global league table for the extraction of molybdenum, with an extraction of 38.7 thousand tons in 2013 (Comisión Chilena del Cobre, 2014a); fifth place with regard to silver, with 1,217.8 tons (2013); and 15th place in terms of the extraction of gold, with 48.57 tons (2013) (Comisión Chilena del Cobre, 2014a). With regard to nonmetallic mining, Chile occupies second place in the extraction of lithium, with an extraction of 65,620 tons (2012), which accounted for 37% of total global production (Comisión Chilena del Cobre, 2013).[8]

8. In terms of fuel extraction, Chile does not have an important role globally. In 2013 Chile extracted 401,428 m^3 of crude oil and 893 million m^3 of natural gas (Comisión Chilena del Cobre, 2014a).

COMMODITY	WORLD RANKING	TONS (THOUSANDS) in 2013
COPPER	1	5.776
MOLYBDENUM	3	38.7
SILVER	5	1,217.8
GOLD	15	48.57

Source: Author, based on the Comisión Chilena del Cobre (2014a)

Table 1: Extraction amounts and ranking in relation to other countries in 2013

Directly related to the scale of extraction is the intensity of it. Chilean copper mining activity uses 14.7 m^3 per second of water, and the Chilean government estimates that in the next 10 years this sector will increase its water consumption by 66%, reaching 24.6 m^3 per second (Comisión Chilena del Cobre, 2014b). Efforts have been made to use desalinated seawater, but so far the mining sector has consumed mostly freshwater. The use of energy is also intrinsically linked to mining activity. In 2011, the mining sector in Chile constituted 33% of the country's total energy consumption (Comisión Chilena del Cobre, 2016, p. 5) and the Chilean authorities argue that the mining sector will require more energy in the next 10 years. Currently the mining sector uses 23.79 TW/h, and it is expected that by 2025, it will use 37.41 TW/h, which means that 1,700 MW should be incorporated to the interconnected electricity system to supply this demand.

	2014	2025
WATER CONSUMPTION (M^3/S)	14.7	24.6
ENERGY CONSUMPTION (TW/H)	23.79	37.41

Source: Author, based on the (Comisión Chilena del Cobre, 2014b, 2016)

Table 2: Expected increases in water and energy consumption from copper mining in Chile, 2014–2025

B. Dependence on FDI

The mining sector in Chile is highly dependent on FDI. In 2012, the total investment in the sector was $ 9.416 billion. 72% of the investment in the mining sector comes from FDI, representing a 56.6% of total FDI in the country (Comisión Chilena del Cobre, 2014a). Economist Elizabeth Asiedu has worked extensively on the impact of FDI, drawing mainly on three features of it: capital controls, restrictions on investment and trade, and the host country's investment climate. Her research shows that Latin America is one of the world regions most open to FDI, second only to Asia Pacific (Asiedu, 2004). The literature also reveals that capital flows have been used as potential generators of employment and poverty reduction (Asiedu, 2004; Hoogvelt, 2001).[9] However, the literature also emphasizes that openness to FDI can generate weak regulations on social and environmental matters, less stringent tax laws, and a diminished capacity of states to protect and promote human rights (Frankental, 2011; Sikka, 2011). The relationship between extractivism and these negative impacts has been also been illustrated in the Latin American critical literature (see for example Gudynas, 2011).

C. Political Control

Examination of the literature reveals at least three types of political control over the extraction of natural resources, including neoliberal forms of control, which encourage private natural resource exploitation and where the market regulates—up to a certain point—the social and environmental controls related to the exploitation of natural resources; state-led forms of control, wherein the state regulates and controls the exploitation of natural resources; and decentralized forms of control and exploitation of natural resources, wherein the local communities are the ones that regulate and exploit natural resources (Vélez-Torres, 2014).

Today we can clearly observe the existence of two extractive models in Chile. On the one hand, the country has a state-owned platform for the extraction of copper,[10] which prevailed as the most important form of extraction until the beginning of the 1990s and a form of private extraction, which in the 1980s started to gain more importance in the country (see Figure 1). Chile's

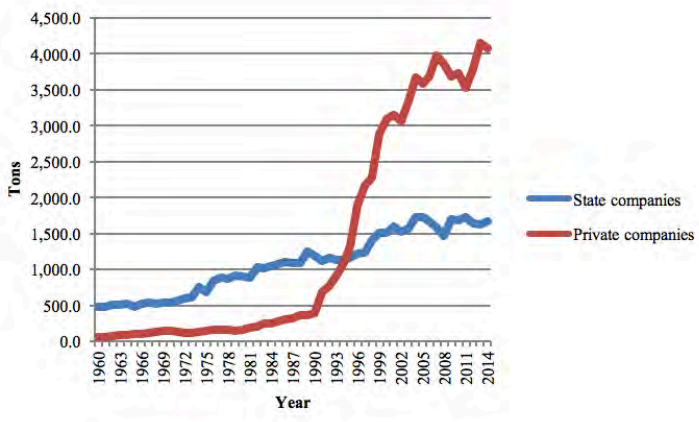
9. Despite the arguments against predatory extractivism, it is difficult to find a direct relationship between the neoextractivism development model and the reduction of poverty. Gamu, Le Billon, and Spiegel (2015) go further and, as a result of their review of 52 empirical cases in relation to the links between extractivism and poverty, conclude that industrial mining is more frequently associated with poverty exacerbation and artisanal mining with poverty reduction (Gamu et al., 2015).

10. Mainly led by the state companies CODELCO and ENAMI.

extraction was controlled by the state until 1994, after which the liberalization of markets and new technologies reduced the percentage of government exploitation of the total amount copper extraction from 84% in 1973 to 29% in 2014. The remaining 71% of the copper in the country is extracted by private companies (Comisión Chilena del Cobre, 2015).[11]

Between 2007 and 2011, tax controls on private natural resource production accounted for 3.2% of Chile's gross domestic product (GDP), a low rate if it is compared with those of other economies in the region, such as Mexico (7.8%) Venezuela (9.4%), Bolivia (10.1%) and Ecuador (12.9%). Even if we compare it as a percentage of the total tax income, the 14.1% that represents the exploitation of natural resources in Chile (2012) is far lower than the percentages seen in Mexico (32.5%), Venezuela (39.2%), Bolivia (29.9%), and Ecuador (34.5%) (Comisión Chilena del Cobre, 2014a; Fuentes, 2013). An analysis by James Otto (2007) compared 24 mining countries; he concluded that Chile is among the 20% of countries with less efficient tax forms and higher private profitability.

Figure 1. Comparison of extraction of Chilean copper by state-run and private companies (tons/year)



Source: Author, based on statistics of COCHILCO (Ministry of Mining) http://www.cochilco.cl/estadisticas/produccion.asp

Finally, it should be noted that by the end of the 1990s and during the first decade of the 21st century, Chile enacted a series of regulations allowing local

11. BHP Billiton, Rio Tinto, Antofagasta Minerals, and Anglo American, among others.

social control.[12] They regulate the forms of participation of local communities in social and environmental design of extractive projects. However, much has been discussed regarding the lack of legitimacy, processes of information, participation, and binding effect that these provisions have had in the country (Carruthers, 2001; del Fierro & Perez, 2009; Rojas, Sabatini, & Sepulveda, 2003).

The coexistence of these three forms of political control, with a strong emphasis on private extraction, and the recognition that different actors have different values and interests in extractive processes, have generated tensions between them (Maristella Svampa, 2011; Vélez-Torres, 2014).

D. Dependence on International Markets:
Chilean extractivism is highly dependent on international markets. As an example, in 2013, 5.590 of the 5.776 tons of copper extracted were exported (Comisión Chilena del Cobre, 2014b). Copper represents 51.4% of Chile's total metal and mineral exports, whereas gold represents 1.8%, molybdenum 1.5%, and silver 0.5% of the total exports (ECLAC & UNASUR, 2013). The intentions behind the creation of regional markets are far from becoming a reality. The total amount of mining exports is $44,121 million, of which only $7,219.3 million is exported to countries in the Americas. The United States ($3,230.8 million) and Brazil ($3,344.9 million) are the most important markets in the region. Exports of minerals in Chile are highly concentrated in the Asian market ($28,183.5 million), specifically in China, receiver of 35% of the total minerals exported by Chile ($15,332.6) (Comisión Chilena del Cobre, 2014).

E. Diversification of the Economy
Although mining has increased in scale in recent years, its contribution to Chile's GDP has decreased: in 2008, mining extraction represented 18.4% of GDP, whereas in 2013 it was 12.11% (Banco Central de Chile, 2014). This is mainly due to the growth of other sectors of the economy, such as business and financial services (18.9%), trade (11.2%), and manufacturing (10.1%). In this way, we could say that at the domestic level, Chile has diversified its economy, something the country still needs to do in its exports grid.

The neoliberalization of the economy and the special status given to extractivism within this model are possible only because the Political Constitution, based on a neoliberal legal framework, assigns such status to the privatization of mining activities (Yáñez & Molina, 2008). This model

12. See Environmental impact assessment legislation in Chile: Law 19,300 (1994) and its modifications (2005).

is not a response to an ideal development; it was mainly part of a political archetype inherited from dictatorship. From this brief political–economic context analysis, we could conclude that Chile promotes a form of predatory extractivism, a form of extractivism that has negative consequences for human rights and therefore motivates and enhances the rise of social conflicts. The question, then, is whether the national and international system of human rights has advanced any solutions that will aid in the resistance to the negative consequences of this form of extractivism.

Extractivism and Human Rights

In 2005, the United Nations high commissioner for human rights, Louise Arbour, prepared a report on the situation of human rights in the context of extractive industries.[13] So far this is the only report generated by the human rights bodies of the United Nations that analyzes—generally and not thematically—the impact of extractivism in human rights.[14] Meanwhile, some progress has been made in the recognition of the potential effect of extractivism in regional human rights systems; the Inter-American Human Rights System (IAHRS), for example, has promoted the regulation of extractivism in the region. Finally, the development of civil society organizations (CSOs) should be recognized. Among other undertakings, CSOs have tried to influence the adoption of a compulsory mechanism that regulates issues on business and human rights and the protection of human rights defenders in the context of extractivism (FIDH & OMCT, 2015; Working Group on Mining and Human Rights in Latin America, 2014).

From the development produced by the United Nations, regional systems and CSOs, some consensus has been generated towards the recognition of situations in which extractivism may generate the worst violations to human rights:

a) A conflict requiring mining companies to use public or private forces (or both) to defend facilities
b) A country with a low level of governance and, as a result, is unable to promote and protect human rights
c) An authoritarian government (which might react unduly to community

13. Human Rights and the Extractive Industry: Report of the United Nations High Commissioner for Human Rights, Hum. Rig. Comm., 62 Per. Ses., Agenda 17, U.N. Doc. E/CN.4/2006/92 (2005).

14. Other reports have seen the sectorial impact of extractive industries in vulnerable groups such as indigenous people's (see, for example, Extractive Industries Operating Within or Near Indigenous Territories: Report of the Special Rapporteur on the Tights of Indigenous Peoples, Hum. Rig. Counc., 18 Per. Ses., Agenda n. 3, U.N. Doc. A/HRC/18/35 (2011).

criticism, even responding with excessive violence)
d) An Indigenous community with values that differ from those promoted by a central government (such values typically have to do with cultural or religious traditions of certain communities linked with the natural environment or the land)[15]
e) A community in need of land or water for survival (extractivism can have severe environmental impacts)

In the Chilean context, we find a mixture of these situations, a combination that can generate human rights violations and, if changes are not made, will probably do so.[16] It is important to recognize the efforts Indigenous people in Chile have made in defense of the land and the environment. Although it is not the aim of this paper to analyze the rights that are recognized as such in the human rights system, we must highlight the importance of their struggles vis-à-vis the socioenvironmental movement in the country. Their fight has resulted in the development of important international standards, which have created opportunities to mobilize (such as free, prior, and informed consultation; a right to water; and access to ancestral land, among others) and resulted in a motivation for a broader socioenvironmental contention in the country.

These opportunities can be seen in the increasing tendency of socioenvironmental organizations in Chile to use forms of legal mobilizations.[17] According to 2012 statistics, for example, a lack of protection to the right to an adequate level of health and the right to water was claimed in 53% and 51%, respectively, of a total of 53 cases of social conflicts raised against mining extractivism. In 36% of cases, the right to free, prior, and informed consultation and consent

15. Opposition to mining projects, in some cases, derives from values, narrative frames, or social metabolisms that differ between companies or states and local communities. A good example is the dispute over territories in Chiloé, where the government argues that development should be proportional to the social and economic demands of the country and local communities maintain that development should respond to local necessities and should be compatible with their territory. In such cases, the government usually places some value on the ideal of a sustained development and sustainable principles, but local communities argue that extractive projects may affect the culture of local people. It is also common for governments and companies use technical and scientific language, whereas communities typically use sociocultural and socioeconomic language (see Sannazzaro, 2016). In other words, the epistemological frame, especially its sociopolitical and citizen dimensions, is also a cause of struggles for different forms of development (Marisella Svampa & Antonelli, 2009, p. 101).

16. See for example the case of the Mapuche people and the use of public and private security forces to defend extractivisms (mainly forestry) or the case of water consumption and Indigenous cultures in the Pascua Lama case with the Hausco Altino community (for more information, refer to INDH, 2012).

17. For a definition of legal mobilization, see Vanhala (2012).

standards had been violated.[18] And finally, in 26% of the cases, the right to environmental information and participation had been breached.[19]

The example of Caimanes, a small community in northern Chile, fighting against the mining giant Antofagasta Minerals can illustrate the way in which protests create opportunities for mobilization. A community that has fought against the effects of extraction on water consumption, security, and health stemming from the construction of the El Mauro tailings dam has secured some impressive decisions from Chile's judicial system. For example, in 2006 the Appeals Court of Santiago declared that:

> The exercise of an economic activity cannot be privileged upon the interests of a community [...] reason why this Court states that is our duty not to remain impassive on this serious situation, preventing [the economic activity] to be carried out.[20]

These matters should be given special consideration; the IAHRS has developed three standards in the area of extractive companies and human rights, including the obligation of states to implement measures that allow participation of the affected communities; states should ensure access to justice when human rights are violated; and states should implement measures enabling communities to access information on extractive projects that may affect them, promoting the transparency of the information.[21] These standards are applicable to Chile because of decisions by the Inter-American Court of Human Rights in the cases *Saramaka v. Suriname*[22] and *Sarayaku v. Ecuador.*[23]

Socio-environmental Conflicts in Chile

As stated above, I propose that socioenvironmental contention in the context of mining extractivism arises from the tension generated by a neoliberal regulatory body on the one hand and alleged opportunities for the protection

18. Taking into consideration the standards adopted in Convention 169 for Indigenous and tribal people (September 5, 1991), adoption: Geneva, 76th Indigenous and Tribal Peoples Convention (June 27, 1989).

19. All figures taken from my own analysis of INDH (2012).

20. Corte de Apelaciones de Santiago, *Comité de agua potable rural Caimanes/Dirección General de Aguas: Recurso de reclamación*, Rol: 12004-2005 (2006), parr.21. (Translation, author.)

21. Report on the situation of human rights in Ecuador, Inter American Commission of Human Rights, OEA/Ser.L/V/II.96, Doc. 10 rev. 1, 24 April 1997.

22. Case of the Saramaka People. v. Suriname. Preliminary Objections, Merits, Reparations, and Costs. Judgment of November 28, 2007 Series C No. 172.

23. Case of Kichwa Indigenous People of Sarayaku v. Ecuador. Merits and reparations. Judgment of June 27, 2012. Series C No. 245.

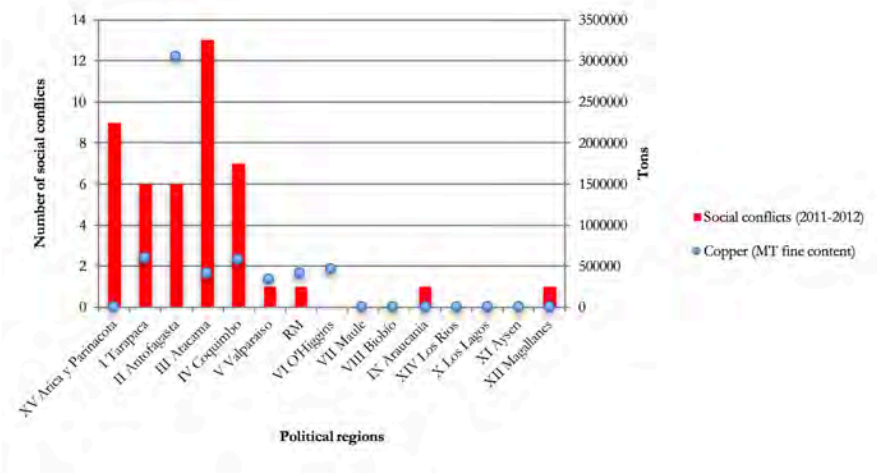
and promotion of human rights on the other. This tension creates incentives and opportunities for mobilization. But those incentives and opportunities are not sufficient to explain resistance; to test this hypothesis we should add the influence of local, national, and transnational network organizations that support the rise of social conflicts. To test this premise, I will cross the data from episodes of contention with political and economic data of the mining sector in Chile and then with the capacity generated by socioenvironmental networks.

A. Scale and Resistance

If the scale of the activities related to the extraction of resources motivates the rise of socioenvironmental protest, we could expect to find a correlation between scale and number of protests—in other words, the greater the scale (quantity of tons extracted), the greater the absolute number of social protest will be. But a regression analysis reveals no statistically significant association between social conflicts and, for example, copper extraction at the national level. If we examine it by geographical-political area, we can find important and relevant differences between the number of protests and the scale of extraction, and some of the most extreme examples may be the regions of Arica and Parinacota and Atacama (see Figure 2). In both cases, we can see a low level of exploitation of mineral resources (copper) and high number of social protests. The exception of Arica and Parinacota might be explained by its being the region with greatest exploitation of boric acid in the country (534,071 MT) (Comisión Chilena del Cobre, 2014: p. 124). However, only one of the nine conflicts reported in the region, known as "Minera Quiborax S.A." (INDH, 2012: pp. 18–19), is directly related to the exploitation of boric acid. Atacama is also a special case because most of the conflicts arise against projects in the exploration or construction phases, which is the reason why the analysis of the extraction of minerals is not sufficient condition to understand the rise of social conflicts in this region. [24]

24. We can also observe cases of historical mobilizations. One example is the social resistance against the pollution generated in Chañaral, which for more than 30 years was recipient of 29,000 tons of copper per day of from tailings of El Salvador (CODELCO).

Figure 2. Relation between exploitation of copper (MT) and social conflicts according to region, 2011–2012

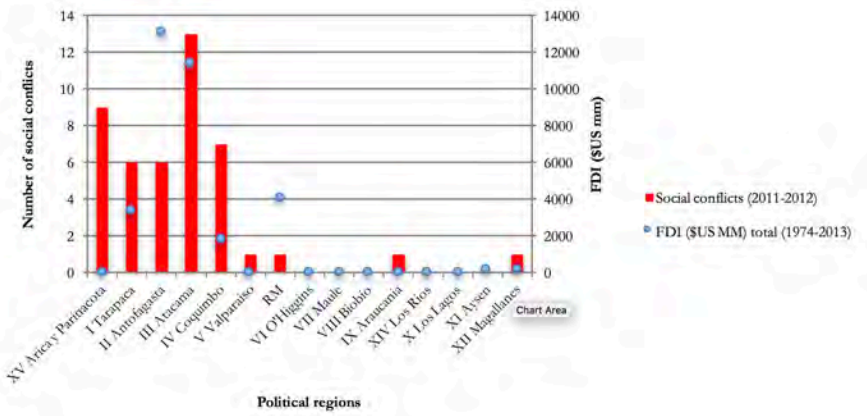


Source: Author, based on data retrieved from COCHILCO (2014a) and INDH (2012b)

B. FDI and Resistance

Regression analysis was performed to test the statistical significance of the association between FDI and social conflicts at the national level, finding a positive statistical association ($p < .05$). FDI may allow us to explain, for example, the level of resistance seen in the Atacama region (see Figure 3), in which opportunities and incentives to mobilize were often found in the effects of projects under construction (as in Pascua Lama). Specifically, residents claim that these projects affected or may affect the right to consultation (both Indigenous and environmental) and potential effects that mining projects can have on health and the access to water (INDH, 2012. pp. 62–65 and 72–77. See also: project Pascua Lama, Cerro Casale, & Caserones).

Figure 3. Relation between historical FDA ($US, millions) in mining projects and social conflicts according to region, 2011–2012



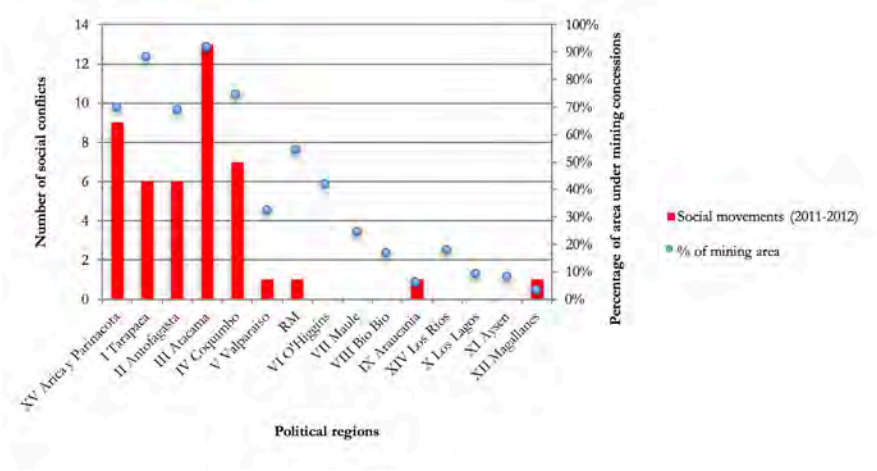
Source: Own creation based on data retrieved from COCHILCO (2014a) and INDH (2012b)

C. Political Control, Land Speculation, and Resistance

One of the main problems of the high concentration of investment in mining projects in northern Chile has to do with land speculation. The freedom to request concessions for mining exploration or exploitation, or both, as recognized in the Chilean neoliberal legal framework, has led to a market of mining and land speculation.[25] The association between the percentage of land concessions and the rise of social conflicts is statistically significant; there is a positive correlation between the mining area given for concessions and the social conflicts at the national level. When the percentage of mining area increases, the number of social conflicts also increases ($p < .001$). Also, Figure 4 shows the relation between the percentage of territory under mining concession (according to political region) and the number of social conflicts. This figure helps us to explain—to some extent—the high number of conflicts in Arica and Parinacota, where we can find low levels of exploitation but high levels of speculation, which usually result in forced displacement of communities.

25. Probably the most extreme case is the Atacama region, where 91% of the regional territory is under mining concessions.

Figure 4. Relation between mining concessions and social conflicts according to region, 2011–2012



Source: Author, based on data retrieved from Comisión Chilena del Cobre (2012) and INDH (2012b)

It should be noted that the current Chilean legal framework recognizes that mining concessions can be requested by anyone who has an interest in a specific piece of land beyond the right of ownership (individual or community) (Vergara Blanco, 2014).[26] This model of granting concessions has generated a high level of land speculation, often creating tensions over the rights to land and security of tenancy granted to individuals or communities and the rights of those possessing mining concessions over the same piece of land, thereby creating a clear conflict of interest (Ramos, 2011).

D. Networks and Resistance

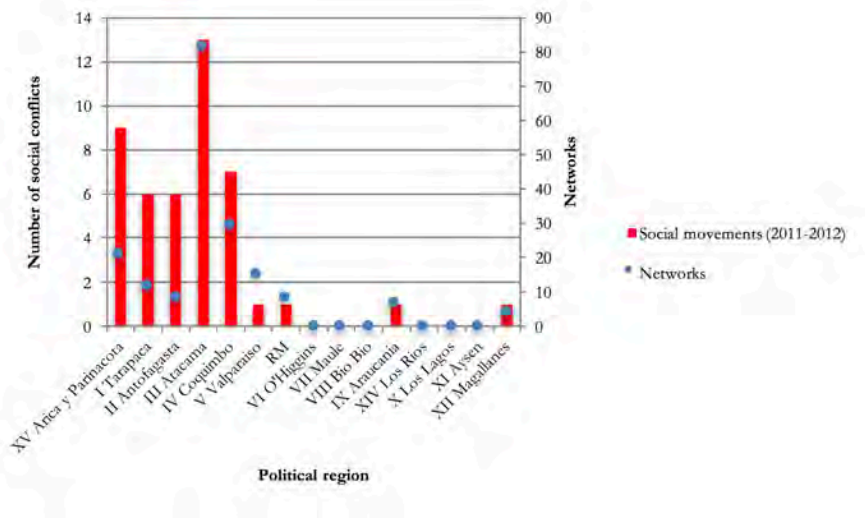
Finally, it is important to highlight the influence that local, national, and transnational networks have had in creating common discourses and a sense of solidarity within certain groups, motivating mobilization. Different theories of social movements and protest consider organizations and networks to be key elements in mobilization (Cuadra Montoya, 2014; Keck & Sikkink, 1998). There are theorists who have pointed out that in order to transform ideas and beliefs into action, constant communication among members, adherents, and the expectant public is required (McCarthy & Zald,

26. Mining concessions are given by the judicial branch, which can grant exclusive rights of exploration and exploitation (articles 10 and 11 of the Constitutional Organic Law of Mining Concessions and articles 112 and 116 of the Mining Code).

1977, p. 1223); in other words, external organizations, individuals, and groups play a role in the rise of social movements (Touraine, 1981, p. 150). To test this hypothesis, I analyzed 174 civil society organizations that supported social conflicts against mining. This analysis revealed that 83% of these organizations were formed at the local level and were not able to extend their capabilities beyond their area of involvement. The remaining 17% of the organizations participated in at least two social conflicts, creating real networks. I must highlight some transnational, national, and local organizations because of the importance, in absolute numbers, of episodes of contestation that were influenced by them. At the transnational level, organizations such as the Observatorio Latinoamericano de Conflictos Ambientales (OLCA), Oceana, and Greenpeace (which supported 15, 11, and seven conflicts, respectively); at the national level Terram Foundation (which supported the rise of seven conflicts); and at the local level, Coordinadora Aymara de Defensa de los Recursos Naturales de Arica y Parinacota and the Consejo Ecológico de Puchuncaví-Quintero (which supported six conflicts in Arica and Parinacota and five in Valparaiso, respectively). As noted previously, I argue that there is a correlation between the level and number of networks and the number of social conflicts against mining extractivism.

The regression analysis reveals a significant positive association between the number of networks and conflicts. When the number of networks increases, the number of social conflicts also increases ($p < .001$). Also, Figure 5 explains the situation in the Antofagasta region, where despite having a high rate of extraction, high rates of mining investment, and a high percentage of territory under concession, there are low levels of socioenvironmental conflict, in comparison with other regions in northern Chile. In Arica and Parinacota we also see a small number of networks and a relatively high concentration of social conflicts. However, as was already explained, the region of Arica and Parinacota has a highly cohesive network of organizations supported by the Coordinadora Aymara de Defensa de los Recursos Naturales de Arica y Parinacota and OLCA.

Figure 5: Relation between networks and social conflict according to region, 2011–2012



Source: Author, based on INDH, 2012b.

Some Final Considerations

This paper seeks to provide a descriptive analysis of socioenvironmental episodes of conflict against mining extractivism in Chile. Through the study of cases proposed by the INDH and triangulation of the macropolitical and economic data, I have observed some patterns of relation between predatory extractivism and the emergence of social conflict. However, these outcomes are not the unique condition necessary for the development of socioenvironmental conflicts. I consider that the maintenance of neoliberal policies of exploitation of natural resources have generated clear incentives for social mobilization. The opportunity to resist comes from the normative framework of human rights protection and the clear tension that it causes when analyzed in the light of the country's extractive policies. I consider that the macroeconomic and political incentives as well as the opportunities for mobilization against mining extractivism are not sufficient to explain the mobilization. To understand the rise of socioenvironmental conflicts, we need to analyze the capacity provided by individuals or organizations that generates solidarity and cohesion, allowing mobilization.

Finally, it must be recognized that the intention of this paper is to be just a first photograph describing broadly the emergence of socioenvironmental

conflict in the country and one that could be used in and complemented by further research (such as case study research) that may help to broaden the understanding of socioenvironmental conflict in Chile.

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