
This is the **accepted version** of the journal article:

Urkidi, Leire; Walter, Mariana. «Dimensions of environmental justice in anti-gold mining movements in Latin-America». *Geoforum*, Vol. 42, Issue 6 (November 2011), p. 683-695. DOI 10.1016/j.geoforum.2011.06.003

This version is available at <https://ddd.uab.cat/record/271510>

under the terms of the  license

Accepted version

Urkidi, L., **Walter, M.** (2011). Dimensions of Environmental Justice in Anti-gold mining movements in Latin-America. *Geoforum* 42 (2011), pp. 683-695. <https://doi.org/10.1016/j.geoforum.2011.06.003>

Dimensions of Environmental Justice in anti-gold mining movements in Latin America.

Authors; Leire Urkidi, Mariana Walter

Abstract

The present article examines two Latin American gold mining conflicts, one in the city of Esquel (Patagonia in Argentina) and the other in Pascua-Lama (Chilean border with Argentina). We identify the emergence of three dimensions of environmental justice (distribution, recognition, participation) in the anti-mining movements of these two cases. The study finds that some dimensions of justice appear first (participation and recognition), while distributive demands emerge later, as movements *jump scales* engaging with national and international networks that provided a systemic perspective of the conflicts. Findings agree with other studies that refer to environmental justice as multi-scalar and context related. We also point to the relevance of studying decision-making procedures and *jumping scales* for understanding how environmental justice claims are framed in resource extraction conflicts.

Key words: Environmental justice; resource extraction conflicts; participation; recognition; jumping scales.

Introduction

From 1990 to 2001, 12 of the world's 25 largest investments in mining were made in Latin America: two in Peru, nine in Chile and one in Argentina (Bridge, 2004). In fact, according to the 7th International Gold Symposium (May 2008, Lima) 'Latin America is the region where most gold prospecting took place in the world in the 1990s and 2000s, and this is set to continue'. This is partly due to the strict environmental and labour regulations in Canada and the US, and the political instability in the former Soviet Union, Asia and Africa (Butterman and Amey, 2005). Furthermore, regulatory reforms promoting mining undertaken in Latin America since the 1990s, added to skyrocketing ore prices and new technologies are fostering this shift of the international geography of mining investment towards Latin America (Bridge, 2004). In the particular case of Chile and Argentina, a bi-national agreement on mining was signed in 1997, opening up the borderer Andes to large-scale transnational mining.

According to the Environmental Protection Agency of the United States, hard-rock mining generates more toxic waste than any other economic sector. In 2008, mining activities emitted 80% of the arsenic, 89% of the mercury and 86% of the lead released in the US (EPA, 2009). Since the 1990s, more efficient although risky technologies (i.e. cyanide leaching in gold mining) made technically feasible and profitable the exploitation of low grade ore deposits. Such technologies, however, imply high environmental and social impacts (Moran, 2002) and greater environmental impacts per unit of gold (Mudd,

2007).

Mining activities have generated environmental conflicts all around the world (Martinez-Alier, 2001). The Latin American Observatory of Mining Conflicts¹ reports more than 150 active mining conflicts in the region, most of which started in the 2000s (OCMAL, 2010). Conspicuous human rights violations have taken and still take place in many communities opposing mining projects, as exemplified by the murder of activists like Godofredo García Baca (Tambogrande, Peru, March 2001), the recent murders of Mariano Abarca Roblero and Betty Cariño in Mexico (Chiapas and Oaxaca, November 2009 and April 2010), the tortures suffered by peasants in the Peruvian Rio Blanco mining project in 2005 (Red Muqui, 2009), or the repression suffered by Guatemalan peasants in Sololá in 2005 (Castagnino, 2006). As a response to mining projects, dozens of communities are mobilizing and conducting popular referendums or consultations about mining (OCMAL, 2010). Just in Guatemala, more than 40 municipalities organized referendums rejecting mining projects –in line with ILO Convention 169 on indigenous people’s rights– (Prensa Libre, various dates). Tambogrande (Peru, 2002) and Esquel (Argentina, 2003) are emblematic cases as their vote led to the cancellation of the mining projects.

As mining conflicts multiply in the region, scholarly research on anti-mining movements is expanding. Studies address a diversity of issues, which include the institutional frameworks (decision-making processes, participatory inclusions and exclusions, and regulatory schemes) and territorial transformations fostered by these movements, their strategies and demands, the constructions of narratives across scales and the valuation

¹ An Observatory composed of more than 40 active Latin American organizations. Its aim is to defend communities affected by mining impacts by disseminating and exchanging information, supporting local and regional campaigns and articulating activities. OCMAL website (www.conflictosmineros.net) has a database on current mining conflicts in Latin America .

languages deployed (Bebbington et al., 2008, Bury, 2005, De Echave et al., 2009, Haarstad and Floysand, 2007, Muradian et al. 2003, Svampa and Antonelli, 2009, Walter and Martinez-Alier, 2010). During the last decades national and regional environmental justice networks have emerged in Latin America (Acsehrad, 2008, Carruthers, 2008) where mining concerns and anti-mining movements have a central place. However, little research has explicitly focused on how environmental justice -EJ- dimensions and demands are framed and articulated in Latin American mining conflicts (Carruthers, 2008, Matinez-Alier, 2001, Pulido, 1996).

In this vein, the present article studies the connections between Latin American anti-mining movements and the environmental justice framework. Our approach addresses two research needs. Firstly, it improves our understanding of how the EJ discursive framework travels and is framed by activists in Latin America (Holifield et al., 2009, Swyngedouw and Cook, 2009, Walker, 2009). Secondly, although research has pointed to the plurality of the environmental justice movement –EJM- discursive framework (Benford, 2005) and on the distributive dimensions of injustice (Schlosberg, 2007), little is known regarding how EJ claims are shaped over time and across scales and which are the key factors leading this process (Benford, 2005, Holifield et al., 2009). In this line, the paper analyses two well-known Latin American mining conflicts, one in Pascua Lama (Chile) and the second in Esquel (Argentina) in order to analyse the emergence and deployment of the movements and their demands over time and across scales.

In line with Schlosberg (2007), the article concludes that in both case studies participation, recognition and distributional concerns are expressed in intertwined ways. The analysis of the evolution of discourses in each case also highlights the transformations of the relative relevance of each EJ dimension over time. At the onset of the conflicts, when the official participatory process is set in place, the dominant claims

refer to participation and recognition. Later, as activists engage in supra-local networks with other communities and organisations, and in national and international advocacy activities, a *jumping scale* process occurs where distributive claims are emphasized. We suggest that the dimensions of environmental justice must be analysed in relation to the temporal evolution of conflicts, the decision-making procedures and the jumping scales that take place.

1. Environmental Justice

Most Scholars agree that the environmental justice concept was born in 1982 when rural poor, mostly African-American of Warren County (North Carolina, US) mobilized to oppose a PCB landfill next to their homes² (Bullard, 1993, Schlosberg, 2007). Although the Warren County story had no positive resolution for the local activists, their experience marked the emergence of a new type of movement where environment, anti-racism and civil rights concerns were brought together (Bullard, 1990, Pulido, 1996). The following years, the Environmental Justice movement expanded to include Hispanic, Native American and *poor white* groups (Roberts, 2007).

As governmental reports denounced and confirmed the uneven exposure of minorities to toxics and polluting activities (Toxic waste and race, 1987) the EJ concept gained acceptance and legitimacy among scholars (Bullard, 1993, 1996, Melosi, 2004) and politicians. Research that emerged during this period focused on the distributional dimension of injustice. Quantitative methods were used to study the spatial and social distribution of injustices (Walker and Bulkeley, 2009). A strong body of evidence

² The antitoxics US movement started with previous episodes of resistance to toxic waste dumping, such as the case of Love Canal in 1978. Among other EJM precedents, the Highlander Centre of Tennessee has a long history of activism which includes campaigns against strip mining in the Appalachian Mountains beginning in the 1970s.

revealed that people of colour and other minorities were subjected to disproportionately larger health and environmental risks in their neighbourhoods and jobs (Bryant and Mohai, 1992, Bullard, 1990).

Research dedicated to the study of mining activities from a spatial and economic distribution perspective indicates two trends. Firstly, it underlines that there is a global displacement of investments from the global North towards the global South (Bridge, 2004). Currently, Latin America concentrates a quarter of all investment in metals' exploration (ECLAC, 2008). Argentina and Chile, where our case studies are placed, are among the main mining attractors of the region (Fraser Institute, 2007). The literature points to a negative effect of oil, gas and mineral dependence on national economic growth and poverty levels in the form of the so-called 'resource curse' (Pegg, 2006, Sachs and Warner, 1995). Secondly, studies also show the environmental, economic and social negative impacts of mining activities, questioning the long-term positive balance at the local level (Pegg, 2006). These studies challenge the arguments made by the mining industry and the World Bank, as well as other International Financial Institutions policies that promote mining in poor countries as a source of development and poverty alleviation (ICMM, 2006).

However, to reduce the analysis of environmental justice to the distributional outcome can be a double-edged approach where, depending on the scale of analysis, opposite conclusions can be drawn. As analysed by Bickerstaff and Agyeman (2009), a ship-breaking company succeeded to locate a facility in a UK coast village by appealing to a global distributive justice. Most of these highly polluting facilities are located in poor Asian areas. This argument delegitimized the claims of local inhabitants that framed their campaign as a national distributive injustice and participative exclusion given their long history of industrial pollution and marginalization. This case illustrates the peril of having

distributive arguments shadowing other environmental justice legitimate concerns, such as the right to participate in decisions affecting your livelihood, or to have your civil or human rights respected. To avoid reductionist approaches, a broader analysis that considers the structures and procedures generating injustices is needed.

During the past four decades of political theory research, social justice has been defined almost exclusively as a question of equity in the distribution of social goods and ‘bads’ (Schlosberg, 2007) However, when analysing closely EJM, definitions of justice also include a wide range of power, gender, identity, cultural and institutional concerns. This diversity of perspectives and framings has inspired and expanded the scholarly research agenda (Schlosberg, 2007). The process has also fostered the use of qualitative research methods, better suited to grasp this complexity (Holifield et al., 2009). Nevertheless, some authors still defend the need for a universal definition of EJ grounded on distributional evidence (Schroeder et al., 2008). They argue that a broader definition would weaken the concept’s explanatory force. However, we consider that a narrow distributive approach obscures the multiple facets and nuances of EJM demands, and that the “injustice perceptions and justice demands are constructed through relative, scale-sensitive political and discursive processes” (Debbané and Keil, 2004). In order to take into account the heterogeneous claims of EJM and recent EJ studies, Schlosberg's (2007) review identifies three main dimensions of environmental justice: distribution, recognition and participation (or procedural justice).

Recognition and Participation in EJ

Iris Young (1990) argued that although distributional matters are crucial to achieve justice, it would be a mistake to reduce social justice to those issues. The distributive paradigm tends to centre the social justice analysis in the allocation of material goods,

like resources, income and wealth, or in the distribution of social standing. This perspective neglects the relevance of the social structure and the institutional context in the models of distribution. Young stresses the significance of power, decision making procedures, division of labor, and culture. These aspects are relations of different nature. According to this perspective, justice must also concern the processes that construct the material *maldistribution* (Honneth, 2001, Walzer, 1983, Young, 1990).

In this direction, some scholars highlight ‘recognition’ as a key dimension of justice (Schlosberg, 2007, Young, 1990, Honneth, 2001, Fraser 1998). According to Fraser (1995), while the ‘redistribution’ concept is tied to a vision of justice which aims to achieve social equality through a redistribution of the material necessities for an existence as free subjects, in the case of ‘recognition’ the conditions for a just society are defined as the recognition of the personal dignity of all individuals. Recognition not only refers to the individual right for self-recognition (Honneth, 2001), but most importantly, the recognition of collective identities and their particular needs, concerns and livelihoods.

Recognition is particularly relevant to indigenous communities. For years, these groups have demanded for the recognition and protection of their culture, livelihood and territorial rights. They have obtained national and international legal safeguards due to their vulnerability and historical discrimination. Although signatory countries do not always respect it, the 169 ILO Convention obliged signing countries (e.g. Chile, Argentina) to consult indigenous communities before deciding on activities affecting them. As pointed by some authors (Kirsch, 2007, Valdivia, 2005), indigenous communities have succeeded to influence national and international agendas by focusing on defining their *indigeneity*, emphasising historical grievances and demanding for recognition. Decision-making processes, however, usually do not take indigenous

communities truly into account, forcing them to engage in procedural disputes to defend their rights (Baker and McLelland, 2003).

Procedural justice is a third dimension of environmental justice, and refers to the fair and equitable institutional processes of a State. Here, justice requires not just an understanding of unjust distribution patterns and the lack of recognition, but, importantly, of the ways in which the two are tied together in political and social processes (Cole and Foster, 2001, Schlosberg, 2007). When “patterns of disrespect and disesteem are institutionalized” (Fraser, 1998), participatory inequities or exclusions (Agarwal, 2001) appear in institutions and decision-making processes. Cole and Foster (2001) highlight that even if an EJM could start as a reaction to a certain unjust distributional trends, activists sometimes complain against their exclusion and marginalization from official decision-making processes. Activists also point to the structural forces (class, caste, ethnicity and gender) that prevent individuals from fully participating in decisions that affect their lives.

Since the 1990s, Latin American countries have included and expanded participation and environmental regulations and rights through, for example, environmental impact assessment mechanisms. The adoption of participation criteria for project approval has fostered the interest and involvement of affected groups in decision-making processes. However, in many mining conflicts, participatory procedures have often proven insufficient or inadequate for taking into account local views and concerns and have led to disputes about the decision-making processes (Muradian et al., 2003, Suryanata and Umemoto, 2005, Walter and Martinez-Alier, 2010). Mining is often perceived by rural communities as incompatible with a livelihood based on agriculture (Haarstad and Floysand 2007, Muradian et al. 2003, Urkidi, 2010). Anti-mining groups frequently argue that the approval of mining projects implies the misrecognition of their material and cultural dependence on agriculture and ignores the concerns expressed in participatory

stages. Bebbington et al. (2008) and Bury (2008) highlight the territorial and institutional changes related to mining activities (e.g. changes on land distribution and prices, social relations, livelihoods, local organizations); issues that are usually minimized in the official decision making. Baker and McLelland (2003) suggest that mining decisions fail to take into consideration the values and beliefs of indigenous communities. As claimed by Arnstein (1969) different levels of participation are related to different degrees of recognition.

Politics of scale in EJ

It has been argued that a “politics of scale” approach allows a better understanding of EJ and EJM arguments and outcomes. In fact, as stated by Kurtz (2003: 891) “the very concept of environmental injustice precipitates a politics of scale”. Some authors examine the multiple ways in which environmental justice activists invoke geographical scales to negotiate the meaning and extent of environmental injustices (Williams, 1999, Towers, 2000, Kurtz, 2003). Kurtz (2003) conceptualizes “scale frames” as the discursive practices which link “scales of meaning” and “scales of regulation”. While the “scales of meaning” are the scales at which a problem is experienced and framed in political discourse, “scales of regulation” refers to the scale at which the problem is politically addressed (Towers, 2000). Following Kurtz argument, Bickerstaff and Agyeman (2009) argue that the success of EJM is tied to their capacity to adjust their scale of meaning with the relevant scale of regulation.

In relation to Latin American mining conflicts, Haarstad and Floysand (2007) study how, in Tambogrande (Peru), the ability of the social movement to articulate and re-frame claims in legitimated terms at different scales empowered the community. They study the links between scaling-up processes (Smith, 1993, 1996) and discourse framing. Williams

(1999) suggests that one of the key features of the US EJM was their capacity to jump across scales and accurately frame their struggles. Movements scale up or *jump scales* when they successfully engage in networks with social actors from different geographical locations and/or appeal to supra-local regulatory institutions.

This paper studies how the different dimensions of EJ (distribution, recognition and participation) are articulated by anti-mining movements at different scales and at different stages of the conflicts. We conclude that the jumping scales play a key role in the framing and reframing of EJ claims, and foster the use of some EJ dimensions over others by local communities.

Environmental Justice Movements in Latin America

As in many most Latin American countries, the Chilean and Argentinean economic development growth has been built over a strategy of commodity extraction and export. This has led to an accumulation of environmental liabilities in terms of deforestation, contamination and land degradation. According to many Chilean authors, those liabilities and the dissemination of global environmental concerns are the origin of the emergence of the Chilean environmentalism in the 1990s (Sabatini, 1997, Sabatini and Sepulveda, 1997, Padilla, 2000). In the 1960s and the 1970s, small conservationist groups were formed and in the 1980s environmental scientists and activists emerged in a time of opposition to the dictatorship. It was in 1989, returning to the civilian rule that the 'First National Meeting of Environmental Action Organisations' took place in Chile (Carruthers, 2001). According to Folchi (2001), there are many conflicts related to the environment in Chile's History. However, it was in the 1990s that some struggles started to be named 'environmental conflicts': the conflict around a timber project in Chiloe in 1993, the waste-disposal conflicts in Santiago since 1993, the criticisms to Escondida

cooper mine since 1989, the conflict around Ralco hydropower-plant in Mapuche territory in 1996, or the Mapuche conflicts with timber companies since the early 1990s (Sabatini, 1997, Carruthers and Rodriguez, 2010). In Argentina, small environmental groups emerged during the dictatorship in the 1970s, but it was after the end of this period that such groups started to multiply and expand. In 1984, the first national conference of environmental groups was organized in Argentina and the environmentalist journal “Mutantia” started to be published disseminating environmental views (Maiwaring and Viola 1985, in Wagner 2010). As we will expand later on in this section, the first environmental conflicts of Argentina started to shape in the early 1980s in la Patagonia in opposition to the location of a nuclear repository.

During the last decades, claims for EJ have moved beyond the borders of the US. The spatial, cultural and institutional context in which environmental justice claims are being made are globalizing including movements in Latin America, Europe, Africa, Asia and Australasia (Holifield et al., 2009, Sholsberg, 2007).

Through the analysis of the emergence of EJM in Latin America we highlight three elements, firstly, the novelty of the formation of these movements, secondly, the redefinition of EJ and its incorporation of new concerns and actors, and thirdly, their articulation with a long tradition of human rights and social justice activism in the region.

The first formal EJ network in Latin America was born in 2001 in Brazil, a country with a large population of indigenous and people of colour. This was possibly the first time the term “environmental justice” was explicitly used by Latin American social movements. A few years before, in 1998, representatives from different US EJM networks visited the country to disseminate their experience and to establish bonds with local organizations. These meetings triggered a process of local appropriation and framing of EJ, widening

the scope to other social groups (e.g. indigenous, peasants, urban poor), to procedural and participative issues, to resource access rights and to the recognition and empowerment of social movements and their alternative development models (Acsehrad, 2008). In March 2007, a regional meeting on Environmental Justice and Mining took place in Oruro, Bolivia, in which the relation between mining activities and environmental injustice was stressed (CEPA/OCMAL, 2008).

In 2006, the second EJ network of Latin America is formed in Chile. According to Carruthers and Rodriguez (2009), three Chilean organizations played a key role introducing social and economic injustice dimensions in environmental claims in Chile: the Institute of Political Ecology (Instituto de Ecología Política, IEP), the Latin American Observatory of Environmental Conflicts (Observatorio Latinoamericano de Conflictos Ambientales, OLCA) and the Ecological Action Network (Red Nacional de Acción Ecológica, RENACE). The work of the Mexican scholar Enrique Leff (2001) was also very influential in Latin America (Carruthers, 2008). In 2004, OLCA issued a declaration entitled “Environmental Justice, an inalienable right”, which stated that “if we observed a map of the environmental degradation of Chile, this would mainly match with the map of poverty”. Although the declaration stressed the unequal distribution of environmental impacts in poor communities, it also signalled issues of participation, democracy and indigenous rights (OLCA, 2004).

In 2005, the Citizen Action Network for Environmental Rights (Red de Acción por los derechos ambientales, RADA) was founded in Temuco, to deal with projects impacting Mapuche territories. The defence of human rights was a key element in the formation of this network. In November 2006, a large group of Chilean organizations met in Santiago to create the inter-regional³ Network of Action for Environmental and Social Justice (Red

³ The network uses the term “Inter-regional” instead of National to stress the decentralized structure.

de Acción por la Justicia Ambiental, RAJAS) aimed at “resisting and mobilizing against plunder”, alluding to past colonial abuses. The group was concerned with the impacts and injustices of large-scale mines, plantations, hydropower plants, and other industries mainly driven by transnational corporations and IFIs.

In Argentina, there is still no network explicitly defining itself as an EJ network. However, EJ concerns are deeply-rooted in environmental organizations and networks claims (e.g. Renace, Unión de Asambleas Ciudadanas). As asserted by Reboratti (2008), the Argentinean discourse of environmental conflicts constitutes an “informal” EJ framework. In fact, Argentinean activists and scholars are increasingly using the term “socio-environmental conflicts”, highlighting the relation between environmental problems, social equity and human rights.

In Argentina, some authors tend to restrict environmental concerns to urban middle-class spheres (Maiwaring and Viola, 1985, Reboratti, 2008), however in 1986, two years after the reestablishment of democracy a significant environmental conflict with international echo took place in Patagonia. A regional and national movement successfully opposed the installation of a nuclear repository in Gastre, in what was arguably the first expression of the lively environmental activism in Patagonia (Chiappe, 2004). Since the 2000s, coinciding with a period of political and economic crisis, social mobilization and the emergence of two iconic environmental conflicts (mining and Uruguay River pulp-mills conflicts), environmental movements expanded gaining public legitimacy and support. In 2006, the “Unión de Asambleas Ciudadanas” (Coalition of Citizen Assemblies) was formed with the aim “to articulate and empower the different local fights” and to “defend the common goods, the health and the self-determination of the peoples seriously endangered by plunder and the contamination that the expansion of different economic activities leave in their way” (...) “with the conviction that local consultations and the self-determination

of our communities is the only way to reach a sustainable regional model, respectful of ecosystems, of regional economies and cultures and local identities”.⁴

The emergence of the EJ framework in Latin America did not result from the simple translation of the US-specific definition (Holifield et al., 2009). In fact, as pointed by Debbané and Keil (2004), EJMs are always situated in contingent, multiscalar and often quite different political, social and economic contexts. In those contexts, calls for justice are frequently based on localised perceptions. The Latin American interpretation of EJ is a hybrid fusion of imported notions and local, indigenous experiences. In this line, human rights struggles have tremendous salience for Latin Americans⁵, with decades of authoritarianism looming large in their recent pasts (Carruthers, 2008). Since the 1990s human rights activism and regulations have increasingly incorporated “environmental rights” (Adeola, 2000, Leff, 2001). The combination of human rights and social justice tradition, environmental concerns, and the experiences of mobilised communities contributed to the development of a (more or less explicit) EJ framework in Chile and Argentina. In the region, Environmental Justice is an emerging notion that incorporates the historical development of a culture of rights and movements that seek to expand the meaning of human, social, economic, political, cultural and environmental rights (Acsehrad, 2008).

2. Methods

Pascua-Lama (Chile) and Esquel (Argentina) are both recent Latin American mining conflicts that linked, for the first time in their countries, mining issues and environmental

⁴ www.asambleasciudadanas.org.ar

⁵ Argentina has one of the most internationally known human rights movements of Latin America: the mothers of plaza de mayo. Since the 2000s, their members are frequently active in Argentinean environmental conflicts, as supporters, observers, etc. Adolfo Perez Esquivel (Peace Nobel Prize, 1980) is also a usual supporter of environmental movements.

justice concerns. These local conflicts fostered the first national debates on the environmental injustices of mining in Argentina and Chile. A process that culminated in the formation of two national networks that framed mining conflicts in environmental justice terms: the RAJAS (Network for Environmental and Social Justice Action) in Chile and the National Network of communities affected by mining in Argentina, Both cases started at the beginning of the 2000s and are emblematic environmental conflicts at the national and international level (Svampa and Antonelli, 2009, Urkidi, 2010, Walter and Martinez-Alier, 2010).

The analysis of the two case studies follows a similar methodology, and draws from diverse sources of information. Firstly, we did an institutional analysis (mapping of actors and organizations, laws and regulations) and reviewed secondary sources such as Environmental Impact Studies (EIS), press releases, leaflets, newspaper articles, NGO and academic publications. During a second stage, field work used participant observation techniques (living in the community, taking part in assemblies, local activities and rallies) (Jorgensen, 1989) and in-depth interviews with key actors (Glaser and Strauss, 1967). In the PL case field work took place from November 2006 to March 2007. In Esquel, field work was divided in two parts: the first one, from February to March 2003, the second in March and April 2006.

Interviews were conducted in PL and Esquel, 21 and 15 respectively. Semi-structured interviews lasted an average of 1 hour 15 minutes and explored the history of the conflict, the emergence and development of the local movement and its claims. The recorded interviews were then transcribed and analysed. Content analysis was also performed on key documents (e.g. public statements) elaborated by actors during the conflict, which allowed to study the chronological evolution of the discourse. The analysis permitted the reconstruction of the history of the conflicts, the power structures and the narratives of

the environmental movements.

[Figure 1 here]

Figure 1: Esquel and the Pascua-Lama.

3. Dimensions of Environmental Justice in PL and Esquel gold mining conflicts

This section analyses and discusses the results of PL and Esquel case studies. Both cases are contextualized and developed separately.

3.1 The Pascua-Lama project and the Huasco Valley

The Chilean case study concerns the conflict around the Pascua-Lama bi-national mining project, located in the Andes Mountains in the border with Argentina. This is the second largest gold mine deposit of Latin America. The Canadian company Barrick Gold, owner of the mine, is the biggest gold mining company in the world in terms of reserves and resources and production/year (Mining and Resource Company Investment Research Tool, 2009). The estimated investment is 3,000 million US\$ and, as in the second case study, it would be an open-pit project using cyanide leaching for its ore recovery process. Table 1 presents the main features of PL and Esquel mining conflicts and projects. PL mine was environmentally approved in Chile and Argentina in 2006, but its construction did not start officially until October 2009. Production is scheduled to begin in 2013. According to Barrick (2009), the construction was delayed due to administrative and legal problems, such as the division of taxes between Chile and Argentina.

[Table 1 here]

Table 1: Main features of Esquel and Pascua Lama conflicts.

Geographically, the mine is located close to three mountain glaciers, at more than 4,500 metres of altitude and close to the water sources of the Huasco Valley in Chile (Villagrán, 2006). This basin is adjacent to one of the world's driest deserts, Atacama. Huasco's runoff depends on mountain snows and on glacier thaw, which represents the main water source during long periods of drought. This research focuses on the Huasco Valley (66,491 inhabitants)⁶ and in the rural municipality of Alto del Carmen (4,840 inhabitants), the nearest area to the project.

The major economic activity in the area is agriculture, mainly grape production for export. Some agricultural lands are still worked for subsistence farming and goat herding. The Diaguita ethnic group resides in the Alto del Carmen territories, and in other municipalities of the province, and represents about 20% of the population of the municipality of Alto del Carmen (Ley Indígena, 2006).

Emerging claims on recognition and participation

In 2000, the first Environmental Impact Study (EIS) for the Pascua-Lama project was presented by Barrick Gold. The impact of the project in the three mountain glaciers was not examined in this EIS. This omission fostered concerns in the Huasco Valley, because those glaciers are key water sources for the basin. Scepticism about the project came from religious, farming and political sectors in Alto del Carmen rural community.

The first EIS was approved by Chilean environmental authorities (CONAMA), but in 2004 Barrick presented a new EIS with an enlargement of the project. Although participatory activities to present and discuss the EIS with the affected communities are not mandatory in the Chilean regulation, the mining company proposed a "citizen

⁶ Vallenar, the capital of the valley, has 48,040 inhabitants.

participation process”. Small meetings and dissemination events were organized (EIS, 2004). The Chilean legislation only requires that the company publishes an extract of the EIS in official gazettes and regional or national newspapers (Ley de Bases del Medio Ambiente, 1994). After its publication, the affected population has 60 days to review the EIS (accessible to the public in governmental offices) and present founded objections. In the final decision of approval/rejection, the CONAMA must take into account concerns and respond to the appellants. However, even if appellants can demand further consideration of their requests, their opinions are non-binding and have no veto power on the official resolution. In Pascua-Lama some appellants argued that they had difficulties to read the EIS as it was very long and technical and that in many cases they did not have the knowledge and resources to present proper allegations. Moreover, they felt frustrated because although they received responses on their opinions, they were not taken into account in the final decision. As stated by a woman activist of Alto del Carmen, trust in the process started to erode: “The public participation was not transparent on the part of the company. Although they presented the Environmental Impact Study, the time for answering was too short and it is a lot of information that you have to check”⁷ (December 2006).

The EIS assessment process brought together people concerned with the mining project. While preparing objections to the EIS, two organizations were formed. They differed in geographical location and social composition. The first, Alto del Carmen Defence Coordination (Coordinadora de Defensa de Alto del Carmen), was founded by a local catholic organization (Pastoral Salvaguarda de la Creación⁸), local social leaders, small farmers and peasants of Alto del Carmen in order to defend water and life against mining.

⁷ Original quote: “Igual que el tema de participación ciudadana, no fue, digamos, algo transparente por parte de la empresa porque ellos, si bien es cierto presentaron el estudio de impacto ambiental, el tiempo para responder fue demasiado corto y es mucha información que ver”

⁸ Creation Safeguard Catholic Pastoral.

The second, the Defence Committee of Vallenar (Comité de Defensa de Vallenar, of the capital city of the province) gathered provincial politicians, professionals and environmental activists from this city. OLCA, a Chilean organization with longstanding experience in advising local movements facing environmental conflicts, and other NGOs from Santiago (capital city of Chile) supported both groups with information about the legal, environmental and political implications of the project. The key goal of local organizations was the defence of water and glaciers threatened by the project, and central to the local livelihood. Indeed, agriculture is the basis of the valley's economy, the main source of income and in some cases the direct mean of subsistence of local population.

“Water is for us the main raw material, since we live from farming (...) How are we going to live if they pollute our water? What are we going to live on? What are this poor people going to live on if they live on a peach or orange tree?” (Small farmer, Alto del Carmen, January 2007).

Agriculture was also defended as a cultural good, structuring daily activities, family, community and inter-community relationships, and festivals among other cultural expressions. The inhabitants of Alto del Carmen described their life as calm, natural and full of peaceful and close social relationships, rooted in the farming activities. As expressed by a town councillor and farmer of Alto del Carmen, they saw mining and their material and cultural subsistence as incompatible: “mining is death, agriculture is life” (town councillor and small farmer, Alto del Carmen, January 2007). The sectors critical to mining argued that the mining project and its impacts were excluding and denying a certain livelihood and identity attached to agriculture and water resources. The EIS formal procedure fostered the construction of participatory demands, but recognition concerns related to livelihood needs were central for Huasco local inhabitants.

The Diaguita indigenous community saw the mining project as a risk for their collective property rights and for their cultural survival and also presented appeals to the EIS. However, they did not take part in the emergent anti-PL organisations. This is because they had their own political strategy to fight the project. They went to the courts and claimed that Barrick and its subsidiaries had illegally obtained the communal lands of the Huasco-Altino Agricultural Community⁹ (Comunidad Agrícola de los Huasco-Altino, Diaguita organization). They contacted organisations and lawyers from Santiago specialized on indigenous rights (Jose Aylwin and Nancy Yañez) and prosecuted the company for the land dispossession (interview with Diaguita leader, February 2007) . In fact, since the 1990s, Diaguita people are litigating for recognition as an indigenous group with ancestral territorial rights¹⁰ (Molina, 2007, Yañez and Aylwin, 2007).

They also sued the Chilean State in the Inter-American Commission on Human Rights IACHR (suit filed in 2007 and accepted for treatment in 2010) for failing to respect their right of free and informed consent, for not considering the socioeconomic impact of the project on their traditional land-uses, and for not taking into account the cultural impacts in the EIS assessment process. The Diaguitas saw mining as the last step in the colonization process that had been destroying their territory and cultural identity for centuries (Yañez and Rea, 2006).

“The indigenous territorial rights are not only about land. They are also about rights over rivers, lakes and water, as defended by our ancestors (...), water is life (...). And there are also rights over the underground. The knowledge, the identity, and the feeling of belonging are the base of our existence. All these are human rights. In short, this is a call

⁹ The Huasco–Altino Agricultural Community is the Diaguita organisation which holds the ownership rights of the communal lands, which currently span an area of 390,000 ha.

¹⁰ The Huasco-Altino Diaguita got the legal property rights of the communal lands in the beginning of the 20th century. However, they claim that 45% of these lands have been misappropriated and now belong to private owners (Molina, 2007, Yañez and Aylwin, 2007).

for life.” (Letter to Barrick Gold by the Diaguita Huasco-Altino Agricultural Community, November 2006).

While non-indigenous organisations focused on the public dissemination of mining impacts, the Diaguita Agricultural Community appealed to the legal system to reclaim their property and protect their rights. The different strategies deployed by these two groups made it difficult to coordinate a shared agenda. The common work between these movements was restricted to public demonstrations (in Alto del Carmen, Vallenar and Santiago). Only at the beginning of the conflict they participated in common meetings, assemblies and networks. For instance, in May 2008, coinciding with a shareholders’ meeting of Barrick, the anti-Pascua-Lama Coordination of Santiago organised a protest in the Chilean capital city with the participation of spokesmen from Alto del Carmen Defence Committee. The following year, and at the same event, a representative of the Diaguita Agricultural Community and of an indigenous community of Papua New Guinea travelled to Toronto to explain to the shareholders the impact of Barrick on their indigenous communities. This example illustrates how the two movements deployed different actions with different national and international allies albeit in the same demonstration. These strategic differences did not create explicit conflicts in the Valley, but certain disagreements. The non-indigenous anti-mining groups felt that the Diaguitas were not engaging in a bottom-up deliberation process and were following an overly narrow approach. As stated by a women activist and shopkeeper of Alto del Carmen:

“I think that the [diaguita] huascoalinean leader has focused too much in litigation and has left the community aside. We need a lot of work on information”. (Woman activist, shop manager, Alto del Carmen, December 2006).

In 2004, Barrick Gold launched a local campaign in an attempt to improve its public image. A wide range of activities were conducted by the company: from door to door interviews to agreements with local bodies (data from interviews, January 2007). Barrick started economic, infrastructure, education and health projects¹¹ in the Valley. In 2005, Barrick settled an agreement with one of the most influential local opponents to PL: the Huasco Oversight Board (Junta de Vigilancia del Huasco¹²), which divided the local opposition movement. Even if this actor was not part of the local organizations against the mining its opposition had being politically relevant.

Barrick also fostered the inclusion of some Diaguita groups in local development projects (e.g. handcraft). As studied by Kirsch (2007) in Papua New Guinea, indigenous groups were not homogenously positioned. Although the Huasco-Altino Agricultural Community represented a great part of the indigenous population, other Diaguita groups in the Valley did support the mining project. The practical and legal implications of recognising the Diaguitas' cultural and territorial rights pushed the recognition debate in the public arena. As the following quote explains, the definition of what it means to be a Diaguita was also a disputed matter in the conflict:

“The company has brought in professionals from other parts of the country to conduct workshops on the ‘traditional’ Diaguita crafts, essentially inventing a nonexistent Diaguita culture and denying the ethnicity of our community. They have raised false leaders, who are now attending meetings with the company and the media, discrediting the real leaders of the community and creating irreconcilable divisions between

¹¹ For example, since 2005, Barrick has launched the Productive Development Fund to support small and medium enterprises in Vallenar; in January 2009, it began a social work project in Vallenar with the Iván Zamorano foundation (www.barrick.com).

¹² The Huasco Oversight Board -Junta de Vigilancia del Huasco- manages the water resources of the Huasco basin and is formed by the biggest farmers of the valley. They received 60 million US\$ in exchange for agreeing not to oppose the project publicly.

community members and their neighbours. All these actions have led to confusion and they have weakened the identity of the Diaguita Huascoalinos.” (Letter to Canadian parliament by the Diaguita Huasco-Altino Agricultural Community, May 2009).

Jumping-scales and distributional claims

Barrick’s local campaign became a handicap for local anti-mining activists, in addition to the problems posed by municipal governments and other local institutions, which openly received mining funds (e.g. school computers, public buildings). Local anti-mining activists also alleged verbal and anonymous threats (e.g. phone calls, loose screws of car wheels), that were increasing their feeling of despair. Accordingly, in order to make their case gain public recognition and change the power balance, they appealed to national and international networks. OLCA became the stable bridge linking Alto del Carmen Defence Coordination and Vallenar Defence Committee with supra-local allies. The political strategy focused on national and international campaigning against PL and Barrick Gold.

“I have hopes on the people that support us worldwide, because here there is no hope; we have no hope”. (Woman from the Diaguita ethnic group, manager of a little hostel, Alto del Carmen, November 2006).

“There are international organisations that are supporting us such as OLCA, which is working on this issue. I hope that in this way it would be possible, at least, to mitigate what this mining company could do”. (Town councillor and small farmer, Alto del Carmen, January 2007).

The first criticisms from Santiago crystallized in a report explaining the influences of Barrick in the official mining decision-making. The report edited by OLCA pointed to the leading role of Barrick in the bi-national mining agreement between Argentina and Chile,

a key decision that made politically feasible the PL project (Luna Quevedo et al., 2004). The document pointed to the distributive injustices of mining regulations in Chile (e.g. low taxation and royalties, large fiscal advantages to foreign investors). This report was part of a wider public debate existing in Chile about the possibility to re-nationalize mining, to improve the distribution of profits and to decide who should pay the environmental liabilities after mines close down.

Social actors advocating for the increase of mining royalties (left-leaning lawyers and politicians, activists, NGO members and some academics) opposed PL from an economic and distributive perspective. They protested against foreign investment policies and natural resource privatisation as harmful to Chilean public interests. PL approval was identified as an act of injustice, because the Valley would suffer the socio-environmental impacts while Barrick would benefit economically paying little to the national and municipal treasury. Specific anti-PL groups appeared in Santiago and Valparaiso (Acción Ciudadana Anti Pascua Lama, Autoconvocados contra Pascua Lama de Valparaíso, Colectivo Reexistencia, Coordinadora anti-Pascua-Lama de Santiago)¹³. These emergent groups and the previous national links contributed to frame the conflict in distributive terms.

“The plan of transnational companies is to plunder the valley’s resources with the collaboration of local politicians under the protection of deficient environmental laws and an economic system that privileges large capitals despite citizens’ rights.” (Internal letter, Defence Committee of Vallenar, January 2007).

“[Barrick] works with cyanide and by open-pit, so [the pollution] goes to air, water and

¹³ In English: Anti-Pascua Lama Citizen Action, Valparaiso Autonomous citizens against Pascua Lama, Reexistence Group, Anti-Pascua Lama Coordination of Santiago

land. This is not what they told us. This is a swindle. They only care about taking the gold away, leaving here just pollution. They do not leave anything in the country, nothing at all. They do not leave taxes because they always declare losses” (Catholic nun, Vallenar, December 2006).

Eventually, in 2006 the Chilean Environmental Justice Network (RAJAS) was formed, and became a stable coalition and space of exchange with other communities in conflict in Chile. Moreover, an international network of communities affected by Barrick was established¹⁴. The distributive argument became a framework of discontent shared by national and international allies and networks such as RAJAS. This common position strengthened bonds and encouraged mutual supports. The argument was, no longer about environmental impacts (lack of water and pollution) and social recognition (of local peasantry and indigenous populations) but increasingly about the unequal distribution of economic goods and environmental ‘bads’.

The following statement of a local activist, illustrates how the local conflict began to be framed as part of a global problem, a power asymmetry affecting communities worldwide: “It is a situation that is being lived worldwide. The abuse of those, so powerful leaders, that want to dominate the world with their fingertip”. (Woman activist, shop manager, Alto del Carmen, December 2006).

Foreign academic institutions and NGOs (e.g. Mining Watch, No Dirty Gold, Corp Watch) have also supported local organizations with demonstrations, international dissemination and technical assistance. In order to reach a broader public, in the context of the current climate justice debate, the international dissemination efforts focused on

¹⁴ Every May international campaigning acts against Barrick take place and the anti-PL activists play an active role in them.

the intrinsic value of glaciers: "Making glaciers disappear is not a problem for this valley or for Chile; it is a problem for the whole world" (Small farmer, Alto del Carmen, January 2007). Anti-PL international campaigns turned the case into one of the most relevant Chilean conflicts of the 2000s, as reflected in the several reports published in the Chilean, Canadian and foreign press (e.g., *The Economist* 23/06/2005, *The Independent* 20/06/2006, *The New York Times* 30/06/2006 and *Al Jazeera* 09/07/2007).

3.2 A gold mining project in Esquel

The second mining project analysed in this article was located 6.5 km away from the small city of Esquel, in the Argentinean Patagonia (Province of Chubut). With an estimated population of 28,089 inhabitants in 2001, the city is the main Andean settlement in the province, with the most important transport, service and educational equipments in the region. The region is also inhabited by some Mapuche indigenous communities. Esquel municipality lies between the Patagonian steppe and the Andean mountain range. It is characterized by water shortages (394 mm/year of rainfall), and dry and sandy soils; however, forests and lakes are also found just a few kilometres away from the city in the mountain range.

Traditionally, economic activities were related to public and private services and agriculture. During last decades, tourism gained relevance, with the development of sports fishing, mountain and ski activities, and the proximity to the Alerces National Park. During the 1980's and the 1990's, due to national economic politics and severe climatic circumstances, the traditional activities suffered a crisis. In 2002, 25% of the population was unemployed and 20% was under the poverty line (INDEC, 2002).

The Environmental Impact Study (EIS, 2002), presented by the US junior mining

company Meridian Gold and that has not been approved yet, estimates that the deposit would produce 12 millions of mineral tons (gold and silver) and 130 millions of sterile rock tons, using 180 tons of cyanide by month. The project would trigger a provincial GDP increase of 4.6%, with a tax revenue equivalent to 3.9% of the provincial tax incomes.

Struggling for procedural justice

The first details concerning the gold mining project reached Esquel by mid-2002. National and provincial authorities had already expressed their interest in the project and started to announce to the local press its arrival to the city.

During the 1990s, Argentina approved laws and regulations aimed at attracting foreign mining investment and improving environmental and participatory rights (e.g. information access, public audiences, referendums, public consultations). According to this framework, the appraisal and approval procedure for mining projects requires the companies to submit an EIS before each stage of the project. The regulatory authority, designated at provincial level, evaluates the report and either approves it or declares the document insufficient. According to the environmental legislation non-binding public audiences must be conducted for public information and participation on the EIS. Differently from Chile, public audiences are mandatory for impacting activities, although the concerns expressed by participants are not binding.

A presentation on the risks related to the use of cyanide, organized by the provincial Mining Department and conducted by a representative of the future supplier of cyanide to Meridian Gold (Du Pont), triggered the first reactions. Claims for procedural justice appeared from the very beginning of the information and deliberation stages of the

project. Doubts about the quality and reliability of the information presented, combined with mistrust about the way in which the information was disseminated by the Government, and the poor space for local participation, prompted the involvement of two chemistry university lecturers. “It was a slap in the face for knowledge, and for the people, because it was like saying ‘I am telling you these things and you believe them because you are stupid.’ (...) we felt an enormous responsibility to tell people the truth about what was being said.” (Chemistry lecturer from UNSJB, March 2006). These academics started to build alternative information channels about cyanide and its related risks. They organized a series of parallel talks and events offering alternative spaces for information and participation.

In mid-October 2002, provincial authorities announced the presentation of the EIS followed, one month later, by a public audience. The project was publicly scheduled to start at the beginning of 2003. The urge to start the project and the lack of criticism of the authorities that were supposed to control the forthcoming activity, started to raise concerns regarding the seriousness of the decision-making procedure. Moreover, assessments indicating technical inconsistencies and errors in the EIS were made public (newspapers *El Oeste*, 16/11/2002, *El Chubut*, 17/12/2002, *Crónica* 17/11/2002).

Unable to establish a dialogue with provincial decision makers, Esquel neighbours contacted various institutions at the local (“Concejo Deliberante” [Deliberative Council]), regional (environmental organisations), provincial (the Provincial Ombudsman and the provincial legislature) and national level (National Ombudsman, Deputies and Senators). These institutions backed the plea for postponing the public hearing, arguing that more time was needed in order to give due consideration to the EIS. Nevertheless, this request was rejected repeatedly by the Provincial Government based on the following argument quoted in a local newspaper: “A specialist could study any particular issue raised by the

report in no more than a week. For this reason, we consider the time limit of 60 days excessive” (El Chubut, 7 November 2002). According to this reasoning, the EIS was a technical document intended for specialists and not for members of the public, who were unlikely to understand its contents.

“We are changing the face of our town forever. The decision taken must not be subject to time constraints or, even less, to the sensitivities of a few civil servants...” (reader’s letter published in El Oeste, 13/11/2002).

In mid-November 2002, after a period of informal meetings, analysis and deliberations, an assembly of 600 local citizens voted unanimously to adopt a position against the mining project and formed the Autonomous People’s Assembly (Asamblea de Vecinos Autoconvocados, AVA) with the slogan ‘No to the mine’. In the months that followed, AVA led the way to building a movement opposed to the mine.

The acknowledgement of an increasing number of mining permits in the region also arose concerns regarding the recognition of Mapuche territorial rights. Mapuche organizations were active in the AVA, participating in assemblies and rallies. Moreover, in 2001, a Mapuche community located near Esquel had already denounced to provincial and mining authorities the illegal entrance in their territory of foreigners, Meridian Gold apparently, without previous consultation (interview with local lawyer, March 2006). As Meridian Gold was campaigning to get the support of Mapuche leaders, in December 2002, Mapuche communities issued a massive public declaration against mining activities.

“Again, they arrive with their colour mirrors, as they did 500 years before. They come for the gold and they won’t doubt to kill us as they did in the past. ” (...) “The 169 ILO

Convention is only a partial reflect of our worldview, and it says that we have to be consulted before entering our territory. But the State has permitted it, opening the doors to the mining company Meridian Gold, among others, to go on with the plunder of our land [wallmapu]”. (Fragments of the Mapuche Declaration, December 21, 2002).

Later, as the Assembly contacted other anti-mining movements and activists new information and experiences from Latin America gave way to new considerations. As explained by a local activist (March, 2006): “It was a constant construction, while in a first moment there was a limitation to ecologic concerns, later on, there was an advance to what the government and company were doing (...). More political analysis started to emerge“.

For instance, authorities were promoting the positive mining experience of Catamarca, an Argentinean province located in the north of the country. Local neighbours contacted local councillors from these communities and started to exchange information and experiences via email. Finally, two persons from Catamarca were invited to visit Esquel. They explained that no economic improvements had occurred in their communities after the arrival of the mine, the low amount of employments generated and that, for instance, respiratory diseases had increased 300 times. The visitants from Catamarca stressed that “the gold chimera is a lie”, and that “with what you have [natural resources and environment potentials] surrender to mining is suicide.” (August, 2005¹⁵).

Local lawyers prepared an *acción de amparo* –an injunction against infringement of rights– based on a procedural fault: the fact that no EIS and Public Audiences was held before the approval of Meridian Gold exploration activities. This action led to the

¹⁵ Interview done by Paula Porras and Roxana Longo to Eduardo Salas. Available at: http://www.cifmsl.org/index.php?option=com_content&task=view&id=27&Itemid=33

temporary suspension of mining activities in February 2003. Moreover, AVA presented to National Human Rights organizations a report denouncing 19 verbal, physical and anonymous threats to its members (AVA, 2003). In an atmosphere of mounting tension and increasing mobilisation of the local community, the municipal Deliberative Council approved, in the beginning of February, three municipal orders promoted by the AVA: a ban on the use of cyanide in Esquel¹⁶, a municipal derogation of national and provincial mining laws since they ‘are harmful to the tourist profile and the interests of the local community’, and the announcement of a public referendum on the mining project.

As Esquel’s neighbours considered that the decision-making processes excluded local values and interests, they focused on promoting alternative deliberation and participation spaces, and mechanism for decision-making. The successful call for a local referendum symbolises AVA's participation concerns, and reflects its political resources. The AVA brought together neighbours with different backgrounds: such as specialists –in chemistry, geography, medicine, journalism, law, and education–, Mapuche communities and spokespeople from Esquel marginal sectors.

Supra-local support and national networking

With the imminent referendum, the movement searched for further national and international support. “We had to send our call for help everywhere (...) we had to aim to the national media to improve the dissemination of the conflict (...) to contact national organizations” (Zuoza, 2005, 156). This outreach campaign succeeded to get an increasing support of a number of national (Ombudsman, politicians, celebrities) and international organisations (Mining Policy Center, Greenpeace). National media started to cover the local conflict (La Nación, Clarín, Página12) and some protests were

¹⁶ Subsequently rescinded by the mayor on the grounds that it possibly clashed with national law.

organized in Buenos Aires city.

Greenpeace and the Mineral Policy Center wrote reports (Greenpeace, 2003, Moran, 2003), and financed local activities and the visit of the US hydro-geologist Robert Moran that held a public conference explaining the faults of Meridian Gold EIS. He corroborated the claim of AVA that mining is a highly polluting activity and that there is no example of a clean gold mining project in the world. This expert had also assessed the community of Tambogrande (Peru) in 2001. With the aim to affect Meridian Gold reputation AVA succeeded to make the conflict public in the international mining website Mineweb, read by mine shareholders and investors.

On March 23, 2003, the plebiscite was duly held with a turn-out of 75% of the 20,000 eligible voters and an 81% saying 'No to the mine'. In the days that followed, mining activities were halted and the Chubut provincial legislature approved a provincial ban on open-pit mining. However, the project was sold to the Canadian company Yamana Gold that is currently lobbying to overcome these bans.

After the cancelation of the project, AVA promoted the constitution of the first national network against mining. In November 2003, representatives of communities from six provinces in Argentina met in Buenos Aires and set up the National Network of Communities Affected by Mining. Its objective was to "coordinate the combat against the plunder and ecocide on our doorsteps which is condoned by the current mining legislation" (RNCAM, 2003). The network identified the root causes of mining conflicts to be the laws that grant disproportionate advantages to private investment in mining, neglect the right to participation and decision-making at local levels, and promote the unjust distribution of mining goods and 'bads'. An economic assessment prepared by the AVA concluded that after accounting for all the exempted and deducted mining taxes and

royalties, the State ends with a negative balance (AVA, n.d.). Moreover, in the months that followed, new anti-mining movements sprang up in different parts of the country. These movements successfully obtained bans on open-pit mining that uses toxic substances in seven provinces of the country.

The Esquel case became a national referent and the AVA created the “no a la mina” website¹⁷ that, in 2010, still remains one of the most complete sources in Spanish of news and reports on mining conflicts in Argentina, Latin America and the world. A few years after the referendum, the national anti-mining network composed by local assemblies, joined other assemblies engaged in environmental conflicts (e.g. Paper-mills, transgenic soya plantations, deforestation, hydropower plants) founding the Unión de Asambleas Ciudadanas. AVA also became a member of international networks and campaigns. As stated by an AVA member in an international meeting of communities affected by gold mining conflicts: “We are not alone in this fight! We are with other communities with similar problematics and we are supported by organizations such as the Mineral Policy Center and OXFAM (...) thanks to the join work local campaigns are supported with respect to the decision of their local assemblies. (...) (Oro sucio, 2004).

3. Discussion and conclusion

Mining was no longer seen as a local but as a regional, even national and international issue affecting many communities (Zuoza, 2005). As explained by a member of the AVA after this visit (March, 2006): “We know a lot of communities that have been exploited by mining and are now poorer than before”.

¹⁷ www.noalamina.org

They argued that Pinochet's neoliberal laws, currently in force, had created great economic benefits for foreign investors without dealing with social inequalities and environmental impacts (Huneus, 2001).

During the conflict, Huasco's communities, both indigenous and not, carried out a revalorization of water and territory and a reflective process connecting those issues with their identity. However, as networks were created, mining injustices were seen as globally widespread and structural. Many of the supportive organizations in Santiago had a political background that made them see the conflict from a national distribution perspective. Indeed,

The Esquel and Pascua-Lama movements demanded participation, recognition and distributional justice. However, through the analysis of the evolution of their discourses, we identified a change in the relative relevance of each EJ dimension over time.

The official participation spaces were significant in the organization and the initial claims of both movements. Firstly, these spaces gathered different social actors willing to be informed and to be part of the decision-making. Also, the presentation of the EIS implied the public access to the project details and forced affected parts to search for expert support, and engage in a technical debate. Secondly, the experience was frustrating given the lack of comprehensive information, dialogue and binding participation, which fostered the organization of the movements (Cole and Foster, 2001, Couch and Kroll-Smith, 1997). These issues centred the initial discourse of the movements on procedural and recognition matters.

The resistance movement in Esquel focused on participation and the movement of Huasco on recognition. Huasco inhabitants focused on recognition demands because there were no conditions for a procedural justice that would acknowledge cultural differences

(Escobar, 2001, Young 1990). As phrased by Page (2007): “Recognition requires that unique cultural connections to the environment are taken into account in issues of environmental justice”. The local history of political activism and the size and power of the mining companies involved is significantly different in both cases. As pointed by Carruthers (2001), persistent elitism, alienation and de-politicisation motivated by Pinochet dictatorship weakened Chilean civil society. The lack of a massive local mobilization in PL could be related to these features. Moreover, the successful social intervention operated by Barrick Gold damaged local opposition and amplified the feeling of resignation and power imbalance between mine promoters and local inhabitants, discouraging local activism and the possibility of participatory actions such as a referendum.

The 2001 Argentinean social and economic crisis fostered a national process of reflection about democracy, transparency and participation, illustrated by the emergence of neighbours assemblies (a non hierarchical and participative organization structure) all over the country (Rossi, 2005). This experience was inherited by the AVA in Esquel. Moreover, in contrast with Huasco Valley, Esquel had wider access to professionals, academic and technical knowledge locally (Reboratti, 2008). The fast deployment of Esquel conflict –eight month since the announcement of the project to the referendum– minimized the reach of the pro-mining lobby, added to the fact that Meridian Gold was a junior mining enterprise.

Although distribution claims do appear at the onset of the conflicts (e.g. low royalties, number of jobs, high transnational benefits versus local negative impacts, access to scarce water), they do not become the central theme for the movements until later on for at least two reasons. Firstly, as previously mentioned, the timing of the decision-making procedure led to focus on the participation schemes. Secondly, the economic distribution

arguments were mainly exploited by the Government and the mining companies. The number of jobs that would be created, the amount of taxes that would be paid and the local development that would be generated were the main arguments used to promote mining. The affected communities aimed to engage in a wider debate that considered cultural, social, environmental, human health, indigenous rights and economic dimensions as incommensurable (Martinez-Alier, et al., 1998, Martinez-Alier, 2001). The economic benefits could not really compensate for the socio-environmental impacts and the loss of territorial rights that were at stake. The economic distributional arguments were associated with mining promoters and the movements distanced themselves from these economic foci.

Social movements constructed their first arguments against their frustrating participation experience (Arnstein, 1969) and against the pro-mining distributional framing of national regulations. This process reflects the dialectical and relational nature of discourse construction in mining struggles (Bridge and MacManus, 2000). Local movements were proposing a much more deliberative and bottom-up decision process where local values and interests were not relegated to technical and economical criteria, and the community had the right to reject a mining project.

However, as disputes unfolded, the networks with other communities and organisations strengthened, exchanges grew and actions at national and transnational political spaces became frequent (e.g. international pressure campaigns, demonstrations in capital cities, dissemination activities in foreign countries). The engagement in these networks enriched the movements' discourses and fostered a common frame of meaning about mining impacts (Keck and Sikkink, 1998). The scale of meaning or problem evolved (Towers, 2000): while in the first stage of the conflicts, the anti-mining movements identified the scale suffering mining impacts as local (Esquel or the Huasco Valley), exchanges with

other communities and networking activities broadened the perception of the scale of problem. It was not just a local problem, but the result of a national and regional regulatory framework that was also affecting many other Latin American communities.

Both movements deployed scaling-up strategies in order to influence the scale of regulation, which was the national in Chile and the provincial in Argentina. Esquel succeeded in becoming relevant at the scale of regulation (obtaining a ban on mining) via a strong local campaign (referendum) supported by national and international NGOs. The common work in the national network against mining in Argentina succeeded to ban mining activities in 7 of the 23 National Provinces. In PL, due to the intense local campaign of Barrick, the local movement concentrated its efforts in fostering national and international denounces, but was unable to stop the project.

Two conclusions about the politics of scale can be drawn from these cases. Firstly, in line with Haarstad and Floysand (2007), constructing legitimate discourses at different scales is part of the key to success, as shown by the Argentinean case. However, the main scale of action does not have to be, necessarily, the scale of regulation. Esquel experience does not fit Bickerstaff and Agyeman (2009) proposal since a provincial ban was obtained through local action and supra-local support. Secondly, PL effort to influence the scale of regulation proved insufficient given the power imbalances, a long Chilean mining trajectory and a weakened local activism, among other factors that limited the reach of the movement.

Nevertheless, the jumping-scale fostered the emergence of a broader distributive understanding of the conflicts. Mining resistance movements felt part of a larger group of losers in the distribution of mining impacts and benefits of transnational mining, a legacy of colonial domination and injustices. Sacking and plunder appeared as a main argument

in both Chilean and Argentinean anti-mining networks, linking these struggles to the Latin American social justice tradition.

Indigenous communities relate to another long struggle, the recognition of their territorial rights, identity, and worldviews. The approval of specific national laws and international conventions was the result of this fight and indigenous communities tend to appeal to these frameworks when their rights are violated. In the case of the Diaguitas, the community was engaged since the 1990s in a national trial against the misappropriation of their communal lands. This struggle was in place when the mining conflict started. The mining conflict was not seen as an independent fight, but as a new element in their ongoing struggle. Although they jumped scales and worked with national and international actors, the Diaguita followed their previous strategies based on litigation and claims of recognition, distancing from emerging anti-mining groups.

While the EJ movement in the United States was mainly born from local waste disposal conflicts, resource extraction conflicts (mining, oil, forestry, biomass exports, etc.) are at the core of Latin American EJ networks. This is the case in Argentina and Chile, but also in Bolivia, Brazil, Colombia, Ecuador and Peru. 'Plunder' is one of the key words of these movements that do not necessarily call themselves EJM but do focus on the relation between social inequalities and the environment. These are sensitive issues in Latin American politics, so framing the mining debate in sacking, anti-dispossession and anti-colonialist terms appeal to Latin American social justice sensibilities (Carruthers, 2008). These features of the Latin American EJMs contrasts with the US EJ tradition which is more focused on racial discrimination and intra-national justice.

So, while Latin American governments and mining companies discuss in terms of revenue and money compensation for externalities, communities are demanding democracy,

bottom-up decision-making, recognition of the links between culture and environment, and structural reforms of the mining regulatory frameworks. “Water is worth more than gold” is becoming the common claim of many anti-mining movements in Latin America.

DEVELOPMENT MODELS!!

Mining struggles are taking place at the extraction frontiers of key commodities (e.g copper, coal, bauxite, gold etc), implying *per se* a challenge to the increasing material demand of economies, to capital accumulation, and perhaps providing an opportunity for global and local sustainability.

Figure captions: Figure 1: Esquel and Pascua-Lama.

References

Acsehrad, H., 2008. Grassroots reframing of Environmental Struggles in Brazil. In: Carruthers, D. (Ed.) Environmental Justice in Latin America: Problems, Promise, and Practice. MIT Press, Cambridge, pp. 75-97.

Adeola, Francis O., 2000. Cross-national environmental injustice and human rights issues: A review of evidence in the developing world. *American Behavioral Scientist* 43, no. 4: 696–706.

Agarwal, B., 2001. Participatory Exclusions, Community Forestry, and Gender: An Analysis for South Asia and a Conceptual Framework. *World Development* 29,1623-

1648.

Agyeman, J., Evans, B., 2004. 'Just sustainability': the emerging discourse of environmental justice in Britain? *Geographical Journal* 170 (2), 155–164.

Amey, E.B., Butterman W.C., 2005. *Mineral Commodity Profiles-Gold*. USGS, Virginia.

Arnstein, S.R., 1969. A Ladder of Citizen Participation. *JAIP Journal of the American Institute of Planners* 35 (4), 216-224.

AVA, 2003. *Autoconvocados de Esquel Amenazados*, February 2003, 14.

AVA, n/d. *Mega Minería Argentina ¿Oportunidades para todos?* [online]. Asamblea de Vecinos Autoconvocados de Esquel. Available from:

http://www.noalamina.org/index.php?module=documents&JAS_DocumentManager_op=downloadFile&JAS_File_id=238 [Accessed 20 March 2009]

Barrick Gold Company, 2009. Available from: www.barrick.com [Accessed 15 December 2009]

Baker, D.C., McLelland, J.N., 2003. Evaluating the effectiveness of British Columbia's environmental assessment process for first nations' participation in mining development. *Environmental Impact Assessment Review* 23 (5), 581-603.

Bebbington, A., Bebbington, D.H., Bury, J., Langan, J., Muñoz, J.P., 2008. *Mining and Social Movements: Struggles Over Livelihood and Rural Territorial Development in the*

Andes. *World Development* 36 (12) 2888-2905.

Benford, R., 2005. The half-life of the environmental justice frame: Innovation, diffusion, and stagnation. In Pellow, D., Brulle, R. (Eds.) *Power, Justice, and the Environment*. MIT Press, Cambridge, pp. 37–54.

Bickerstaff, K., and Agyeman, J., 2009. Assembling justice spaces: the scalar networking of environmental justice in north-east England. *Antipode* 41 (4), 781-806.

Brige, G., McManus, P., 2000. Sticks and stones: environmental narratives and discursive regulation in the forestry and mining sectors. *Antipode* 32 (1), 10-47.

Bridge, G., 2004. Mapping the Bonanza: geographies of mining investment in an era of neo-liberal reform. *Professional Geographer* 56 (3), 406-21.

Bryant, B., Mohai, P., 1992. Environmental Racism: Wasting Communities of Color. *Prairie Journal* 3(1), 16-17.

Bullard, R., 1990. *Dumping in Dixie: Race, Class, and Environmental Quality*. Westview Press, Boulder, CO.

Bullard, R., 1993. *Confronting Environmental Racism: Voices from the Grassroots*. South End Press, Boston.

Bullard, R., 1996. Environmental Justice: It is More Than Waste Facility Sitting. *Social Science Quarterly* 77, 493-499.

Bury, J. 2005. Mining mountains: neoliberalism, land tenure, livelihoods and the new Peruvian mining industry in Cajamarca. *Environment and Planning A* 37 (2), 221–239.

Bury, J. 2008. Transnational Corporations and Livelihood Transformations in the Peruvian Andes: An Actor-Oriented Political Ecology. *Human Organization* 67 (3), 307-321.

Camacho, D., 1998. The environmental justice movement. In: Camacho, D. (Ed.) *Environmental Injustices, Political Struggles: Race, Class, and the Environment*. Duke University Press, Durham, NC.

Carruthers, David, 2001. 'Environmental politics in Chile: Legacies of dictatorship and democracy'. *Third World Quarterly* 22, (3): 343–357.

Carruthers, D., 2008. *Environmental Justice in Latin America: Problems, Promise, and Practice*. MIT Press, Cambridge, MA.

Carruthers, David and Patricia Rodriguez, 2009. 'Mapuche Protest, Environmental Conflict and Social Movements Linkage in Chile', *Third World Quarterly* 30 (4): 743-761.

Castagnino, V., 2006. *Metal Mining and Human Rights in Guatemala. The Marlin Mine in San Marcos*. Peace Brigades International.

CEPA/OCMAL, 2008. Justicia Ambiental y Minería. Memoria del Encuentro Internacional de Marzo del 2007. Centro de Ecología y Pueblos Andinos CEPA/OCMAL, Oruro.

Chiappe, L., 2004. La Patagonia de Pie. Ecología vs. Negociados. Proyecto Lemu-Grupo de Amigos del Libro, Chubut, Argentina.

COCHILCO, 2007. *Online Mining Data*. Comisión Chilena del Cobre. http://www.cochilco.cl/productos/base_datos.asp

Cole L.W., Foster S.R., 2001. From the Ground Up: Environmental Racism and the rise of the environmental justice movement. New York University Press, London.

Couch, S.R., Kroll-Smith, S., 1997. Environmental movements and expert knowledge: Evidence for a new populism. *International Journal of Contemporary Sociology* 34, 211-233.

De Echave, J., Diez, A., Huber, L., Revesz, B., Lanata, X.R., Tanaka, M., 2009. Minería y Conflicto social. Instituto de Estudios Peruanos, Lima.

Debbané, A.M., Keil, R., 2004. Multiple disconnections: environmental justice and Urban water in Canada and South Africa, *Space and Polity* 8 (2), 209 — 225.

Demaria, F., 2010. Schipbreaking at Alang-Sosiya (India): An ecological distribution conflict. *Ecological Economics* 70 (2), 250-260

ECLAC, 2008. United Nations Economic Commission for Latin America and the

Caribbean, Available from: www.eclac.org [Accessed 15 June 2009]

EIS, 2002. Informe de Impacto Ambiental - Proyecto Esquel. Minera el Desquite, Esquel.

EIS, 2004. 'Capítulo 10, Participación Ciudadana'. Estudio de Impacto de Ambiental, Modificaciones Pascua-Lama. ARCADIS Geotecnia, Barrick Gold.

EPA, 2009. Summary of Key Findings. EPA Toxics Release Inventory, U.S. National Analysis. Environmental Protection Agency, Washington.

Escobar, A., 2001. Culture sits in places: reflections on globalism and subaltern strategies of localization. *Political Geography* 20, 139- 174.

Fraser Institute, 2007. Survey of Mining Companies 2006-2007 [online]. Fraser Institute. Available from:

http://www.fraserinstitute.org/commerce.web/product_files/MiningSurvey2006.pdf

[Accessed 10 November 2008]

Fraser, N., 1995. Recognition or Redistribution? A Critical Reading of Iris Young's Justice and the Politics of Difference. *Journal of Political Philosophy* 3, 166-180.

Fraser, N., 1998. Social justice in the age of identity politics: redistribution, recognition and participation. *The Tanner Lectures on Human Values* 19, 2-67.

Glaser Barney, Anselm Strauss, 1967. *Discovery of Grounded Theory: Strategies for Qualitative Research*. New York: Aldine Publishing Company.

Greenpeace, 2003. No todo lo que es oro brilla. Buenos Aires, Argentina.

Haarstad, H., Floysand, A., 2007. Globalization and the power of rescaled narratives: A case of opposition to mining in Tambogrande, Perú. *Political Geography* 26, 289-308.

Holifield, R., Porter, M., Walker, G., 2009. Introduction Spaces of Environmental Justice: Framework for Critical Engagement. *Antipode* 41 (4), 591-612.

Honneth, A., 2001. Recognition or Redistribution? Changing Perspectives on the Moral Order of Society. *Theory, Culture & Society* 18 (2-3), 43-55.

Huneus, C., 2001. El comportamiento político de los empresarios en Chile. *Perspectivas* 4 (2), 315-337.

ICMM, 2006. Submission to UN Secretary General's Special Representative on Human Rights and Business. Clarity and consensus on legitimate human rights responsibilities for companies could accelerate progress, March 2006. International Council on Mining & Metals, London. Available from: www.icmm.com [Accesed 3 September 2010]

INDEC, 2002. Censo Nacional 2001. Instituto Nacional de Estadísticas y Censos, Buenos Aires.

Jorgensen, Danny, 1989. *Participant Observation. A method for Human Studies*. California: SAGE.

Keck, M.E., Sikkink, K., 1998. *Activists Beyond Borders*. Cornell University Press, Ithaca.

Kirsch, Stuart, 2007. Indigenous movements and the risks of counter globalization: Tracking the campaign against Papua New Guinea's Ok Tedi mine

Kurtz, Hilda, 2003. Scale frames and counter scale frames: Constructing the social grievance of environmental injustice. *Political Geography* 22: 887-916.

Leff, Enrique, 2001. *Justicia ambiental: Construcción y defensa de los nuevos derechos ambientales, culturales, y colectivos en América Latina*. PNUMA.

Ley de Bases del Medio Ambiente, 1994. Ley número 19.300. Comisión Nacional del Medio Ambiente, Chile.

Ley Indígena, 2006. Ley número 19.253. Ministerio de Planificación y Cooperación, Chile.

Luna Quevedo, D., Padilla, C., Alcayaga Olivares, J., 2004. *El exilio del cóndor: Hegemonía transnacional en la frontera: El tratado minero entre Argentina y Chile*. OLCA, Santiago de Chile.

Maiwaring, S., Viola, E., 1985. Los nuevos movimientos sociales, las culturas políticas y la democracia: Brasil y Argentina en la década de los ochenta. *Revista Mexicana de Sociología*, Universidad Nacional Autónoma de México, 47 (4): 35-84.

Martinez-Alier J., Munda G., O'Neill J., 1998. Weak comparability of values as a foundation for ecological economics. *Ecological Economics* 26, 277-286.

Martínez-Alier, J., 2001. Mining conflicts, environmental justice, and valuation. *Journal of Hazardous Materials* 86, 153 – 170.

Melosi, M. V., 2004. *Garbage in the Cities: Refuse, Reform, and the Environment*. University of Pittsburgh Press, Pittsburgh, PA.

Mining and Resource Company Investment Research Tool, 2009. Available from: <http://www.miningnerds.com/gold-mining-report-all-countries> [Accessed 20 September 2009]

MMERC, 2008. Estimación de la producción minera colombiana por distritos, basada en proyecciones de PIB minero Latinoamericano 2008-2019. Ministerio de Minas y Energía de la República de Colombia. Available from:

[http://www.simco.gov.co/simco/Portals/0/Otros/Proyecciones%20de%20producci%C3%B3n%20\(2008-2019\)1.pdf](http://www.simco.gov.co/simco/Portals/0/Otros/Proyecciones%20de%20producci%C3%B3n%20(2008-2019)1.pdf) [Accessed 3 September 2010].

Molina, R., 2007. Identidad Diaguita, derechos indígenas y proyectos mineros en Huasco Alto. In: Yañez, N., Aylwin J. (Eds.) *El gobierno de Lagos, los pueblos indígenas y el 'nuevo trato'*. LOM Ediciones, Santiago de Chile.

Moran, R., 2002. De-coding Cyanide, An Assesment of Gaps in Cyanide Regulation at mines. A Submission to the European Union and the United Nations Environmental Programme. Available from:

<http://www.earthworksaction.org/pubs/DecodingCyanide.PDF> [Accessed 12 October 2009].

Moran, R., 2003. Esquel, Argentina: Predictions and Promises of a Flawed Environmental Impact Assessment.

Mudd, G. M., 2007. Global trends in gold mining: Towards quantifying environmental and resource sustainability? *Resources Policy* 32: 42–56.

Muradian, R., Martinez-Alier, J., Correa, H., 2003. International capital versus Local Population: The Environmental conflict of Tambogrande Mining Project, Peru. *Society and Natural Resources* 16, 775-792.

OLCA, 2004. Justicia Ambiental, un derecho irrenunciable. Observatorio Latinoamericano de Conflictos Ambientales, Santiago de Chile. Available from: www.olca.cl/oca/informes/justicia.pdf [Accessed 15 September 2010].

OCMAL, 2010. Observatorio de Conflictos Mineros de América Latina. www.conflictosmineros.net [Accessed 16 February 2009].

Oyarzún, M. J., 2008. Geoquímica de las Aguas del Río Elqui y de sus Tributarios en el Período 1975-1995 [online]. Asociación Ecologista INTI Chuteh. Available from: <http://www.intichuteh.com.ar/> [Accessed 16 February 2009].

Oro Sucio, 2004. Representantes de Esquel en encuentro internacional sobre el oro en Lima, Perú. Available from: http://orosucio.madryn.com/articulos/04_02_20.html

[Accesed 16 February 2009].

Page, J., 2007. Salmon Farming in First Nations' Territories: A Case of Environmental Injustice on Canada's West Coast. *Local Environment* 12 (6), 613-626.

Pegg, S., 2006. Mining and poverty reduction: Transforming rhetoric into reality. *Journal of Cleaner Production* 14 (3-4), 376-387.

Pulido, L., 1996. *Environmentalism and Social Justice: Two Chicano Struggles in the Southwest*. University of Arizona Press, Tucson, AZ.

Reboratti, C., 2008. Environmental Conflicts and Environmental Justice in Argentina. In: Carruthers, D. (Ed.) *Environmental Justice in Latin America: Problems, Promise, and Practice*. MIT Press, Cambridge, MA, pp.101-117.

Red Muqui, 2009. Fedepaz denuncia torturas a comuneros en Majaz. Available from:

http://xa.yimg.com/kq/groups/15536342/1193846703/name/RM_16-11-2009.pdf

[Accesed 20 March 2009]

RNCAM, 2003. Documento del 1er Encuentro Nacional de Comunidades Afectadas por la Minería. Red Nacional de Comunidades Afectadas por la Minería, Buenos Aires, November 2003.

Roberts, J.T., 2007. Globalizing Environmental Justice: Trend and Imperative. In: Sandler, R. and Pezzullo, P. (Eds.) *Environmental Justice and Environmentalism. The Social Justice Challenge to the Environmental Movement*. MIT Press, Massachusetts, pp.

285-308.

Rossi, F.M., 2005. Aparición, auge y declinación de un movimiento social: las asambleas vecinales y populares de Buenos Aires, 2001-2003. *European Review y Latin American and Caribbean Studies*, 78: 67-87.

Sachs JD, Warner AM., 1995. Natural resource abundance and economic growth. Harvard Institute for International Development Discussion Paper No. 517a, Cambridge, MA.

Schlosberg, D., 2007. *Defining Environmental Justice: Theories, Movements, and Nature*. Oxford University Press, New York.

Schroeder, R., St. Martin, K., and B. Wilson, 2008. Third world environmental justice. *Society and Natural Resources* 21: 547-555.

Smith, N., 1993. Homeless/global: scaling places. In: Bird, J., Curtis, B., Putnam, T., Robertson, G. and Tickner, L. (Eds.) *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, *Critique of Anthropology* 16, 63-77.

Suryanata K. and Umemoto K. 2005. Beyond environmental impact: articulating the “intangibles” in a resource conflict. *Geoforum* 36: 750-760.

Svampa M., Antonelli, A., 2009. Minería transnacional, narrativas del desarrollo y resistencias sociales. Biblos, Buenos Aires.

Swyngedouw, E., Cook I., 2009. Cities, social cohesion and the environment. Social Polis Survey Paper. University of Manchester.

Towers, George, 2000. Applying the Political Geography of Scale: Grassroots Strategies and Environmental Justice. *The Professional Geographer* 52 (1): 23–36.

Urkidi, L., 2010. A Glocal Environmental Movement against Gold Mining: Pascua-Lama in Chile. *Ecological Economics*, 70 (2): 219-227.

Valdivia, Gabriela, 2005. On indigeneity, change, and representation in the northeastern Ecuadorian Amazon. *Environment and Planning A* 37, 285-303.

Villagrán, C., 2006. Pascua-Lama: Amenaza a la Biodiversidad. Oceana: Santiago de Chile.

Walker, G., 2009. Globalizing environmental justice. *Global Social Policy* 9 (3), 355-382.

Walker, G., Bulkeley, H., 2009. Geographies of Environmental Justice. *Geoforum* 37 (5), 655-659.

Walter, M., Martinez-Alier, J. 2010. How to Be Heard When Nobody Wants to Listen: the Esquel mining conflict. *Canadian Journal of Development Studies* (in press).

Walzer, M., 1983. Spheres of Justice. Blackwell, Oxford.

Williams, R. 1999. Environmental injustice in America and its politics of scale. Political Geography 18, 49-73.

Yañez, N., Rea, S., 2006. The Valley of Gold. Land & Resources in the Americas 30 (4).

Available from: <http://www.culturalsurvival.org/publications/cultural-survival-quarterly/chile/valley-gold>

[Accessed 10 September 2010]

Yañez, N., Aylwin J., 2007. El gobierno de Lagos, los pueblos indígenas y el 'nuevo trato'. LOM Ediciones, Santiago de Chile.

Young, I., 1990. Justice and the Politics of Difference. Princeton University Press, Princeton, NY.

Zuoza J.A., 2005. Esquel y su No a la Mina Cronología de la lucha de un pueblo en contra de los abusos del poder político y económico. Chiappe, El Bolsón.