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# Analysis Resistance to Mining. A Review

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## ABSTRACT

This academic review of more than 200 articles, books and reports sheds light to why and how do communities resist mining and how do their forms of resistance change over time. The literature reveals that local communities react not only to perceived environmental impacts but also to their lack of representation and participation in decisions concerning their development path, lack of monetary compensation and distrust with the mining company and the state. Several authors explore the objectives and discourses of these movements that range from compensation and market embedded demands to the articulation of post-material values and the emergence of socio-ecological alternatives. Cross-scalar alliances have emerged as a crucial factor in the formation of discourses and strategies; local narratives and alternatives are being combined with global discourses on rights (to clean water, to take decisions, indigenous rights) and environmental justice. Cross scalar alliances have also allowed local groups to increase their knowledge about the projects, give them visibility, and comprehend and act against their weak position in the global commodity chain. These alliances have also contributed to the emergence or consolidation of a diverse set of resistance strategies such as legal court cases, activist-scientist collaborations and local referendums or "consultas" at community level to reject mining projects. This review also explores the response of the state and the mining companies to these conflicts, exploring responses such as regulatory changes or Corporate Social Responsibility programs.

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## 1. Introduction

Why and how do communities resist mining, and how do their forms of resistance change over time? Answering this question is important for studies of ecological distribution conflicts (EDC) and of the changing nature of commodity frontiers. EDCs are increasing due to the growing metabolism of society that is demanding more energy and material resources (Martinez-Alier, 2003). Even a non-growing economy, if based on current technology, would need "fresh" inputs of fossil fuels and minerals. The commodity frontier in mining has been expanding especially to the global South due to structural adjustment plans and mining law reforms, rising mineral prices from the mid-1990s to the mid-2010s (with a temporary drop in 2008), strong equity markets, and low domestic interest rates in core economies (Bridge, 2004; Campbell, 2009; Gordon and Webber, 2008).

From the year 2000, the emergence of Asian economies and specially China has caused a steady and rising demand for natural resources worldwide (Muradian et al., 2012) pushing further the commodity frontier. India's increase in material consumption has relied so far on internal supplies, causing many resource extraction conflicts nationally (Vagholikar and Dutta, 2003). Also in the last decade speculative trading activities with hedge funds have provoked investment booms pushing mining exploration projects in many parts of the world (see, for the effect in different countries, Tavasci and Ventimiglia, 2011; Fraser and Larmer, 2010; Conde and Kallis, 2012).

Industry technological advances are making reserves accessible that were previously not economically viable (Mudd, 2007). Companies go deeper and farther, into more ecologically and sometimes socially vulnerable areas to extract the remaining resources. On many occasions these areas are inhabited by (indigenous and non-indigenous) communities who suffer the burdens of pollution and lack of access to basic resources due to the unequal distribution of power and income, and social inequalities of ethnicity, caste, social class and gender (Bury, 2007; Martinez-Alier, 2003; Martínez Alier et al., 2014b) leading to the formation of EDC.

The term EDC was coined by Martinez-Alier and O'Connor (1996) to describe social conflicts born from the unfair access to natural resources and the unjust burdens of pollution. These two authors, trained as economists, were inspired by the term 'economic distribution conflicts' in political economy that describes conflicts between capital and labour. For instance, claims for higher wages from mining unions opposing company owners - that don't always go in hand with environmental compliance (Martinez-Alier, 2003).

'Ecological distribution conflicts' is then a term for collective claims against environmental injustices. For instance, a mine may be polluting a river yet this damage is not valued in the market and those impacted are not compensated (as studied by Bebbington







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et al., 2008a). Unfair ecological distribution is inherent to capitalism, defined by Kapp (1950) as a system of cost-shifting. In environmental neoclassical economics, the preferred terms are "market failure" and "externalities", a terminology that implies that such externalities could be valued in monetary terms and internalised into the price system. If we accept economic commensuration and reject incommensurability of values (Martinez-Alier et al., 1998), 'equivalent' eco-compensation mechanisms could be introduced. Instead ecological economics and political ecology advocate the acceptance of different valuation languages to understand such conflicts and the need to take them into account through genuine participatory processes (Agarwal, 2001; Zografos and Howarth, 2010).

There are local as well as global distribution conflicts; whilst many of them occur between the global South and the global North (an Australian or Chinese mining company operating in Namibia), many are local conflicts within a short commodity chain (e.g. on local sand and gravel extraction for nearby cement factory) (Martinez-Alier, 2004). From a social metabolic perspective we can classify EDCs through the stages of a commodity chain; conflicts can take place during the extraction of energy carriers or other materials, transportation and production of goods, or in the final disposal of waste. This review focuses only on the EDCs that emerge at the first stage of the commodity chain; the extraction and processing of minerals and the resistance that emerges in these areas.

There is a lot written on mining conflicts and resistance, but much of it is fragmented among different disciplines and is written with different questions in mind. This literature review attempts to give a "meta" outlook on resistance to mining, from the perspective of a critical researcher interested in the drivers of ecological distribution conflicts and the social forces that might change unsustainable ecological distributions. This review analyses a shift in strategies and discourses used by resistance to mining in the last two decades. It points to alliances with extra-local actors as having played an important role in this shift; not only fostering movements to emerge, but also developing solidarity and political opportunities (Ali, 2009; Bebbington et al., 2010; Conde and Kallis, 2012; Foweraker, 2001; Keck and Sikkink, 1998; Urkidi, 2010).

Resistance also shapes and influences patterns of development. An important finding of many authors is that many movements create, recover or re-affirm a development path that rejects mining, in the process proposing alternative development models, or "alternatives to development" (Bebbington, 1996; Escobar, 1995). In other cases communities adapt and accept the offers of the mining companies largely in the form of Corporate Social Responsibility programs and other ameliorations (Horowitz, 2012).

Resistance as a concept may refer to different political aims and forms of opposition and mobilisation. Hollander and Einwohner's (2004) review of the term identifies 'action' whether it be "verbal, cognitive or physical" and 'opposition' to existing power relations as core elements of resistance. The issue of 'recognition' is more contested. Whilst some scholars suggest the term should be reserved for visible and collective acts (Rubin, 1996), a growing scholarship based on Scott's (2008) research draws attention to what he termed "everyday" resistance. Although his research is based on peasant studies, a parallel can be drawn with mineworkers that need to make a living out of the source that is causing their grief, compelling them to covert resistance and calculate their conformity. 'Everyday socio-environmental resistance' in mining is not well documented so most resistances covered by this manuscript are found to be visible and overt, where both the communities and the mining companies are aware of it taking place. The review does include works where communities resist as part of their negotiation strategy with the mining company. Moreover, resistances covered can be sporadic or even anecdotal or they can be sustained over time, based on organised collective actions and backed by a dense social network, turning into a social movement (Tarrow, 1994).

Extensively used in this manuscript is the word 'community'. It has been challenged on many occasions as ignoring the complexity of actors, different interests and the institutions that it entails (Agrawal and Gibson, 1999). In this review, 'community' describes groups of lay people that live in the surrounding area of mining projects. This can represent one or several groups, with different visions and understandings of the project, different ethnicity, gender, class and cast cleavages, and with different degrees of marginalisation. I acknowledge this simplification and try to specify where I can the differences in each case.

After a short explanation of the methods used for the review, Sections 3 and 4 analyse why EDCs emerge and what are the objectives of those resisting a mining project. Section 5 points to the important role of cross-scalar alliances in the diffusion and formation of discourses and strategies used by resistance movements in mining conflicts. Section 6 explores the responses of the state and mining companies to this resistance, especially looking at Corporate Social Responsibility programs. The last section highlights two findings of this review and points to several gaps in the literature.

### 2. Methodology

I carried out an integrative literature review aiming at summarising all related themes of social resistance to mining (Cooper, 1988). Following Creswell's (1994) methodology I undertook a process "of reading, analysing, evaluating, and summarising scholarly materials about my topic". I embarked on an extensive search using the Web of Knowledge and Google Scholar employing different combinations of relevant keywords in English and Spanish. For example I combined resistance, social movement, conflict, protest, collective action and strikes together with mining, resources, extractive industries, governance, development, CSR, etc. A second search was carried out using snowball methodology from the bibliography obtained in the first search. A second search was carried out using snowball methodology from the bibliography obtained in the first search. A literature map helped me organise and decide how to group the articles and structure my work. After a screen of more than 300 works, around 200 peer-reviewed publications and books were summarised starting to feed into the outline of the review and responding to my research question.

The review omits significant literature on oil and gas. Although the patterns of resistance are similar -and in many cases the same movements are involved in both- the dynamics of each industry and the resistance that emerges can vary. Having said this, some of the literature revised analyses aspects of resistance to extractive industries that includes, but is not confined to, mining cases. I have regretfully excluded the extensive and valuable literature produced by grassroots organisations, NGOs and activists that analyse and denounce the impacts of the mining industry as well as that produced by think tanks, mining companies or consultancy firms due to word limit constraints. Moreover there are whole regions of the world that are not covered because of the limitations of looking at English and Spanish literature alone.

#### 3. Why Mining Conflicts Emerge?

Economic growth and the increasing social metabolism of society coupled with neoliberal reforms are some of the reasons behind the advancing resource frontier. What causes a conflict to emerge however are the socio-environmental impacts on land, water and livelihoods coupled with the lack of participation of local communities nearby extraction projects in decision-making processes. Combined with a lack of trust in the companies and the deficient compensation for the grievances suffered, many communities react giving way to EDCs. I describe in more detail below these four broad forces.

Mining conflicts emerge in source regions due to a "clash of metabolisms" between a subsistence and an extractive economy. Illustrating this clash, Silva-Macher and Farrell (2014) use the Yanacocha-Conga conflict in Peru to compare a local form of social metabolism such as Download English Version:

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