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Intergenerational dynamics and local development: Mining and the indigenous community in Chiu Chiu, El Loa Province, northern Chile

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ABSTRACT

Water conflicts are a significant issue in northern Chile, especially when linked to neoliberal economic activities – mainly mining – on the lands of indigenous peoples. In fact, political ecology tends to accentuate the ways in which their communities unite around a water-based territoriality and/or cultural politics when faced with 'threatening' outsiders. However, internal differentiation has become especially relevant to enable a more nuanced appreciation of local struggles and claims. Taking a political ecology of water perspective, this article analyses in what ways Intergenerational Dynamics (hereafter IGDs) shape the way indigenous communities articulate their collective vision of development when dealing with mining companies. In addition, it examines to what extent IGDs shape the key elements that constitute different positions regarding territory, and also assesses how such dynamics reflect age-related traditional interests and cultural senses of identity and territoriality.

1. Introduction

Struggles over water rights have been a key issue for indigenous groups throughout the past few decades in Chile, especially in the northern regions. Since the introduction of the 1981 Water Code, its strict market rules have caused a water scarcity crisis with no government power to intervene (Bauer, 2004). Therefore, the consideration of water as a basic right for all human beings rather than an economic value, has come into conflict with the neoliberal approach found in Chile, where an extreme position has generated permanent conflicts between global and local actors, and has drawn the attention of many scholars in the field (Bauer, 2004; Budds, 2009a; Prieto, 2015, 2016).

Following this line of research, this article underscores how neoliberal dynamics regarding water can contribute to redefining local ideas about development, increasing local divisions and generating vulnerability within indigenous communities located in northern Chile. Through intergenerational dynamics (IGDs) it analyses how the 1981 Water Code has challenged these communities, and how the 1993 Indigenous Law has failed to bond indigenous communities and represent their ancestral claims. Through a political ecology of water perspective it analyses the way different age groups engage in discourses and narratives within a community, especially when it comes to dealing with mining companies. Thus, it explores indigenous peoples' dynamics, which are useful in analysing the political scenario in Chile, especially as the Chilean government seeks to make the 1993 Indigenous Law (a law that was developed under democratic governments) 'mesh' with the legal framework regarding water which was established under a military government shaped by a neoliberalist vision.

This article therefore addresses questions that notably consider how intergenerational relations may reflect and/or reinforce different territorialities about local development within a water-based indigenous community when dealing with mining companies. Specifically, this article assesses the degree to which the Indigenous Community of Chiu-Chiu, the case study, is internally differentiated according to intergenerational dynamics, regarding their attitudes to development.

2. Political ecology of water

Political ecology is a framework that seeks to define the relationship between the political economy and ecology. It integrates "the concerns of ecology and a broadly defined political economy" as well as "the constantly shifting dialectic between society and land-based resources" (Blaikie and Brookfield, 1987: 17), emphasising the "role of political economy as a force of maladaptation and instability" (Walker, 2005: 74). Indeed, it suggests a new vision that rejects "apolitical cultural ecology" that places attention on the environment (Biersack, 2006: 3) and cultural adaptation (Bateson, 1972; Robbins, 2004), adopting instead a new conception

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where nature is socially constructed and produced (Demeritt, 2001; Bakker and Bridge, 2006).

When dealing with water, political ecology offers an interesting approach to understanding the relevance that it has in redefining local cultural politics. In this sense, it considers that both the recognition and formalisation of water rights are political and therefore contested and contestable (Robbins, 2004). Under the premise that water is an issue that creates a dialectical tension between society and nature (Budds, 2009b), political ecology studies consider water resources to be "total social phenomena" (Mauss, 1990: 3) as both quantity and quality of water are always a social construction and therefore cannot be recognised only for their physical condition. Consequently, considering water as a social fact requires an examination of the value assigned to the resource and its distribution, as well as its governability and political facts (Orlove and Caton, 2010).

Hence, political ecology considers the different discourses about water which are engaged in by actors such as state agencies, NGOs (Non Governmental Organisations), TNCs (transnational corporations) and others, as the focus is to understand "the imaginary basis of their oppositions and visions (...) and the discursive character of their politics" (Peet and Watts, 2004: 38–39). In this sense, water rights privatisation policies have been criticised as they are seen as a very powerful strategy to guarantee water around the globe creating "new hydrosocial territories through the legalisation of space, which is deeply connected to hydraulic infrastructure and water resources" (Seemann, 2016: 160). This has generated strong resistance from local communities, most of them indigenous, who have a rationality linked to representations and appropriations of nature (Gonçalves, 2001) – including material and symbolic contents – that defines the concept of water rights in a very different way, as can be seen in Peru (Jenkins, 2014), Ecuador (Boelens and Gelles, 2005) and Bolivia (Perreault, 2006; Seemann, 2016).

In this context, the extent to which water conflicts can be managed by techno-rationalised solutions is a matter of interest for political ecology, especially when dealing with the mining industry (Delgado Ramos, 2010; Alimonda, 2011). Instead of considering them as a highly politicised matter, water conflicts have been described as concerns that follow universal economic, legal and natural scientific rules and require objective answers (Boelens and Vos, 2012). This can be seen when they are incorporated in national laws, as both development strategies and policy documents are highly depoliticised, based on the argument that techno-rationalised solutions should be enough (Boelens and Seemann, 2014).

An example of this trend, and that which constitutes the context for this article, is the Chilean 1981 Water Code, which adopted an extremely neoliberal position, as seen in other countries of the Latin American region (Alimonda, 2011). This law has confronted the consequences of water scarcity in northern Chile through initiatives which are mainly oriented towards a more efficient use of available water (*e.g.* preventing water leaks and losses), rather than redefining the allocation of water rights which are highly oriented towards mining companies (Molina, 2012).

3. Water, territoriality and culture in the northern region of Chile

Considering the development of the relationship between culture and nature, as well as political, economic and cultural constructions (Bakker and Bridge, 2006), political ecology emphasises an approach based on the "complexity of relations (...) that account for particular configurations of nature and culture" (Escobar, 2008: 29), and on the way different actors express their interests and concerns via assertions of territoriality (Bozzano, 2000; Aliste, 2001; Gonçalves, 2001). For instance, in the relations between indigenous groups and mining companies, it is possible to see how both groups typically hold dissimilar positions in the way that they rationalise their relationship with water.

The role of territoriality is often pivotal in grasping how social groups and water interrelate. Territoriality is to be understood as a conceptualisation and signification of space (Bozzano, 2000; Aliste, 2008) that is not limited to a physical context, as it includes a whole disposition of geographic, natural and social objects (Bozzano, 2000; Storey, 2001; Aliste, 2008). As Gonçalves (2001) argues, territoriality involves different perceptions and distinctions within the socio-natural dynamic, thereby serving as a manifestation of a rationality linked to representations and appropriations of water. Empirically, territoriality can be seen in the way that indigenous groups and mining companies interact between themselves and with water. In this regard it shows how both actors have an appreciation of territory that is partially defined in geographical terms that allow them to interpret the same territory in different ways, mediated by their own particular knowledge systems and expectations (Bozzano, 2000). Moreover, seeing territoriality as one part of the argument in this case leads, in turn, to seeing how actors have struggled to define the set of meanings that constitute place, seen as an "important source of culture and identity" (Escobar, 2008: 7).

This situation is particularly relevant in indigenous communities where territoriality is strongly defined by an identity that is based on their ancestral connection to water. In the case of the Atacameños, as well as of other indigenous groups such as the Aymara and Quechua, their ancestral and collective water uses were incorporated into a free market (under the 1981 Water Code), in a manner that did not consider local customs, ecosystem dynamics, or notions of territoriality based on a collective worldview (Gentes, 2001). This confirms that water policies (as well as the politics of development) "reflect and deploy the political will and cultural hegemony of a dominant ethnic group, one which has controlled nation-building processes since Independence" (Boelens and Gelles, 2005: 314).

This scenario of the free market and the changes from collective to private water uses have redefined the way the Atacameño interact with water. They have started to ask for "modern" irrigation techniques, knowledge and norms in order to progress, and have started to leave behind their traditional "backward" technology (Boelens and Gelles, 2005), in order to continue their traditional activities oriented towards agriculture and, to a lesser extent, livestock. Therefore, they have started to change their former socio-natural territoriality, which was focused on their cultural, social and economic values (Bjureby, 2006), tensioning their ancestral relationship between culture and water. Although they still have a sense of territoriality based on a system of meanings and cultural norms linked to local diversity and water (Leff, 1994), they have been forced to negotiate with external actors such as mining companies, accepting that a profit-driven, capitalist view of water that emphasises 'productivity and efficiency' (Morin, 2001) has been forcefully imposed on them.

3.1. Why intergenerational dynamics?

Considering that indigenous groups are usually highly dependent on water, there are several scholars that have studied ethnicity (Blaikie, 2000; Bryant, 2002; Perreault, 2003), in order to identify the genesis of these unequal power relations regarding water. Others have analysed other elements of social identity, such as gender (Rocheleau et al., 1996; Warf, 2004; Maclean, 2007; Jenkins, 2014) and class (Harvey, 2001; Smith, 2010). For the purpose of this article, intergenerational dynamics will be analysed in