

Extraction, Territory, and Inequalities: Gas in the Bolivian Chaco*

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ABSTRACT Conflicts over extractive industry have emerged as one of the most visible and potentially explosive terrains for struggles over distribution, territory, and inequality in the Andes. We explore these relationships in Bolivia, focusing on gas extraction in the Chaco region of the southeastern department of Tarija. We consider how the expansion of extractive industry intersects with territorializing projects of state, sub-national elites, and indigenous actors as well as with questions of inequality and inequity. We conclude that arguments over the territorial constitution of Bolivia are inevitably also arguments over gas and the contested concepts of equity underlying its governance.

RÉSUMÉ Les conflits liés aux activités de l'industrie extractive sont apparus comme l'un des terrains de lutte les plus visibles et les plus potentiellement explosifs sur des questions de distribution, de territoire et d'inégalité dans les Andes. Dans ce texte, nous traitons de ces relations en Bolivie, en nous concentrant sur l'extraction de gaz dans la région du Chaco relevant du département de Tarija dans le sud-est du pays. Nous examinons les interactions entre l'expansion de l'industrie extractive, les projets de territorialisation des élites infranationales et étatiques, et les acteurs indigènes, de même que les questions d'inégalité et d'iniquité. Nous concluons que tous les conflits entourant la constitution territoriale de la Bolivie sont aussi inévitablement des conflits sur la question du gaz et des concepts contestés d'équité qui sous-tendent sa gouvernance.

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I. Extractive Industries, Bolivian Territories

The social-state need[s] to generate economic surpluses that are the state's responsibility ... Is it mandatory to get gas and oil from the Amazon north of La Paz? Yes. Why? Because we have to balance the economic structures of Bolivian society, because the rapid development of Tarija with 90 percent of the gas is going to generate imbalances in the long run. It is necessary, accordingly, to balance in the long term the territorialities of the state ... combined with the right of a people to the land is the right of the state, of the state led by the indigenous-popular and campesino movement, to superimpose the greater collective interest of all the peoples. And that is how we are going to go forward. (Álvaro García Linera 2009)

With arresting directness this quotation from Bolivia's vice-president Álvaro García Linera reveals at least four tensions that underlie hydrocarbon policy and politics in contemporary Bolivia. These are tensions between local rights and the rights of the central state, between the territorial logics of sub-national indigenous projects and the territorial logic of Bolivia's new nation state, between the localization of costs and the nationalization of gains from extraction, and between the political logic of a state grounded in "the indigenous-popular and campesino movement" and that of a state ready to "superimpose the greater collective interest" on areas occupied by indigenous and campesino communities. These tensions, the ways in which they are contested, and how they are governed constitute our primary interest in this paper.

Over the last decade in Bolivia, hydrocarbons, natural gas in particular, have become the backbone of the macroeconomy as well as a primary source of social conflict (Kaup 2008). While the "gas war" of 2003 demonstrated the explosiveness of hydrocarbons governance on a national scale (Perreault 2006), voting patterns in the 2008 referenda on departmental autonomies and the revocation of elected authorities revealed the conflicting ways in which gas and the revenues it generates enter into sub-national political behaviour (Humphreys Bebbington, forthcoming). It is the contention of this paper that central to these conflicts are two related themes: perceptions of and responses to inequality and inequity, and struggles among conflicting territorializing projects, each linked to a particular view of gas and its governance (Wilson 2004; Perreault, forthcoming).

The distinction between inequality and inequity is important to these claims. We take inequality to refer to patterns in the distribution of outcomes (income, consumption, etc.), while the idea of inequity refers to the distribution of opportunities and of abilities to influence socio-economic and political processes (World Bank 2006; Bebbington, Dani et al. 2008a). In this sense, the term "equity" elicits notions of fairness and justice, and therefore might be closer to capturing factors that trigger socio-political activity in the presence of inequality.

This distinction between inequality and equity also sheds lights on the different territorializing projects associated with gas in Bolivia. This is so in two senses. First, in

order to finance new social programs aimed at reducing inequality in the distribution of public spending and in interpersonal income distribution, the current administration of President Evo Morales and his Movement Towards Socialism (MAS) is committed to the expansion of extractive industries in areas such as Tarija, where the bulk of Bolivia's proven gas deposits are located (Bebbington 2009). However, solving the function {(increased extraction) \rightarrow (reduced inequality)} also demands that the government redistribute part of the income generated by this gas extraction away from Tarija and towards other regions with fewer financial resources as well as into central government programs. Second, as the quotation from García Linera suggests, the Bolivian government is seeking to offset the geographical "imbalances" produced by the concentration of gas operations in Tarija. In addition to the political motivations that underlie these efforts,¹ a concern to reduce geographical inequality informs these calculations and has led the government to open hydrocarbon frontiers in departments² with no history of oil and gas on the grounds that "[i]t is necessary, accordingly, to balance in the long term the territorialities of the state" (see Figure 1).

Politically, these processes confront the government with three challenges, each of which derives from the relationships between extraction, territory, and inequality/equity.

1. While the simultaneous promotion of extraction in Tarija and elsewhere reflects policy commitments to reduce interpersonal and territorial inequalities, it has also led the government to reproduce more traditional forms of inequity through political decision-making processes in which central authorities decide, more or less unilaterally, to "superimpose" their vision of how resources should be governed.
2. While these processes are components of a particular territorializing project in which the central state seeks to impose its view of national space and how it should be governed (cf. Wilson, 2004 Wainwright and Bryan 2008; Wainwright and Robertson 2003), this central government strategy runs up against the more localized territorializing projects of indigenous peoples and sub-national elites. These sub-national projects involve rather different notions of how space should be governed and used.
3. There are good a priori, empirical, and conceptual reasons to expect that the expansion of extractive industry will itself aggravate inequalities and inequities within the regions in which it occurs (even as it is a strategy oriented towards reducing inequalities at a national scale). An instrument used to try and offset certain forms of inequality thus becomes a source of new inequalities.

Through the example of the extraction of natural gas in Bolivia, and specifically in the Chaco of Tarija, this paper explores the relationships among extraction, territory, and inequality, the conditions under which these relationships have given rise to social

1. These calculations involve efforts to reduce the political power of the so-called "Media Luna," the lowland departments of Bolivia in which both hydrocarbons and commercial agriculture are concentrated and which have historically had antagonistic relationships with the highlands (an antagonism that has intensified since the election of Evo Morales and his Movement Towards Socialism (MAS)).

2. This includes departments such as Oruro, Potosí, Beni, and the north of La Paz.

mobilization, and the extent to which this social mobilization has reworked these relationships. The paper is divided into three sections. The first section discusses (1) the ways in which the expansion of the extractive economy is likely to deepen and produce new inequalities within and between territories and (2) the ways in which these inequalities and the inequities that underlie them are contested. In the light of these ideas, the second section discusses the effects that natural gas extraction has had on territory and distribution in the department of Tarija and how this has interacted with different territorializing projects in the region. We pay particular attention to the implications that this has had for the Weenhayek indigenous people who live in the Chaco of Tarija. The final section draws conclusions.

The empirical material underlying our arguments draws on field research conducted at different moments between 2007 and 2009. The most significant period of research involved nine months of fieldwork in Tarija conducted by the first author during 2008–2009. This fieldwork was complemented with four other shorter field visits involving one or other of the authors. A second source of data has been the authors' continuing engagement with regional and national actors involved in conflicts over gas and territory in Tarija, and particularly the first author's close collaborative relationships with two organizations in Tarija—the Consejo de Capitanes Guaraníes de Tarija (CCGT) and the Regional Studies Centre for the Development of Tarija and the People of El Chaco (CERDET). In addition to key informant interviews conducted with government, companies, activists, indigenous leaders, families, and researchers in Tarija, Santa Cruz, and La Paz, the first author's research involved participant observation of the work of CERDET (where she is also a Research Associate), of community consultations on gas development in Weenhayek territory, and of technical conferences on gas development. Finally, collaborative research activities with the technical team of the CCGT have also been an extremely important source of information and insight into the relationships between the expansion of the gas economy and the territorial projects of indigenous organizations in the Chaco of Tarija.³

II. Extraction, Inequality, and Territorial Dynamics

A. Extraction, Inequalities, and Inequities

The literature on the so-called “resource curse” has demonstrated the economic and political distortions that frequently characterize mineral-dependent economies and which inhibit growth, frustrate economic diversification, and lead to forms of capitalist development that exhibit continuing poverty and inequality (Auty 1993, 2001;

3. The Bolivian Chaco is part of the eastern and southern lowlands, an ecoregion that is characterized by drier forest transitioning into scrub forest. Temperatures are extreme and water scarce. Population densities are low. Indigenous Guaraní, Weenhayek, and Tapiete occupy parts of the Chaco, though there has been significant colonization by other ethnic and cultural groups, and ranching dominates. The Chaco as an ecological region extends into Paraguay and Argentina. The Chaco forest is the second largest and most important in South America after the Amazon.

Weber-Fahr 2002; Sachs and Warner 1995; Humphreys, Sachs, and Stiglitz 2007; Karl 1997). While much of this literature focuses on the market volatility and exchange-rate effects of mineral dependence (often referred to as the Dutch Disease), there is also a substantial body of work exploring the distributional consequences of the extractive economy (Ross 2008; Kirsch 2006; CIDSE 2009; Aspinall 2007; Isham et al. 2005). This latter body of work explores how mineral-dependent economies both create new forms of inequality and interact with existing forms of inequality in ways that reduce transparency in economic management and increase levels of social conflict and rent-seeking behaviour (Ross 2008). These arguments have been explored both at national and sub-national scales (Arellano-Yanguas 2008).

There are several ways in which the arrival of extractive industry can aggravate inequality. Most significantly it creates asymmetrical power relations on an unprecedented scale (Stiglitz 2007). The size of the extractive enterprise, the resources at its disposal, its direct contacts with national and regional political authorities, and its privileged access to and control of information place it in a position of power in relation to other actors. This power gives the enterprise the capacity to favour candidates in local and regional elections, to sponsor social organizations with gifts and programs of various types, to assume a dominant presence in the local media, and to become, in Jeff Bury's terms, a "puppeteer" in the regional political economy, manipulating the actions of a range of the other actors.

The asymmetries of power that accompany the arrival of extractive enterprise in a new territory can themselves drive further inequality. First, through the control that the enterprise exercises over the natural resources it requires in order to operate, mostly land and water, the industry reduces other actors' access to and control over these resources (Bury 2004). Second, through its effects in the labour market, extractive industry creates new employment inequalities. Only part of the local population is able to access the jobs provided by the industry. Skilled jobs typically go to trained people who migrate in from other regions or countries. Even when the enterprise makes a deliberate attempt to create unskilled jobs for local populations, access to these only reaches out a certain distance from the mine or the well, and only lasts a limited time as such positions tend to be concentrated in the construction phase of a project. Furthermore, when extractive enterprises do hire unskilled labour, they frequently do so via local labour recruitment companies. In many cases these companies are created by pre-existing local and community elites, the effect being to further accentuate local inequalities of wealth and to induce the emergence of new local authorities (the labour gang organizers) who compete for power with existing community authorities.⁴

Third, to the extent that the enterprise acquires service and supplies from local companies,⁵ this also creates new inequalities. Whether it be for reasons of compe-

4. Here we draw on our research across different parts of the Andean region, as well as on the insights of other researchers who have encountered similar phenomena.

5. This is not to criticize such practices; indeed, they help localize some of the multiplier effects of extractive industry. We merely want to note that one effect is often to accentuate inequalities between the owners of these enterprises and others.

tence, scale, or proximity, only certain enterprises are able to participate in these new markets, and hence their owners emerge as new sources of local economic and political power. Fourth, extractive industries often initiate social and community development programs with a view to enhancing community relations and company reputation and securing social licence to operate.⁶ The distribution of these programs—both between and within communities—is also unequal. This inequality may be deliberate, particularly when such programs are intended to compensate those people who are most negatively affected by extraction. Nonetheless, for those who do not benefit, these programs constitute a new form of inequality of opportunity as well as potential for exclusion. Moreover, such programs are often undertaken without regard to traditional forms of organization and decision making which, among lowland groups in the Bolivian Amazon and Chaco, often include mechanisms to maintain a degree of distributional equity.

Finally, extractive industry is by definition a geographically focused activity that generates significant environmental externalities. These externalities are both real (landscape modification, water contamination, water consumption, noise, traffic, night-time illumination) and perceived (the perception of environmental risk even when the company insists that it has been able to control for and prevent actual contamination). Reflecting the uneven geography of extraction, these externalities are also distributed unequally among communities.

The growth of extractive industry can introduce new inequalities among territories as well as within them. As the opening quotation from Bolivia's vice-president notes, the distribution of royalties from extraction, and the degree to which this distribution should match that of actual extractive activities, constitutes one of the most serious terrains of conflict in Bolivia and has been so severe as to have called into question the integrity of the country (García Linera 2009; Humphreys Bebbington, forthcoming). Hydrocarbon-producing regions such as Tarija and Santa Cruz have believed passionately that they should hold onto the taxes and royalties that are due to them by law and generated by extraction. Conversely the western highlands (La Paz, Oruro, Potosí) have felt just as strongly that they have not received their "fair" share of the income streams that flow from hydrocarbon extraction. Finally, inequalities (and tensions) also emerge between the territories at the point of extraction and those distant territories in which the accumulation based on that extraction actually occurs. These distant territories may be within, or even beyond, Bolivia.

B. Contesting Inequality

There has been much interest in the types of institutional arrangement that might counteract these different sources of inequality. This interest is apparent in the literature on the resource curse (Humphreys, Sachs, and Stiglitz 2007; Weber-Fahr 2002) as well as in the literature which argues that subsoil natural resources should be seen as an "endowment" (and not a "curse") that countries can transform into human development and economic growth (ICMM 2006; Davis 1995; Davis and Tilton 2002). A concern

6. "Social licence" refers to the notion that in order to operate smoothly, companies need good relationships with, and the approval of, local populations.

for alternative institutions is also visible in the Extractive Industries Review, conducted in response to the criticisms made of the World Bank Group's support to mining and hydrocarbon investments (World Bank 2004, 2005). Across these literatures one finds a wealth of recommendations regarding the sorts of institutional arrangement that might mitigate the adverse political, economic, and environmental effects of extractive industry. These include transparent fiscal contracts, civil society vigilance of the extractive sector, strengthened environmental and tax codes, independent monitoring of the local impacts of mining and hydrocarbons operations, fine tuning of consultation mechanisms, and many other recommendations (Weber-Fahr 2002, Stiglitz 2007, Karl 2007, Ross 2008, World Bank 2005). These are all, in effect, institutions for coping with and offsetting the inequities and inequalities that occur as a result of extraction. However, such recommendations for institutional design are less frequently accompanied by analyses of how new arrangements might emerge. Here other literatures are more helpful, in particular those on contentious politics (Tilly 2004), policy networks (Haas 1992), and the political economy of institutional change (Boix 2008). Bringing these literatures together with case studies of "institutional transitions to equity," Bebbington, Dani et al. (2008b) have identified several pathways through which equity-enhancing institutions might emerge. The most relevant for the discussion here are those pathways that derive from social mobilization, policy networks, and the formation of broader class alliances.

Social mobilization does not always induce equity-enhancing institutional change; indeed it can induce authoritarian and repressive responses. However, both the historical record (Tilly 2004) and more recent experience in the Andes (de Echave et al. 2009; Bebbington and Burneo 2008) suggest that institutional changes that reduce inequities can occur as responses to organized social protest. Policy networks and policy reformers can also play critical roles in the emergence and design of new institutions that reduce inequity (cf. Hochstetler and Keck 2007; Fox and Brown 1998). They help build technical and analytical arguments to justify the case for institutional change, and they craft the actual design of new institutions that have the chance of being viable in the context of existing administrative and political arrangements. Their ability to play these roles, however, can often depend on the political space that opens up as a result of organized social protest. Finally, the sustaining of institutional changes is that much more likely when new class alliances emerge (particularly of middle classes) that are committed to increased equity (Boix 2008; Lehmann 1978). By the same token, when these alliances unravel institutional changes can be reversed.

Institutional change is unlikely to be induced by just one of these pathways. Institutional changes that signal innovation in mining-sector governance in Peru, for instance, can only be understood as the combined effect of mobilization *and* policy networks (Bebbington and Bury 2009). By the same token, such pathways operate in the context of, and will be influenced by, other political projects.

III. Territory and Inequity in a Gas-Fuelled Economy: Bolivia and Tarija

In this section we discuss the forms of inequality that have been associated with the gas economy in Bolivia and the extent to which they have been reworked as a result of social mobilization. Following a discussion of these relationships at a national level, we focus our discussion on Tarija and particularly those parts of the Chaco occupied by indigenous peoples. As will be clear, the nature and effects of such mobilization have to be understood in the context of the different territorializing projects to which it is linked. In the case of Tarija, such territorializing projects include those of

1. The national government, which has a project aiming to reinforce the territorial integrity of Bolivia and to govern national space in a way that allows increased resource transfers away from gas-producing departments and towards highland departments and national social programs,
2. Regional elites who are concerned to ensure that resources from hydrocarbon extraction remain in Tarija and who seek to use these resources in order to produce a particular vision of the department as a territory governed from the city of Tarija and integrated to Bolivia and South America by large-scale infrastructure,
3. sub-regional elites, such as those of the Gran Chaco, whose territorializing project hinges around increased autonomy for the provinces of the Gran Chaco within the department of Tarija, and
4. indigenous peoples whose projects hinge around the consolidation and governing (and in several cases expansion) of their legally recognized collectively owned lands (so-called *Territorios Comunitarios de Origen*).

Each of these projects draws on a sense of grievance with the current order of things and the current distribution of the costs and benefits of gas extraction; and at the same time the viability of each project depends on changes in the management and governance of gas.

A. Extraction, Inequities, and National Mobilizations around Gas

Though natural gas is considered a new commodity in Bolivia, the hydrocarbons industry dates back to the 1920s when Standard Oil of New Jersey began drilling for oil in Bermejo, along the border with Argentina. In the years following the Chaco War (1932-1935), after allegations that Standard Oil was sending oil to Argentina via a secret pipeline, the government moved to take control of the oil fields and passed the operations onto the newly created national hydrocarbons company, Yacimientos Petroleros Fiscales de Bolivia (YPFB). In the 60 years since the creation of YPFB, real or perceived inequities linked to the hydrocarbons sector have driven several rounds of social protest, and the government has nationalized and then reprivatized the sector on five occasions. Each nationalization has invoked the same rationale: that the country

was not receiving a fair share of the profits deriving from the extraction of the nation's natural resources.

As its title, "Héroes del Chaco," makes clear, the Supreme Decree 29701 ushering in the most recent such nationalization in 2006 invoked this same history. As in earlier periods, the decree grew out of different senses of inequity surrounding the benefits from hydrocarbon extraction and out of a period of expansion in international investment in the sector. Since the mid-1990s, Bolivia has steadily shifted toward an economy powered by and increasingly dependent upon receipts from the extraction and export of its natural gas reserves. The interest in discovering and exploiting these reserves is linked to larger trends in the Andes and in South America that include among other things the extraction and export of primary materials, especially minerals, oil, and natural gas, and the development of a network of regional infrastructure works that can facilitate the flow of these commodities to markets located both within the region as well as overseas (Bebbington 2009). Bolivia was encouraged and advised by multilateral funding agencies to open up the sector to private investment in order to better exploit and profit from its natural gas reserves. In this way, it was argued, the country would be able to take advantage of high prices and strong demand, in addition to its advantageous geographical location, to provide gas to nearby urban centres (São Paulo, Buenos Aires) hungry for clean fuels.

The combination of technological advances and the new wave of investment catalyzed by reforms since the mid-1990s certainly drove important new discoveries and renewed enthusiasm for the possibility of extraction-led development. By the early 2000s production levels of gas and condensates were rising dramatically. However, increased social discontent accompanied this gas bonanza, particularly over the dominant role of transnational firms in the production chain and the paltry sums that Bolivia received for its gas. Government found itself hard pressed to deliver the benefits that could satisfy the rising expectations generated by the industry and the imaginary it created around the production and export of gas. Meanwhile, anti-globalization sentiments within social movements in Bolivia (as well as within certain transnational networks) inspired criticism of transnational energy firm ownership and control of Bolivia's resources and pushed for an agenda to assert sovereignty over natural resources and to return the sector to state control (Perreault, 2006). These movements drew upon the contentious proposal to export gas from the Margarita field in Tarija through Chile to markets in Mexico and the United States to cultivate the image of Bolivians having died in the Chaco War (1932-35) to defend hydrocarbon resources, only to have this wealth fall into foreign hands. At the same time, disagreement grew between Bolivian officials and transnational energy firms engaged in negotiations over the distribution of profits related to new contracts and the classification of new and old gas fields. Indeed, according to one former government official, rather than the pressure of social protest, it was the greed of some transnational firms that ultimately derailed the plans for gas exports. Whatever the case, the tensions surrounding inequities in benefit distribution and social control of the industry were part cause, and part product, of a broad social movement that coalesced around the struggle to reclaim sovereignty over the nation's national resources, especially hydrocarbon resources, from transnational firms. After a

period of violent confrontation, leading to the resignation of two presidents and contributing to the election of MAS, Evo Morales's government retook control of the direction of the sector and began to reconfigure the distribution of profits.⁷

B. Gas and Protest in Tarija and Its Chaco

Located in the far southern and southeastern reaches of the country, Tarija is the smallest of Bolivia's nine departments, with a total population of approximately 391,000 (less than 5% of the country's total population) and a total land area of 37,623 square kilometres (less than 4% of total national territory) (INE 2009). In colonial times, apart from the fertile valleys of Tarija, there was little in the department that interested the central state. This was particularly the case for the Chaco, where lands were considered unused, uninhabited, and free. Indeed, following the war of independence, veterans were awarded property in the Chaco in recognition of their service – at the expense of indigenous groups already living in the region (Saignes 1990). These veterans became the first official occupants of the region and the beginnings of a self-identified *chaqueño* culture.

Since the colonial period, agriculture and livestock-raising have been important productive activities in the department, with the sector being dominated by small-scale producers and a limited range of products (Preston 1998). Around the mid-twentieth century, however, the regional economy began to shift to hydrocarbon production after important oil reserves were found in Bermejo and the Chaco. This sector quickly became an important source of financial resources for the region when in 1941 Tarija began to receive the 11% royalty paid to those departments producing hydrocarbons (Lema 2008).⁸ During the 1940s, regional leaders created the Comité Pro Intereses de Tarija (the Committee for the Interests of Tarija, now known as the Comité Cívico or Civic Committee), which served as a mechanism around which the interests and projects of regional elites could coalesce and as an instrument to demand the implementation of projects and investments using these royalties. Just as Tarija tussled with the national government over spending royalty monies, within the department there were equally acrimonious struggles over access to royalties between Tarija's provinces (above all those of the Gran Chaco⁹) and the capital. In 1979, the Board of Tarija's Regional Development Authority (CODETAR) moved to recognize the demands of leaders from the Gran Chaco by assigning the province almost half (45%) of the 11%

7. The new hydrocarbons law 3058 was negotiated and signed by the Senate during the Veltze (2005-06) administration, though MAS were an important part of the legislative drafting process.

8. Royalties are payments made for the resource extracted. They are a payment, not a tax, and are calculated on the basis of the volume and value of the extracted resource. The payment of royalties to oil-producing departments was first promulgated in 1929. However it was not until after the Chaco War that the Ley de Regalías established a percentage to be paid: 11%, which appeared to correspond to the percentage that Standard Oil handed over to the Bolivian government. In 1957, the Siles Suazo government attempted to recapture the 11% for the national treasury but was blocked by an oppositional alliance formed by the producing departments (Lema 2008).

9. The province of the Gran Chaco comprises three municipalities in the east of the department of Tarija: Yacuiba, Carapari, and Villa Montes. The Chaco as an eco-region extends from these provinces into Argentina, Paraguay, and parts of the departments of Santa Cruz and Chuquisaca.

royalty received by the department. However, in both cases it was often necessary to resort to civic mobilizations in order to force the government to disburse long-delayed payments owed for projects.

The bulk of these royalty monies were used to build roads connecting the city of Tarija with Argentina and the Chaco with Argentina, to pave the streets of urban Tarija, and later to build a series of provincial roads. Some royalty money, complemented by loans from international financial institutions (IFIs) received via the central government and the Bolivian Development Corporation (CBF), was also used to finance the construction of a sugar processing plant in Bermejo in 1968 and a vegetable oil plant in Villa Montes in 1979. Notwithstanding these investments in roads and agroindustry, the long-standing presence of hydrocarbon development in Tarija is not perceived as having contributed to the creation of a more dynamic and equitable regional economy, either at a departmental level or at that of the Chaco of Tarija, the area where most of the extraction has been taking place. The critical question today is whether the effects of the most recent round of gas expansion will be substantially different in a context in which, in 2008, the department's natural gas sector exports soared to US\$2.19 billion,¹⁰ dwarfing soya (US\$5.38 million) and more traditional products such as sugar (US\$5.33 million). This has produced windfall resources for Tarija.

Today about 70% of Bolivia's annual production of natural gas originates in the department of Tarija with the bulk of that production located in the two eastern provinces of O'Connor and Gran Chaco (INE 2009). This expansion of gas in Tarija has reverberated throughout the national economy. The contribution of the oil and gas industry to Bolivia's GDP rose from 4.46% in 1995 to an estimated 10% in 2005; the contribution to exports jumped from approximately 13% to nearly 50% in the same period, and the latest figure is higher still. The growth of the hydrocarbon industry has also dramatically shifted incentives and possibilities in the regional economy. The increase in the department's income, primarily through transfers to Tarija of revenue raised by royalties and the Direct Hydrocarbons Tax (IDH),¹¹ has been extraordinary. The income accruing to the prefecture (the departmental government) from royalties and taxes on hydrocarbons has quadrupled from BOB 522.8 million (approximately US\$74.7 million) in 2004 to BOB 1,982.2 million (approximately US\$283.2 million) in 2008. Over the same period the IDH transferred to Tarija's municipalities has increased from zero to BOB 443.5 million (US\$63.4 million). As a consequence, Tarija accounts for fully 35% of the entire budget for public investment across Bolivia's nine departments (though its capacity to spend this budget is severely reduced).¹² Indeed, it was because of such "imbalances" (to use Evo Morales's term) that the central government decided, in 2008, to redirect some of the transfers to Tarija to other regions through national income transfer pro-

10. These figures are from INE 2009. The jump in natural gas exports is primarily due to highly favourable prices though natural gas production in Tarija grew by 4% in 2008.

11. The IDH is a new tax created in the light of the Gas Wars that increased the government's share in the profits made from gas extraction. The IDH was created prior to the election of Evo Morales. The Morales government increased the rate of the tax.

12. All the data in the second half of this paragraph come from a public presentation made by the Ministry of Hacienda in Tarija in May 2008 (Ministerio de Hacienda 2008).

grams. Though the overall budget for Tarija continued to increase from 2007 to 2008 (Ministerio de Hacienda 2008), it was this central decision that sparked intense conflict between Tarija and the government (Humphreys Bebbington, forthcoming).

Indeed, this financial windfall has triggered a series of conflicts. Some of these occur within the department, both among provinces (O'Connor and Gran Chaco) and between provinces and the departmental capital (Gran Chaco and Tarija); others occur between the department of Tarija and other departments (especially Chuquisaca) over the distribution of income from fields that cross political boundaries; and yet others occur between Tarija and central government. The most visible version of this third type of conflict has been that between the Prefecture and Comité Cívico of Tarija on the one hand, and the central state authorities on the other, though lowland indigenous groups in the Chaco have also had tense relations with central government and MAS over certain aspects of gas expansion.¹³

These conflicts can be read in the light of the territorializing projects we noted earlier. There is a direct confrontation between the project of the Morales government, which seeks to consolidate Bolivia as a territory¹⁴ within which resources are shared more evenly (on a per capita basis) between the eastern departments and the western highland departments, and that of Tarija's elites, whose project focuses on the modernization and integration of Tarija. Both projects require control over the resources generated by gas, not only to consolidate their own projects but also to weaken that of the other. Meanwhile within Tarija, the Gran Chaco has long had a project to separate from Tarija and create a tenth department of the Gran Chaco. This project also requires control over gas income in order to make such a department viable and has therefore lead to recurring tensions with the city of Tarija. The announcement by Evo Morales in August 2009 that the Gran Chaco would henceforth receive its royalties directly from the central government (currently they pass through Tarija), and would be allowed to vote on its own regional autonomy¹⁵ in December 2009, reflects a pact between his territorializing project and that of the Gran Chaco, to the cost of the project of Tarija's elites. Meanwhile, the Guaraní, Weenhayek, and Tapiete peoples pursue their own projects. However, as we will note in the next section, they have been the least favoured by, and the least able to consolidate their agendas through, the gas question.

Existing alongside these disputes sits another inequality which derives from the organization of the gas production chain (Bridge 2008) rather than the fiscal arrangements governing how profits from extraction are redistributed. While this inequality has not induced mobilization, it is an ongoing source of grievance and annoyance in

13. This issue has cropped up on various occasions in our interviews with indigenous leaders and organizations. See also Bebbington 2009.

14. This is made clear in the New Political Constitution of the State (2009). The Constitution also allows for departmental, municipal, regional and indigenous "autonomies" within Bolivia. These autonomies (of which the indigenous autonomy is the strongest) will delegate authorities to these sub-national units. The principle of autonomies, however, has been recognized as part of a strategy to ensure the geographical integrity of Bolivia.

15. This is not the same as becoming a tenth department. It is instead an intermediate form, allowed for by the new constitution.

Tarija. Much of the extraction of gas in Tarija is governed from company offices in the city of Santa Cruz, and government offices in La Paz and Santa Cruz. Santa Cruz therefore becomes the point at which high-salaried positions are concentrated, where strategic decisions are made, and where many of the subcontracting arrangements are worked out with suppliers of strategic services or inputs (many of whom are also based in Santa Cruz). In terms of accumulation and decision-making power related to gas, Santa Cruz and Tarija thus stand in an unequal relationship. This same inequality plays out in the relationship between Tarija and the international locations of the companies operating Tarija's gas fields. These companies include Petrobras (Brazil), British Gas (UK), Repsol (Spain), and Total (France).

The persistence of imbalances and unequal treatment drives much of the increased social protest, mobilization, and conflict around hydrocarbon development within the department of Tarija. Increasingly, struggles around who controls and who decides how and where to drill and lay pipelines, and struggles over how the benefits derived from extraction should be shared, mean that gas has become a commodity that divides rather than unites. The inability of leaders to forge a common vision across these different territorializing projects threatens to undermine the social order and risks even greater fragmentation of society by giving rise to resource regionalisms and, indeed, indulging them, as in the recent decision to transfer royalties directly to the Gran Chaco.

C. Inequity and Indigeneity: Gas and Territory

Beginning in the mid-1990s with the adoption of the Ley INRA,¹⁶ the government moved to formally recognize and title the ancestral lands of lowland indigenous groups under the denomination of Territories of Collective Origin (TCOs). In Tarija, the three TCOs with claims to land include the Guaraní TCOs of Itika Guasu (in the municipality of Entre Rios) and Yaku Igua (in Yacuiba), and the Weenhayek TCO (in Villa Montes). All three TCOs have ongoing and/or proposed hydrocarbons operations located within their limits.

The fact that much of the hydrocarbon extraction now taking place is located in poor, remote areas occupied by these indigenous groups is a direct result of the loss of important oil and gas fields in the North. New technologies now permit companies to take a fresh look at old and abandoned fields as well as to identify new areas of hydrocarbon potential.¹⁷ While it is beyond the scope of this paper to address the impacts of hydrocarbon development on indigenous land claims and processes of territorial consolidation, suffice to say that there is strong evidence to suggest that where there are known reserves of hydrocarbons, indigenous efforts to claim formal title to those lands

16. Law for the National Institute of Agrarian Reform. This law was proposed in 1996 during the first government of Gonzalo Sánchez de Lozada to resolve the territorial demands of lowland indigenous groups.

17. The Chaco, a traditional area of production, has attracted some of the world's largest transnational energy firms (Petrobras, REPSOL, British Gas, British Petroleum, REPSOL, and Total ELF). These firms, and others, have agreements with the Bolivian government to jointly produce gas and condensates for export to Brazil and Argentina.

systematically fail. This is the case for both the Guaraní and Weenhayek in the Chaco of Tarija. However it is important to note that the trajectory of the different Guaraní TCOs in the Chaco of the department of Santa Cruz and their negotiations with the state have produced different results.¹⁸ The perceived inequality of treatment or opportunity that is felt by TCO leaders in the Chaco is one of the reasons why they have recently stepped up efforts to pressure the government to move forward in recognizing increased levels of indigenous autonomy.

1 Extraction and the TCO Weenhayek

The case of the TCO Weenhayek, encompassing some 3,500 inhabitants in 22 settlements located along the left-hand margin of the Rio Pilcomayo, in the province of Gran Chaco, illustrates how the unfolding of extractive industry has had a profound influence not only on the physical landscape but also on the social organization and social relationships that sustain both Weenhayek livelihoods and their capacity to pursue their territorial project. Exploration for gas, in an area that now forms part of the TCO, dates back to the decade of the 1980s when Tesoro Bolivia Petroleum Company, a US-Bolivian firm, carried out seismic testing in and around a number of communities. According to one community leader present at the time, the testing involved opening up trenches that “extended under our feet causing terrible vibrations and noise.”¹⁹ These trenches are still visible on satellite images. The same leader noted that there was no process of gaining community approval, much less compensation for damages: company representatives did not ask for permission, they merely set up videos for the children and passed out sweets. Tesoro went on to drill a number of wells but the lack of capital and suppressed world prices for oil and gas put further exploration on hold.

In the late 1990s, the multinational energy firm British Gas (BG Bolivia) acquired Tesoro Bolivia and came to own the concessions that overlap with the TCO Weenhayek.²⁰ BG Bolivia sought to further explore and develop wells as well as build a network of infrastructure in order to process and transport gas and condensates. In the early 2000s, two hydrocarbon transport firms, Transierra and Transredes, held negotiations with the Weenhayek regarding rights-of-way to lay pipelines across parts of their territory in order to transport gas from more distant fields to markets in Brazil and Argentina.²¹ In contrast to the exploratory activity of the 1980s the operating environment had changed in important ways. Firstly, the Weenhayek were organized, albeit with much difficulty and many limitations, and had elected community representatives and a directorate – ORCAWETA (Organización de la Capitanía Weenhayek) – to

18. The clearest case here is that of the TCO Alto Parapeti. Among the factors that led to successful recognition of territory in this instance, the strength, maturity, and political connections of the NGOs working with the Guaraní were especially important.

19. All interviews have been kept anonymous.

20. The TCO Weenhayek claim was recognized by the Bolivian government on May 19, 1993 and encompasses a total area of 195,659 hectares; to date some 25,000 hectares have been titled.

21. For more on these negotiations between the Weenhayek and Transierra see Inturias and Aragón (2005).

represent and defend their interests.²² Thus negotiations between transnational energy firms and the Weenhayek were to be conducted, at least in theory, via ORCAWETA and its higher level representative organization, CIDOB.²³ Secondly, the Weenhayek had a pending claim with the government to recognize an additional area of land that they argued also comprised part of their TCO.

Operating in a context of increasing resistance, energy firms sought to smooth the negotiation of their entrance and secure Weenhayek approval by offering payments to ORCAWETA to support development projects. BG Bolivia agreed to fund an “indigenous development plan” or PDI (an instrument that was first introduced by Transierra in its negotiations with the Weenhayek). The plan sought to provide support to those Weenhayek settlements most affected by the firm’s activity. In this case, BG Bolivia determined which communities were most affected and what activities would be prioritized and funded, and then retained control over the administration of the funds. The plan was portrayed as part of the company’s commitment to corporate social responsibility (CSR), but BG Bolivia did not accept that it was a form of compensation for damages caused by their operations; rather it was presented as an expression of the company’s desire to help foster the development and betterment of the Weenhayek people. Still, in the minds of ORCAWETA leaders and community leaders, these payments are considered a form of compensation. As one former leader suggested, “They are taking something from our land so it must be replaced.”

The development plan, which has been amended and expanded as BG Bolivia continues to work the gas field, has become the instrument that increasingly defines the relationships between the Weenhayek and the company, among the Weenhayek, and between them and their territory. As one observer noted, “You can be sure that every time the company wants to expand its operations, or when a community needs more resources, leaders will organize some sort of mobilization” in order to renegotiate the PDI. In short, the PDI has become the medium for the transfer of resources to Weenhayek leaders who, in order to maintain their standing and power within their communities, must be seen as successfully “collecting” resources to redistribute among their members. However, there is little evidence that the PDI has a pro-poor or developmental impact at the community level, much less at the level of TCO, given its limited scope, its preference for delivering in-kind donations, and a tendency toward funding an ad hoc list of activities favouring those communities most impacted by its operations. While in Weenhayek cosmology and culture the maintenance of harmony and equilibrium within and among communities is critical to peaceful coexistence, the PDI is premised on the notion that benefits will be unequally distributed and is implemented through a relationship of inequity in which the power to decide resides with BG Bolivia. The resulting and persistent distributional imbalances within and among

22. See Alvarsson (2006) and Cortez (2006) for a discussion of Weenhayek social organization and the formation of ORCAWETA.

23. CIDOB is the Confederation of Indigenous Peoples of Bolivia, a confederation of indigenous lowland organizations.

communities have led to a crisis in relationships, outbreaks of violence, and a breakdown of the social order.²⁴

More recently, the perception of imbalance and unfair treatment linked to BG Bolivia's proposed expansion within the TCO has led to a new round of internal conflicts resulting in the weakening of ORCAWETA. Confrontations between leaders who seek to gain control of the organization and access to rents have debilitated the organization at the very moment when internal cohesion is needed to analyze and debate the proposed expansion and determine if and how it can be aligned with the Weenhayeks' own ostensible territorial project to consolidate and expand their TCO. Rival leaders have emerged to accuse ORCAWETA's leadership of negotiating behind the backs of community members and enriching themselves in the process. The lack of transparency and the secretive nature of company-ORCAWETA negotiations feed this distrust. Typically negotiations around the PDI involve only a company representative and the head indigenous leader (or at most a handful of leaders). The results of these negotiations tend not be socialized or discussed with or ratified by the communities. The closed nature of negotiations and resulting agreements stems from the company's desire to keep the information from becoming public—and most likely to keep communities and groups from comparing results. Indeed, neither the government nor companies use a recognized or standardized methodology to calculate the value of a well or of one kilometre of pipeline, which results in wide variations in what communities are able to negotiate (Inturias and Aragón 2005, 153).

The forms taken by hydrocarbon expansion within the TCO Weenhayek and across Tarija derive from structured inequities in relationships of power. The history of these inequities dates back to the days of Standard Oil and runs through to transnational firms like BG Bolivia in the present. These inequities reside in the relationships between hydrocarbon companies and the central government, in the relationships between companies and territorially based indigenous populations, and in the relationships between central government and indigenous populations. Central government has had the power to grant concessions (and now contracts) without any free, prior, and informed consent²⁵ and the power of lead companies has given them the direct access to

24. There is some resonance here with Foster's old notion of "the image of the limited good" (Foster 1965), such an image occupies an important place in sustaining certain cohesion in Weenhayek communities. The structurally uneven distribution of benefits from the PDI contravenes this image.

25. In May 2005, the parliament approved the new Hydrocarbons Law 3058, which among other things recognized the rights of indigenous, peasant, and original communities to prior and informed consultation. In 2007, President Evo Morales promulgated Supreme Decree 29033 to regulate the consultative process (known as *Consulta y Participación*). According to the guidelines issued by the Ministry of Hydrocarbons, there are two moments when the *Consulta y Participación* process should be applied: the first is prior to any concession or contract being accorded for new operations, and the second is when an operation proposes to expand its activity. In the case of the Weenhayek, one of the first consultative processes carried out under this government, the process comes in the second moment when BG Bolivia proposed to reactivate a well held in reserve. The *Consulta y Participación* process was led by the Ministry of Hydrocarbons and YPFB, and BG group representatives were not allowed to take part. This process ended in mid-2009 after which BG Group reassumed control of negotiations with the Weenhayek in the final round of talks over compensation for non-mitigable

central government that has allowed them to progress more or less as planned. Regardless of whether this extraction has generated resources for local investment, it has been grounded in and made possible by structured inequities in political and decision-making processes in which indigenous communities remain by far the weakest player. Furthermore once extraction has installed itself in Tarija, these structured inequities have installed themselves as the central political fact in the territorial landscape. Whether the image is of Tesoro Bolivia doling out presents, or of BG Bolivia determining the design and governance of an indigenous development plan, the message regarding the relationships between power and the governance of gas and territory is much the same.

In the face of these inequities, national social movements, the Morales government, the elites of the Gran Chaco, and the elites of Tarija have all, at different times, been able to mobilize in ways that have both enhanced the benefits that they can derive from gas and furthered their territorializing projects. This has not, however, been the case for the Weenhayek. While the Weenhayek's material gains from gas *have* increased marginally, in the form of the PDI, the institutional effect has been to weaken the integrity of their representative organizations and the quality of social relationships within Weenhayek society. This in turn weakens their territorial project. ORCAWETA are only too aware of their disadvantageous position in these processes, and the sense of powerlessness and injustice is deepened.

Conclusions

The history of hydrocarbons in Bolivia has been characterized by inequalities in the distribution of benefits, costs, and risks and by inequities in the ability of different actors to influence these distributions. This in turn has induced forms of social mobilization demanding institutional changes that would, in the eyes of those mobilizing, reduce these inequities and inequalities. In pursuit of such ends, a number of these mobilizations have been successful: they have won changes in the ownership of the industry, in levels of royalty and tax payments, and in the distribution of benefits. The mobilizations that have systematically been least successful have been those of the lowland indigenous peoples who live on top of, or alongside, hydrocarbon deposits and who are most immediately subject to the costs that extraction exacts on the human and physical environment. Among these lowland peoples, the Weenhayek and Tapiete have been the least able to defend their territorial projects in the face of the expansion of the extractive frontier.

Most, if not all, of these mobilizations have been linked to particular territorializing projects and their interpretations of the inequalities and inequities surrounding gas extraction. This is all the more so in contemporary Bolivia. The territorial visions

impacts. It also merits noting that Vice-President Álvaro García's comments about "superimposing" hydrocarbon extraction elsewhere in Bolivia (see opening quotation) suggest that these processes of Consulta offer little real negotiating power to communities.

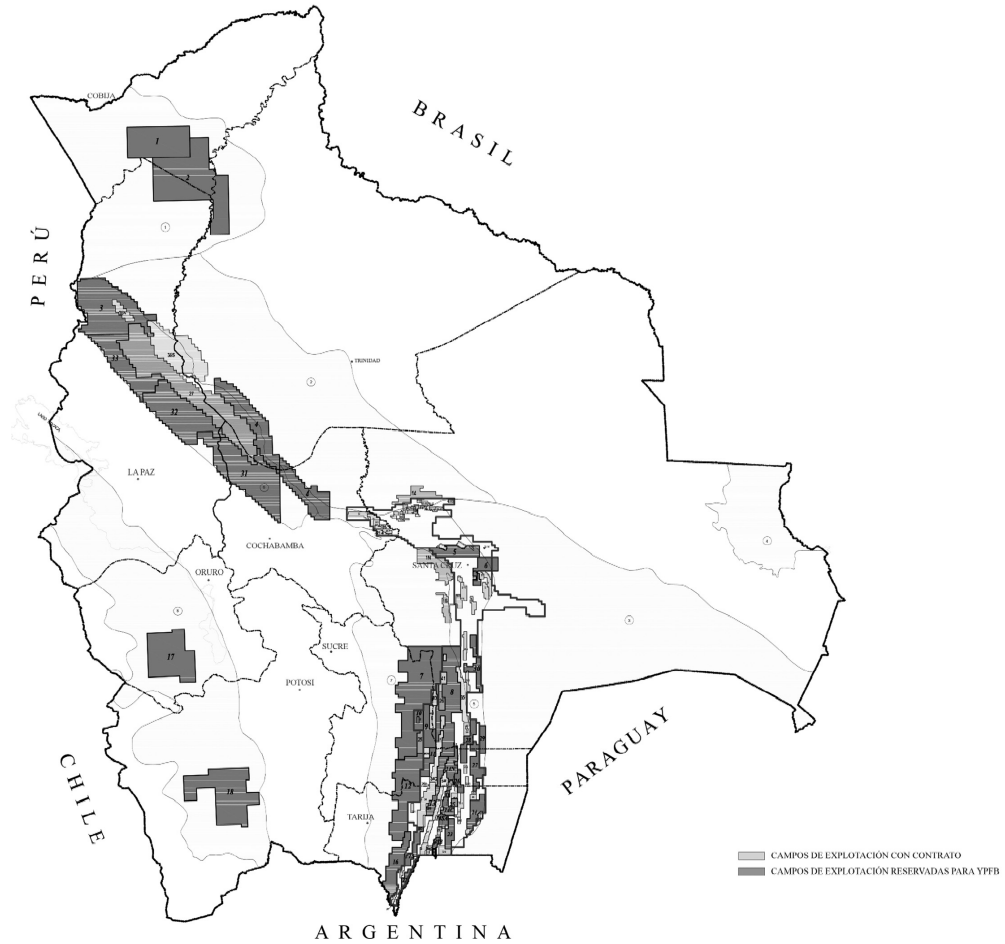
underlying these projects are not, however, consonant with each other. Indeed, the divergence among the objectives of these different mobilized social groups has resulted in continuing cycles of conflict. At stake in these conflicts is the question of the territorial organization of modern Bolivia. Gas and its governance has become central to this question. This, indeed, is the message of the quotation of Vice-President Álvaro García with which we opened this paper.

However, there is more at stake in these conflicts than just the territorial organization of Bolivia. Running through them are also ongoing debates on equity and fairness, and on how a criterion of “equity” should inform resource allocation in contemporary Bolivia. This is so both in a general sense and at a territorial scale. First, there is very significant debate on what constitutes a “*fair*” distribution of the benefits and costs generated by extractive industry. This fairness is partly discussed in terms of spatial justice. Here one issue is how benefits should be distributed in relation to the spatially uneven exposure of people and communities to the negative effects of extraction. What constitutes “*fair*” recompense to those localities most affected and from which resources are directly extracted? Another issue regards what constitutes a fair distribution of benefits among regions where extraction occurs and those where it does not occur. It was this debate that so rocked Bolivia during 2008.

Second is the issue of fair recompense for losses incurred by individuals and communities as a direct consequence of extractive activity. What would constitute a fair price for land and water taken by extractive activity? What constitutes a fair distribution of work opportunities for communities located adjacent to the site of extraction? What is a fair “geography” and distribution of company CSR activities? And in a similar vein, what constitutes fairness in access to information and decision making? Guaraní and Weenhayek groups in Tarija appear to feel that the ways in which decisions are made are not fair, and that furthermore they are treated by companies and the state in ways that are systematically unjust.

In the end there is of course no neutral, technical definition of “fairness” and the different groups involved in these conflicts approach notions of what is “fair” from their particular historical, cultural, and socio-political positions. To date the different processes of social mobilization noted in this paper have not converged to create a sphere in which the actors involved can move towards a relatively stable agreement on what they will collectively take to be fair. As long as this is the case, it is very likely that the inequalities produced by gas, and the inequities underlying gas extraction, will continue to generate conflict. As was clear during 2008, these arguments can be hugely volatile and they risk weakening even further the very public sphere in which debates over equity might occur. In this sense, while social mobilization has been a vehicle through which different groups in Bolivian society have been able to offset the inequities that affect them, mobilization has not yet served to produce an institutionalized notion of equity on the basis of which a collectively accepted approach to governing gas can be pursued.

Figure 1. Hydrocarbon contracts and areas available for contracting in Bolivia. The light shaded area represents areas available for contracts, while dark shaded areas represent existing contracts. Note the contracts given in La Paz, Oruro, and Potosí, none of which has any history of hydrocarbon extraction



Source: Yacimientos Petroleros Fiscales de Bolivia, 2008.

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