Cuts, Flows, and Leaks: Enclaving Practices and Countertopographies at Bolivia's Hydrocarbon-Conservation Frontier

Cortes, flujos y fugas: prácticas de enclavamiento y contratopografías en la frontera hidrocarburos-conservación de Bolivia

Penelope Anthias[a]
Durham University

Abstract

This paper interrogates the spatial practices and politics involved in remaking Bolivia's protected areas as territories of extraction, focusing on the ongoing conflict over natural gas development in the Tariquía National Reserve of Flora and Fauna. Extending and connecting debates on enclave infrastructures, neoextractivist state formation, and resource futures, I argue that territorialising this hydrocarbon frontier rests on a double movement of *cuts* and *flows.* On the one hand, enclaving practices work to minimise environmental impacts, restrict access to sites of extraction, and shield hydrocarbon companies from local efforts to hold them accountable. On the other hand, the state directs flows of money, infrastructure, and political influence to territories of extraction to manufacture consent, situating these spaces within broader geographies of hydrocarbon citizenship. I show how the boundaries and governance structures of protected areas—key sites for new extraction in Bolivia—have become implicated in the management of these cuts and flows. The paper advances understanding of neoextractivist territorialisation, while also highlighting how anti-extractivist peasant movements disrupt this spatial production by mobilising around extraction's leaky materialities and knowledge across extractive sites and project cycles.
Keywords: *extractivism, neoextractivism, resource enclave, Bolivia, space, territory, conservation, protected areas, anti-extractivist social movements*

Resumen

Este artículo interroga las prácticas y la política de espacio involucradas en la conversión de las áreas protegidas de Bolivia en territorios de extracción, centrándose en el conflicto en curso sobre el desarrollo de gas natural en la Reserva Nacional de Flora y Fauna de Tariquía. Extendiendo y conectando los debates sobre infraestructuras de enclave, formación de Estado neoextractivista y futuros de recursos, sostengo que la territorialización de esta frontera de hidrocarburos se basa en un doble movimiento de cortes y flujos. Por un lado, las prácticas de enclavamiento funcionan para minimizar los impactos ambientales, restringir el acceso a los sitios de extracción y proteger a las empresas de hidrocarburos de las esfuerzos locales para hacerlos responsables. Por otro lado, el Estado dirige flujos de dinero, infraestructura e influencia política a los territorios de extracción con el fin de fabricar el consentimiento, situando estos espacios dentro de geografías más amplias de ciudadanía de hidrocarburos. Muestro cómo los límites y las estructuras de gobernanza de las áreas protegidas (sitios clave para extracción nueva en Bolivia) se han visto implicados en la gestión de estos cortes y flujos. El artículo promueve la comprensión de la territorialización neoextractivista, como

[a] Department of Geography, Durham University. Lower Mountjoy, South Road, Durham DH1 3LE, UK. E-email: penelope.f.anthias@durham.ac.uk

también destaca cómo los movimientos campesinos anti-extractivistas interrumpen esta producción espacial al movilizarse en torno a fugas materiales y de conocimiento que atraviesan sitios y ciclos de extracción.
Palabras clave: *Extractivismo, neoextractivismo, enclave de recursos, Bolivia, espacio, territorio, conservación, áreas protegidas, movimientos sociales antiextractivistas*

Introduction

Reflecting a hegemonic neoextractivist political economic model in Latin America, Bolivia under the Movement Toward Socialism (MAS) government (2006–2019, 2019–present) has seen an aggressive expansion of extractive industry frontiers into Indigenous and peasant territories, along with the channelling of state gas rents into public services, infrastructure, and cash transfer programmes.[1] The latest phase of hydrocarbon development centres on the country's protected areas, following a relaxation of environmental protections in 2015 (Campanini Gonzáles, 2022). This article draws on recent ethnographic research to examine the spatial practices and politics of Bolivia's extraction-conservation frontier. Engaging debates on infrastructural enclaves and neoextractivist state formation, I interrogate the *cuts* and *flows* involved in the remaking of protected areas as territories of extraction, and how these are being disrupted by emerging countertopographies of anti-extractivist resistance.

At the outset, the neoliberal corporate fantasy of the so-called resource enclave—in which territories of extraction are neatly cordoned off from broader political and material relations (Ferguson, 2005)—might seem at odds with Bolivia's regime of post-neoliberal resource governance, which is predicated on a reassertion of state sovereignty over the country's gas fields. But this is not necessarily the case. In fact, extractive enclaves predate the dawn of neoliberalism, being a feature of both state-led and colonial mining economies in Latin America.[2] A growing Latin American literature on sacrifice zones (Bolados et al., 2024) hints at the tendency of neoextractivist states to reproduce the resource enclave as a spatial imaginary and project.[3] Moreover, enclaves have recently been conceived not as

disconnected spaces of resource production, but as infrastructural forms that facilitate particular forms of circulation while evading accountability for others (Appel, 2009). The question, perhaps, is not whether resource enclaves remain relevant in contemporary Bolivia, but what form they take and what specific configurations of state and corporate power are involved in their territorialisation.

My analysis reveals how state institutions in Bolivia deploy enclaving practices—cuts—to shore up the resource-accessing claims of transnational capital against local demands for consultation and/or environmental protection, in ways that complement a politics of corporate disentanglement. At the same time, I highlight how manufacturing consent for new extraction hinges on the state's ability to manipulate various kinds of flows—from the distribution of gas rents to regional authorities, to channelling public spending to affected communities, to awarding land titles to new settlers, to the national oil company co-funding the national park agency. The question of citizenship—who feels included in the hydrocarbon state and who feels that their rights are being sacrificed—is intimately connected to these cuts and flows.

The cuts and flows I identify are discursive, material, legal, cartographic, embodied, and affective. They form part of an incomplete and contested process of *worlding* new extraction. Informed by work on resource temporalities and affects, I highlight how these spatial practices are implicated in contested futures at Bolivia's hydrocarbon-extraction frontier. Resource affects are affective states or atmospheres that emerge from relations between resources and those who undertake or witness resource extraction, and may include euphoria, excitement, aggression, doubt, trepidation, frustration, or disillusionment (Weszkalnys, 2016). When corporations depict the spatial imprint of extraction as a percentage point less than one, they contribute to the production of resource affects. Flows of money, infrastructure, and gifts fuel expectations around the spatial distribution of benefits

from future development. Reworked conservation cartographies assuage fears about environmental contamination of fragile ecosystems. Together, these cuts and flows invoke a future in which the social and environmental impacts of extraction are spatially contained, while positive economic benefits flow out to reconfigure the development prospects of surrounding communities, regions, and the nation. The relationship between space and affect is also a critical site of intervention for community activists, as I elaborate below.

My analysis of these dynamics centres on the ongoing conflict over the development of three new gas fields in the Tariquía National Reserve of Flora and Fauna, located in southeastern Bolivia. Declining reserves in the traditional gas fields of the nearby Chaco region, coupled with a dramatic rise in Bolivia's national fiscal debt, have made the exploitation of these fields a strategic priority for the MAS government. These projects have been fiercely opposed by local peasant communities, who have staged a series of successful marches and blockades. While it has been subject to little previous research, the ongoing conflict in Tariquía is arguably the most significant case of local resistance to gas extraction under the MAS government.[4] It sheds light on the evolving and dialectical relationship between neoextractivist territorialisation and anti-extractivist resistance in Bolivia.

It is here that I directly engage this special issue's framing concept of leaks.[5] As noted in the introduction, resource enclaves are permeated by a variety of unintended circulations—from leaking wells and pipelines to clandestine flows of resource wealth—that shape the production of political subjectivities and spaces in and around sites of energy production. In what follows, I highlight how local activists in Tariquía have challenged state and corporate efforts at territorialisation (cuts and flows) by mobilising around such leaks, which include knowledges of the uncontained and enduring socioecological impacts of extraction in the gas fields and Indigenous territories of the Chaco. By documenting these countertopographies (Anthias, 2024; Katz, 2001), I show how thinking from/against the enclave makes visible

subaltern efforts to intervene in the production of space, in ways that challenge the spatial manoeuvres of capital and the state. My analysis extends recent work on the extraction-conservation nexus in Latin America (Collins & Fletcher, 2024) by showing how the territoriality and governance structures of protected areas have become implicated in these processes of extractivist territorialisation and anti-extractivist resistance.

The remainder of this article is structured as follows. The first section elaborates my analytical framework of cuts, flows, and leaks in conversation with the literature on infrastructural enclaves, neoextractivist state formation, and the extraction-conservation nexus. The next section analyses the ongoing conflict over new gas development in the Tariquía Reserve. I begin by describing a series of presentations organised by the Ministry of Hydrocarbons in Tarija city to analyse the enclave imaginaries mobilised to manufacture consent among the urban population. Next, I consider the territorialising practices used by state agencies to promote extraction in the Tariquía Reserve, through flows of money, infrastructure, and political influence. The next section examines how community activists in Tariquía have mobilised around the leaky materialities of extraction to counter the spatial tactics of oil companies and the state. The article is based on ethnography, interviews, and analysis of documents conducted over five research trips of between one and two months from 2017 to 2023.[6] It also draws on insights from my previous work on gas extraction in Tarija Department since 2008, which focused on Guaraní territorial claims and hydrocarbon development in the Chaco region (Anthias, 2018).

Cuts, Flows, and Leaks

Extractive Enclaves and Awkward Circulations

The concept of extractive enclaves describes how extractive industries carve out spaces of sovereignty in postcolonial states, fencing in production sites, bypassing state regulatory frameworks, and limiting the financial benefits of national societies (Ferguson,

2005). It hints at the limits on state sovereignty in the context of neoliberal globalisation, echoing international political economy work on the rescaling of government authority (McCreary & Turner, 2018). Enclavisation has been associated with the mechanisation of large-scale mining operations, the international marketisation of private security, and the emergence of a transnational industry in mine support services (Hilson et al., 2024). Extractive enclaves involve dynamics of extreme socio-economic marginalisation and dispossession (Lesutis, 2021), and may be spaces of violence, human rights violations, and corporate impunity (Watts, 2004). They are also associated with forms of corporate governmentality, as states delegate responsibilities to multinational corporations to expand capitalism and modernise so-called frontier regions (Jaramillo & Carmona, 2022).

The concept of the extractive enclave has also been critiqued for depicting areas of resource production as isolated and disconnected. Far from being discrete spaces, recent work by geographers and anthropologists has shown how resource enclaves are in fact deeply entangled in local political economies and social relations (Côte & Korf, 2018; Hilson et al., 2024). Their operation often requires companies to engage local elites, communities, state police, and paramilitary forces (Watts, 2005). As the introduction to this special issue makes clear, extractive enclaves are permeated by *unintended* flows of materials and knowledge, which leak out to reconfigure surrounding landscapes and polities. Recent work on infrastructures highlights how efforts to achieve seamless connectivity and flow are punctuated by instability, interruptions, and fragility (Harvey, 2022).[7] Indeed, efforts at spatial containment are produced *relationally to* such vulnerabilities, and the crises of legitimacy they give rise to.

Here, Hannah Appel's (2009) work is instructive. Focusing on Equatorial Guinea's offshore oil rigs, she highlights how particular kinds of infrastructures work to smooth the passage of oil to market, while helping the oil and gas industry evade responsibility for local

outcomes. She conceptualises the enclave not as a bounded space, but as a logic and form that is replicated at a variety of scales, linked to a politics of corporate disentanglement.

My analysis focuses on new hydrocarbon projects that have not yet fully materialised, rather than an established enclave. Nevertheless, the above conceptualisation of enclaving practices is relevant to the ways in which the Bolivian state seeks to territorialise and manufacture consent for extraction in Tariquía. As will become clear, this involves a multitude of boundary-making practices that depict seismic testing and gas extraction as neatly contained within particular geographic sites and infrastructures, with no significant or durable impact on surrounding ecosystems, livelihoods, or social relations. The corporation driving these projects—the Brazilian company Petróleo Brasileiro S.A. (Petrobras)—remains curiously disentangled from these projected outcomes and the politics surrounding them.

I describe these enclaving practices as cuts. My analytic of cuts and flows draws inspiration from legal geographer Nick Blomley's (2011) work on the making of liberal property, which he argues requires conscious cuts—both spatial and subjective—in the processual networks through which space is produced. Not only are property boundaries central to extractivist territoralisation (providing legal security for capital), but enclaving practices are, as already noted, forged relationally to a variety of awkward (unintended) circulations and potential disruptions. However, the flows described in this article are also intentional, as the Bolivian state seeks to manufacture consent for extraction through the proliferation of gas rents, jobs, and public infrastructure around designated sites of extraction. It is here that debates on neoextractivist state formation acquire an additional relevance.

Governing Flows: Neoextractivism and Hydrocarbon Citizenship

Since President Evo Morales's 2006 nationalisation decree, the state oil company Yacimientos Petrolíferos Fiscales Bolivianos (YPFB) actively participates in the extractive

process via joint ventures with transnational companies, holding a 51 percent stake in all new contracts. The country's gas fields are no longer neoliberal enclaves for wealth extraction by transnationals, as in the 1990s, but are celebrated as spaces of reconstituted national sovereignty that provide the material foundation for social development and "living well." This does not automatically transform the dynamics of extraction on the ground. For example, traditional gas fields, located mainly in Indigenous territories of the Chaco, continue to be treated as sacrificial zones marked by poverty, dispossession, and ecological devastation, where the state defers local demands for accountability to transnational oil companies (Anthias, 2018). However, the neoextractivist model does mean that the state takes a more active role in territorialising new extraction, rather than simply ceding territory to transnationals through a concessionary model. The state oil company YPFB is clearly a central actor here, but, as will become clear, a variety of other state agencies may contribute to this process.

Besides the extractive process, the post-neoliberal hydrocarbon regime also grants the state a much heftier share of the wealth generated from hydrocarbon development, via royalties and a direct hydrocarbon tax. Under the MAS government, state revenue from gas has been used to fund cash transfer programmes, public infrastructure projects, and an inflated state bureaucracy. Flows of gas wealth not only maintain hegemony for extractivism at a national level, but also help manage the crises of legitimacy that emerge from the uneven spatial distribution of extraction's economic benefits and ecological harms (Watts, 2001). Resource grievances have been central to the politics of hydrocarbon-producing regions of Tarija Department (Bebbington & Bebbington, 2010), in terms of both directly impacted Indigenous communities and rent-seeking regional elites. Felipe Irarrázaval (2022) highlights how the transfer of natural gas rents to subnational governments under MAS—particularly through investments in public infrastructure—has helped embed gas production networks in

local politics by coopting local elites, mobilising local labour, and projecting an image of progress. Revenue-sharing arrangements with provincial governments have also weakened political opposition from right-wing departmental elites (Anthias, 2022b). Unsurprisingly, such flows of state investment do not always reach Indigenous and peasant communities living adjacent to gas wells, who continue to complain of state abandonment (Ruíz, in press). Still, these communities are subject to other kinds of flows, as hydrocarbons corporations enable small amounts of wealth to "trickle out" from "inside the fence" (Gustafson, 2020, p. 217) via payments for lost animals, handicrafts, or temporary labour. Flows of money, jobs, or infrastructure may complement a corporate politics of disentanglement by mitigating grievances about unintended leaks.

Building on and extending this work on neoextractivist territorialisation, I highlight how the Bolivian state participates in territorialising extraction *both* through enclaving practices, or cuts, *and* through managing flows of money (gas rents), infrastructure, people, and political influence. Together, these cuts and flows reinforce a particular enclave imaginary and extractive future, compatible with revolutionary nationalism, in which the social and environmental impacts of extraction are spatially contained, while positive economic benefits flow out from territories of extraction to reconfigure the development prospects of surrounding communities, regions, and the nation.

Flows of gas wealth are connected to what I have previously termed hydrocarbon citizenship (Anthias, 2018)—the emergence of the subsoil as a conduit for relations of mutual recognition between communities and the central government. Indeed, a key feature of neoextractivism in Bolivia is the degree to which resource affects and futures are linked to broader narratives of nation and citizenship, grounded in histories of resource struggle. However, the flows of money and political influence discussed here do not merely produce state-citizen relations in a positive sense; they also enable forms of political containment and

territorial control that are linked to enclaving practices. This is the case, for example, when money from the state oil company is channelled to the agency responsible for protected areas and used to restrict access to sites of extraction. As this demonstrates, the dynamics of gas extraction are also shaped by preexisting territorial formations, including those related to conservation.

Territorialising the Extraction-Conservation Frontier

The opening of Bolivia's protected areas to hydrocarbon development exemplifies the growing articulation and spatial overlap of extraction and conservation geographies in Latin America, as the appropriation of nature as commodities expands into new territories. A burgeoning literature examines this extraction-conservation nexus (Collins & Fletcher, 2024). To date, this work has focused on the threats that extraction poses to forest ecosystems (Bebbington et al., 2018), and the new forms of eco-territorial resistance to which this has given rise (Svampa, 2015). In neoextractivist states, the tensions between a discourse of environmental rights and a political economic model based on an extractive imperative have been widely noted (Arsel et al., 2016), as have the resulting weakening and selective applications of legal frameworks for environmental protection (Campanini, 2022). The 2011 Isiboro Secure Indigenous Territory and National Park (TIPNIS) conflict (Hope, 2016) placed these tensions at the centre of political debate in Bolivia.

This article contributes to this literature. However, rather than focusing on tensions between extraction and conservation as they manifest in state policy or social resistance, my analysis sheds light on how the territoriality of protected areas—their boundaries, infrastructure, and governance institutions—are becoming implicated in the cuts and flows of extractivist territorialisation. It is worth noting that protected areas are themselves legacies of a neoliberal enclave imaginary, in which the drawing of legal-cartographic boundaries, paired

with flows of transnational conservation finance, promised to protect biodiverse natural areas from destruction by ongoing processes of capitalist territorialisation (Anthias & Radcliffe, 2015). In practice, these territories have always been transgressed by various kinds of unintended flows, from truckloads of illegal timber to the diversion of conservation funds into private bank accounts. While the MAS government has framed protected areas as an anachronistic legacy of "colonial environmentalism" (La Voz de Tarija, 2017), my analysis shows that their boundaries are being repurposed and reworked to push forward extractive projects. Moreover, the historical exclusion of these territories from flows of state investment enables extraction to be framed as a frontier of development and inclusion in citizenship.

Protected areas are also consequential for anti-extractivist resistance. The spillover ecological impacts of extraction in protected areas are of particular public concern, both within and beyond these territories. Like TIPNIS, the Tariquía Reserve has become a spatial frame for galvanising opposition to new hydrocarbon projects, as captured in the activist slogan "Don't Touch Tariquía!" Meanwhile, at a national level, a new National Council of Indigenous Peasant Territories and Protected Areas (CONTIOCAP) has emerged to represent residents of protected areas and develop shared strategies of territorial defense. In short, the boundaries of protected areas have become implicated in state and corporate efforts to govern space, as well as activist strategies of territorial defence. Processes of frontier territorialisation do not simply dissolve existing social and territorial orders, but involve the recycling of institutional debris (Lund & Rasmussen, 2018), in this case articulating the vestiges of neoliberal conservation geographies with new processes of neoextractivist state-formation.

Territorialising Extraction in the Tariquía Reserve

On May 20, 2015, Bolivia's president, Evo Morales, signed Presidential Decree 2366 permitting "the development of hydrocarbon exploration activities in the different zones and categories within protected areas" (Article 2.1, Decreto Supremo No. 2366, 2015: 3). Today, 17 percent of the total area of Bolivia's protected areas is under the influence of hydrocarbon contracts (Página Siete, 2017). The Tariquía National Reserve of Flora and Fauna is located in Tarija Department in southeastern Bolivia, near the border with Argentina. The only protected area of the Andean Yungas, it includes subtropical and temperate forests and rare cloud forests, along with hundreds of threatened and endangered species. The reserve is located in a mountainous area with cliffs, steep slopes, and unstable soils. It plays a critical role in regional hydrology and climate, providing water supply and rain cloud effects for Tarija's regional capital and central valley, an important food and wine-producing region. There are at least 10 communities living inside the reserve, and another 13 in the surrounding areas.

Figure 1. Map showing gas fields and hydrocarbon blocks overlying the Tariquía National Reserve of Flora and Fauna. (Elaborated by Chris Orton, Cartographic Unit, Durham University, using a map obtained by the Commission of Human Rights of the Departmental Assembly of Tarija following a legal petition for information on new hydrocarbon contracts. Accessed by Anthias in February 2022.)

The focus of recent conflict over hydrocarbon development in Tariquía has been on the San Telmo and Astillero blocks (Figure 1), which were the subject of initial 40-year agreements between the Bolivian state and Petrobras in April 2015.[8] In March 2018, Bolivia's Plurinational Legislative Assembly approved contracts for exploration and exploitation of these fields by Petrobras, in partnership with YPFB. These reserves are thought to be the most significant recent discoveries in Tarija Department, potentially shifting the geographies of hydrocarbon development away from the Chaco region, although exploration in the Astillero gas field since 2022 has disappointed such expectations. Plans for

hydrocarbon development in Tariquía have generated strong resistance by local peasant communities, with women playing a leading role (Chávez & López, 2018; Van der Hout, 2024). This has included a four-day march from Tariquía Canton to the regional capital Tarija in 2017 and a 147-day blockade of a bridge in Chiquiacá in 2019, which prevented the start of drilling. This mobilisation has provided the context for new alliances between rural communities on the extractive frontier and urban environmental activists in the city of Tarija.

In what follows, I draw on a series of presentations by the Ministry of Hydrocarbons and YPFB in the city of Tarija in 2017 to analyse the spatial imaginaries mobilised by the state and oil companies to manufacture consent for extraction among the urban population. I then turn to an analysis of territorialising processes and counter-strategies of resistance in the reserve itself. My ethnographic account draws attention to how, across a variety of spaces, corporate and state imaginaries of the enclave have been challenged by alternative knowledge and solidarities forged around the leaky materialities and enclaved benefits of extraction.

Enclave Imaginaries

On April 3, 5, and 7, 2017, I attended three events held by Bolivia's Ministry of Hydrocarbons in the city of Tarija, the capital of Tarija Department, which they called "Hydrocarbons and the Bicentenary." The event title references the 200-year anniversary of the 1817 Battle of Tablada, a semi-fictionalised military standoff between royalist forces and local militias aligned with Argentina. Strategically framing hydrocarbon development within a regionalist narrative of independence, a booklet produced for the events showed a local military commander on horseback superimposed onto a gas plant bearing the logo of the state oil company, under the slogan "200 years of life, 11 years of glory" (since the nationalisation of gas by the newly elected President Evo Morales), with specific figures showing income received from royalties and direct hydrocarbon tax. The presentations followed news in local

media that YPFB had already signed 40-year agreements with Petrobras to develop three gas fields within the Tariquía Reserve. Communities in one area of the reserve (Tariquía Canton) had just announced they would hold their first march to the city of Tarija in opposition to extraction later that month. As such, it was a politically strategic moment for a regional propaganda campaign.

The events took place in a large auditorium of the Faculty of Agricultural and Forest Sciences of the University Juan Misael Saracho. They were so well-attended that some people had to sit on the floor—a sign of the high level of public interest in these new hydrocarbon projects. The first event focused on a technical presentation of the difference between the neoliberal and post-neoliberal hydrocarbon regimes in terms of benefits for the local and national population. The second and third events, titled "Main Environmental Services of the Tariquía Reserve of Flora and Fauna" and "Benefits of Exploration," focused explicitly on planned projects in the Tariquía Reserve. The events, which I photographed and audio recorded, provided insight into the spatial imaginaries deployed by the state and oil companies to manufacture consent for hydrocarbon development within the regional context.

The second event, presented by Vice Minister of Energy Development Jorge Ríos, tackled the question of environmental impacts most directly. At the heart of Ríos's presentation was an effort to minimise the negative environmental impacts of extraction through spatial and temporal cuts, while emphasising its multiscalar benefits. Ríos attempted to minimise the spatial imprint of impacts using adjectives such as "partial" and "precise" and presenting fractional figures that sounded scientific, though the evidence these figures were supposedly taken from was not presented. One slide stated that only 0.03 percent of the total area of the reserve would be deforested for hydrocarbon exploration (based on the number of hectares required for seismic lines, workers' camps, a heliport, and a discharge zone), while others presented tables estimating that 0.01 percent of carbon dioxide,0.01 percent of oxygen,

and 0.01 percent of biomass would be affected by seismic testing. A concluding slide summarised the impacts of exploration as "of little significance, of reduced magnitude, and with a precise location." Here, spatial cuts are accompanied by temporal cuts, with the impacts of seismic testing described as temporary. The most significant temporal cut, however, was that the entire presentation focused only on the impacts of exploration, with no discussion of the impacts of the hydrocarbon *exploitation* that would follow if the presence of valuable gas reserves were confirmed. This shut down any discussion of the spatially uncontained, long-term, and cumulative environmental and social impacts that would follow from the development of three major gas fields within the Tariquía Reserve—development to which the Bolivian state was already legally committed.

The title of Ríos's presentation, "Main Environmental Services of the Tariquía Flora and Fauna Reserve" is also noteworthy. During his talk, Ríos equated natural gas with other environmental services of the reserve, a comparative framing that shifted focus away from how extraction would impact ecosystems. In fact, the minister claimed that hydrocarbon development would strengthen environmental conservation by providing money for the state park agency, Servicio Nacional de Áreas Protegidas (SERNAP), a point I will return to below. He compared the estimated deforestation caused by seismic testing (affecting, he claimed, 0.03 percent of the reserve) with data on deforestation over a 25-year period (1990–2015), which he blamed on the "subsistence activities" of park residents. These examples present hydrocarbon extraction and biodiversity conservation as complementary activities. They point to a repurposing of the enclave logic of protected areas to facilitate extraction, legitimised through a shared language of environmental services.

This emphasis on spatially and temporally bounded impacts was accompanied by an even stronger emphasis on the uncontained, multiscalar benefits that would accrue from the development of Tariquía's gas reserves. As noted, the first of the three presentations focused

on the economic benefits of the post-neoliberal hydrocarbon regime, while the third was titled "Benefits of Exploration." Sandwiched between these benefits-focused presentations, Ríos moved on from environmental services to a slide showing some donkeys crossing a stream, emblazed with the caption "Based on these impacts, can one cut processes of local, regional, and national development?" The concluding slides hammered home the cost-benefit analysis, reminding the audience that the income from hydrocarbon royalties sustains the economy of Tarija Department and concluding, "The economic growth of Tarija can't be left in the subsoil, it's necessary to opportunistically exploit our natural resources, because Tarija requires a dignified and sustainable future."

Ríos's presentation was followed by a heated question-and-answer session. A white-bearded man from Tarija's Civic Committee complained of the lack of concrete information in the talk, suggesting that the public needed to see the environmental impact study to make a judgment. Gonzalo Torrez, an environmentalist and with a master's degree in ecology, accused Ríos of having told "a pack of lies." He explained how seismic testing would affect animals, groundwater, and vegetation, while opening access roads would unleash a whole series of other secondary environmental impacts. He also mentioned the potential consequences of extraction for the region's hydrological cycle, describing how a "rain shadow" created by the cloud forest of Tariquía ensures rainfall for Tarija's central valley, where most of the food for the city is produced. In light of this interdependence, he argued that not only a few communities of Tariquía, but also the "big community" of people in Tarija and the Central Valley, should be consulted about extraction. He also questioned whether the economic benefits would ever arrive to Tarijeños, speculating, "We will end up with the forest destroyed and not a peso in our pockets." A student from Entre Ríos asked what comes after seismic testing, questioning whether communities would have sufficient access to information to make a decision. Another speaker challenged the organisers of the

event, saying it should have been an "impartial information-sharing event," not state and oil company propaganda. The final presentation several days later again saw state and corporate efforts to manage the narrative of extraction interrupted by alternative knowledge, questions, and claims. On this occasion, three hours of presentations by the representatives of the Spanish oil company Repsol, which emphasised their positive environmental record in Indigenous territories and protected areas of the Chaco region, were interrupted by angry shouts of "We want to talk about Tariquía!". Finally, a group of activists raised a banner emblazoned with the words "Hands off Tariquía!", a slogan that emphasises the territorial integrity of the reserve, in contrast to corporate representations of spatially bounded environmental impacts.

The events I have described demonstrate how the spatio-temporal distribution of ecological harms and economic benefits was central to corporate and state efforts to manufacture consent for extraction within the regional capital. These can be conceived of as enclaving imaginaries in that they depict a sense of infrastructural containment of and technocratic control over hydrocarbon materialities. The events also show how members of the audience contested these narratives by pointing to hydrological spillover effects, more-than-human feedback loops, unequal flows of hydrocarbon wealth, and futures beyond exploration marked by cumulative and uncontained environmental impacts. Those present raised questions about who should be considered an affected community and who had a right to consultation, arguing this should include residents of the city of Tarija.

Governing Flows

Alongside state efforts to promote extraction in the regional capital, oil companies and state agencies were busy manufacturing consent for extraction within the Tariquía Reserve. In many ways, this work resembled the spatio-temporal manoeuvres discussed

above: minimisation of the spatial imprint and duration of impacts, alongside promises of widely distributed benefits. Community members from Chiquiacá Canton—the site of two planned gas wells—described a series of informational meetings held by oil companies and state officials to address concerns about environmental impacts of extraction. In one meeting, engineers and geologists from Santa Cruz were brought to answer questions. A local resident, Silvana, described the dynamic: "We pressed them with questions but they tried to minimise the impact" (personal communication, February 11, 2022). Her husband, Sergio, was silenced by the provincial governor when he attempted to read out relevant environmental legislation to show how planned projects violated constitutional articles stipulating the required distance of gas wells from water sources. As Sergio recalled, "He asked me if please, please, would I stop and, well, I ceded the microphone" (personal communication, February 11, 2022). Counter-knowledge around extraction's leaky materialities were thus mobilised but quickly shut down in the context of state-convened political spaces.

The state and the oil companies also emphasised the flows of wealth, employment, and other benefits that would follow from hydrocarbon development in Tariquía. In contrast to the presentations in Tarija, which focused on the national and regional distribution of gas rents, the emphasis here was on the material benefits that would be experienced by rural communities. As Lilian, the vice president of Chiquiacá's Defence Committee, described:

> Here the first thing they did is convince people that they would have a job. That they would have a job where they would earn money, and then when people didn't really agree, they brought stoves, gas cylinders to give away; a stove and a gas cylinder to give to each community member so that they would let the company enter. They said that the women were going to wash the clothes, that others were going to make bread, others were going to cook, that there'd be no shortage of work. That they would have a salary. But that's not forever, that would only be for about two or three months. Then what would we be left with? With ruin. (personal communication, February 12, 2022)

Here, Lilian described how the promise of employment was both specific and targeted by gender, presenting an image in which flows of gas wealth would penetrate the space of the rural household. However, she quickly countered this with a reflection on the temporality of benefits versus environmental impacts. Another community member drew on his experience working as a driver for a company involved in seismic testing to question promises of local employment:

> The women were going to have work washing clothes, they were going to make empanadas and sell them to them; bread, they were going to make bread—all those things. And I know that the oil companies bring products from the interior of Bolivia and even from abroad; they have preserved foods, great quantities—it's a huge supermarket that's private; they don't need to buy anything; everything is labelled. (personal communication, February 12, 2022)

Contrasting with the state and oil company narratives that impacts would be contained while benefits would be widely distributed, they suggested that the reverse would be true: Wealth would be contained within enclave infrastructures, while environmental impacts would seep out into the surrounding landscape, producing long-term futures of "ruin." The basis for this countertopographic knowledge will be discussed in the next section.

The promise of benefits also took on material forms. As Lilian mentioned, on March 30, 2019, the Ministry of Hydrocarbons and YPFB held a meeting with community members in Chiquiacá, where the company distributed stoves, gas cylinders, and roof tiles. The event was captured on film by local journalists and denounced by Chiquiacá's women-led Defence Committee (Anthias, 2022a; Cardona, 2019). The Minister of Hydrocarbons was forced to respond, claiming no knowledge of the meeting. The stoves and gas cylinders acted as material manifestations of extraction's future benefits, in case anyone suspected these were merely empty promises. They had an intentional and tangible impact on people's hopes for the future. As Sergio put it: "People saw a stove, a gas cylinder, and people said, 'Well, this

is just the beginning!'" (personal communication, Febrary 11, 2022). Giving away gas canisters also fuelled local rumours that gas would be free if extraction went ahead. Moreover, people reported feeling that they could not oppose the entry of oil companies once they had accepted these "gifts." The distribution of material goods in the countryside thus generated hopes about future flows of gas and gas wealth, as well as feelings of indebtedness within a moral economy of reciprocity.

These tactics, of course, had a strong temporal dimension: They used present benefits to generate future hopes and obligations. Nor was their timing accidental, coming just five days after communities issued a public declaration denouncing a meeting at which those present had signed a sheet of paper in order to receive a free lunch—a document that was later used as evidence of their consent for extraction. Yet, they also fed into a spatial imaginary in which extraction would be limited to specific sites, while flows of gas wealth and state benefits would penetrate surrounding rural communities that had historically been excluded from geographies of state investment.

The state has also used public spending to signal the benefits of acquiescence to extraction. Community members, NGOs, and local media reported that communities in which the peasant union leadership was supportive of extraction had received a new house-building project from the Ministry of Housing, while those opposed to extraction were excluded.[9] In 2018, the Peasant Union of Tariquía Canton denounced that medical brigades had entered communities without their permission and "they only attended to people who are in agreement with [hydrocarbon] projects" (Subcentral Sindical Única de Comunidades Campesinas-Cantón Tariquía, 2019, p. 25). Meanwhile, residents of Chiquiacá joked that the refurbished school building had been inaugurated by state officials on three separate occasions. These examples suggest that a neoextractivist development model—whereby the state uses hydrocarbon taxes and royalties to fund social spending—enables the state to take

on more active roles in shaping affects around futures of extraction and hydrocarbon citizenship, both by materialising promised flows of hydrocarbon wealth in the present, and by using those flows to reward communities and social organisations that support extractive projects.

Remaking Protected Areas as Governable Spaces of Extraction

The national park agency, SERNAP, is playing an important role in facilitating such investments, acting as a kind of articulating agency for a variety of other state institutions. In an interview in December 2020, the regional director of SERNAP, a MAS-affiliated former peasant union leader, described to me how the agency's role had been reimagined under the then–national director, Teodoro Mamani:

> There were a lot of conflicts [in protected areas] due to disinformation in the communities and, according to the mandate of the national executives, [our task was] to do a more social work compared to before, when it was more narrowly the protection and control [of the environment] without seeing the social part. . . . Our director is the former leader of the peasant union and wants to do a more social job—various projects have been implemented on the basis of that, which arrive directly to the communities and can generate development (personal communication, February 4, 2022).

She described how this recent focus on basic services and productive projects addressed a historic lack of state investment in protected areas, where authorities had avoided implementing projects due to complex environmental regulations. Here we see how the status of the Tariquía Reserve as a protected area is mobilised to facilitate flows of gas-funded public spending through the appropriation of its governance structures to facilitate the territory's incorporation in the national development project. Extraction is presented as overcoming a history of state abandonment; rather than a frontier of dispossession, it is presented as a frontier of inclusion in citizenship.

This is not the only way in which the territoriality of the National Reserve has been appropriated to facilitate flows of gas wealth. Presidential Decree 2366 of 2015 that facilitated extraction in Bolivia's protected areas states that 1 percent of hydrocarbon profits obtained by the Bolivian state will go directly to SERNAP "for the strengthening of the intervened protected area" (Article 4.2, Decreto Supremo No. 2366: 4). In July 2022, YPFB Chaco formally handed SERNAP Tariquía a cheque for 4.6 million bolivianos (approximately US$665,350) at a ceremony in the city of Tarija. The funding of national parks by the state oil company signals how protected areas are being reimagined as governable spaces of extraction (Watts, 2004): While environmental regulations have been weakened, the boundaries of protected areas have been repurposed to direct investment of hydrocarbon rents emanating from "holes" within them. This both enables oil companies to greenwash their environmentally destructive practices and establishes relations of institutional patronage between SERNAP and YPFB.

Indeed, flows of state funding have also been accompanied by flows of political influence. An anonymous SERNAP employee described how, since 2010, the agency has seen conservation specialists replaced with less qualified staff aligned with MAS. Those who remained have faced threats and psychological pressure to align their work with the state's extractivist agenda. The employee claimed to have witnessed the then-director of SERNAP Tariquía sign off on environmental licenses for extraction, under direct pressure from the Ministry of Hydrocarbons via a phone call. They also reported that SERNAP Tariquía had attended training sessions with YPFB and had received equipment, computers, uniforms, and a jeep from the state oil company. This demonstrates how flows of political influence within an extractivist state are instrumental in processes of extractivist territorialisation, shaping relations that are political, fiscal, and infrastructural.

If the external boundaries of the Tariquía Reserve have been appropriated to channel flows of gas rents, then its internal boundaries have been reconfigured to establish cuts between conservation and extractive geographies. In 2014, the Bolivian state—with European Union funding—contracted a Dutch consultancy to produce a new national park management plan for Tariquía. Within this new plan, park boundaries have been altered so that planned gas wells in the Astillero and Churumas fields lie outside of what is known as the nucleus zone or zone of strict protection (where hydrocarbon development remains illegal) and are now located in a moderate use zone (Figure 2). Conservation geographies have thus been redrawn to facilitate subsoil access for transnational hydrocarbon companies.

Figure 2. Community members from Tariquía present a poster at Tarija's Comité Cívico highlighting the difference between the old (2000–2004) and new (2014–2025) management plans for the national reserve. The green shaded area shows the zone of strict protection (or nucleus zone), which has been reduced to exclude planned gas wells. (Photograph by Anthias, February 8, 2022)

The governance of the national park has also become implicated in more material forms of cuts. Community members from Chiquiacá describe how SERNAP personnel barred them from accessing areas where seismic testing was being conducted, effectively acting as a private—or rather public—security force for the oil companies. When the development of the Astillero field began in earnest in 2022, a barrier across the access road was marked with a giant information sign bearing SERNAP's logo. This became the site of a heated stand-off in April 2022, when the President of the Permanent Assembly of Human Rights of Bolivia was barred from entering and, somewhat dramatically, declared that she felt *secuestrada* (taken hostage) (Agencia de Noticias Fides, 2022). SERNAP has also been used to police entry by NGOs and activist groups supporting local communities, and has threatened to deny them authorisation to operate within the reserve. Indeed, during my interview with the director of SERNAP Tariquía, I was warned that I would require the agency's permission to conduct my

research. SERNAP has thus become instrumental both in channelling flows of gas wealth and in enclaving practices of securitisation and spatial regulation within and around the Tariquía Reserve. This is illustrative of what Christian Lund and Mattias Rasmussen (2018) observe about processes of frontier territorialization: that these involve not only an erasure of existing institutional orders, but also a recycling of what they call institutional debris to facilitate new processes of commodification and accompanying forms of governmentality.

Thus far, this article has demonstrated how new gas development in the Tariquía Reserve has both reproduced corporate enclaving logics and exceeded them. Rather than simply ceding territory to transnationals via a concessionary model, the Bolivian state takes on active roles in processes of frontier territorialisation. This involves promoting spatial imaginaries of contained impacts and free-flowing benefits, redrawing and securitising park boundaries, and managing flows of gas wealth to situate impacted communities within a broader regime of hydrocarbon citizenship. These cuts and flows are implicated in (and often oriented toward) the production of resource affects around extractive futures, as well as playing more practical roles in the present—for example, in policing exploration activity and evading environmental regulations to establish legal security. In the final section, I examine how community activists in Tariquía have countered these spatial imaginaries and practices through countertopographic strategies that hinged on making visible extraction's leaky materialities and the threat they posed to local ecosystems, livelihoods, and well-being. Due to limitations of space, my discussion focuses on Chiquiacá Canton, the site of a five-month blockade in 2019.

Leaks: Countertopographies of Resistance in Chiquiacá

When oil companies began seismic testing in Chiquiacá in 2010–2011, community members remarked on the novelty of seeing helicopters flying overhead. They did not

immediately perceive their danger. However, a growing presence of geologists and other hydrocarbon personnel in Chiquiacá in 2017–2018 led to increasing confrontations with locals, who accused them of trespassing without authorisation. On more than one occasion, women confronted hydrocarbon workers in the forest and forced them to leave, although they invariably reappeared in a different part of the countryside.

Notwithstanding state assurances that exploration affected only 0.01 percent of Tariquía's total biomass (discussed above), community members observed the impacts of seismic testing on the local environment. They described local streams drying up, the emergence of sink holes, the death of local livestock, rivers filled with dead fish, and deforested areas that were "scars on the land" (Anthias, 2022a). As noted above, those who had worked as drivers for seismic testing companies also noted that other employment opportunities were contained within enclaved economies of transnational corporations and catering subcontractors.

As such, observations of the leaky materialities and enclave economy associated with seismic testing generated some unease about what the drilling of gas wells would mean for local communities. However, it was only after making contact with the neighbouring canton of Tariquía that such concerns culminated in a growing movement against extraction, spearheaded by Chiquiacá's women-led Defence Committee. A crucial moment came in late September 2018, when a group of community members from Chiquiacá attended a meeting in Tariquía Canton to exchange experiences with the local peasant union. Women in Tariquía Canton had organised several years earlier (Chávez & López, 2018) and had managed to retain control of the peasant union against efforts at state intervention. In April 2017, with support from the Catholic organisation CARITAS, they marched to the regional capital city of Tarija. Their march, which they titled "Step by step for dignity. Tariquía on its feet and never on its knees," expressed their firm opposition to hydrocarbon development in the

reserve, and also demanded state investment in their communities. Following a series of unsuccessful legal complaints (Anthias, in press) and the oil companies' shift in interest to Chiquiacá, activists in Tariquía focused their efforts on sharing their knowledge with communities in Chiquiacá.

The meeting in September 2018 thus forged new connections across possible sites of extraction within the reserve. Also present were participants representing established sites of hydrocarbon extraction: a commission from Oilwatch with representatives from Ecuador, Venezuela, Colombia, Brazil, Argentina, and Chile, along with Guaraní and Weenhayek leaders from hydrocarbon-producing areas of the nearby Chaco region. Participants shared their first-hand experiences of the social and ecological consequences of hydrocarbon development. The group watched a number of documentaries that provided visual evidence of environmental contamination and heard additional community testimonies. Barbarita Mesa, the former vice president of the Defence Committee of Chiquiacá, who played a key role in facilitating dialogue between the two cantons, explained:

> There was a workshop in Tariquía where people from different countries gave their testimonies. They came to explain how they live there with the oil companies, the pollution they cause and, well, that filled us with knowledge about how the oil companies leave behind a disaster. And from there we came [to Chiquiacá] and told people about it. We held a meeting in the community of Pampa Redonda and we told them the testimonies . . . of the visits we'd had from different countries, and then the people gave us support—to protect [the reserve] (personal communication, August 13, 2022).

As has been documented elsewhere, counter-knowledge of extraction's impacts shared among networks of anti-extractivist resistance helped solidify opposition to the entry of oil companies in Chiquiacá.

Following the meeting, community members from Chiquiacá decided to organise a visit to the Chaco to see the impacts of hydrocarbon development with their own eyes. First,

they visited Caigua, a Guaraní community that lies within the Aguaraguë National Park. A protected area comanaged by the Guaraní, Caigua has a history of oil development dating back to the 1970s, which left several leaky abandoned wells. New hydrocarbon development since 2010, which included drilling new wells and rehabilitating old ones, has increased contamination of local water sources. A young man who accompanied the visits recounted hearing how promises made by oil companies had not been kept, while local rivers and streams had been contaminated:

> They had no drinking water, and we went to the place where they had their water source, near where they were drilling, and the stream, the spring where they drank: full of oil. It ran over the water like gasoline, the water shone and to the side there were little wells and if you collected water and it was like oil. . . . We went there with a man who has cows in that place and he said that now the cows—before he raised a lot of cattle and now the cows go down to drink the water from the river and . . . the cows abort their calves, they get plagues, diarrhoea, and many more cattle than before are starting to die (personal communication, Febrary 11, 2022).

The group also visited Palos Blancos, a transport hub for subcontractors of Repsol operating in the Margarita gas field, located within the Guaraní territory of Itika Guasu. There they heard stories of broken promises and unfulfilled agreements over local employment. On returning to Chiquiacá, they shared their experiences with their neighbours in meetings, in informal encounters, and by distributing videos via WhatsApp. Lilian, who did not herself participate in the visits, described:

> They went to see how it is. According to what they told us, but they also brought photos, videos, of how all the water there is contaminated. And the community members themselves said they can't plant anything anymore because everything goes to ruin; they say that vegetables are wasted, they say everything dries up. Because the water is useless. They went right up to the gas plant, to where the plant is. And they say that you have to ask for permission—everything is padlocked. And we don't want that here (personal communication, February 12, 2022).

By travelling across space and implicitly through time (from the start to the end of gas projects), community activists from Chiquiacá documented a geography in which wealth and jobs were contained within securitised enclaves, while toxic substances leaked out into surrounding landscapes and waters, as well as into the bodies of livestock and people. These leaks were a direct challenge to the spatial imaginaries conjured by oil companies and the state, described above. As Lilian's concluding remark, "We don't want that here," signaled, they generated strong affective responses, not only among those who participated in the visits, but also among those who heard about them through personal testimonies and circulated videos.

It was not only the impacts themselves—such as contaminated streams—that produced affective responses, but the affects they generated among local populations. Sergio saw the visits to the Chaco as a forewarning of the anger, sadness, indignation, and guilt that residents of Chiquiacá might feel if they believed the state's promises and failed to prevent extraction from happening:

> We saw the reactions in other communities, in other places, what happens when people feel defrauded and what was promised to them isn't fulfilled, and that it was at the cost of contaminating their waters, contaminating their environment, which is something that everyone respects, everyone loves, isn't it? . . . When reality hits, next comes the indignation of people and there they turn to violence, and that's when the real blockades, bad things, start, isn't it? (personal communication, February 11, 2022).

Nelly Coca, the vocal vice president of Chiquiacá's Defence Committee, emphasised how the visits to the Chaco were instrumental in their decision to take direct action to prevent the entry of oil companies. As she put it, "I think that that experience gave us more strength to go back and say, 'Now we're going to take a stand; now we're not going to let the oil companies enter, even if we have to chain ourselves to the bridge" (personal communication, February 12, 2022). The five-month blockade that followed – which is narrated through

activist footage in my documentary *Tariquía No Se Toca* (Anthias, 2022a) – enacted a cut in the circulation of hydrocarbon workers and machinery and forced the oil companies to suspend their operations in Chiquiacá. As noted in the postscript, they returned in 2024, when they were met with further resistance.

Conclusion

This article has argued that the territorialisation of extraction at Bolivia's hydrocarbon frontier rests on a double movement of cuts and flows. On the one hand, enclaving imaginaries and practices work to minimise environmental impacts, securitise extractive infrastructures, and shield transnational oil companies from local claims of accountability. On the other hand, flows of money, infrastructure, and political influence are mobilised to manufacture consent and situate affected communities within broader geographies of hydrocarbon citizenship. These spatial practices project a hydrocarbon future in which social and environmental impacts of extraction are spatially contained, while positive economic benefits flow outward from territories of extraction to reconfigure prospects for local, regional, and national development. While Bolivia's neoextractivist development model is discursively framed as a reassertion of national sovereignty over the country's gas fields, the state's role in these processes complements a politics of corporate disentanglement, while redeploying gas wealth to manufacture consent for the expansion of extractive geographies. Neoextractivist territorialisation thus reproduces enclaving logics even as it diverges from accounts of resource enclaves as spaces of state abandonment.

The conflict in Tariquía highlights how protected areas have become implicated in the management of these cuts and flows. I have traced how park boundaries have been both repurposed and adjusted to facilitate a set of institutional relations and spatial practices that facilitate and legitimise extraction, from securitised fences and environmental permits to

flows of state investment coordinated through the national park agency, SERNAP. By tracing these topographies, this paper provides a territorially grounded account of the evolving extraction-conservation nexus in Latin America, focused not on competing political discourses or state policies, but on practices of frontier territorialisation.

Finally, I have shown how state and corporate efforts to territorialise extraction in Tariquía have been contested at every turn. While anti-extractivist resistance in Tariquía has usefully been understood through a decolonial feminist perspective of body-territory (Chávez & López, 2018; Van der Hout, 2024), my objective in this article has been to highlight its counter-topographical nature; that is, how its spatial tactics are forged relationally to the space-making projects of capital and the state. By mobilising around hidden flows of materialities and knowledges, and across sites and time scales of extraction, activists in Tariquía intervene in the relationship between space, affect, and resource futures. They do so in ways that draw on the relational flows of Indigenous and peasant life projects, while critically engaging and challenging the enclaving logics and clientelistic networks of extractivism. These practices highlight the work that is required to maintain the spatial fiction of the enclave, the erasure of socio-ecological harms on which it rests, and the possibility of imagining and producing territory otherwise.

Postscript

On October 1, 2024, Petrobras and YPFB entered Saican community in Chiquiacá Canton to begin work on a topographic survey and an access road to planned gas wells Domo Oso X2 and Domo Oso X3. Community activists immediately mobilised, confronting workers and arguing that they lacked authorisation from local communities, who rejected the entry of oil companies in an emergency vote held the same week.[10] They also argued that authorisations the oil companies has obtained from supposed property owners were invalid,

given the unresolved status of land rights for these properties, which are subject to competing claims and boundary disputes, and lack formal property titles. The following day, the president of YPFB presented criminal charges against 21 community members (later adding a further eight) under the Bolivian Penal Code Articles 161, "Impeding and hindering a state official in the performance of their duties" (Código Penal de Bolivia, page 28) and Article 303, "Attacks against the freedom of work" (Código Penal de Bolivia, page 61). These charges carry a maximum combined sentence of four years imprisonment.

The criminalisation of *defensores ambientales* in Chiquiacá marks a new phase of the conflict over gas extraction in Tariquía, in which the state's monopoly on law and violence is mobilised to secure flows of personnel and machinery, and to establish legal and physical security for hydrocarbon workers. It has been accompanied by an aggressive political and media campaign by Petrobras and YPFB emphasising economic benefits of extraction and the contained nature of environmental impacts.

The charges have also opened a new phase of legal activism. On November 8, 2024, urban environmentalist Gonzalo Torrez Terzo submitted an *acción de libertad* (action of freedom) to the Departmental Tribunal of Justice in defence of those facing criminal charges.[11] I gave supporting testimony at the virtual hearing, and my 2022 documentary *Don't Touch Tariquía* (Anthias, 2022a) was presented as evidence. While the action was rejected on the basis that legal proceedings for the charges had not been concluded, it provided a public forum in which countertopographic knowledges—of body-territory relations, of leaky materialities of extraction, of regional and international solidarities—penetrated the power-infused spaces and formal procedures of state law. Equally important, the action publicised sensitive information about the unresolved status of property rights in sites of planned extraction, constituting a further leak in ongoing processes of extractivist territorialisation.

Funding Statement

Research for this article was supported by the Independent Research Fund Denmark as part of the research project LEAKS: Resource Enclaves and Unintended Flows in Latin America (2018-2023). The writing process was made possible by a British Academy Mid-Career Fellowship (MFSS24\240071).

Acknowledgements

Penelope wishes to thank the three anonymous reviewers for their insightful comments, Chris Orton and José de la Rosa for help with figures, and JLAG editors, Jessica Budds and Martha Bell, for the guidance and support they offered throughout the publication process.

Notes

[1] On neoextractivism in Latin America, see Gudynas, 2021.

[2] The Bolivian tin mines of the early twentieth century were classic enclave economies, whose separateness was encouraged by the state to prevent the spillover of the unions' "dangerous" radical ideas. The literature on extractivism highlights continuities with the territoriality of colonial resource extraction (Acosta, 2013). I am grateful to a reviewer for pointing out this longer history of extractive enclaves.

[3] The concept of sacrifice zones originated in the environmental justice movement in the United States but has been widely taken up and expanded by Latin American social movements and scholars.

[4] Previous research on the Tariquía conflict has focused on local women's resistance from a feminist decolonial perspective (see Chávez & López, 2018; Van der Hout, 2024).

[5] *Leaks* was also the title of the research project that funded this research (see Acknowledgements).

[6] In 2017–2019, I conducted preliminary interviews, attended the public meeting following the first march from Tariquía Canton to Tarija city, and collected and analysed documents on the history of the protected area and hydrocarbon development. In 2021–2022, I conducted 35 audio-recorded in-depth interviews with community activists, NGOs, human rights workers, SERNAP officials, and local politicians in Tarija City, conducted ethnography in community meetings and human rights workshops in Chiquiacá Canton, and analysed a large file of documents relating to hydrocarbon contracts and litigation by activists. In 2022, I conducted further ethnography, and directed and produced a documentary on resistance with seven women from Chiquiacá's Defence Committee, with whom I conducted in-depth interviews lasting several hours. This been publicly screened in Tarija on several occasions, generating further research opportunities. I have maintained contact with key research participants and a local research assistant via WhatsApp and returned to Chiquiacá in November 2024, allowing me to document a new phase of the conflict.

[7] Indigenous conceptions of ethical relationality and nonhuman agency predate the popularity of an assemblage analytic within academia (Todd, 2015), providing alternative vantage points through which to interrogate the boundary work of extractive infrastructures. This is of empirical as well as theoretical relevance, given that community activists in Tariquía have contested extractive territorialisation drawing on a nonhumanist understanding of agency and the ontological unity of body-territory.

[8] The first two blocks under operating contract in Tariquía were Churumas (with YPFB Chaco in 2007) and Huacareta (with BG Bolivia [owned by Shell] in 2013)—see Figure 1.
[9] Local newspapers and an NGO report, respectively, described the construction of 35 and 55 houses in communities of Tariquía Canton.
[10] Activists in Chiquiacá have publicised documents showing that 292 members of the local peasant union voted against the entry of oil companies while 182 voted in favour of extraction (Noticias NT, 2024).
[11] The action argued that oil companies lacked legal authorisation due to the contested status of property rights and the absence of a prior consultation process, and that community members were defending their constitutional rights to the environment, water, and prior consultation.

References

Acosta, A. (2013). Extractivism and neoextractivism: Two sides of the same curse.In Permanent Group of Alternative to Development, M. Lang & and D. Mokrani (Eds.), *Beyond Development. Alternative Visions from Latin America* (pp. 61-87). Transnational Institute Luxembourg-Rosa Foundation.

Agencia de Noticias Fides (2022, April 18). Amparo Carvajal denuncia que fue secuestrada por interculturales en el ingreso a Tariquía. Accessed at: https://www.noticiasfides.com/nacional/sociedad/presidenta-de-derechos-humanos-denuncia-que-fue-secuestrada-por-ir-a-visitar-a-comunarios-en-tariquia

Anthias, P. (2018). *Limits to decolonization: Indigeneity, territory and hydrocarbon politics in the Bolivian Chaco.* Cornell University Press.

Anthias, P. (Director). (2022a). *Tariquía no se toca: la resistencia de Chiquiacá* [Film]. Available on YouTube with English subtitles at: https://www.youtube.com/watch?v=R3SbF-nGZbI

Anthias, P. (2022b). The pluri-extractivist state: Regional autonomy and the limits of Indigenous participation in Gran Chaco Province. *Journal of Latin American Studies*, *54*(1), 125—154.

Anthias, P. (2024). Counter-topographies and the futures of geographical thought. *Dialogues in Human Geography*, *14*(2), 221-225.

Anthias, P. (in press). Plurinational juristocracy and rights from below at Bolivia's gas frontier. In M. Goodale & O. Zenker (Eds.), *Reckoning with Law in Excess: Mobilization, Confrontation, Refusal.* Cambridge University Press.

Anthias, P., & Radcliffe, S. A. (2015). The ethno-environmental fix and its limits: Indigenous land titling and the production of not-quite-neoliberal natures in Bolivia. *Geoforum*, *64*, 257–269. https://doi.org/10.1016/j.geoforum.2013.06.007.

Appel, H. (2009). *The Licit Life of Capitalism: US Oil in Equatorial Guinea.* Duke University Press.

Arsel, M., Hogenboom, B., & Pellegrini, L. (2016). The extractive imperative in Latin America. *The Extractive Industries and Society, 3*(4), 880-887.

Bebbington, D. H., & Bebbington, A. J. (2010). Extraction, territory, and inequalities: Gas in the Bolivian Chaco. *Canadian Journal of Development Studies / Revue canadienne d'études du développement, 30*(1-2), 259-280.

Bebbington, A. J., Bebbington, D. H., Sauls, L. A., Rogan, J., Agrawal, S., Gamboa, C., Imhof, A., Johnson, K., Rosa, H., Royo, A., Toumbourou, T., & Verdum, R. (2018). Resource extraction and infrastructure threaten forest cover and community rights. *Proceedings of the National Academy of Sciences*, *115*(52), 13164–13173. https://doi.org/10.1073/pnas.1812505115.

Blomley, N. (2011). Cuts, Flows, and the Geographies of Property. *Law, Culture and the Humanities*, *7*(2), 203-216. https://doi.org/10.1177/1743872109355583

Bolados, P., Panez, A. & Jérez, B., 2024. Resistance to dispossession and environmental suffering in territories sacrificed by neoextractivism: the example of Chile. In: P. Anthias & P. López Flores (eds.). *Neoextractivism and Territorial Disputes in Latin AmericaSocial-ecological Conflict and Resistance on the Front Lines.* London: Routledge.

Campanini Gonzales, O. (2022). El extractivismo en Bolivia: Efectos derrame e impactos en las áreas nacionales protegidas. *Revista CIDOB d'Afers Internacionals*, *130*, 73-95. https://doi.org/10.24241/rcai.2022.130.1.73

Cardona, A. (2019, April 10). Gobierno entrega garrafas y cocinas en Chiquiacá Norte. *El País.* https://elpais.bo/tarija/20190410_gobierno-entrega-garrafas-y-cocinas-en-chiquiaca-norte.html

Chávez, M., & López, C. (2018). Women Rebel in Tariquía: In southern Bolivia, the fight for the dignity and against oil interests begins with women. *NACLA Report on the Americas*, *50*(4), 408-410.

Código Penal de Bolivia. Accessed at: https://www.oas.org/juridico/spanish/gapeca_sp_docs_bol1.pdf

Collins, Y. A., & Fletcher, R. (2024). From green to black: A voluminous political ecology of the extraction-conservation nexus. *Annals of the Association of American Geographers*, *114*(6), 1291-1309.

Côte, M., & Korf, B. (2018). Making concessions: Extractive enclaves, entangled capitalism and regulative pluralism at the gold mining frontier in Burkina Faso. *World Development, 101*, 466-476.

D'Angelo, L., & Pijpers, R. J. (2018). Mining temporalities: An overview. *The Extractive Industries and Society*, *5*(2), 215-222.

Decreto Supremo N° 2366, 2015. Accessed at: https://faolex.fao.org/docs/pdf/bol145342.pdf.

Ferguson, J. (2005). Seeing like an oil company: Space, security, and global capital in neoliberal Africa". *American Anthropologist*, *107*, 377-382.

Gudynas, E. (2021). *Extractivisms: Politics, Economy and Ecology*. Fernwood Publishing.

Gustafson, B. (2020). *Bolivia in the Age of Gas.* Duke University Press.

Hannover, C. (2017, January 16). Empresas exploran 11 áreas protegidas sin guía ambiental. *Página Siete.* https://www.cedib.org/noticias/empresas-exploran-11-areas-protegidas-sin-guia-ambiental-pagina-siete-26-1-17/.

Harvey, P. (2022). Foreword. In J. Alderman & G. Goodwin (Eds.), *The Social and Political Life of Latin American Infrastructures.* University of London Press.

Hilson, G., Hu, Y., Hilson, A., Owen, J.R., Lèbre, E., & Sauerwein, T. (2024). Rethinking resource enclavity in developing countries: Embedding Global Production Networks in gold mining regions. *Journal of Economic Geography, 24*(1), 95-116.

Hope, J. (2016). Losing ground? Extractive-led development versus environmentalism in the Isiboro Secure Indigenous Territory and National Park (TIPNIS), Bolivia. *The Extractive Industries and Society*, *3*(4), 922-929.

Irarrázaval, F. (2022). Mobilising rents: Natural gas production networks and the landlord state in Peru and Bolivia. *Antipode*, *54*(3), 825-847.

Jaramillo, P., & Carmona, S. (2022). Temporal enclosures and the social production of inescapable futures for coal mining in Colombia. *Geoforum, 130*, 11-22.

Katz, C. (2001). On the grounds of globalization: A topography for feminist political engagement. *Signs, 26*(4), 1213-1234.

La Voz de Tarija. (2017, August 6). *García Linera denuncia al ambientalismo colonial elitista.* https://lavozdetarija.com/2017/08/06/garcia-linera-denuncia-al-ambientalismo-colonial-elitista

Lesutis, G. (2021). Infrastructural territorialisations: Mega-infrastructures and the (re)making of Kenya. *Political Geography*, *90*, 102459.

Lund, C., & Rasmussen, M. B. (2018). Reconfiguring frontier spaces: The territorialization of resource control. *World Development*, *101*, 388-399.

McCreary, T., & Turner, J. (2018). The contested scales of indigenous and settler jurisdiction: Unist'ot'en struggles with Canadian pipeline governance". *Studies in Political Economy*, *99*(3), 223-245.

Noticias NT (2024, October 17). Tarija Comunarios de Chiquiaca indican que tras una reunión de voto resolutivo ganó el NO. Accessed at: https://www.facebook.com/100064772260737/videos/3919827444959563

Ruíz Fournier, H. (in press). Dispossession of the Guaraní territory of Karapari: Contradictions within the Plurinational State of Bolivia. In M. Blaser, S. Poirier, & P. Anthias (Eds.), *Territories of Life: Equivocations, Entanglements, and Endurances.* University of Alberta Press.

Subcentral Sindical Única de Comunidades Campesinas-Cantón Tariquía (2019). *Una lucha anti-petrolera por la defensa de la vida: Cronología de la disputa entre el estado boliviano/empresas petroleras y las comunidades de Tariquía-Bolivia. Enero 2015-mayo 2019.* [Unpublished report.]

Svampa, M. (2015). Commodities consensus: Neoextractivism and enclosure of the commons in Latin America. *South Atlantic Quarterly*, *114*(1), 65-82.

Todd, Z. (2015). Indigenizing the Anthropocene. In H. Davis, E. Turpin (Eds.), *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environments and Epistemologies* (pp. 241-254). Open Humanities Press.

Van Der Hout, F. (2024). *Women Territory Defenders' Activism in Bolivia: Weaving Resistance against Extractivism through Embodied, Careful, and Relational Politics* [Unpublished doctoral dissertation]. University of Northumbria.

Watts, M. (2001). Petro-violence: nation, identity, and extraction in Nigeria and Ecuador. In N. Peluso and M. Watts (Eds.), *Violent Environments* (pp. 189-212). Cornell University Press.

Watts, M. J. (2005). Righteous Oil? Human rights, the oil complex, and corporate social responsibility. *Annual Review of Environment and Resources*, *30*(1), 373–407. https://doi.org/10.1146/annurev.energy.30.050504.144456

Weszkalnys, G. (2016). A doubtful hope: Resource affect in a future oil economy. *Journal of the Royal Anthropological Institute*, *22*, 127-146.