Less Shipwrecks, More Navigators: Decolonial Perspectives on Bolivian Lithium Extraction

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Bolivian lithium is a highly contested resource with environmental, economic, and cultural significance to actors at both local and international levels. This paper employs an ethics of decolonial pluriversality to critically evaluate the rival claims to truth being made by the various lithium stakeholders. Through this lens, it is found that an approach that centres the experience of Indigenous Bolivians is favourable under that ethical framework.

Fig. 8. (Winter). Uyuni Salt Flat, Bolivia. (Winter).

The Bolivian Andes have long been prized for the resources hidden below their surface. The Inca Empire operated meticulously organized mining projects from the cordillera to the Altiplano (Zori 379), and when the Conquistadors arrived, one of their primary objectives was to exploit the richness of the land to the greatest possible extent. They sent their galleons back to Spain loaded with gold and silver in what is often considered to be the beginning of a new capitalist world order (Greenfield). After the end of formal colonial rule in the 1825, the violent campaigns started by the Spanish were continued, often by foreign investors from the Global North. The mines were the source of frequent discontent, with labour strikes and protests being common throughout the twentieth century (Neruda 135). In recent years, the bloody history of the mines has become harder to reconcile with the modern decolonial principles espoused by those in power and by local Indigenous groups. Yet, mining makes up a significant portion of the region's GDP and provides a large majority of Bolivian exports ("Bolivia – Market Overview"). In addition to this economic dependency, Bolivia holds a large amount of the world's total lithium deposits. The silvery metal is a valuable component in powering green technologies that can reduce international dependency on fossil fuels. Lithium is essential for the manufacture of the batteries that power electric vehicles, which are touted as a major focus of many nations' plans to go green. The state of California under Governor Gavin Newsome has even expressed plans to end sales of fossil fuel-powered vehicles by 2035, instead turning to electric transportation (Pfeiffer). However, lithium extraction is not a simple matter of economic growth and sustainable energy. This paper will take a decolonial perspective in examining the ethical dilemmas facing Bolivian lithium mining operations. I will argue that by operating within the frameworks of pluriversality and border thinking, it is possible to determine an ethical course of action for the development of Bolivia's lithium reserves. By placing an emphasis on the revitalization of Indigenous mining practices, it may be possible to reach an ethical and sustainable conclusion to the issue of contested development in Bolivia.

To some foreign developers, Bolivia is "the new Saudi Arabia" (Krauss). The country's vast lithium deposits have become increasingly sought-after as the global desire for rechargeable electric technologies has increased. These technologies are essential in many

governments' planned transitions away from fossil fuels and may not be possible without lithium. The Salar de Uyuni, a four-thousand-square-mile plain of salt flats high in the Andes, contains one of the world's largest reserves of lithium. These largely untapped deposits have become of particular interest to foreign investors: as of 2021, eight foreign companies from China, the United States, and Russia are competing to establish trials to work with Bolivian lithium. They are not the first to try to develop the Salar – local projects exist, like the state-owned production plant opened in 2013 (Krauss). Foreign developers are having more difficulty getting boots on the ground in the Salar, largely because of a local government wary of outside investors. Marco Pumari, a government official, former miner, and the leader of the 2019 protests against foreign development, demands a tripling of royalties for his province of Potosí and local involvement in the ownership of any future lithium enterprises ("How Bolivian Lithium Could Help"). There is more than enough historical precedent for his caution: the city of Potosí, in the eponymous state, was founded by Spanish conquistadors eager to mine silver from the surrounding mountains. The resulting riches spurred the globalization of the world economy while devastating the environment and the Indigenous population of Potosí (Robins 76). In addition to the structural damage done to the mountain from uninhibited and largely unplanned mining, the process by which silver ore was refined has the unpleasant side effect of releasing mass amounts of mercury into the surrounding environment. Vaporized mercury fell to Earth, where it entered the waterways and soil of Potosí, poisoning the land (Robins 109). In addition to its effects on the earth, the element is most readily absorbed into the bloodstream in a vaporized form. The effects of mercury poisoning include neurological problems, kidney disorders, and insanity. In 1680, when silver production was at its peak, mercury concentration in the air around Potosí was over thirty thousand times higher than modern recommended limits near the smelters (Robins 116).

The brutalities of the past may be reason enough for Bolivia to keep foreign investors at bay, but there are additional reasons to limit mining in the Salar. In the modern era, high mercury levels and their associated risks are still common near mines. Elva Roca, who lives by a river downstream from a major gold mine in the north of Bolivia, records over ten times the safe level of mercury in her bloodstream. She is aware of the dangers of her environment and says

that "we know that over time [mercury pollution] will get worse. And only God knows what will happen then" (Mendoza). Adding to the concerns over environmental degradation in the Salar, the salt flats are a sacred site to the Quechua locals, who believe the Salar was formed from the tears of a goddess (Legends of the Salar). Polluting this landscape would ruin its spiritual integrity. The uniqueness of the environment has led to the formation of a rare and diverse ecosystem and a leading tourist attraction for Bolivia (Osborne). The push to preserve the Salar, then, is motivated as much by the realities of the present as it is the tragedies of the past.

The decolonial-environmental sentiment is not only held by minor activist groups. Since the 2006 election of Evo Morales, fairly elected Bolivian governments have leaned towards leftist policies. During his two terms in office, Morales led a radical campaign to nationalize industry, prioritize Indigeneity, and reduce dependence on international neoliberal organizations such as the International Monetary Foundation (IMF) (Castro et al. 120) At the time of his inauguration, Bolivia was the poorest nation in South America despite holding the continent's second-largest reserve of natural gas (Castro et al. 122). One of the defining moments of Morales' early term was the nationalization of the hydrocarbon industry. Previously, foreign companies paid eighteen percent of profits to the state. Morales reversed this balance, collecting eighty-two percent of profits and leaving the rest to private industry (Castro et al. 122). While this move upset investors, it helped fund a successful campaign to eliminate illiteracy and boost Bolivia's net hydrocarbon income from $173 million in 2002 to $1.3 billion by 2006 (Castro et al. 136). Morales is a proud decolonialist and self-described "permanent nightmare of the United States." His successor, Luis Arce, is also a member of the Movimiento al Socialismo (MAS) party.

During Bolivia's initial period of nationalization, Arce was Minister of Finance and the primary architect of the policies that disrupted the hydrocarbon industry. The current lithium industry is unlikely to find an ally in Arce, much to the dismay of speculators. Teague Egan, who is leading the American investigation into the Salar, is quoted by Clifford Krauss as saying that "in Bolivia they are so sensitive about the politics. I just don't understand why they should not do what is in the best interest of the country." Egan's moralized statement is open to criticism by those who may argue that

an exponential increase in state revenue and national education programs would, in fact, be better for Bolivia instead of further foreign interference. Evidently, there is a diversity of opinions on what is best for Bolivian lithium, all of which are competing for the same resource.

One of the seminal questions of decolonial theory is the following: how do we assess rival claims to truth? This problem is heavily tied to discourse around expanding the definition of who can produce valuable knowledge (Hutchings 120). Neocolonial systems are ones in which formal external rule has ended but the values, morals, and habits of the colonizers are still upheld through economic or political meddling. In these systems, the Euro written-language, peer-reviewed system is favoured as producing the most empirical or "correct" knowledge (Hutchings 118). In the case of Bolivia's lithium, the rival claims to truth come from a variety of backgrounds, some of which fall outside hegemonically preferred ontologies. To work with the issue of varied interpretations of what is morally just, decolonialism's theory of pluriversality draws heavily from Indigenous Latin American philosophies to assert that "there are actually multiple worlds, ontologically different from the Euromodern world, and with different ethical and political implications" (Hutchings 116). The Mexican Zapatista movement of the early twenty-first century brought international attention to pluriversality, with their rallying cry of "*un mundo donde quepan muchos mundos,*" [a world in which many worlds fit] (Schacherreiter 4). The distinction between pluriversality and mainstream views of diverse societies relies on an understanding of worlds with genuine external variations in the former, rather than internal or personal differentiation in the latter (James). In the overlapping worlds of Bolivia's lithium, there exists the world of the Quechua, and the Salar is a goddess's tears. For many Global North environmentalists, the Salar is one of the keys to green technologies that will reduce global dependency on fossil fuels and improve planetary health. And for investors like Egan, the Salar is a frontier of capitalist possibility. Having accepted these rival claims to truth as all having a degree of worth, the pluriversal system must now avoid the hazard of "a relativism of anything goes" (Dunford 392), in which there is no ethical override to structure actions taken within the pluriverse. Strong decolonialism, of which pluriversality is a key component, understands itself as more than an option within the field of

international relations. To achieve its goal of defying colonial norms, decolonial theory must form unique moral principles and substantiative values (Dunford 393). As decolonial theory finds its footing in the international realm, a variety of approaches have emerged to answer the call of the ethical imperative.

Resource development, despite being largely perceived as an economic-technical undertaking, is highly normative in nature. Decolonial ethics are based largely in refuting the colonial matrix of power – an "intersectionality of multiple, heterogeneous global hierarchies… of sexual, political, gender, epistemic, economic, spiritual, linguistic and racial forms of domination and exploitation" (Grosfoguel 12). The practice of border thinking, which simply refers to approaching issues using non-colonial knowledge traditions, can be used as a response to the potential weakness of pluriversality. As it seeks to defy the colonial matrix by highlighting the ontologies of groups who have been historically marginalized, it can create pluriversalities that acknowledge the validity of differing points of view but chooses to emphasis those that, in simple terms, have not yet had their turn to make decisions about the policies or matters at hand. Border thinking emerged from Latin American decolonial theory in response to the destruction wrought upon Indigenous societies by the conquistadors (Mignolio 137). Being intentionally separated from their traditional ways of understanding the world created "people without histories" throughout Latin America, at least by the purview of mainstream social sciences (Parasram 109).

Subaltern knowledge, defined by Antonio Gramsci as being produced by people who have been excluded from hierarchies of power in colonial or neocolonial societies, is of great importance to border thinking. The value found in these ideals is not an exercise in pity or cultural relativism, but rather exists "because the centuries old experience of coloniality and dehumanization provides colonized subjects with important perspectives" (Maldonado-Torres 250). Border thinking provides a way in which to improve upon the dreaded 'relativism of anything goes' by prioritizing worlds that have been historically marginalized and suppressed. In the case of Bolivian lithium, border thinking tasks the worlds that benefit from the colonial matrix to engage with Quechua knowledge, as those ways of being are the product of a tradition that has experienced centuries of sidelining by colonial projects.

Decoloniality finds the ethical approach to Bolivia's lithium to be one guided by Indigenous knowledge. But what would that knowledge look like in practice? Bolivia already offers a strong model for incorporating grassroots Indigeneity into economic governance in the policies established by Evo Morales and Luis Acre. The risky decision to force the hand of foreign developers by increasing profits paid to the state returned benefits, as the companies stayed in Bolivia despite their frustration. A similar arrangement for lithium-related enterprises would prove favourable to Bolivians, who would then benefit from the resources of their land. Distribution of profits is not the only concern of ethical mining, as the enterprise must also consider the environmental impacts of operations. The Salar is a fragile, unique ecosystem, and holds spiritual value to the Quechua. Even if all profits from lithium mines went to Indigenous groups, a purely extractivist model would defeat the proposed initiative of a just lithium mining enterprise.

Conveniently, Bolivia has a history of sustainable mining that long precedes the Spanish presence (Zori 380). A modern reclamation of the small-scale practices used by the Inca, which had included wind-powered smelters and single-file tunnels (Zori 379) would not be able to exactly replicate past conditions. However, the philosophies behind the indigenous approach to mining in the Andes could be applied to modern technologies. Central to the Quechua epistemology is the acceptance of nature as an equal moral agent, on even footing with humans. This concept is often personified as the earth goddess Pachamama (Zori 377). Resource extraction requires the developer to make a deal with Pachamama. She is content to supply precious metals, given that greed does not accelerate development beyond reasonable bounds. If this pact is broken, reprisal will come in the form of earthquakes (Salas Carreño 155). This understanding of the natural world as something to be negotiated with provides a structure for sustainable mining that allows local communities to benefit from the resources in their land as well as to preserve sacred nature. Refined lithium can play a role in protecting the natural world. Its importance as a component of green technologies is legitimate, and the world outside Bolivia is not wrong for taking an interest in its lithium. A decolonial approach and the adoption of a subaltern extraction ontology can protect the immaterial

riches of the Salar de Uyuni and provide capital for those who will respect the land that created the resources being used.

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