

Extraction for the Green Transition

An Eco-Marxist actor analysis of lithium governance in Bolivia

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Abstract

Bolivia holds among the biggest reserves of lithium in the world. Lithium-ion batteries are essential components in electric vehicles, solar panels, and wind turbines, and are therefore crucial for a global transition from fossil fuels to renewable energy. Meanwhile, the extraction process of lithium can cause large environmental damage. Bolivia has previously failed to industrialize its lithium, but the country's current government has expressed ambitions to resume plans to do so, following a state-controlled model. The purpose of this thesis is to attain a greater understanding of Bolivian lithium governance, seeking to identify the main actors involved and affected, and analyze potential power relations between them. This is done through an actor analysis and the application of an Eco-Marxist theoretical perspective based on works by John Bellamy Foster. The primary material used to identify the actors consists of four public media articles, a press statement by Bolivia's president, and a government document. The study's results show that the main actors are the Bolivian government of Luis Arce, the MAS party, the state-owned lithium company YLB, transnational corporations, the states of Germany, China and the United States, and local communities and organizations. The Bolivian government's extractivist stance can be seen as imposed by economic and ecological hierarchies of the capitalist world system, and the relations between the government and transnational corporations, Germany, China, and the US show signs of an unequal core-periphery relation enabling ecological imperialism, due to the interests and positions of these actors within global capitalism. Further, the government's extraction plans hint of a similar relation domestically towards local communities and organizations, who hold mixed views on the government but clearly oppose involvement of foreign actors in the lithium sector.

Key words: Bolivia; lithium; extractivism; climate change; energy transition; actor analysis; Eco-Marxism; John Bellamy Foster; metabolic rift; ecological imperialism

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1. Introduction

As our planet moves further into climate crisis, many visions are expressed on how to abandon the global dependency on extracting and burning fossil fuels. If climate change is not effectively mitigated, the world will move beyond irreversible tipping points which threaten humanity's very existence.¹ The future state of our planet will be characterized by great uncertainty, and therefore, concrete solutions are required to halt carbon emissions. Often, there is a strong emphasis on the importance of a transition to a green economy that is powered by renewable energy.²

An increasingly recurring theme connected to this is lithium.³ Lithium as a resource has brought hope in combating climate change because it enables for low-carbon energy technologies.⁴ Lithium-ion batteries are essential components in electric and hybrid vehicles and mobile tablets already in use all over the world.⁵ Additionally, these batteries are important for renewable energy sources such as wind and solar power, which are expected to become increasingly affordable on a larger scale in the near future.⁶ However, despite the hopeful narrative, lithium itself is not renewable.⁷ It requires extraction, which can cause large environmental damage. This damage originates from intense use of groundwater, as well as dumping chemical waste from the extraction process.⁸ Lithium is found in many different sources, such as oil deposits, seawater, rock minerals and salt brines. The only ways to extract lithium that are deemed profitable enough to pursue are through rocks or by evaporating salt brines, of which the latter is the most common.⁹ There are somewhat varying perceptions of lithium in different parts of the world; in the global North, lithium is largely seen positively and as a pillar of the energy transition, while

¹ Foster, John Bellamy, York, Richard & Clark, Brett, *The Ecological Rift: Capitalism's War on the Earth*. Monthly Review Press, 2011, pp. 15–16.

² Perreault, Tom, "Bolivia's High Stakes Lithium Gamble: The renewable energy transition must ensure social justice across the supply chain, from solar panels and electric vehicles to the lithium extraction that fuels them". *NACLA – Report on the Americas*, Vol. 52, No. 2, 2020, p. 166.

³ Sanchez-Lopez, Daniela, "Sustainable Governance of Strategic Minerals: Post-Neoliberalism and Lithium in Bolivia". *Environment: Science and Policy for Sustainable Development*, Vol. 61, No. 6, 2019, p. 18.

⁴ Barandiarán, Javiera, "Lithium and development imaginaries in Chile, Argentina and Bolivia". *World Development*, Vol. 113, 2019, p. 381.

⁵ Sanchez-Lopez, Daniela, 2019, p. 18.

⁶ Barandiarán, Javiera, 2019, p. 381.

⁷ *Ibid*, p. 382.

⁸ Perreault, Tom, 2020, p. 166.

⁹ Sanchez-Lopez, Daniela, 2019, p. 18.

in the global South, its exploitation is increasingly presented as a road to economic development.¹⁰ The largest reserves of lithium in the world are concentrated in South America, in the so-called “lithium triangle”, reaching into Bolivia, Chile and Argentina. This area holds more than half of the world’s reserves.¹¹ The lithium here is primarily brine-based.¹² While Chile and Argentina have allowed private companies to exploit their lithium reserves for decades, Bolivia has not yet fully industrialized their lithium, despite holding the biggest reserves. However, the country’s government has expressed its ambition of doing so to boost economic development, committing to a state-controlled extraction model.¹³

Against this complex backdrop, this thesis aims to explore the context and the actors involved in lithium governance in Bolivia. An actor analysis will be conducted to identify the main actors and relationships involved. Further, an Eco-Marxist theoretical perspective will be applied to analyze the context and investigate potential power aspects within economic, political, and environmental relations.

1.1 Background

It is likely that Bolivia holds approximately 40-50 percent of the world’s lithium.¹⁴ The exact statistics differ depending on who is asked: according to the US Geologic Survey, the country holds 22 percent of the world’s reserves, while the Bolivian government itself claims the figure is actually 70 %.¹⁵ In either case, the lithium reserves of Bolivia are among the largest in the world

¹⁰ Perreault, Tom, 2020, p. 166. Note: the *global South*, also often called the *Third World* or the *developing* world, generally includes countries in Latin America, Africa, and Asia which in many of the cases have history of colonization by European countries. The *global North*, sometimes referenced to as the *West*, generally includes economically developed and industrialized parts of the world, such as Europe, the US and Canada. There are of course exceptions to this generalized division, and there is a debate about which terms are most analytically accurate in the contemporary world. Nevertheless, despite not necessarily providing any focus on material conditions, the terms *global North* and *global South* will be used as this division is deemed accurate enough. These terms are also used within the theoretical literature, which gives them further legitimacy.

¹¹ Sanchez-Lopez, Daniela, 2019, p. 18.

¹² Barandiarán, Javiera, 2019, p. 381.

¹³ Sanchez-Lopez, Daniela, 2019, p. 18.

¹⁴ Lunde Seefeldt, Jennapher, “Lessons from the Lithium Triangle: Considering Policy Explanations for the Variation in Lithium Industry Development in the “Lithium Triangle” Countries of Chile, Argentina, and Bolivia”. *Politics & Policy*, Vol. 48, No. 4, 2020, p. 745.

¹⁵ Perreault, Tom, 2020, p. 170.

and therefore plays an important role for a global transition to renewable energy.¹⁶ Bolivia's main reserves are found in Salar de Uyuni, the enormous, dry salt flats in the country's southwestern highlands. In this area, there are many indigenous communities nearby, as well as biodiversity and a wide presence of tourism.¹⁷ The curiosity towards Bolivia's lithium goes back to the mid-1970's when the reserves in Salar de Uyuni were verified. In 1985, the post-dictatorship government of Hernán Siles Zuazo ordered the country's salt flats to be further explored for resources, to counter the then ongoing economic crisis.¹⁸ Despite several neoliberal governments attempting to establish deals with multinational corporations to exploit the lithium reserves over the years, the extraction never properly took off. Additionally, these processes were often characterized by a lack of transparency, leading to public dissatisfaction and protests.¹⁹ For example, in 1992, the Bolivian government at the time tried to start up lithium production for commercial purposes together with a corporation called Lithco, but the contract was eventually cancelled after local protests erupted.²⁰ Despite the fact that lithium was discovered in Bolivia decades ago, it is not until recently that it has become of larger interest globally, especially in relation to the urgent need for a global energy transition.

Bolivia is a country with a colonial past and has historical memory of centuries of exploitation of its resources by foreign actors.²¹ Today, despite years of progress, it still has high levels of poverty and large environmental degradation. Following these problems, it also has a long history of social struggles.²² Lithium is only the most recent extractive resource that could be important for Bolivia. Oil, natural gas, and minerals such as silver and tin make up for 60 % of the country's exports.²³ In 2005, the left-wing candidate Evo Morales from the political party MAS, *Movimiento Al Socialismo*, won the presidential election.²⁴ Morales was previously a coca growers union organizer and was active in social conflicts, such as the so-called water wars in

¹⁶ Perreault, Tom, 2020, p. 170.

¹⁷ Ibid, pp. 166–167.

¹⁸ Ibid, p. 170.

¹⁹ Ibid, p. 170.

²⁰ Lunde Seefeldt, Jennapher, 2020, p. 746.

²¹ Farr, Alexander, S., "Bolivia, batteries and bureaucracy". *Law and Business Review of the Americas*, Vol. 17, No. 2, 2011, p. 324.

²² Sanchez-Lopez, Daniela, 2019, p. 20.

²³ Ibid, p. 20.

²⁴ Postero, Nancy, *The Indigenous State: Race, Politics and Performance in Plurinational Bolivia*. University of California Press, 2017, p. 1.

1999-2000, and the gas conflicts in 2003 and 2005.²⁵ Morales, who is Aymara, became the first indigenous president of Bolivia, a country where indigenous peoples are majority. The country embarked on a process of sociopolitical transformation during his rule.²⁶ Naturally, this caused a dramatic shift in resource governance, as he pursued a new road of development of the country's extractive industries.²⁷ Morales emphasized Bolivia's state sovereignty over its natural resources, to counter foreign exploitative interests with historically frequent presence in Bolivia.²⁸ During Morales's presidency, the country's natural gas industry was nationalized, and the state-owned mining company COMIBOL reconstructed.²⁹ Despite his government following an evidently extractivist model of resource governance, Morales has been a proponent for environmentalism and his government a strong voice for climate justice.³⁰ The profits from state-run extractive industries largely funded social policies, and the Morales government also adopted the Andean indigenous concept of *Buen Vivir*, incorporating the rights of nature into Bolivian legislation.³¹ However, there has been a clash between Morales's eco-centric discourse and his government's plans for concrete economic development, which has divided parts of his largely indigenous support base.³² In 2008, Morales showed interest in lithium extraction and ordered COMIBOL to create a government agency responsible for exploring the salt flats, resulting in the National Administration of Evaporitic Resources.³³ Eventually, in 2017, this agency was converted into

²⁵ Sanchez-Lopez, Daniela, 2019, p. 20. Note: The *water wars* refer to the widespread protests that erupted in the city of Cochabamba in Bolivia in 1999 and 2000 as reactions to a plan backed by the World Bank to privatize the city's water company and sell it to a US corporation. The social conflict eventually ended with the demands of the protesters being met and the privatization contract being cancelled. The water wars were depicted in the award winning 2010 film *También la lluvia* (Even the Rain), thus bringing the events into Western popular culture. The name of the film referred to how the privatization plan would make it illegal for Bolivians to even collect rainwater, as the US-based corporation in question would have full monopoly of the water supply. In a somewhat similar fashion, the gas conflicts of 2003 and 2005 also flared up due to public dissatisfaction, but this time about the handling of the country's large natural gas resources.

²⁶ Ibid, p. 20.

²⁷ Perreault, Tom, 2020, p. 170.

²⁸ Lunde Seefeldt, Jennapher, 2020, p. 746.

²⁹ Perreault, Tom, 2020, p. 170.

³⁰ Lunde Seefeldt, Jennapher, 2020, p. 746. See also Postero, Nancy, 2017, pp. 91–92.

³¹ Sanchez-Lopez, Daniela, 2019, pp. 20–22. Note: The concept of *Buen Vivir*, also called *Vivir Bien* (meaning “good living” or “living well”) is a holistic worldview and development model of living in harmony with nature, practiced by indigenous peoples in the Andes. Important for this worldview is the worship of Pachamama (like Mother Earth). *Buen Vivir* is called *Sumak Kawsay* in Quechua and *Suma Qamaña* in Aymara.

³² Ibid, p. 21.

³³ Perreault, Tom, 2020, p. 170.

the state-owned YLB, Yacimientos de Litio Bolivianos, a company with sole responsibility of lithium development in Salar de Uyuni.³⁴ Lithium was now considered a strategic resource for Bolivia.³⁵ Morales wanted to avoid the so-called resource curse and opted for state control over lithium extraction. He claimed that now, there would be “cars produced in Bolivia”, in contrast to the country’s historical export dependency of raw materials. The first two phases of developing Bolivia’s lithium sector were conducted without foreign actors.³⁶ However, after seeing the downfall of the state-run oil industry of his ally Venezuela, partly due to difficulties in attracting investors, Morales turned slightly less hostile to private sector involvement in his own country’s lithium.³⁷ He then pursued a model of balancing state control with some foreign investment.³⁸ Two test plants for lithium batteries were built near the city of Potosí between 2014 and 2017, by French and Chinese companies. Morales made further deals with strategic partners; in 2018, he signed a deal with the German ACI Systems to develop the lithium sector.³⁹ In 2019, the Chinese Xinjiang TBEA Group Co Ltd was picked as a strategic partner to identify and develop lithium in other salt flats. However, this partnership is deemed to have had limited success.⁴⁰

Morales won the new presidential election in October 2019 but was accused of election fraud and tampering with re-election limits, leading to protests.⁴¹ These protests coincided with dissatisfaction in Potosí regarding the lithium deal with ACI Systems, resulting in Morales cancelling the deal in November 2019.⁴² Around a week later, Morales was ousted by the military in what is widely seen as a far-right coup, and went into exile in Mexico and Argentina. Suspicions have been expressed about these events relating to foreign access to lithium reserves. The interim government, led by opposition senator Jeanine Áñez, put lithium development

³⁴ Perreault, Tom, 2020, p. 170.

³⁵ Lunde Seefeldt, Jennapher, 2020, p. 746.

³⁶ Sanchez-Lopez, Daniela, 2019, p. 21.

³⁷ Lunde Seefeldt, Jennapher, 2020, pp. 747–748.

³⁸ Ibid, p. 747.

³⁹ Sanchez-Lopez, Daniela, 2019, p. 27.

⁴⁰ Lunde Seefeldt, Jennapher, 2020, p. 748.

⁴¹ The allegations of Morales committing election fraud came from the opposition as well as the OAS, the Organization of American States. However, these allegations were also subject to criticism for lacking proper evidence. It was partly expressed by the research organization Center for Economic and Policy Research (CEPR). For further information on this critique as well as on the event itself, see Weisbrot, Mark, “What the OAS did to Bolivia”, *CEPR – Center for Economic and Policy Research*, 2020-09-18, <https://cepr.net/what-the-oas-did-to-bolivia/>.

⁴² Lunde Seefeldt, Jennapher, 2020, p. 748.

further on hold by neglecting state-owned industries in purpose of privatizing them in the long run.⁴³

In October 2020, after months of postponement, a new election was held in Bolivia. It was won by landslide by MAS candidate Luis Arce, Evo Morales's former Minister of Economy. Arce's government has announced it will resume the plans of state-controlled lithium industrialization that were not achieved during the Morales presidencies. However, Arce is seen as more pragmatic and less hostile to foreign investment than Morales, which could have importance in how the country's lithium governance might develop.⁴⁴

1.2 Purpose and research question

Due to the complexity of the question of lithium and the recurring ambitions of the Bolivian government to industrialize and expand extraction of its lithium reserves, this thesis aims to attain a greater understanding of the context of Bolivian lithium governance. It seeks to closer identify what main actors are involved and affected, as well as analyze potential relations of power between them. The research question for this thesis is the following:

- What are the main actors in Bolivia's lithium governance and how can their relations be understood in the light of an Eco-Marxist perspective?

1.3 Previous research

On the topic of Bolivia's lithium governance, there is a certain amount of literature. Some papers focus exclusively on Bolivia, while others include the whole lithium triangle. Several studies are based on fieldwork on the ground, often conducted through qualitative interview methods. A recurring thread between the articles is that they present a complexity within Bolivia's lithium governance. One important study is "Sustainable Governance of Strategic Minerals: Post-Neoliberalism and Lithium in Bolivia" from 2019, by Daniela Sanchez-Lopez. This article is based on fieldwork in Bolivia and includes local voices.⁴⁵ It gives an overview of historical

⁴³ Davis, Jared, "Bolivia's lithium future: a second chance?". *Wilson Center's Latin America Program*, December 2020, pp. 1–3.

⁴⁴ Davis, Jared, 2020, p. 2.

⁴⁵ Sanchez-Lopez, Daniela, 2019, p. 19.

lithium governance in Bolivia, examining the state's extractivist stance and post-neoliberal circumstances. It concludes that lithium extraction is different to other types of extraction, but that the post-neoliberal framework does not necessarily mean more equal economic distribution.⁴⁶ Similarly, the long-titled 2020 article "Bolivia's High Stakes Lithium Gamble: The renewable energy transition must ensure social justice across the supply chain, from solar panels and electric vehicles to the lithium extraction that fuels them" by Tom Perreault is also based on fieldwork. Perreault references to Sanchez-Lopez and provides historical context to Bolivia's extractive industries. The article concludes that there is a duality and risk for conflict within the promises around lithium and that Bolivia needs to acknowledge this while developing the industry.⁴⁷ Another article of relevance is "This time it's different: lithium extraction, cultural politics and development in Bolivia" from 2016, by Anna C. Revette. The author conducted seven months of fieldwork in Bolivia for the article.⁴⁸ The study explores extractive industries in relation to development and argues that these are continuously relevant in Latin America, while emphasizing that the context and its multiple actors must be considered while exploring the subject.⁴⁹

Nicole Fabricant and Bret Gustafson's 2019 article "The Political Economy of Gas, Soy and Lithium in Morales's Bolivia" shares the perception of the context's complexity. As the title suggests, it examines the extractive industries of natural gas, soy, and lithium in Bolivia. While acknowledging much economic progress made during the Morales years, it concludes that the country is still embedded in an unsustainable extractivist model and dependency of exporting natural resources, a well-known state for countries in the global South.⁵⁰ Another paper emphasizing complexity is the short "Bolivia's lithium future: a second chance?" by Jared Davis from 2020, which presents Bolivia's context, problems, and prospects for the current government to develop the country's lithium industry.⁵¹ Further, the 2011 article "Bolivia, batteries and bureaucracy" by Alexander S. Farr, discusses Bolivia's potential in becoming a "Saudi Arabia"

⁴⁶ Sanchez-Lopez, Daniela, 2019, p. 29.

⁴⁷ Perreault, Tom, 2020, p. 172.

⁴⁸ Revette, Anna C., "This time it's different: lithium extraction, cultural politics and development in Bolivia". *Third World Quarterly*, Vol. 38, No. 1, 2016, p. 153.

⁴⁹ Revette, Anna C., 2016, p. 149.

⁵⁰ Fabricant, Nicole & Gustafson, Bret, "The Political Economy of Gas, Soy and Lithium in Morales's Bolivia". *Bolivian Studies Journal / Revista de Estudios Bolivianos*, Vol. 25, 2019, pp. 45–59.

⁵¹ Davis, Jared, 2020, pp. 1–3.

of lithium. The author recommends Bolivia to pursue a similar strategy to what Saudi Arabia did when developing its oil industry: the country should collaborate with foreign corporations in the initial phase while still taxing them, thus gaining revenue, and simultaneously receiving support from abroad.⁵² On a more general note, the 2017 book *The Indigenous State: Race, Politics and Performance in Plurinational Bolivia* by Nancy Postero examines different aspects of MAS rule in Bolivia.⁵³

Some studies focus on the whole lithium triangle. Javiera Barandiarán's article "Lithium and development imaginaries in Chile, Argentina and Bolivia" from 2019 is one. The article is based on material from mixed methodological approaches.⁵⁴ It explores lithium debates in these countries and concludes that while there are some similar points, there is also a lacking confidence in development, and that these debates and the role of the state will decide how sustainable lithium production will be.⁵⁵ Another similar article on the lithium triangle is "Lessons from the Lithium Triangle: Considering Policy Explanations for the Variation in Lithium Industry Development in the "Lithium Triangle" Countries of Chile, Argentina, and Bolivia" from 2020, in which the author Jennapher Lunde Seefeldt seeks to explain the differences in development and investment in lithium between the countries in the lithium triangle. It is based on e-mail surveys and phone interviews, as well as reports and government policy documents.⁵⁶ The author conducted case studies of each country for comparison and concludes that the differences in investment at least partly can be explained by specific policies of the states in question.⁵⁷

Further widening the perspective, the book chapter "An Assessment of the Environmental and Social Impact of Chinese Trade and FDI in Bolivia" by Alejandra Saravia Lopéz and Adam Rua Quiroga can be relevant. It is found in the 2017 book *China and Sustainable Development in Latin America: The Social and Environmental Dimension* by Rebecca Ray, Kevin Gallagher, Andrés Lopéz and Cynthia Sanborn. The chapter describes Chinese economic involvement in

⁵² Farr, Alexander, S., 2011, p. 345.

⁵³ Postero, Nancy, *The Indigenous State: Race, Politics and Performance in Plurinational Bolivia*. University of California Press, 2017.

⁵⁴ Barandiarán, Javiera, 2019, p. 385.

⁵⁵ Ibid, p. 381.

⁵⁶ Lunde Seefeldt, Jennapher, 2020, p. 733.

⁵⁷ Ibid, p. 753.

Bolivia, particularly in mining, and concludes that Chinese involvement is still limited but can have importance in the future.⁵⁸

In the book *Exploring Regional Sustainable Development Issues: Using the Case Study Approach in Higher Education* by Andrew Barton and Jana Dlouhá, which includes a chapter with the methodological base for this thesis, there are several similar case studies within the sphere of environmental governance, however none focus on lithium. On Eco-Marxism and the metabolic rift, the theoretical framework of this thesis, the most well-known research is by John Bellamy Foster, in his notable works *Marx's Ecology*, and *The Ecological Rift: Capitalism's War on Nature*, together with Brett Clark and Richard York.⁵⁹ However, some other authors have applied similar theoretical approaches, such as “The Metabolic Rift of Livestock Agribusiness” by Ryan Gunderson. Gunderson applies the theory of metabolic rift onto the growth of industrial livestock business, claiming that this practice is a consequence of capitalism and that a socialist model is needed to repair the ecological rifts created.⁶⁰ Brett Clark, Rebecca Clausen and Stefano B. Longo have authored the article “Metabolic rifts and restoration: Agricultural crises and the potential of Cuba's organic, socialist approach to food production”, in which they apply the metabolic rift theory on Cuba, concluding that the country's agroecological production model has potential of repairing rifts in the social metabolism.⁶¹

Despite there being some research already conducted on Bolivian lithium governance, none have applied the exact same theoretical and methodological approach on this topic as intended by this thesis. While building on previous research, this thesis hopes to contribute by more deeply analyzing the actors of this specific case, as well as applying a theoretical framework that can bring newfound perspectives. In the next section, this theoretical framework will be outlined.

⁵⁸ López, Alejandra Saravia & Quiroga, Adam Rua, “An Assessment of the Environmental and Social Impacts of Chinese Trade and FDI in Bolivia”. In Gallagher, Kevin, López, Andrés, Ray, Rebecca & Sanborn, Cynthia (ed.), *China and Sustainable Development in Latin America: The Social and Environmental Dimension*. Anthem Press, 2017, p. 176.

⁵⁹ Foster, John Bellamy, York, Richard & Clark, Brett, *The Ecological Rift: Capitalism's War on the Earth*. Monthly Review Press, 2011 and Foster, John Bellamy, *Marx's Ecology: Materialism and Nature*. Monthly Review Press, 2000.

⁶⁰ Gunderson, Ryan, “The Metabolic Rift of Livestock Agribusiness”. *Organization and Environment*, Vol. 24, No. 4, 2011, pp. 404–422.

⁶¹ Clausen, Rebecca, Clark, Brett & Longo, Stefano B., “Metabolic rifts and restoration: Agricultural crises and the potential of Cuba's organic, socialist approach to food production”. *World Review of Political Economy*, Vol. 6, No. 1, 2015, pp. 4–32.

2. Theoretical framework

The theoretical framework of this thesis consists of an Eco-Marxist approach based on works of influential US sociologist and political scientist John Bellamy Foster. Further, it will apply some certain focus on specific key concepts within Eco-Marxist theory: ecological imperialism and the metabolic rift. This critical theoretical focus is perceived as compatible with the methodology and subject of the thesis, as it is related to environmental governance and examines power. The actor analysis methodology, which later will be presented under “4.1 Actor analysis” specifically opens for identifying power in the relations between actors.⁶²

2.1 John Bellamy Foster and Eco-Marxism

Eco-Marxism, also known as Ecological Marxism or Marxist Ecology, is a theoretical school of thought which combines classic Marxism with Ecologism. Eco-Marxism has been developed by several Marxist scholars interested in environmental issues, but the most influential is John Bellamy Foster, Professor of Sociology at the University of Oregon. Through his work, Foster responds to common environmentalist critiques against Marxism, of which the most frequent claim that Marxism is anti-ecological due to its original focus on industrial society, as well as its connections to environmental practice in the Soviet Union.⁶³ Foster frequently references to Karl Marx’s own writings on the environment and emphasizes that Marxism is in fact clearly conscious of environmental issues. Marx and Engels viewed humanity’s relationship to nature as deeply fundamental to our existence, and thought that if we exploit nature, we become desynchronized with it.⁶⁴ Hence, Eco-Marxism expands traditional Marxism to not just analyze capitalism’s exploitation of human labor, but also adding the dimension of its exploitation of

⁶² Burandt, Simon, Dlouhá, Jana & Zahradník, Martin, “Actor analysis as a tool for exploring the decision-making processes in environmental governance”. In Barton, Andrew & Dlouhá, Jana (ed.), *Exploring Regional Sustainable Development Issues: Using the Case Study Approach in Higher Education*. Grosvenor House Publishing Limited, 2014, p. 57.

⁶³ Foster, John Bellamy, “Marx’s Theory of the Metabolic Rift: Classical Foundations for Environmental Sociology”. *American Journal of Sociology*, Vol. 105, No. 2, 1999, pp. 371–372.

⁶⁴ Parson, Sean & Ray, Emily, “Reimagining Radical Environmentalism”. In Gabrielson, Teena, Hall, Cheryl, Meyer, John M. & Schlosberg, David (ed.), *The Oxford Handbook of Environmental Political Theory*. Oxford University Press, 2016, p. 586.

nature. This understanding derives from the concept of alienation; Marx saw that similarly to how workers are alienated from their labor under capitalism, humans are also alienated from nature.⁶⁵

Eco-Marxism maintains the traditional Marxist critique of capitalism, its materialist view of history and incorporates its classic concepts.⁶⁶ However, the core focus of Eco-Marxism is that it points to capitalism and its need for constant capital accumulation and growth as the main driving force for environmental degradation and destruction.⁶⁷ This means that capitalism is seen as inherently anti-ecological, as it seeks unlimited expansion in a world with limited resources.⁶⁸ Capitalism recognizes no such thing as enough growth, wealth, or consumption, and operates by the logic that it simply must grow or die.⁶⁹ The expansion of capitalism includes simply moving geographically, meaning that capitalists, after using up the resources in one region, simply move to new regions or continents. This expansion is either done by force or by opening new markets, which was reflected in how Europe was industrialized through the colonization and plundering of other continents and their natural resources.⁷⁰

2.2 Ecological imperialism

For the reasons mentioned above, Eco-Marxism is concerned with imperialism, which inevitably touches upon North-South relations. It maintains that global capitalism is a hierarchical and ecologically imperialist world system which divides the global division of labor into dominance and dependency, into core and periphery.⁷¹ This hierarchy causes countries in the South to be systematically exploited by countries in the North, both directly and by its corporations.⁷² As countries in the South hold the natural resources of interest within their territories, they must also pay the large ecological costs of extracting them.⁷³ Therefore, the system's process of capital accumulation relies on ecological degradation as it constantly appropriates resources, land, or

⁶⁵ Parson, Sean & Ray, Emily, 2016, p. 586.

⁶⁶ Ibid, pp. 586–587.

⁶⁷ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 74.

⁶⁸ Ibid, p. 74.

⁶⁹ Foster, John Bellamy, Holleman, Hannah & Clark, Brett, “Imperialism in the Anthropocene”. *Monthly Review*, Vol. 71, No. 3, 2019, p. 71.

⁷⁰ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 74.

⁷¹ Ibid, p. 346.

⁷² Ibid, p. 346.

⁷³ Foster, John Bellamy, Holleman, Hannah & Clark, Brett, 2019, pp. 71–72.

labor from distant countries.⁷⁴ This process was key for the rise of the capitalist world economy and its hierarchies.⁷⁵ The trade flows from lesser-developed ‘peripheral’ countries in the South to the developed and industrialized countries in the North are not only exploitative economically but also undermine the South’s socio-ecological conditions. The North profits and gains access to the extracted resources, thus maintaining a form of imperialism that exploits countries in the South both economically and ecologically.⁷⁶ These relations are also reflected in material-ecological flows within nations, through the division between town and country.⁷⁷

Ecological imperialism has been less visible in comparison to economic, political, or cultural imperialism. Previously, Marxist theory has generally emphasized solely the extraction of economic surplus from countries in the periphery, rather than the ecological aspects. However, Marx laid out the groundwork for enabling analysis of ecological imperialism, due to his interest in and work concerning capitalist expansion and environmental degradation.⁷⁸

2.3 Metabolic rift

A key concept within Eco-Marxism is the so-called *metabolic rift*. Foster developed the concept, but it is originally based on Marx’s own writings. Marx analyzed the development of capitalist agriculture and was especially concerned with the problem of soil fertility. During his time, the 19th century, there were big developments in the use of fertilizers and chemical soil technology.⁷⁹ These inventions were closely connected to the demand for efficiency, and therefore an increased fertility, to sustain capitalist agriculture. However, despite technological advancement, there were widespread problems with loss of soil fertility in capitalist economies. This caused a big demand for fertilizers, which had to be imported.⁸⁰ Marx took this into account, and increasingly started to link social relations of capitalism with the exhaustion of the soil, observing unnatural processes

⁷⁴ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 345.

⁷⁵ Ibid, pp. 347–348.

⁷⁶ Ibid, pp. 346–347.

⁷⁷ Ibid, p. 346.

⁷⁸ Ibid, pp. 345–346.

⁷⁹ Foster, John Bellamy, 1999, pp. 373–374.

⁸⁰ Ibid, pp. 375–376.

of capitalist agriculture. He eventually started focusing more on exploitation of the earth and how capitalism failed to maintain the means and conditions for its reproduction.⁸¹

We humans rely on functioning ecosystems for our existence, and these ecosystems are affected by our actions. This causes every society to have a metabolic interaction between humans and nature.⁸² These interactions regulate and govern the handling of materials, which we are dependent on for our livelihoods. This phenomenon is called the *social metabolism*, something which exists under every mode of production.⁸³ However, in *Capital*, Marx claimed that large-scale agriculture under capitalism caused a rift in this relation between humans and nature. This is the so-called *metabolic rift* – a rupture in the cycle of the social metabolism. The system’s desire for growth and profit exhausted and exploited the soil, and the use of chemicals and fertilizers to boost it caused an irreparable rift that made it unable to restore its natural capabilities. Therefore, Marx described this capitalist mode of production as a “robbery” of the soil and connected it to capitalism’s exploitation of labor, therefore claiming that the system simultaneously exploits its two main sources of wealth: workers and nature.⁸⁴ Additionally, capitalist ownership structures and high concentration of land forced workers to move into cities, causing a division between city and countryside and more ruptures in the natural cycle.⁸⁵ As previously touched upon, this division further contributed to the alienation of humans from nature.⁸⁶

Today, capitalism has spread metabolic rifts globally through different means.⁸⁷ It operates on a global scale as a specific social metabolic order.⁸⁸ Capitalism is however unable to repair the metabolic rifts that it has caused, as its inherent laws and practices violate the nature of metabolic restoration.⁸⁹ The reproduction processes of nature’s own metabolism could need timescales of hundreds of years.⁹⁰ Due to the system’s internal contradictions, its solutions to environmental

⁸¹ Foster, John Bellamy, 1999, p. 375.

⁸² Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 73.

⁸³ Ibid, p. 75.

⁸⁴ Foster, John Bellamy, 1999, pp. 379–380.

⁸⁵ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 78.

⁸⁶ Parson, Sean & Ray, Emily, 2016, p. 586.

⁸⁷ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 77.

⁸⁸ Ibid, p. 348.

⁸⁹ Ibid, pp. 85–86.

⁹⁰ Ibid, p. 85.

problems simply create new such problems. What is required to solve global environmental crises is to go to the root and break with the capitalist system.⁹¹ A sustainable society, according to Eco-Marxist thought, is one where the mode of production allows producers to regulate their exchange along nature's boundaries, therefore not causing metabolic rifts. It holds that nature must be able to restore itself within a given timeframe to be able to reproduce.⁹² This can be roughly translated to a socialist mode of production. In this sense, sustainability means that societies cannot exploit more resources than what is generated by nature, while simultaneously not polluting more than what can be absorbed by it.

3. Material

The primary material of this thesis consists of four media articles on Bolivian lithium, an official video statement by Luis Arce, and one document from Bolivia's Ministry of Energy, regarding the state company YLB. The media articles are from the German public broadcaster Deutsche Welle (DW) and the independent platforms Diálogo Chino and Latin America Bureau.⁹³ This material will be used to identify actors involved in the chosen case and the relations between them. It has been chosen with clear awareness of how media articles are a type of secondary material; the methodological approach however allows for the use of this type of material. This methodology will be presented under "4.1 Actor analysis". Further material could be added, however during the collection process, a saturation point was reached in which remaining material found was not perceived as providing more knowledge.⁹⁴ The reason behind the chosen

⁹¹ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 86.

⁹² Ibid, pp. 86–87.

⁹³ The material that is explicitly used and cited in this thesis consists of the following sources: "Bolivians protest over lithium deal with German company". *Deutsche Welle*. 2019-10-08; Harasim, Kinga, "Bolivia's lithium coup". *Latin America Bureau*. 2020-12-08; Jemio, Maria Telma, "Bolivia rethinks how to industrialise its lithium amid political transition". *Diálogo Chino*. 2020-05-19; Aro, Enrique/Revolucionario Quechua, "Propuesta de Arce Catacora industrialización de Litio". YouTube. Uploaded 2020-11-11; Ministerio de Energías, Estado Plurinacional de Bolivia, "Respuestas a la fundamentación de COMCIPO para la abrogación del Decreto Supremo N° 3738". 2019-10-17; Viohl, Franz, "German industry hopes to lift Bolivia's lithium treasure". *Deutsche Welle*. 2020-11-12. Direct individual links are later provided in footnotes, as well as in the list of references at the end of the thesis.

⁹⁴ To slightly elaborate on what is mentioned in this passage: at the saturation point in the collecting of material, most further media articles provided basically the same information or knowledge surrounding Bolivian lithium governance, simply reaffirming the content of the already collected material. This contributed to drawing the limitation, in which the currently chosen material consisting of a few different angles was deemed wide enough to serve as the empirical base for the thesis, in regard of the purpose, research question, analytical focus, and especially, the nature of the methodology.

material is due to the purposes of the study and interest in the case itself. Additionally, these are also some of the few sources providing information on lithium in Bolivia. The Ministry of Energy document was found on YLB's website, and the press statement and the media articles were collected through internet searches. If not for the current pandemic, collection of fieldwork material might have been possible. Now, however, the main ways to find out about the Bolivian context are through media, documents, and previous research. Therefore, there will also be additional secondary material included, consisting of previous academic research on the subject. Relevant research was included under "1.3 Previous research" at the end of the introduction chapter of the thesis.

As methodological material, the chapter "Actor analysis as a tool for exploring the decision-making processes in environmental governance" by Simon Burandt, Jana Dlouhá and Martin Zahradník in the book *Exploring Regional Sustainable Development Issues: Using the Case Study Approach in Higher Education* by Jana Dlouhá and Andrew Barton will be used. The theoretical material is based on works by John Bellamy Foster, especially the book *The Ecological Rift: Capitalism's War on Nature* and the articles "Marx's Theory of the Metabolic Rift: Classical Foundations for Environmental Sociology" and "Imperialism in the Anthropocene".

3.1 Source evaluation

The material is seen as trustworthy for several reasons. The Ministry of Energy document and the press statement by Luis Arce clearly originate from the government itself as a primary source.⁹⁵ Regarding the media articles, one must naturally consider that media can be biased and portray things in certain lights. Ownership structures and possible interests behind reporting could also be considered. Deutsche Welle (DW), a public broadcast network owned by the German government, is regarded to be a trustworthy source. It is a large broadcaster active worldwide and has reported extensively about Bolivian lithium. However, while keeping possible underlying

⁹⁵ The video statement by Luis Arce is uploaded by a YouTube channel called *Revolucionario Quechua*, run by a person named Enrique Aro, who, judging by the channel's name and content, appears to be sympathetic to the Bolivian government. Arce's statements and the video itself, however, are clearly from an official government press conference in which he outlines and explains his government's proposal for lithium industrialization.

interests in mind, this reporting would also enable insight in the Bolivian context. This insight is relevant for the very purpose of using this material. *Diálogo Chino* is a quite different media outlet; it is independent but has staff worldwide, and its mission is to create a better understanding of challenges in relations between China and Latin America. Latin America Bureau is a charity and a non-partisan source that seeks understanding of the region. These are regarded as nuanced voices and are deemed usable in this case, in relation to the purpose of this thesis.

3.2 Limitations

Certain limitations exist regarding the material. As this thesis seeks to analyze actors that are contemporarily relevant, the primary material is from no earlier than 2019. This limitation also relates to events during the Morales administration, and is deemed still relevant due to the closeness in time and similarities in policy between Morales and the current administration of Luis Arce.

Further, there is a limitation in only focusing on Bolivia and not including Chile and Argentina. The choice of Bolivia as a case has several reasons. It is a deeply interesting case due to differing from the other countries in the lithium triangle regarding the state's bigger role, political circumstances, and adherence to *Buen Vivir*, as well as the country's historical difficulties regarding lithium development. It is a case of a resource-dependent country in the global South, with majority indigenous population and several years of left-leaning rule, attempting to develop an industry of wide interest globally. The case especially has strong relevance for understanding other countries in Latin America but could also help interpretation of different mining-related cases, for example Australia, or the issue of cobalt in DR Congo. Nonetheless, it is likely that by digging into this specific case of lithium, one can gain insight of the complexities and challenges of the global energy transition as we know it.

In the analysis, there will inevitably be limitations in the number of actors included. This is partly due to the limited length of the thesis, but also that the chain of actors could become very long. It would be possible to stretch it so far as declaring anyone who aspires to buy an electric car an actor here. This would be interesting to demonstrate how long an economic chain could be but going into an individual level subverts from the purpose. Nevertheless, the methodology

emphasizes the focus on key actors, and therefore, this is what the analysis will be limited to. This choice of methodology will be presented next.

4. Methodology

In this section, the methodological approach of the thesis is outlined, consisting of an actor analysis.

4.1 Actor analysis

Actor analysis (AA) is a methodological approach that is used to analyze the social dimension of issues regarding environmental governance and regional sustainable development, and therefore seeks to identify social actors, their relationships, and interests within certain contexts.⁹⁶ This is due to the complexity of environmental governance, which frequently involves a large number of actors with different interests and interactions.⁹⁷ Decision-making and influence in environmental governance also often include a certain degree of decentralization and involvement of non-state actors.⁹⁸ The application of the method is frequent in studies with the purpose of describing and understanding actors, their relations, and the context in which they operate.⁹⁹ Therefore, the method of actor analysis is mostly used to conduct qualitative case studies.¹⁰⁰

The method has been chosen for this thesis due to an interest of deep diving into the context of lithium governance in Bolivia. It is likely a useful tool to gain better understanding of this specifically complex case. The primary focus of the method are the relations between the actors in question, which also provides a practical aspect, as it can contribute with solutions to issues within environmental governance. When not used in academic research, the method can therefore be used to practically support policy makers in decision-making.¹⁰¹ An actor analysis begins with finding the case of interest and identifying the central issues within it, such as Bolivian lithium governance in this thesis. Then, in the second step, one designs the research question and narrows down the analytical focus. Additionally, hypotheses and theoretical assumptions are made at this

⁹⁶ Burandt, Simon, Dlouhá, Jana & Zahradník, Martin, 2014, p. 34.

⁹⁷ Ibid, p. 35.

⁹⁸ Ibid, p. 38.

⁹⁹ Ibid, p. 46.

¹⁰⁰ Ibid, pp. 44–45.

¹⁰¹ Ibid, p. 44.

stage.¹⁰² The loose hypothesis for this thesis is that several main actors will be involved in Bolivian lithium governance; these will likely include the Bolivian state, local communities and foreign corporations and governments. There will probably exist certain economic, ecological, and political power relations between the relevant actors, influenced by hierarchies of global capitalism.

The third step of the actor analysis is the identification of actors, their interests, and other characteristic features. This will help to relate them to the central issue of the case.¹⁰³ Actors are here generally understood as a group of people acting in line with a common interest or goal.¹⁰⁴ Here, the material comes in. To identify the actors of the case study, the method allows for the use of a wide range of material types and information sources. Documentaries, interviews, videos, TV clips, documents, and media articles are included within this spectrum.¹⁰⁵ Therefore, as mentioned, the material for this thesis consists of a document, a press statement, four media articles, as well as previous academic research, to outline the main actors within Bolivian lithium governance. Then, as a fourth step, one sorts out the key actors and recognizes their power and influence in relation to the issue. The relationships between these actors are more thoroughly analyzed and their roles are described.¹⁰⁶ Among the things one considers here are the key actors' roles and responsibilities, resources, and legitimacy.¹⁰⁷ This step and forward is mainly what will be outlined in text in the analysis part of this thesis. It will be done by quoting certain excerpts of relevance from the chosen material. Finally, the research questions are answered, and the findings interpreted and discussed. If the method is used for practical purposes, such as in advising policy makers, the results are also tested in practice and it is then desirable to propose solutions to the problems found.¹⁰⁸ Through application of theories originating from political or social sciences, one can identify and analyze different aspects of power, influence or strength of the actors and their relations.¹⁰⁹ This is of special interest in this thesis, and therefore, as previously mentioned, Eco-Marxist theory will be applied in the coming analysis.

¹⁰² Burandt, Simon, Dlouhá, Jana & Zahradník, Martin, 2014, p. 52.

¹⁰³ Ibid, p. 47.

¹⁰⁴ Ibid, p. 53.

¹⁰⁵ Ibid, p. 54.

¹⁰⁶ Ibid, p. 44.

¹⁰⁷ Ibid, p. 55.

¹⁰⁸ Ibid, p. 44.

¹⁰⁹ Ibid, p. 57.

5. Analysis

In this section, the main actors identified within Bolivian lithium governance will be analyzed through application of the methodological and theoretical framework. These main actors have been identified throughout the material as the Bolivian government, the ruling party MAS and the YLB lithium company, transnational corporations, Germany, China, the United States, as well as local communities and organizations.

5.1 The Bolivian government, MAS, YLB

The first main actors in the center of things are the government of Bolivia, now under President Luis Arce, the MAS party, and the state-owned lithium company YLB. The government's role is very important; it has legitimacy due to being elected and holds permanent sovereignty over the country's natural resources. It is therefore also a relatively resource strong actor with power to set the terms to a certain degree, but not to develop its lithium sector alone. Nonetheless, the government's interest to industrialize its lithium is clear. To quote Arce:

“What we want is to advance in production of lithium-ion batteries, and for this, we will enter in partnerships with large corporations that guarantee us international markets, but of course, the majority from this commerce will be for the Bolivian state.”¹¹⁰

Starting up this industry has not been easy for Bolivia.¹¹¹ These ambitions inevitably affect the relations to other actors. Even if the emphasized role of the state could help gaining revenue, opening for the involvement of corporations is risky. DW also states in one of its articles:

“The former economy minister in the Morales government seems willing to restart the project, including Bolivia's partnership with the Germans.”¹¹²

¹¹⁰ Aro, Enrique/Revolucionario Quechua, “Propuesta de Arce Catacora industrialización de Litio”. YouTube, uploaded 2020-11-11. Collected 2021-05-18. <https://www.youtube.com/watch?v=GRW-8ZCmtNU&t=78s>. Quote translated from Spanish. Arce's exact original words were: “Lo que nosotros queremos es avanzar en producción de baterías de litio, y para ello, vamos a entrar en sociedades con grandes empresas que nos garanticen mercados internacionales, pero donde la mayoría por supuesto del negocio, es para el estado boliviano.”

¹¹¹ Lunde Seefeldt, Jennapher, 2020, p. 745.

¹¹² Viohl, Franz, “German industry hopes to lift Bolivia's lithium treasure”. *Deutsche Welle*. 2020-11-12. 2020. <https://www.dw.com/en/german-industry-hopes-to-lift-bolivias-lithium-treasure/a-55572714>

The “Germans” refer in this case to the companies ACI Systems and K-Utec. The possibility of the Arce government resuming the plans for lithium development and approaching transnational corporations for assistance will have certain consequences. Since Bolivia is not in the economic position to industrialize its lithium alone, this can be understood as a relation of dependency on foreign actors who are only interested in Bolivia’s resources due to their capitalist practice, seeking profit and expansion.¹¹³ Further, by expanding lithium extraction to a large scale, these plans will inevitably create a metabolic rift, a “robbery” of nature, and such expansion would violate the laws of metabolic restoration.¹¹⁴ Natural cycles should not be broken to any larger degree, as nature must be able to restore itself.¹¹⁵ It would additionally go against the government’s adherence to *Buen Vivir* and respecting nature’s boundaries. In this case, it would specifically threaten groundwater levels in the dry area of Salar de Uyuni, as lithium extraction demands large amounts of water.¹¹⁶ This rift can easily be linked to capitalism functioning as a global social metabolic order.¹¹⁷ It is therefore unfair to primarily place the blame on the Bolivian government itself, as it is rather the capitalist world system that forces the country to follow certain lines of economic development if seeking higher standards of living, which inevitably pave the way for environmental degradation and ecological imperialism.¹¹⁸ As Bolivia, a country in the global South, holds the lithium reserves within its territory, it will also have to live with the ecological consequences that come from extracting these resources.¹¹⁹ The corporations would simply gain access the lithium but not deal with the environmental aspects to any further degree than what is necessary for the extraction itself. Despite Bolivia’s government having a say in its choice of governance, these factors, with an emphasis on the pressure of global capitalism, create inequality within the government’s relationship to transnational corporations, enabling ecological imperialism by the latter.

¹¹³ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 74.

¹¹⁴ Ibid, p. 85.

¹¹⁵ Ibid, pp. 86–87.

¹¹⁶ Perreault, Tom, 2020, p. 166.

¹¹⁷ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 348.

¹¹⁸ Ibid, p. 370.

¹¹⁹ Foster, John Bellamy, Holleman, Hannah & Clark, Brett, 2019, pp. 71–72.

Moreover, similar but slightly more complex relations can be observed with the governments of Germany, China, and the US, due to the connections between these governments and corporations originating in these countries. DW writes:

“Demand for battery metals such as cobalt, nickel and lithium is soaring as the German auto industry scrambles to build more electric cars and cut greenhouse gas emissions.

...

German Economy Minister Peter Altmaier has urged German industries to secure raw materials for electric batteries to reduce dependence on Asian suppliers.”¹²⁰

This demonstrates the characteristics of the global trade system. The German government supports its national industry and companies abroad, which move around geographically to gain access to resources, in this case by opening markets.¹²¹ Due to Bolivia’s position as a lesser developed, ‘peripheral’ country, the Bolivian government’s lithium plans relate to economic development rather than environmental protection or “greening” the country’s own economy, causing need for relations with economically stronger actors. While Bolivia has formal sovereignty over its resources, the country’s need for capital embeds it in the extractivism of global capitalism.¹²² As a South-to-North trade flow of lithium-ion batteries would enable Germany to electrify its transport and energy sectors while potentially contributing to large environmental damage in Bolivia, this ecologically imperialist practice could be seen as a 21st century version of how European industrialization was made possible by the exploitation of resources in colonized countries.¹²³ However, on a different note, DW writes in a more recent article:

“Although the German Economy Ministry has been supporting the Bolivian project, it’s refusing to step into the fray over the terms of a new contract. Upon DW’s request for comment, the ministry said in a statement that it had made it quite clear from the beginning that concerns for the project’s environmental sustainability and Bolivia’s demand for a larger share of the value chain must be given “high priority.”¹²⁴

While the German companies are eager to make a new lithium deal, the German Economy Ministry hesitates to pursue it due to supposed environmental effects of the original contract.

¹²⁰ “Bolivians protest over lithium deal with German company”. *Deutsche Welle*. 2019-10-08. <https://www.dw.com/en/bolivians-protest-over-lithium-deal-with-german-company/a-50732216>

¹²¹ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 74.

¹²² Postero, Nancy, 2017, pp. 101–102.

¹²³ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 74.

¹²⁴ Deutsche Welle, 2020-11-12.

However, rather than interpreting this as the German government's genuine concern for nature's cycles and acting outside of the global social metabolic order, it could in this case simply be understood as a capitalistic actor being cautious with possibly non-profitable investment, due to Bolivia's history of internal protests and nationalization of extractive industries at will.¹²⁵

The Bolivian government's relation to the US is tense, due to the latter's hegemonic influence, history of economic, political, and military interference in the region, and well-known distaste for the political development under MAS. The US has, for example, used sanctions against Bolivia.¹²⁶ Latin American Bureau writes, regarding the 2019 overthrow of Morales:

“The OAS audit clearly indicates the involvement of United States in the coup. Although the organization was created to facilitate Interamerican diplomacy and promote peace, democracy and economic cooperation, it has been often used as a tool of destabilization in the region.

...

The headquarters of the OAS are located in Washington and about 60 per cent of its funding comes from the American government. The Trump administration was a major cheerleader of the coup in Bolivia”¹²⁷

The US reportedly worked through the Organization of American States, the OAS, contributing to spreading information about election fraud to topple Morales. Due to the well-documented history of US interference in Latin America, this is a clear example of how core states dominate and use force, seeking to exploit the resources of peripheral states.¹²⁸ The Bolivian government's relation to China holds further complexity. Approaching China has partly been a way for Latin American states, Bolivia included, to avoid US hegemony. China increased its investment in

¹²⁵ Lunde Seefeldt, Jennapher, 2020, pp. 747–748.

¹²⁶ Postero, Nancy, 2017, p. 98.

¹²⁷ Harasim, Kinga, “Bolivia's lithium coup”. *Latin America Bureau*. 2020-12-08.
<https://lab.org.uk/bolivias-lithium-coup/>

¹²⁸ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 74. Note: The reason that the OAS is not noted as an actor itself, is because it is not deemed as involved in lithium governance per se, but rather seen in this case as a political instrument being used by the US to exercise power and pursuing regional interests. As the provided excerpt shows, the US holds strong influence within the OAS. This has caused some Latin American voices to raise criticism towards the regional organization over the years. For example, Marxist revolutionaries Che Guevara and Fidel Castro, leaders of the Cuban Revolution, famously accused the OAS of being the “Colonial Ministry” of the United States after it expelled the self-proclaimed socialist island of Cuba from the organization in 1962. For their more exact quotes and further reading, see Biegon, Rubrick, *US Power in Latin America: Renewing Hegemony*. Routledge, 2017, p. 119, and Langley, Lester D., *America and the Americas: The United States in the Western Hemisphere*. The University of Georgia Press, 2010, p. 205.

Latin America in recent years.¹²⁹ Chinese demand for raw materials is high, also here laying the groundwork for exploitation. Relations to China are yet to change the characteristics of Bolivia's export-oriented economy, and China has a reputation as somewhat of an environmental predator in the region.¹³⁰ Pursuing cooperation with China can therefore provide a risk for expanding metabolic rifts created from lithium extraction. A larger demand of resources and exploitation will cause a greater imbalance of nature's cycles and deepen the divide between humans and nature.¹³¹

Meanwhile, the relation of the government and MAS to local communities and organizations complicates the situation even further. MAS came to power through support from social movements and indigenous peoples.¹³² Therefore, it needs to remain on good terms with these groups. The focus on extractivist practices is often global, but here, the local consequences come in. Emphasizing permanent sovereignty over one's national resources in the South can be perceived as conducting a form of class struggle on an international level, but domestically it can be more complex. MAS keeps generally good relations with the campesino organization FRUTCAS in southern Potosí, which is pro-lithium extraction if conducted by the state.¹³³ However, the government's relations are strained with COMCIPO, the Potosí Civic Committee, a rather militant local organization which opposed the original plan of lithium extraction.¹³⁴ In a document with a public answer to COMCIPO's protest claims that the original deal with ACI Systems violated the purpose of creating the YLB company, the Bolivian Ministry of Energy claims: "COMCIPO's observation shows an absolute lack of knowledge of the industry and world market of lithium-ion batteries".¹³⁵ Additionally, Evo Morales blamed the opposition for these protests and for undermining his government and its lithium ambitions.¹³⁶ This tension is understandingly strong due to the country's history of exploitation. Due to the government's priorities, its extractivist stance and the accusations of lacking transparency during these

¹²⁹ Postero, Nancy, 2017, p. 103.

¹³⁰ López, Alejandra Saravia & Quiroga, Adam Rúa, 2017, pp. 149–150.

¹³¹ Parson, Sean & Ray, Emily, 2016, p. 586.

¹³² Postero, Nancy, 2017, pp. 1–2.

¹³³ Perreault, Tom, 2020, p. 171.

¹³⁴ Ibid, pp. 171–172.

¹³⁵ Ministerio de Energías, Estado Plurinacional de Bolivia, "Respuestas a la fundamentación de COMCIPO para la abrogación del Decreto Supremo N° 3738". 2019-10-17. Quote translated from Spanish. https://www.ylb.gob.bo/archivos/notas_archivos/aclaracionrespuestasds3738.pdf

¹³⁶ Lunde Seefeldt, Jennapher, 2020, p. 748.

processes, its relations to local communities and organizations can to a certain degree be characterized by hierarchies that reflect those of capitalism on a global level. The conflict with COMCIPO, for example, could be seen as a class conflict resulting from different material interests and the quest for capital accumulation driven by the state and foreign actors, a process which itself is the main force threatening the environment.¹³⁷ The government's balancing of relations with companies, foreign actors, and especially local communities must be handled smoothly, as it otherwise risks losing legitimacy.

5.2 Transnational corporations

The second category of key actors are transnational corporations. These are mainly the German ACI Systems and K-Utec as well as Chinese and US corporations, such as Xinjiang TBEA Group Co. Ltd and Tesla. The main role of these actors regarding the central issue is to acquire lithium or assist the Bolivian government in exploitation. They are economically strong and characterized by coming from abroad and operating transnationally. However, these companies have little legitimacy, which again easily can be traced to Bolivia's history of colonization and economic exploitation by foreign actors.¹³⁸ Being main subjects of global capitalism, their interest in exploiting lithium resources is driven by a profit motive and desire for capital accumulation, since companies under capitalism operate according to the notion "grow or die".¹³⁹ From this view, the sudden attraction towards lithium is an example of how capitalists move around geographically to exploit new resources and cheap labor.¹⁴⁰ Moving from one polluting industry to another is inherent in the practice of capitalism, and this is a symptom of how environmental problems simply are shifted around within the social metabolic order.¹⁴¹

DW writes:

"Potash mining specialist K-Utec is a German firm that was supposed to deliver exploration equipment for the lithium mined at Uyuni. CEO Heiner Marx still believes the original agreement signed with the Morales government ensures the project is one "among equals."

...

¹³⁷ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 74.

¹³⁸ Farr, Alexander, S., 2011, p. 324.

¹³⁹ Foster, John Bellamy, Holleman, Hannah & Clark, Brett, 2019, p. 71.

¹⁴⁰ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 74.

¹⁴¹ Ibid, pp. 86–87.

Marx argues the project would be “a blessing for Bolivia,” but admits at the same time that taxes in neighboring Chile and Argentina, where K-Utec also operates lithium mines, are “significantly higher.”¹⁴²

This German corporation clearly sees its relations to the Bolivian government as doing the country a favor. This perspective is a quite familiar component in North-South relations and is not unlike classic colonial discourse. Corporations, in the quest for profit, legitimize their exploitation of human labor and nature in any way they can to normalize the process of capital accumulation. K-Utec, in this case, already operates in neighboring countries, and now, as predicted, seeks increased expansion by opening a new market in Bolivia.¹⁴³ Further, ignoring the environmental costs for Bolivia of large-scale lithium exploitation is, especially regarding the “green” extraction of lithium, in line with how corporations generally present themselves as the solutions, rather than the causes, to environmental degradation.¹⁴⁴ Chinese corporations, however, can possibly somewhat work under the radar of South-South cooperation between Bolivia and China, but still seeks to take part in similar capitalist exploitation as German companies. Taking the role of feeding the resource-hungry, up-and-coming world power China requires further exploitation, and the general practice aspired by these corporations to accomplish this, is compatible with ecological imperialism. *Diálogo Chino* writes:

“By 2025, China is going to need 800,000 tons of lithium,” said Chinese Ambassador Liang Yu. “We are available to help in industrialisation regarding metals and chemicals. We are to realise the South American energy and industrial dream of Bolivia,” he added.”¹⁴⁵

German, Chinese and US transnationals assumingly have close relations to their respective governments since exploitation of the South under capitalism is conducted both directly by states and by their corporations.¹⁴⁶ The rhetoric about fulfilling Bolivia’s dream remains similar. These relations put Chinese companies in the same role as German corporations, taking advantage of Bolivia’s position within the hierarchies of the global capitalist economy. The US counterparts

¹⁴² Deutsche Welle, 2020-11-12.

¹⁴³ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 74.

¹⁴⁴ Ibid, p. 413.

¹⁴⁵ Jemio, Maria Telma, “Bolivia rethinks how to industrialise its lithium amid political transition”. *Diálogo Chino*, 2020-05-19. <https://dialogochino.net/en/extractive-industries/35423-bolivia-rethinks-how-to-industrialize-its-lithium-amid-political-transition/>

¹⁴⁶ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 346.

are not different, showing clear interest in exploitation. Regarding the 2019 Bolivian coup, Latin America Bureau writes:

“Elon Musk, the CEO of American electric car producer Tesla, publicly admitted in a now-deleted tweet that the lithium had been the reason. ‘We will coup whoever we want! Deal with it.’ Musk wrote.”¹⁴⁷

Elon Musk, already one of the world’s richest men, seems, as expected from a capitalist, eager to accumulate further capital, even to the extent of hinting involvement in Morales’s overthrow. If these transnationals manage to secure deals for lithium extraction in Bolivia, they will most likely exploit all that they can and then simply move on to finding new markets in other regions to exploit other resources.¹⁴⁸ Further, the relations of these companies to local communities and organizations are generally tense. The organizations COMCIPO and FRUTCAS both reject the presence of foreign corporations in the sector and protest unequal sharing of profits.¹⁴⁹ The people in the communities around where lithium is to be exploited on a large scale will more than anyone directly deal with the environmental consequences from this activity. While geographically located in the periphery of the global capitalist economy, they are undoubtedly in the core of where this system’s quest for never-ending economic surplus will cause the main ecological harm.¹⁵⁰

5.3 Germany, China, the United States

Further actors that throughout the material are shown to have an interest in Bolivian lithium are, as briefly touched upon, the states of Germany, China, and the US. They are economically strong states and, just as the transnational corporations, characterized by coming from abroad, which in turn lowers their legitimacy. The US is the biggest economy in the world, China the second biggest, and Germany is the biggest economy in the EU. The US also has a long history of hegemonic influence in the region. The roles of these states are important, seeing as their internal markets are drivers for the growing demand of lithium. Therefore, they have interests in securing access to these resources. DW states:

¹⁴⁷ Latin America Bureau, 2020-12-08.

¹⁴⁸ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 74.

¹⁴⁹ Perreault, Tom, 2020, p. 171.

¹⁵⁰ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 370.

“And indeed, the lithium from Bolivia is crucially important for Germany, notably the country's carmakers, including VW, Daimler and BMW, which are dependent on a steady supply of lithium for a planned expansion of their battery production.

Europe's auto industry is under immense pressure to roll out more electric vehicles in order to meet stringent CO2 emission targets for their fleets imposed by the EU.”¹⁵¹

As demonstrated, the relations of Germany, China and the US to the Bolivian government are quite like those of transnational corporations regarding the interest in lithium. Regarding Germany, the fact that the EU, situated in the core of global capitalism, can realistically have stricter emission targets is a symptom of the hierarchy of this system, as EU states rely on access to technology which inevitably requires resources extracted from the South. This while states in the periphery rather are in a position of prioritizing important economic development, which additionally will require a CO2 budget that already largely has been used up by countries in the core.¹⁵² The US, also in the core, has maintained a strongly interventionist position towards Latin America for many decades. Latin America Bureau states:

“For Morales, ‘The problem began when the United States was left out.’ ‘When we say that natural resources belong to the people – this is where military bases come, this is where military interventions come, even the coup.’”¹⁵³

The US, arguably the most ideologically convinced capitalist state in the world, can evidently be understood as an imperial nation exercising military and geopolitical hegemony that goes hand in hand with economic interests of exploitation.¹⁵⁴ It is therefore one of the main sustainers of the global social metabolic order and the rifts caused by it. China, however, has gone through a rapid process of economic development just in recent decades. It has also shown limited concern for any CO2 budget or the metabolic rifts created from the quest for raw materials overseas. China is economically and politically important for Bolivia and is already involved in other mining activities in the country, with varied results. As will likely be with lithium, within this other mining, Bolivia's water supplies have been pressured by exports to China.¹⁵⁵ This can again be observed as metabolic rifts. To a certain degree, China itself still follows an economy oriented

¹⁵¹ Deutsche Welle, 2020-11-12.

¹⁵² Foster, John Bellamy, Holleman, Hannah & Clark, Brett, 2019, p. 75.

¹⁵³ Latin America Bureau, 2020-12-08.

¹⁵⁴ Foster, John Bellamy, Holleman, Hannah & Clark, Brett, 2019, p. 77.

¹⁵⁵ Lopéz, Alejandra Saravia & Quiroga, Adam Rua, 2017, pp. 147–148.

towards export, a condition which characterizes countries in the South.¹⁵⁶ However, in relation to Bolivia, China's economic growth and power on the world stage has placed the country in the core of the world economy, enabling it to take advantage of resource flows from more peripheral countries. Within this relation, there is yet no clear way for Bolivia to steer clear from a new so-called resource curse regarding its lithium while following this type of extractivist model.¹⁵⁷ Moreover, the relations between transnationals and the governments of Germany, China, and the US are somewhat intertwined. In this case, the transnational corporations seek ways to supply lithium to answer the demand of the governments and national markets. This is in line with growth logic of the capitalist system and will inevitably create new metabolic rifts where extraction is done. As Bolivia will have to handle the environmental consequences, signs of ecological imperialism can be found in both German, Chinese and US ambitions. Ecological degradation is an inevitable consequence of capitalist economic development, and the case of lithium will be no different.¹⁵⁸

The relations of these states to local communities and organizations are inevitably affected by history and the exploitative nature of extraction conducted by transnationals originating from abroad. As mentioned, both the important organizations FRUTCAS and COMCIPO oppose the presence of foreign actors in the lithium sector, leading to the latter protesting the original lithium deal with the German ACI Systems.¹⁵⁹ Additionally, as consequences of the exploitation of labor and resources by Chinese companies in Latin America, China, similarly to the US, has earned a quite complicated reputation in the region.¹⁶⁰ The contrasts of these actors and the clash of their interests are predictable consequences of global capitalism, as this current world system has imposed such economically and ecologically exploitative practices that make conflict inevitable.¹⁶¹

¹⁵⁶ Foster, John Bellamy, Holleman, Hannah & Clark, Brett, 2019, p. 73.

¹⁵⁷ López, Alejandra Saravia & Quiroga, Adam Rua, 2017, p. 179.

¹⁵⁸ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 370.

¹⁵⁹ Perreault, Tom, 2020, p. 171.

¹⁶⁰ Postero, Nancy, 2017, pp. 103–104.

¹⁶¹ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 370. Note: regarding emergence of conflict caused by the resource curse for states in the periphery, on page 354 of *The Ecological Rift*, Foster et al. quote a memorable passage from the groundbreaking 1971 book *Open Veins of Latin America* by late Uruguayan writer and journalist Eduardo Galeano: “The more a product is desired by the world market, the greater the misery it brings to the ... peoples whose sacrifice creates it.”

5.4 Local communities and organizations

The last main actors are the local communities around Salar de Uyuni and Potosí, as well as the organizations COMCIPO and FRUTCAS. These grassroots actors largely consist of indigenous peoples and hold significance for what can be done in the area. Despite not being economically strong actors, these groups mostly have strong legitimacy due to living nearby where large-scale extraction is to take place. Their interests are mainly to have a voice in what happens to the natural resources in the area and gaining fair revenue in case these are exploited.¹⁶² Diálogo Chino writes, regarding the events surrounding the original lithium deal:

“Comcipo’s opposition led to a 45-day civic strike, as well as a hunger strike at the government headquarters. They demanded the repeal of the decree that formed the joint venture between YLB and ACI Systems because it failed to comply with the decision of 100% Bolivian industrialisation of lithium.

...

Flanked by protests from various sectors and in order to reduce them, Evo broke off the partnership with ACI Systems. But he did not achieve the effect he was looking for. Local communities did not budge in their opposition to his government.”¹⁶³

COMCIPO’s relations to MAS, YLB and the government are affected by these mobilizations, which eventually led to Morales cancelling the original deal.¹⁶⁴ Since the protests gave results, the organization is one actor holding some power in this context. However, there are also divided views on lithium between locals. Diálogo Chino also states:

“These southern populations do not feel represented by Comcipo (the Potosi Civic Committee), which also claims a voice in the debate, but which they see as representing cities like Potosi rather than local communities.”¹⁶⁵

FRUTCAS, being a campesino organization, is relevant, as it has worked closely with the government and its lithium plans, becoming a legitimizing force for the project.¹⁶⁶ Its main concern is to guarantee regional development. However, like COMCIPO, its opposition to foreign involvement in the lithium sector is clear.¹⁶⁷ This makes their relations to transnational

¹⁶² Perreault, Tom, 2020, pp. 171-172.

¹⁶³ Diálogo Chino, 2020-05-19.

¹⁶⁴ Lunde Seefeldt, Jennapher, 2020, p. 748.

¹⁶⁵ Diálogo Chino, 2020-05-19.

¹⁶⁶ Perreault, Tom, 2020, p. 171.

¹⁶⁷ Ibid, p. 171.

corporations, as well as Germany, China, and the US, problematic. Frankly, the biggest concerns about lithium industrialization have been economic, rather than environmental aspects.¹⁶⁸ Certain local communities and organizations seem willing to support processes of extraction and the metabolic rifts that come with it. Nevertheless, these priorities are symptoms of the inequality of the economic system that divides countries into core and periphery, as it is not a coincidence that resource-dependent nations in the South seek economic relief. The extent of these priorities says something about poverty under capitalism, especially also knowing that these countries will face the worst consequences of environmental degradation as well as of climate change.¹⁶⁹

Meanwhile, nations in the North can focus on technological solutions to environmental problems caused by their quest for capital accumulation.

Bolivia's constitution grants state ownership of the country's natural resources, and local municipalities are not involved in Salar de Uyuni.¹⁷⁰ As material-ecological flows under capitalism separate town and country, the extractivism of the central government and interests of foreign actors in relation to organizations and communities in Bolivia demanding revenue for their local resources, are assumingly symptoms of a core-periphery relation also within the country, in which the ecological costs will fall on the periphery domestically as well.¹⁷¹

6. Discussion

The purpose of this thesis was to attain a greater understanding of the context of Bolivian lithium governance, closer identify what main actors are involved in and affected by it, as well as analyze potential power relations between these actors. It has answered the research question "What are the main actors in Bolivia's lithium governance and how can their relations be understood in the light of an Eco-Marxist perspective?".

The main actors have been identified as the Bolivian government under Luis Arce, his party MAS, and the state-owned lithium company YLB, as well as transnational corporations, the states of Germany, China and the United States, and local communities and organizations such as

¹⁶⁸ Perreault, Tom, 2020, pp. 171–172.

¹⁶⁹ Foster, John Bellamy, Holleman, Hannah & Clark, Brett, 2019, p. 76.

¹⁷⁰ Perreault, Tom, 2020, p. 171.

¹⁷¹ Foster, John Bellamy, York, Richard & Clark, Brett, 2011, p. 346.

COMCIPO and FRUTCAS. The Bolivian government's adherence to lithium extraction is part of a growth-oriented development model imposed on countries in the global South by the capitalist world system, which inevitably causes environmental degradation and metabolic rifts. The relations between the Bolivian government, transnational corporations, Germany, China, and the US show signs of an unequal core-periphery relation, due to Bolivia's dependency on capital from foreign actors in developing its lithium sector, including strong potential for ecological imperialism being conducted by these actors because of their interests and positions within global capitalism. While local communities and organizations maintain tense relationships with these foreign actors, their relations to the government are complex; even as the government's plans for lithium also show signs of a domestic core-periphery relation, there are local voices of both opposition and support for the plans for large-scale lithium extraction. These findings are, as expected, complex and generally follow the hypothesis.

Despite Bolivia's ambitions of exercising sovereignty over its lithium reserves, it seems unable to avoid global capitalist interests. This is quite representative for how countries in the South are stuck in a world system that does not primarily benefit them. This system and its imposed extractivism repeatedly makes these countries find themselves at a crossroads between pursuing much needed economic development or protecting the environment. Additionally, by choosing economic development, states in the South are frequently accused of being laggards in the process of global energy transition, however this critique fails to acknowledge the impact of the legacy of colonialism and the hierarchies of contemporary world capitalism. Even if we Europeans want to imagine a smooth and problem-free transition to renewable energy, we would also in our dream vision of "sustainable" capitalism need to extract minerals from countries in the South, most likely damaging the environment in other ways. These contradictory inequalities remain in the very core of the question of climate change and cannot be ignored. Eco-Marxism is a useful tool to help effectively expose the inherent contradictions of the world system through a systematic and critical approach and identify different paths forward.

This discussion naturally opens for the difficult question of how to permanently leave extractivism behind. Whether the potential metabolic rifts and damage caused by large-scale lithium extraction can be countered in the long term by enabling low carbon technologies is also an unknown. Nevertheless, lithium reserves will end eventually, which means we cannot forever

produce solar panels and electric cars either. In general, solutions to these problems will likely require systems of fair distribution of resources as well as energy and resource efficiency on a global scale, which are big challenges in today's world. Capitalism must inevitably be questioned, and production models based on need, not growth, will be required to regulate engagement with the natural boundaries of our planet, while simultaneously enabling the desired improvement of living standards for countries in the global South.

In line with practical use of the actor analysis method, general solutions to the issue can be proposed. In Bolivia's case, the country should hold onto ambitions of sovereignty and be careful with involving stronger foreign actors. Best for the environment at this moment would assumingly be to leave the lithium in the ground, but then other ways to confront harsh economic realities are needed. If the government pursues its plans, a more sustainable way could be seeking cooperation and knowledge from neighboring countries in similar positions, rather than partnering with transnationals or economic giants such as the US, Germany, or China. To avoid conflict, the government should be clearly transparent and inclusive with local communities to ensure participation and fair distribution of revenue. Further, it must strictly follow environmental regulation and set clear limits of extraction, thus also limiting metabolic rifts. In the long term, however, the extractivist model should be abandoned in pursuit of more sustainable strategies of resource governance, despite this being easier said than done.

For future research, this topic can be approached from many angles. Due to the need for a global energy transition, the issue of lithium will likely be covered extensively. Depending on how Bolivia's situation develops, further case studies can be conducted, as well as comparative studies on governance of other resources in states in the global South. Lifting perspectives and voices from the South will also be specifically important. The complexities within resource governance make the subject deeply interesting, and there will undoubtedly be a big need for further knowledge of this topic in the future.

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