EXPELLED AND SACRIFICED: EXPLORING LITHIUM AND RESISTANCE

Written for POL S 462

By Lochlann Kerr

ABSTRACT The Global North's shift to a decarbonized economy has become predicated on access to resources that facilitate new modes of energy production and consumption. One of the most prominent of such resources is lithium, which underpins modern electric vehicles and large-scale battery technologies. The sites of extraction of this mineral have become epicenters of resistance from local and Indigenous communities, and this resistance can be understood as more than simple opposition. Using the framework of sacrifice zones and Saskia Sassen's concept of expulsions, this paper shows that resistance is an inseparable part of a commodity whose extractive logic is predicated on the erasure of people and space, and highlights the contradictory conception of lithium as a part of 'clean energy.'

INTRODUCTION

The world is running out of time — each ounce of coal burned, kilometre driven by gas cars, and flight flown eats into humanity's carbon budget. This urgent need to reduce carbon emissions has spurred repeated, if belated and half-hearted, commitments to decarbonizing our economy. Widely seen as a net good for the world, proponents have lobbied governments and tried to sway the minds of consumers to participate in the new 'green economy.' One commodity considered essential to this transition is lithium.

This paper will explore lithium as a commodity, relying on theoretical frameworks and direct research to characterize an essential aspect of lithium: resistance. This contested commodity is inseparable from the forms of opposition that manifest outside of institutions, governments, and markets. Seeking to explore the roots of this resistance and why it manifests around sites of extraction, this paper will begin by characterizing the process and impacts of the Lithium Triangle, an area of South America with the world's largest proven reserves. From there, the social, political, and economic frictions are explored using the concepts of the neo-extractivist state and political expropriation. Next, the concept of sacrifice zones and exclusion are used to explain how the neo-extractivist state and political expropriation are made possible. Finally, Indigenous resistance will be situated within the broader context of capitalist consumption and extraction. This final section will utilize the prior analysis and conceptualizations to demonstrate how and why resistance is an important socio-political engagement with lithium as a commodity. Taken together, this paper will argue that the neo-extractivist state politically expropriates local communities to perpetuate the harms of capitalist extraction by constructing the salt flats as sacrifice zones in which people, land, and water are expelled, necessitating resistance.

CHARACTERIZING LITHIUM EXTRACTION

Dubbed the “white gold” of the twenty-first century, lithium has become an irreplaceable part of modern technology and the hyper-technological world it underpins — used primarily in lithium-ion batteries for decades, the element is at the forefront of a massive shift towards a ‘green economy’ (Hernandez n.d.). Lithium demand surged in the 2010s and into the 2020s, reaching an 8.9% annual growth in 2019, with this trend expected to continue as the Global North attempts to shift away from fossil fuel consumption (Ahmad 2020).

Two particularly important uses for lithium-ion batteries are energy storage - which is essential for renewable energy - and the electromobility industry. Electric Vehicles (EVs) rely on lightweight, efficient, and affordable batteries in order to compete with traditional cars, and with the growth of the EV sector comes a growth in the resources needed for manufacturing (Jerez, Garces, and Torres 2021, 2). Through efforts to meet emissions reductions targets, and as part of shifting consumer preferences towards products and lifestyles perceived to be more ‘green’, the Global North has been the driving force behind the increased demand for lithium (2). The fact that the supply chain for lithium often and increasingly begins in the Global South but is consumed almost exclusively in the Global North is a significant factor for the analysis of later sections of this paper (Giglio 2021, 48).

While there are multiple global deposits of lithium, embedded in both rock and water pockets, only a handful of locations have sufficiently large and accessible concentrations. The largest proven deposits are located in an area known as the Lithium Triangle - an area encompassing corners of Chile, Argentina, and Bolivia (Hernandez n.d.). This massive area encompasses high, arid, mountainous regions with sparse populations and large salt flats. In these salt flats significant stores of lithium have been discovered; beneath the surface lie complex water systems, including large brine deposits (water with high salt concentration). The lithium is dissolved in this subsurface brine and must undergo a lengthy extraction, evaporation, and purification process before export (Ahmad 2020).

Using Chile as an example, governments sell water rights to mining companies that are permitted to extract a certain amount of brine water per day (Jerez, Garces, and Torres 2021, 5). Although some requirements may exist regarding free, prior, and informed consent of local and Indigenous communities, the consultation process has often been characterized as deeply flawed (Giglio 2021, 50) and there have been disputes between corporations, local communities, and governments over the awarding of water rights and the frequent violation of extraction limits by mining companies (Jerez, Garces, and Torres 2021, 5).

Once extraction does begin, the process can have devastating effects on the water system of the salt flat. Lithium extraction is both water-intensive and done in large quantities. Available estimates put the water use at 500,000L of water to produce 1 ton of lithium — this is due to the process of leaving extracted brine in large pools to evaporate for months as a means of separating the lithium carbonate (Giglio 2021, 50). Given the high water intensity, companies are incentivized to extract as much brine as possible, often pumping as much as 650L of water per second out of the flats (50). Boring through the salts to reach brine deposits can reach depths of 300m — the depth at which freshwater deposits become common. This poses the risk of extracting freshwater or contaminating

freshwater systems with salt water (50). Finally, governments have long had an incentive to minimize the official accounts of the extraction's impacts — by structuring regulatory regimes to exclude certain considerations, corporations can extract more lithium with less accountability. For example, Chile's mining code counts lithium as mineral mining rather than water extraction, reducing the need for environmental reports on the impact on water systems (Jerez, Garces, and Torres 2021, 6). With these effects combined, water rights have been disproportionately prioritized for the lithium industry; in Salar de Atacama, Chile, around 65% of water rights are in the hands of extraction companies (Giglio 2021, 50). Each liter of brine is inexpensive for corporations to extract, and with lithium selling at $12,700 USD per ton pre-COVID (Garside 2021), there are massive financial and structural incentives to continue extracting as much lithium as possible, even beyond the legal limits.

The result of extractivist policies has been a severe destabilization of water systems, which are essential for ecological and human existence in the area, and which have inherent value within Indigenous perspectives. Often, the amount of water extracted by the lithium industry vastly exceeds the natural replacement rate, resulting in an unsustainable depletion of water (Jerez, Garces, and Torres 2021, 8). Looking first at the environmental impact, local communities have experienced severe depletions in water flows. Using interviews with Indigenous communities near extraction sites, Giglio (2021) detailed the impact on the agriculture and subsistence farming that underpins their way of life (8). Romero-Toledo (2019) also identified impacts such as water shortages affecting the migration patterns of native species and severe contamination from suspended dust. As the brine evaporates in open-air pools, wind carries dried salts into other freshwater sources causing further contamination (2019). Turning to Indigenous perspectives on land, important connections to land are excluded from consideration by state regimes (Babidge and Bolados 2018, 177). Many Indigenous communities have deep spiritual, cultural, and historical connections to water systems which are severed by extractionist industry (Jerez, Garces, and Torres 2021, 3). Significantly, water systems are non-human entities that exist in a relationship with human actions, a relationship that entails "responsibilities, rights, and reciprocity" (Babidge and Bolados 2018, 178). Resultantly, the over-extraction of lithium imposes both ecological, health, and cultural harms on local communities and ecosystems.

WHAT IS HAPPENING: A POLITICAL EXPROPRIATION BY THE NEO-EXTRACTIVIST STATE

This section provides an overview of analytical frameworks offered to explain the phenomenon of exploitative lithium extraction, focusing on the concepts of the neo-extractivist state and political expropriation. Based on a literature review on extraction in the lithium triangle, these concepts form a conceptual framework for how exploitative practice manifests.

Beginning with the concept of the neo-extractivist state, Babidge and Bolados (2018) define the term as a state that "incorporate[s] regulatory mechanisms that purport to compensate peoples and environments for the excess of extraction while seeking to sustain extraction-led economies" (171). The desire for economic growth through resource extraction and export gives governments little incentive to enact or enforce effective regulatory regimes to limit the amount and methods of extraction (171). Instead, states attempt to 'compensate'

those impacted by the extraction, allowing it to continue unhindered while muffling resistance or objection. Furthermore, the process of compensation has often been used to justify increases in extraction by tying compensation to the quantity of brine removed from hydro systems; the harms are purportedly canceled out by higher payments (Jerez, Garces, and Torres 2021, 8).

Bringing in the concept of political expropriation, Giglio (2021) characterizes the process of the neo-extractivist state enabling extraction by "counteracting the processes of community resistance, disarticulating them politically and thus losing decision-making and management power" (48). In expropriating the land, water, spiritual connection, and voice of communities impacted by lithium extraction, the state actively devalues the lives and perspectives of Indigenous peoples. Further, the process of political expropriation also manifests in the abandonment of these communities during negotiations with prospective mining companies (Jerez, Garces, and Torres 2021, 8). Rather than provide basic resources like water to communities, the neo-extractivist state appropriates claims to water resources and lets corporations use water as a bargaining chip in seeking to extract consent from communities for extraction (Giglio 2021, 8; Babidge and Bolados 2018, 181). These negotiations can lead to 'compensation' such as direct payments (Jerez, Garces, and Torres 2021, 8), infrastructure projects, jobs, or transfers of water and electricity (Babidge and Bolados 2018, 175-176). Because of the massive power imbalance and lack of state support, or outright suppression, this compensation fails to be fair for Indigenous communities and fails to adequately protect ecological and hydrological systems (181).

Furthermore, this process of state abandonment and corporate compensation ignores the perspectives and needs of Indigenous peoples. The neo-extractivist state and mining corporations apply a capitalist and commodified framework in redressing or mitigating the harms of over-extraction. Compensation programs "represent a symbolic exchange for water" (Babidge and Bolados 2018, 177) that rely on an inherently commodified perspective — harms done by the extraction of lithium must be quantifiable and exchangeable as money, goods, or services. Rather than a commodified and lifeless conceptualization of water, Babidge and Bolados (2018) explore the spiritual, cultural, and ritualistic relationship many Indigenous communities have to land and water systems. Indigenous perspectives emphasize that the rights, and intertwined responsibilities, to water derive from protecting and respecting the water systems as beings (181). This situates Indigenous perspectives in opposition to how the neo-extractivist state views and values water. Because the basic concept underpinning compensation - that of a narrow, capitalist view of water and lithium as mere resources to be extracted for monetary gain - fails to align with the perspectives and needs of Indigenous communities, compensation is both inadequate and intended to extract consent.

In essence, this framework seeks to explain the exploitative nature of lithium extraction by framing the issue as, at its core, the state abandoning Indigenous communities due to its desire to promote resource-led growth and corporations enacting the little responsibility they do have through transactional compensation predicated on the commodification of ecology and culture. This roots lithium as a commodity in an inherently damaging process that reduces the visibility of harm through the application of narrow,

capitalist extractive frameworks of water and land, and through the rejection of Indigenous knowledge and perspectives in order to legitimize deeply ineffective compensatory practices that serve only to muffle dissent.

HOW IT IS HAPPENING: SACRIFICE ZONES AND EXPULSION

Having discussed *what* is happening using the political expropriation and neo-extractive state concepts, this section will focus on a theoretical framework that explains *how* lithium extraction has been constructed in a way that imposes such dire harms. The neo-extractivist state and political expropriation model demonstrate that extraction is disempowering and harmful; the question of how a state effectively ignores and disempowers its own citizens is addressed by the concepts of sacrifice zones and expulsions, which are explored in this section.

An effective conception of sacrifice zones is given by de Souza (2021): a sacrifice zone "is how a certain type of segregated and stigmatized space has come to be internationally known. In such a space the physical and mental health and quality of life of human beings are compromised in the name of 'economic development' or 'progress' - but ultimately for the sake of capitalist interests" (220). This framework is corroborated by Naomi Klien (2014), writing that sacrifice zones are "places that, to their extractors, somehow don't count and therefore can be poisoned, drained or otherwise destroyed, for the supposed greater good of economic progress" (169).

This highlights a utilitarian framework, whereby the harms incurred in one space are justified by the benefits made for another. A socially produced space's sacrifice is 'for the common good' and, because it has been designated as a zone for harms to be concentrated, the harms incurred become justified. That is to say, the Lithium Triangle is not exploited by mistake or by malice, but by a capitalist logic of extraction being justified in places that are constructed as the 'correct' place for harm — as de Souza summarises: if anyone must live with pollution, let it be them that lives with all of it (2021, 222). An additional element of sacrifice zones is their construction as known places of hidden harm. It is no secret that the Lithium Triangle exists, that the extraction is water-intensive, or that the modes of extraction are destructive, and yet sacrifice zones remain unrecognized as sites of *significant* suffering. Not just significant in the scale of suffering, but significant in that the suffering matters. Sacrifice zones remain ignored by the Global North, even by those that claim to champion environmental causes in the push towards a green economy (de Souza 2021, 233, 237). The concept of sacrifice zones is particularly valuable for lithium extraction, as lithium is a commodity with devastating impacts for the regions from which it is extracted yet is hailed as a 'green' resource when it is sold in an EV. Even when there is an awareness in the Global North of the impacts of lithium extraction, it is still constructed as a net-positive commodity — the sacrifices of the salt flat ecosystems are 'worth it' to reduce emissions in the Global North. Each step of the commodity chain rationalizes the harm done or manufactures a clean ledger: the neo-extractivist state justifies the acute harms by pointing to the role of resource extraction in growing the economy, and mining corporations wash their hands by offering jobs to local communities, as if paying economically disadvantaged communities to participate in their own oppression wipes the slate clean.

Extending on this rationalization, de Souza (2021) characterizes sacrifice zones as being perpetrated by a system of fundamental indifference (231-232). Each bureaucrat, CEO,

and EV driver may be wholly aware of what they are participating in but feel no responsibility nor any sense that they are a part of a system doing something deeply wrong. The abject ecological, human, agricultural, and spiritual harm is registered but has no value. De Souza argues that the ability to justify this suffering because of 'economic growth' or 'the green economy' is because sacrifice zones are constructed as disposable (240). In these zones, "not only human lives are disposable there; actually, everything is disposable: fauna, flora, whole ecosystems, and landscapes." (223-224). This makes the rationalization of capitalist logic to the injustices of sacrifice zones possible.

However, this analysis can be taken a step further than de Souza's claim — rather than saying that 'we are indifferent to suffering in sacrifice zones because everything in them is disposable', another layer of analysis as to *how* a zone is made disposable can be added. How does a place *become* sacrificed and made "superfluous?" (2021, 226). For this, Saskia Sassen's concept of expulsions can be used to explain what it means to create sites, peoples, ecologies, and cultures or superfluity. Expulsions, in this context, means the removal of individuals, communities, places, or ecologies from a system, including systems of power and systems of value (Sassen 2016, 89). Distinct from social exclusion within a system, expulsion strips entities of their membership to spaces or systems. This is important because it precludes the possibility of harms being redressed within the systems from which these actors are expelled — if the hydrologies of a salt flat are rendered insignificant by the neo-extractivist state, then no systems of the state will take up their defense.

Applying the expulsion framework to lithium, a significant form of expulsion Sassen explores is the acquisition of land and resources. Here, two forms of expulsions happen. First, people are expelled by virtue of their land's acquisition by extractive corporations or foreign entities — capitalist logic places no value on individuals who are not needed for profitable activities, and so those individuals are expelled in the process of land acquisition. Sassen notes that "the natural resources of [...] Latin America count more than the people on those lands count as consumers and workers" (2016, 91-92). Notably, lithium extraction is dominated by foreign firms acquiring massive land and water rights over community objections (Giglio 2021, 49). The second subject of expulsion is the biosphere; the brutal extraction of resources leaves behind "dead land and dead water [...] marked by the expulsion of biospheric elements from their life space," (Sassen 2016, 101). These forms of expulsion are evident in sites of lithium extraction: the destruction of natural water cycles, the disregard for the impacts on local communities, and the erasure of Indigenous forms of knowledge regarding hydro systems all stem from the fundamental concept of expulsion.

The processes of extraction by the neo-extractivist state also meshes with the expulsion framework. Expulsion happens via complex systems of finance, ownership, regulation, and rights that culminate in the expulsion of beings (Sassen 2014, 2). Rather than overt acts of expulsion, beings can be expelled using the legal and financial instruments of the state (191). This reflects the means by which the governments eliminate the significance of water systems in the extraction of lithium: Chile's mining code designates lithium extraction as mining and not water extraction, which systematically erases the water ecosystem (Jerez, Garces, and Torres 2021, 6). The Chilean water code similarly creates complex legal frameworks for the

ownership and division of water rights, which has led to corporations amassing massive and unsustainable water extraction rights (3). This exemplifies how the process of expulsion happens through complex systems of finance, international capital, and legal institutions to cumulatively expel both people and places in order to pave the way for extraction.

The sacrifice zones framework adds conceptual clarity to the characterization of the neo-extractivist state and political appropriation, and the concept of expulsions that explains how a sacrifice zone is created. An area in which people and biospheres are made irrelevant is done through the removal of those beings from systems of value and voice, rendering the harms done in these zones irrelevant under a capitalist logic. This expulsion, where people and places exist outside of recognition, leads finally to the question of how to prevent the harm being perpetrated in these zones. Given that Indigenous lives and water systems are placed outside of institutions of power and systems of recognition, even to the extent of being expelled from the social contract (Sassen 2014, 29), action within those systems is ineffective. Rather than oppose a single project or demand greater compensation, Indigenous peoples have turned to resistance against the neo-colonial capitalist system itself. This will be the area of exploration in the final section.

RESISTANCE: HOW LITHIUM IS REFRAMED

Having established that lithium extraction is predicated on the creation of sacrifice zones, which are in turn created by expulsions, the final area of inquiry is resistance. By the very nature of being expelled from systems of power and value, Indigenous communities affected by the extraction of lithium are unable to resist extraction using the tools of the state or markets — they are already devalued as workers, citizens, and beings. Being unable to enact resistance within the system, what is left is the ability to resist from the outside. The analysis up to this point cohesively explains why resistance exists: lithium extraction exacts serious harms to ecological systems and the communities that exist in reciprocal relations with them. This harm is concentrated in constructed areas of unvalued suffering called sacrifice zones, and those sacrifice zones are made by processes of expulsion. Given the means and structures that create and extract lithium, the act of resistance becomes an inseparable part of the commodity.

Therefore, the final step is to explore what resistance to a commodity looks like when that resistance is undertaken by expelled peoples in the defense of expelled biospheres. Two forms of distinct but interconnected resistance will be discussed, both of which prevent the direct harms of extraction and also the broader structural harms of capitalist logic.

Turning first to the prevention of direct harms, Indigenous communities have sought to engage in resistance that limits the quantity of extraction and prevents unsustainable methods. This has included acts of protest and blockade to prevent or limit extraction that damages the delicately balanced hydro systems of the flats (Jerez, Garces, and Torres 2021, 9). This form of resistance exists outside of the very limited recognition of Indigenous water rights and relationships afforded by the state and corporations (7). A prominent example of this resistance was a 2019 blockade of one of Chile's largest salt flats by the Atacama Indigenous Council (Sherwood 2019). An important impact of this form of resistance is the prevention of extraction itself by obstructing access to the extraction sites,

but also a rejection through protest of the wider capitalist logic of extraction and consumption. This form of resistance also engages with the concept of sacrifice zones: reduced consumption by the Global North, and subsequently less demand for extraction in the Global South, is a means of preventing the concentration of harm. Scott and Smith describe this form of environmental justice as aiming to "even out burdens or sacrifices across a more diverse range of communities and, where necessary, impose them on more affluent or relatively privileged peoples and communities," (2017, 892). This redistributive justice also holds significance in a decolonial aspect: expanding beyond a zone of sacrifice, the Global South has been constructed as a "zone of conquest" by colonial powers, and the extractive lithium industry is merely the latest iteration of colonial power relations (Jerez, Garces, and Torres 2021, 2). By preventing lithium extraction through resistance, Indigenous communities are enacting power both despite and in spite of their expulsion in order to prevent the death of water ecosystems and as a form of resistance against neo-colonial power structures. The act of limiting extraction also calls into question the paradigm of consumption itself: rather than changing from the consumption of fossil fuels to the consumption of lithium, the Global North must engage in a process of reducing its total consumption of commodities, which requires a change in the underlying capitalist logics of ever-increasing consumption (9). Climate change is a serious issue, but this resistance opposes the assumption that it can be addressed by plundering lands for new consumption.

The second form of resistance that prominently exists outside of systems of recognition is a cultural and spiritual resistance. This entails participating in cultural practices, rituals, and events that simultaneously reinvigorate connections to land and water, and enact critiques of the inherent contradictions of extractive capitalism. One example detailed by Babidge and Bolados is annual water canal cleaning rituals by two Atacameño communities in Chile: the process of community members cleaning and maintaining waterways connected to the Atacama salt flats "articulate[s] a relation to earth and water through the ritual engagement with a productive and responsive landscape" (2018, 171). This is not only an engagement in a way of life expelled by the extractivist state; this also enacts "resistance to the values of extractivism through the logic that communal work practice produces Atacameño rights to and responsibility for water" (181). Where the capitalist state only values the profit of extractable resources, Indigenous communities manifest resistance to this logic by visibly participating in relationships of respect and reciprocity with the biosphere that the capitalist system has expelled. Spiritual and cultural resistance also reconfigures sacrifice zones and expelled beings from being 'hidden' or 'ignored' into being sites of public discourse and awareness. Giglio (2021, 50), Babidge and Bolados (2018, 174), and de Souza (2021, 237) all identify the lack of visibility as a crucial element of lithium extraction sites that Indigenous resistance has sought to rectify. Tying in the concept of expulsions, it is easier to expel a being when no one is able to see that expulsion happen — therefore, resistance to expulsion must bring visibility and awareness.

Resistance is a vital part of how lithium is constructed as a commodity, as it is constructed in such a way that necessitates challenge from outside systems of power and value by and for expelled beings. How this resistance manifests also intertwines with the

broader framework of extractive capitalism, resisting the logic of unlimited consumption and pressing forward with Indigenous perspectives that encompass the very ecological responsibility that systems of capital have expelled.

CONCLUSION

Lithium is a global commodity that will play an increasingly central role in the efforts of the global economy to reduce carbon emissions. It is in the pursuit of this genuinely positive goal that lithium is constructed as a commodity that, on balance, benefits the world — if someone in Germany can buy an EV instead of a gas car, then surely the world must be better off. This construction is grounded in capitalist modes of production and consumption that enforce a logic of justified extraction; the answer to climate change is to change from consuming one exploitative commodity to another. This creates new sites of extraction, particularly in the Global South, so that the Global North can continue high-energy and hyper-technological living — the Lithium Triangle is one such site. Here, lithium extraction decimates natural ecosystems, communities reliant on the complex water systems, and erases cultural connections to, and understandings of, land and water.

This paper first explored what exactly that exploitation looks like in both an ecological and social sense, explaining the massive impacts of the over-extraction of lithium. Stepping beyond the description of the extraction, this paper used the lenses of political expropriation and the neo-extractivist state to explain how this process of over-extraction happens. This analysis was taken a step further by arguing that lithium extraction entails more than just extractive logic; sacrifice zones, created through expulsion are the sites of this extraction. Finally, the necessity and role of resistance to lithium becomes clear. Because lithium extraction exists within the capitalist system, Indigenous communities resist not just the means by which lithium is extracted, but the entire logic of extractive and neocolonial capitalism. This resistance highlights the contradictions of the Global North's attempts at decarbonization and forces the consideration of questions of *how much* we consume rather than just *what* we consume. Lithium is vital to the green transition, which is vital for the future of the Earth — but without a transition away from capitalist modes of extraction by expulsion, it won't be much of a transition at all.

REFERENCES

Ahmad, Samar. 2020. "The Lithium Triangle: Where Chile, Argentina, and Bolivia Meet." *Harvard International Review*. https://hir.harvard.edu/lithium-triangle/.

Babidge, Sally, and Paola Bolados. 2018. "Neoextractivism and Indigenous Water Ritual in Salar de Atacama, Chile." *Latin America Perspectives* 45 (5): 170-185. doi: 0.1177/0094582X18782673.

de Souza, Mario Lopes. 2021. "'Sacrifice zone': The environment–territory– place of disposable lives." *Community Development Journal* 56 (2): 220-243. doi: 10.1093/cdj/bsaa042.

Early, Catherine. 2020. "The new 'gold rush' for green lithium." *BBC*. https://www.bbc.com/future/article/20201124-how-geothermal-lithium-could-revolutionise-green-energy.

Garside, M. 2021. "Lithium carbonate price 2020." Statista. https://www.statista.com/statistics/606350/battery-grade-lithium-carbonate-price/.

Giglio, Elena. 2021. "Extractivism and its socio-environmental impact in South America. Overview of the "lithium triangle."" *América Crítica* 5 (1): 47-53. https://doi.org/10.13125/americacritica/4926.

Hernandez, Oscar. n.d. “Lithium batteries won the Nobel Prize. How is this an opportunity for Latin America?” Inter-American Development Bank. Accessed December 7, 2021. https://www.iadb.org/en/improvinglives/lithium-white-gold-regions-development.

Jerez, Barbara, Ingrid Garces, and Robinson Torres. 2021. “Lithium extractivism and water injustices in the Salar de Atacama, Chile: The colonial shadow of green electromobility.” *Political Geography* 87 (1): 1-11. https://doi.org/10.1016/j.polgeo.2021.102382.

Klien, Naomi. 2014. *This Changes Everything: Capitalism vs The Climate*. New York: Alfred A Knopf Canada.

Romero-Toledo, Hugo. 2019. “Extractivismo en Chile: La producción del territorio minero y las luchas del pueblo aimara en el Norte Grande.” *Columbia International* 98 (1): 3-30. https://doi.org/10.7440/colombiaint98.2019.01.

Sassen, Saskia. 2014. *Expulsions: Brutality and Complexity in the Global Economy*. Cambridge, Massachusetts: Harvard University Press.

Sassen, Saskia. 2016. “At the Systemic Edge: Expulsions.” *European Review* 24 (1): 89-104. doi:10.1017/S1062798715000472.

Scott, Danya N., and Adrian A. Smith. 2017. ““SACRIFICE ZONES” IN THE GREEN ENERGY ECONOMY: TOWARD AN ENVIRONMENTAL JUSTICE FRAMEWORK.” *McGill Law Journal* 62 (3): 861.

Sherwood, Dave. 2019. “Chile protesters block access to lithium operations: local leader.” *Reuters*, October 25, 2019. https://www.reuters.com/article/us-chile-protests-lithium-idUSKBN1X42B9.