Commodity Frontiers

Capitalism, Contestation, and the Transformation of the Global Countryside

The Journal of the Commodity Frontiers Initiative

Mineral Frontiers

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Mission Statement

*Commodity Frontiers* is the Journal of the Commodity Frontiers Initiative (CFI). Edited by a group of scholars and researchers from various disciplines and organizations in the CFI Network, *Commodity Frontiers* explores the history and present of capitalism, contestation, and ecological transformation in the global countryside. Each themed issue includes articles and interviews with experts about studying and teaching commodity frontiers in theory and in practice. The Journal features reflections and reviews on the dynamics of capitalist expansion, social change, and ecological transformation on global as well local scales, in the past and at the present. Contributors include historians, social scientists, (political) ecologists, artists, and activists who work on global commodity production and circulation, rural societies, labor history, the history of capitalism, social metabolism, and contemporary politics, conflicts, and counternarratives in the countryside. *Commodity Frontiers* endeavors to carry out one of the central goals of the CFI: to provide long historical perspectives on problems that are often assumed to be modern, and to link historical and contemporary research to recast our thinking about sustainability, resilience, and crisis.

*Commodity Frontiers* is a biannual open-access publication housed at commodityfrontiers.com, through *Commodity Frontiers* in the Open Journal System at Wageningen University, and distributed through email subscriptions. Its editorial collective is committed to inclusive, anti-racist, anti-sexist, decolonial scholarship and politics.

Objectives

*Commodity Frontiers* aims to provide accessible content from diverse perspectives on the past, present, and future of commodity frontiers and their dynamics. We feature research and educational activities undertaken by academics, artists, activists, and other civil society actors. By soliciting short contributions from our multidisciplinary and multi-sectoral networks, and distributing the open-access Journal through our website and the Open Journal System, we aim to reach a broader audience than typical academic publishing allows. We strive for “real-time” reports and reflections on contemporary issues, as well as contributions that link the past and present.

Editorial Process

The articles in *Commodity Frontiers* are not double-blind peer reviewed. Rather, Section Editors purposely solicit contributions related to the theme of each issue from experts in respective fields. All articles are reviewed by Section Editors and at least one Editor-in-Chief.
Editorial Introduction

Commodity Frontiers 1, Fall 2020

Mineral Frontiers

The history of the making of the modern world is a history of the expansion of commodity frontiers, a historical process so spatially, socially, and structurally all-encompassing that it still awaits its persuasive analysis. Over the past 600 years, since the inception of the capitalist revolution, these commodity frontiers—processes and sites of the incorporation of resources (land, energy, raw materials, knowledge, and labour) that have shaped the expanding capitalist world economy—have moved at ever accelerating speed across vast areas of the globe, incorporating ever more land, labour and natural resources. Flatlands, valleys, forests, marine spaces and mountains have been farmed, logged, fished, and quarried to provide raw materials and food for a rapidly urbanizing and industrializing global economy, extractive processes that have been crucial drivers of capitalism’s expansion (Beckert et al. 2020).

Later this year, the leadership of the Commodity Frontiers Initiative (CFI) – Sven Beckert, Ulbe Bosma, Mindi Schneider, and Eric Vanhaute – will publish an article in the Journal of Global History that outlines our research agenda for studying “Commodity Frontiers and the Transformation of the Global Countryside” from the 15th century up to the present. The lines quoted above open that forthcoming article; they also situate some of the key conceptual and concrete concerns that underlie and motivate our new open-access journal, Commodity Frontiers.

Commodity Frontiers aims to provide robust and freely accessible content on the past,

Correspondence:
Mindi Schneider, mindi.schneider@wur.nl

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present, and future of commodity frontiers, from diverse perspectives and positionalities. We strive for “real-time” reports and reflections on contemporary issues and events, as well as contributions that link the past and present of capitalism and the countryside, providing longer historical viewpoints on problems that are often assumed to be modern.

*Commodity Frontiers* comprises two themed issues per year, one in the Fall and one in Spring. Each issue includes articles and contributions presented in 11 regularly recurring sections, and every section has its own editorial team. The theme of this, our first issue, is *Mineral Frontiers*.

As Leonardo Marques states in his contribution, “From smartphones to so-called green technologies, including Elon ‘We will coup whoever we want’ Musk’s electric cars, the production of many contemporary commodities continues to depend on the extraction of various raw materials from different parts of the world” (this issue, p. 48).

Indeed, although we seem to be living in ever-more virtual worlds, with physical distances mediated through digital platforms and devices, our lives are very much embedded in material worlds of objects, “resources” including minerals, and uneven social and ecological relations. A focus on commodity frontiers grounds us not only in these “things,” but also in the shared and divergent histories and historical entanglements and conjunctures that produce and reproduce them.

Commodity frontiers include land, labor, ecological, and technological regimes in particular times and places. They are marked by uneven and shifting power relations between state, business, civil society actors, and financial institutions. And they include and express patriarchal and racialized notions, practices, relations, and structures. Commodity frontiers are rife with inequalities, degradations, and resistances.

As an orienting concept, the commodity frontier lens offers both an entry point and an invitation for depth. Descriptively, the concept helps to document the form and content of commodity frontiers and the dynamics of frontier-ization in particular times and places, without losing sight of more general and shared processes. Analytically, the lens opens a space for theorizing embodiments of capitalist expansion, including how ecological “limits” (like soil exhaustion) and social contestations (like revolts and protests) underwrite capitalist transformations and flexibility (like spatial and technological fixes). Pedagogically, the commodity frontier offers a connection point between and among researchers, students, and publics, in university, creative, policy, and advocacy/activist spaces.

Contributions in this issue take up the commodity frontier lens in various ways. They deal with a range of minerals and frontiers: gold (Engels; Verbrugge and Robles Mengoa), copper (Cottyn), coal (Yeni), lithium (Arndt and Gueye; Cariola; Marquez), “green energy” (Arndt and Gueye; Cariola; Vázquez Ruiz), and seabed and ocean floor mining (Menon). More than this, the articles highlight various approaches to the study of, and engagement with, capitalism’s mineral frontiers.

In the opening section, Bettina Engels elaborates the conditions of conflict related to gold mining in Burkina Faso, drawing on her ethnographic research with Kristina Dietz in their GLOCON (Global Change –
Local Conflict?) research group. Next, Boris Verbrugge and Maria Eugenia Robles Mengoa discuss conceptual, methodological, ethical, and personal challenges of studying global gold mining, including gendered and racialized experiences during ethnographic fieldwork. In her interview with Anna Zalik, Gayatri Menon’s article turns to the pedagogy of extraction, offering conceptual insights and inspiration for the classroom, and for linking teaching and research.

Explicitly linking past and present, Hanne Cottyn’s article reflects on the “entangled frontiers” of llama herding and copper mining in Bolivia, embedded in histories of capitalism and indigenous resistance, and more recently, in the COVID-19 pandemic. Maria Cariola’s piece centers on an interview with members of the highly interdisciplinary Research Group on Commons and Geopolitics at the University of Buenos Aires in Argentina, whose work coalesces around the politics, experiences, and resistances to lithium frontier expansion.

Julien-François Gerber discusses political and conceptual connections between anti-mining social movements and degrowth, arguing that the two are inexorably linked. Continuing on the theme of conflict and countermovements, Lotte Arndt and Oulimata Gueye’s article introduces the transnational artist’s collaboration, On-Trade-Off, which critically examines extraction, power structures in global capitalism and the global art world, and searches for alternatives. Sithandiwe Yeni’s interview with environmental justice and feminist activist, Pinky Langa, details how the COVID-19 pandemic has impacted women who organize against extractivism in South Africa. And Leonardo Marques reviews two books from 2020 on mining and capitalism, calling for further investigation of how mining changes over time, including in its capitalist forms.

The issue also includes two Op-Eds. Ulbe Bosma, the CFI Coordinator, reflects on the WWF’s “Living Planet Report 2020” and the long history of capitalism. And Alberto Vázquez Ruiz, Project Coordinator of CATAPA (Belgium), discusses the newly announced (29 September 2020) European Raw Materials Alliance (ERMA) as part of the rise of “green imperialism.” Events and Announcements close the issue, with information about relevant workshops, conferences, calls for papers, vacancies, and exhibitions.

Commodity Frontiers is one part of the CFI network and project. Through the pages of this journal, we want to further create and foster community among thinkers and doers who critically engage with commodity frontiers. In these pages we can share perspectives and analyses, data and doubts, reflections and hopes, questions and possible answers. We can exchange ideas, collaborate, and debate. And we can examine the past, while looking to the future.

Mindi Schneider
Amsterdam
30 September 2020

References

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Gold is not for Eating
Conflicts Related to Gold Mining in Burkina Faso

Bettina Engels

Keywords: extractivism, mining, gold, conflict, Africa, Burkina Faso

Resource extraction, for the last two decades, has been one of the fastest growing economic sectors all over the world and particularly in the Global South. Encouraged by the international financial institutions, many governments promote the extractive sector as a driver for national development. However, resource rich states do not necessarily feature a higher level of economic development than others, nor better living conditions of the population. The extractive sector has significant economic, social, and environmental impacts that are far from being just positive: loss of agricultural land and pasture, scarcity and pollution of surface and ground water, soil degradation, noise, rising cost of living in mining areas impact large parts of societies, and particularly poor and marginalized social groups. In many states of the Global South, mining areas are among the poorest and ‘least developed’ within the country. Hardly surprisingly, resource extraction, all over the world, is being accompanied by conflicts and the mobilization of civil society actors.

This article presents large-scale gold mining and related conflicts in Burkina Faso—a paramount example of the recent commodity boom and its pervasive socio-economic effects. Mobilization around the Houndé gold mine, located 250 km southwest of the capital Ouagadougou, is depicted as an illustration.

Correspondence:
Bettina Engels, bettina.engels@fu-berlin.de.

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Conflicts over gold mining in Burkina Faso

15 large-scale mines—14 gold mines and one zinc mine—are currently active in Burkina Faso. All started production in the late 2000s and are run by multinational companies. Burkina Faso’s first mining law, the Code Minier, became effective in 1997. It represented a liberalization of the sector, as private economic mining activities were both permitted and encouraged. With the first reform of the Code Minier in 2003, the taxes and tariffs were re-regulated, under the aegis of the World Bank, in order to make the Burkinabé mining industry even more attractive to foreign investors.

Burkina Faso is currently Africa’s fifth largest gold producing country (after South Africa, Tanzania, Ghana and Mali). In 2019, 50.3 tons of gold were produced (Kaboré, 2020). Exploration and exploitation permits for industrial mining have been issued for almost half of the surface of the country (OCDE, 2018). Altogether, the industrial mines in Burkina Faso directly employed about 10,000 people, the large majority in low qualified and badly paid positions (Kaboré, 2018). Though the vast majority are Burkinabé, they mostly do not come from the villages directly affected by the mines. Since 2009, gold has been Burkina Faso’s most important export product, exceeding cotton. In 2017, the mining sector accounted for 71 per cent of the total export earnings, 16 per cent of tax revenue, and 8.46 per cent of the country’s GDP (BDO, 2019, 48-49). The attractiveness of the Burkinabé mining sector for multinational corporations is due, among other factors, to the comparably low taxation by international standards: until 2015, corporate tax for the mining industry was set at 20 per cent, significantly less than in most other African countries (for example, 30 per cent in Sierra Leone and Tanzania, and 35 per cent in Ghana; KPMG, 2017). In 2015, it was adjusted the rate to 25 per cent, which is still relatively low. Worldwide, Burkina Faso is among the top 10 countries for ongoing gold exploration, as measured by the annual budget for gold exploration (World Bank, 2019, 47).

In June 2015, the government passed a reform of the mining law. The new mining code is oriented towards generating state revenues through mining, especially via a newly introduced Mining Fund for Local Development (Fonds Minier de Développement Local, FMDL). In addition to the regular royalties and taxes, mining companies are supposed to pay 1 per cent of their monthly turnover into the fund. Moreover, 20 per cent of the state revenue from the surface tax will be added to the fund. First payments of the Fund to the municipalities were made in 2020; however, most mining companies had not yet paid in the full amount they owe to the Fund. The introduction of the FMDL, was the result of persistent campaigns by Burkinabé civil society organizations, for a more just distribution of the state revenues generated by the mines.

Artisanal mining

Whereas industrial mining is quite recent in the country, Burkina Faso has a tradition of artisanal gold mining, known as orpaille, which began long before colonization. Since the 1980s, and particularly related to the recent boom in mining, artisanal mining has likewise increased. Burkina Faso therewith reflects the global trend: almost everywhere in the world where artisanal mining is currently practiced to a significant degree, it has expanded alongside large-scale mining. Whereas according to official statistics, only 3 per cent of the gold produced in Burkina Faso is extracted artisanally, it is estimated that de facto the share is rather 25 per cent (Arnaldi di Balme & Lanzano, 2014, 18). The recent report of a parliamentary investigation committee assessed the number of artisanal gold mining sites in Burkina Faso to be more than 1,000 (AN, 2016, 2, 24). At least 1.2 million people make their living through artisanal gold mining, plus a considerable number of community members are supported by them (OCDE, 2018; Pokorny, von Lübke, Dayamba, &
Dickow, 2019, 26). Despite the fact that artisanal mining is by and large an informal activity, and is undertaken under precarious conditions with high economic and health risks, it nevertheless offers a considerable number of people a livelihood.

Artisanal miners, or *orpailleurs*, extract gold by digging holes in the ground. Besides those who work in or on the pits, numerous other people—men and women of all ages as well as children and youths—are involved in processing the artisanally mined gold, or in other work and care that is required to keep the sites running (such as the sale of water, food and products for daily needs, as well as other activities). Several thousand people live and work at some of the largest extraction sites, and some sites exist for years or even decades. Internal organisation and labor relations vary depending on the size of the sites and the degree of mechanization (see in detail, Konkobo & Sawadogo, 2020, 17-21).

Artisanal mining is also frequently practiced near villages, meaning that those involved in artisanal gold mining do not have to live at the extraction sites permanently. Many households live partially from artisanal mining and partially from farming and animal husbandry; for example, some family members are involved in gold mining while others are engaged in subsistence farming, or they mine gold temporarily in the season between seed sowing and harvesting.

The boom of industrial mining in Burkina Faso has direct effects on artisanal mining as a livelihood activity. Given the high number of people living from artisanal mining, the fact that artisanal miners do not have access to compensation, and that in the view of many people—those involved in artisanal mining themselves and others living in the villages where artisanal mining is practiced—that artisanal mining significantly contributes to ‘local development’, it is hardly astonishing that the elimination of artisanal mining is among the main causes of mining-related conflicts.

Protest

At all mining locations in Burkina Faso, a range of civil society organizations and loosely organized groups of residents engage in protest. People deploy several strategies to raise their claims: addressing the mining companies and local authorities personally and through letters; participating in consultations; as well as more confrontational forms of protest such as riots, demonstrations, marches, sit-ins and blockades. Protests often emerge spontaneously, meaning that they are not directly prepared by formal organizations, though this of course does not mean that there are no structures of social organization behind them. Claims include jobs for workers from the villages in close proximity to the mine, compensation, non-damage of cultural sites such as mosques or graveyards, the approval of artisanal mining, as well as investment in the physical and social infrastructure, e.g. paved roads, schools, and health and women’s centers. Moreover, people complain about disrespectful interactions both with the mining companies and public institutions.

Two salient claims are raised frequently: compensation and employment. This is hardly surprising, given that a mine in the neighborhood has a considerable impact on people’s income generating possibilities. This does not mean, of course, that within the affected communities no one benefits from the mines. However, in our research, the great majority of interviewees state that for them, the negative impacts of industrial mining by far exceed the potential benefits (Drechsel, Engels, & Schäfer, 2019; Engels, 2020). The most relevant effect of the expansion of industrial mining, according to the interviewees, is the significant impairment of their livelihood, as they lose their fields and are denied opportunities for artisanal mining.
Compensation

According to the mining code, mining companies have to pay ‘just indemnity’ to the population affected by their activities, namely land owners and farmers. In 2018, a law on the expropriation of property for public interest was voted in; though until the time of writing in July 2020, only one of the required legal documents that would specify the modalities of the compensation has been adopted, focusing exclusively on the inquiries on public interest and plots. Legal documents on amounts and time periods are still pending, all of which thus remain open to negotiation.

According to international standards (IFC, 2012), a field lost to a mine should be compensated by a new field, as fertile as—or even more so than—the previous one. In Burkina Faso, however, land is virtually always compensated by payments instead of providing substitute cultivation areas. Generally, farmers receive between 175,000 and 500,000 CFA franc (around 270-765 Euros) per ha per year as compensation, for a period of five years, without renewal, even though the construction and production phase of a mine usually lasts 15 to 20 years. Fields are taken into account for compensation only when they are cultivated in the respective compensation year; this is a problem given that in the farming system of crop rotation, parts of fields are temporarily left fallow.

Conflict around the Houndé gold mine

A typical example are conflicts related to the Houndé gold mine. Production at the mine started in November 2017, after 18 months of construction. The mine is operated by Houndé Gold Operations, a subsidiary of the Canadian company Endeavour Mining. The Houndé gold mine is the ‘company’s flagship low-cost mine’ (Endeavour Mining, 2017). The mine directly employs 962 persons (Kaboré, 2018). Peasants who lost farmland due to the mine were compensated financially with 350,000 CFA franc (540 Euros) per ha per year for a five-year period. More than 400 households were relocated.

Conflicts particularly concern compensation and employment. In the interviews, people angrily pointed to the fact that the amount of compensation is calculated according to what they used to produce in the respective fields—no matter how many family members had to be fed with it, and regardless of the profit that the mining company makes out of it. Most prominently, they objected to the time limit of the compensatory payments. Limiting the compensatory payment to five years, one resident argued, ‘means that they want to reduce the life of these families to five years. They are killing us. We were living from these fields’ (Interview, Houndé, 1 March 2018).

People complain that promises made by the company before the granting of the concession (during the mandatory environmental and social impact assessments) have not been upheld, particularly concerning investment in infrastructure, employment opportunities, and income generating measures. According to local civil society organizations, recruiting was non-transparent and nepotistic; even for ‘non-qualified’ labor and work that could be done by people from the community, staff was recruited from ‘elsewhere’. Whereas mining companies refer to Burkinabé nationals as ‘local staff’, for people from the affected villages, ‘local’ means the village, district, or province. The Coordination of Professional Associations and the Youth of Tuy province (Coordination des Associations socioprofessionnelles et de la Jeunesse du Tuy, CCJ), a local civil society alliance, complains that only two out of 14 mechanics who were recruited by the Houndé gold mine came from the town itself (CCJ, 2017). The company did provide professional training but then did not employ anyone who had been trained, civil society representatives criticized. As a consequence, they call for a recruitment quota: out of every relocated household, or from every farmer who has
lost his fields, one child should be employed by the mine (CCJ, 2018).

The CCJ, which was created in 2016, is a broad alliance representing numerous associations of manufacturers, service providers, merchants, horticulturists, stockbreeders, fishermen, artisanal miners, and village assembly representatives. It calls public meetings and press conferences, and meets with state authorities at the national and local level and with the mining company to raise its claims. In its recent memorandum (CCJ, 2018), it joined forces with the labor union of mine workers (Syndicat des Travailleurs de la Géologie, des Mines et Hydrocarbure, SYNTRAGMIH). During marches organized by the alliance (e.g. on 24 February 2017), protestors have faced repression by state security forces. On 23 March 2018, local youths spontaneously blocked the principal road leading to the town and the mine. Only vehicles related to the mine, including the buses transporting workers to the mine, were hindered from passing, while other vehicles could go through. According to activists, the workers agreed in principal: ‘They, too, want jobs for their younger brothers’ (Interview, Houndé, 1 March 2018). On 17 April 2018, youths marched to claim that the mining company should hire those who have participated in the professional training it has provided. The state security forces stopped the march and arrested five demonstrators.

People feel that the mining companies are neglecting fundamental social rules. This became evident through residents’ emphasis on the fact that the companies have not kept their promises, and that they feel overlooked. For instance, residents from a village in close proximity to the Houndé mine reported that when they complained about the fissures that the blasting caused to their houses, the mining company’s representative claimed that they had been caused by rainfall. Hardly surprisingly, this incensed the villagers. If the company does not play by the rules, the people will not do so either, they said. ‘If it does not come to a showdown, nothing will happen’, activists claimed (Interview, Houndé, 18 September 2017).

Conclusion

Many people who are affected by the mines perceive the companies’ activities and comportment (and related to this, that of the state authorities) as profoundly unjust and illegitimate. A central point in this respect is that the mines take land from the villagers, and hence their base of subsistence, without giving anything appropriate in return so that people can feed their families. Making profit while allowing people to starve is considered illegitimate, and thus fighting against this—which includes rule-breaking such as enclosure trespassing—is viewed as just and reasonable.

Where there are winners, inevitably there are loosers, too, at whose expenses benefits are made. And in the extractive sector, these expenses are considerably. The bulk of the benefits from industrial mining go to the multi-national companies and to some national firms (such as subcontractors and suppliers) and a relatively small number of employees and tradespersons. By way of contrast, there is a significantly larger number of people losing their base of livelihood and are forcefully resettled.

Conflicts over mining also concern fundamental questions of democracy: The issue at stake is not limited to who gets what and what happens to the benefits; it is likewise a question of who decides on this and how. In the processes of granting a mining concession, the affected population has the right to raise their objections and claims in the mandatory consultations. But a real opportunity to hamper a mining project is hardly provided by most national mining laws. Thus it is hardly astonishing that for many people confrontative means of protest are the only ones that are effective to enforce their interests and claims.
References


Bettina Engels is Assistant Professor for Conflict and African Studies at Freie Universität Berlin. Together with Kristina Dietz, she is co-director of the research group GLOCON (Global Change – Local Conflict?). The article is based on research conducted in the context of GLOCON since 2015.
Making Sense of Global Gold Mining
Boris Verbrugge and Maria Eugenia Robles Mengoa

Keywords: gold, artisanal and small-scale mining (ASM), minerals, commodity frontiers, anthropological fieldwork

A Dual Gold Mining Economy?

The history of mining is often conceived of as a linear evolution from traditional, pre-modern forms of mining to industrial mining undertaken by global corporations (Lynch, 2003). Yet the global gold mining economy now harbors an incredibly wide range of gold mining activities that operate with varying levels of capital- and labor intensity. At one end of the spectrum we find what is commonly referred to as artisanal and small-scale gold mining: low-tech, labor-intensive gold mining activities that usually operate without the legal recognition of the government. On the other side of the spectrum, we find open-pit and underground mining operations undertaken by large mining companies. Yet in-between these extremes, there are a growing number of gold mining operations that defy easy categorization. A good example is the growing number of Chinese-backed gold mining operations in countries like

Correspondence:
Boris Verbrugge, boris.verbrugge@kuleuven.be.

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Madagascar, Ghana, and the Philippines. While these operations involve significant investments, and often operate with the blessing of local politicians, they remain illegal in the eyes of national governments, and fall short of being full-blown industrial mining operations.

Earlier research on gold mining has largely failed to make sense of this diversity. Instead, it has fostered a dominant view of a dual gold mining economy that is split between subsistence-oriented artisanal and small-scale gold mining and modern, capitalist industrial mining. Moreover, social scientists that focus on gold mining (many of whom are anthropologists) have privileged an analysis of dynamics inside gold mining areas, without accounting for diversity across areas.

In our own research, we set out to develop an explanatory framework for understanding diversity in global gold mining. This required a move away from the dualist and localist focus that characterized earlier research. The results of this exercise were recently published in the form of an edited volume, which couples an analysis of systemic trends in global gold mining to thirteen country case studies in Africa, Latin America, and Asia (Verbrugge & Geenen, 2020a). In this contribution, we want to briefly elaborate on the analytical and conceptual challenges that we encountered.

The Perils of Researching the Gold Mining Frontier

Research on dynamics inside gold mining areas inevitably requires an intimate and long-term engagement with the field. Yet as Ballard and Banks (2003) have warned, “mining is no ethnographic playground”, and presents researchers with a variety of ethical and methodological challenges. While this is certainly the case of industrial mining, these challenges are even more outspoken where it concerns smaller, informal gold mining activities. Our own project involved empirical research in gold rush areas in Peru, Colombia, the DRC, and the Philippines. The following reflections were made by Eugenia Robles, a female, Bolivian-Peruvian anthropologist who is one of two PhD students involved in the project.

“Most of these mining areas are situated in remote and rugged terrain, and transport is scarce and expensive. Moreover, the state does not hold a monopoly on violence, and armed robbery and murder are common along the way. While getting to a mining area is a risky undertaking, gaining access to the research site and to respondents is even trickier. Credibility is key, and entering a mining area without a local contact is to put yourself at risk of being greeted with suspicion or even threats. The few times when I entered mining areas without a local contact, people did not want to share any information, and I was warned to leave the site.

Even when you eventually gain access to respondents, they may still be reluctant to share (certain) information, let alone to do so on record. In part, this is related to the fact that many of the mining activities are considered illegal by the government. Risks are even more outspoken when there is a presence of armed groups, such as paramilitary groups in Colombia, and criminal bands that engage in sex trafficking and armed robbery in Peruvian mine sites. In these cases, even a small mistake or the wrong question or answer can prove extremely costly, for researcher and respondent alike. This raises important ethical questions, not least with regards to respondent safety.

Aside from these contextual challenges, it is also important to consider how certain personality traits of the researcher, and particularly gender and race, affect local perceptions about the researcher, and consequently his or her ability to gain access to information.

Mining is a masculine activity par excellence, and women are considered weak (Colombia), fragile (the Philippines) or carriers of bad
Studying Commodity Frontiers

In my own experience, at least initially, female researchers are greeted with less suspicion when gathering “sensitive” or high-risk data. Yet in some cases, this initial openness gave way to unease, as respondents felt entitled to ask for a “reward” after having given their testimony. Likewise, while the color of my skin resulted in me being perceived as a local, it also meant that I faced many of the risks that young Latin-American women face on an everyday basis. There is a higher chance on being verbally or physically harassed, or to suffer sexual violence.

In contrast, my encounters with foreign white researchers (both male and female) suggest that the color of their skin exerts a certain symbolic power, and is associated with having money and authority. These expectations, as well as the mere fact of being ‘different’, raises the curiosity of locals, who might be more inclined to enter into a conversation. More broadly, being white comes with a kind of ‘protective layer’, which in many cases reduces the risk of being harmed or harassed, contrary to what a local researcher would experience.”

In addition to these methodological, ethical, and sometimes very personal challenges, researchers also face conceptual challenges. For instance, the often taken-for-granted distinctions between small-scale and large-scale, formal and informal, or legal and illegal mining make little sense when confronted with messy realities on the ground.

What is branded by government officials as ‘illegal’ mining may well be seen as perfectly legitimate by local communities (Lahiri-Dutt, 2004). Vice versa, industrial miners operating with the blessing of the national government may be seen as foreign intruders who threaten local livelihoods. Here, the challenge is to understand the registers through which different people view reality, and to translate these registers into concepts that more accurately reflect reality. It also raises questions with regards to the position of researchers, who understandably tend to empathize with the weak (there is a strong tradition of activist research on mining).

Understanding Global Connections

Insofar as structural trends in global gold mining were taken into consideration in earlier research, they were mostly seen as an external force, and consequently remained outside the scope of the actual analysis. Such is the case when reference is made to how structural adjustment policies championed by international lenders, and their devastating impact on local livelihoods, are ‘pushing’ people into gold mining (Hilson & Potter, 2005), or how rising gold prices ‘pull’ people to the mines. Yet so far, our understanding of how more complex frontier dynamics – processes of expansion and contraction, changes in land and labor regimes, and technological innovations – intersect with structural trends in global gold mining remains utterly limited.

While there exist detailed analyses of particular episodes in the history of gold mining in particular places (prime examples include the nineteenth-century US gold rushes or (pre-)colonial gold mining in South Africa and Ghana), no-one had undertaken a comprehensive historical analysis of global gold mining.

While it was not our ambition to create such a comprehensive historical overview, we did require a more systematic understanding of structural trends in gold mining during the last century. We took a multi-pronged approach to data collection, compiling insights from existing literature, making our own analysis of historical gold production data, and conducting interviews with industry experts. This combination of methods allowed us to confirm and extend earlier analyses (Mudd, 2007) that in recent decades, gold mining entered a protracted phase of global expansion, whereby it has moved from its historical core (South Africa, the United States, Australia, Canada, and Russia) into a wide range of new gold mining destinations.
(the ‘rest of the world’ in the graph below). Prime examples include China (the world’s top consumer and producer of gold), Indonesia, Ghana, and Peru. While some of these countries may well have a longer history of gold mining, the sheer scale of the ongoing expansion is beyond anything that has been seen before.

Finally, we were left with the task of bridging the divide between global trends and local dynamics. A first exercise involved applying Jason Moore’s concept of the commodity frontier to the case of gold mining (Verbrugge & Geenen, 2019). We argued that, in the face of the systemic challenges described above, the gold commodity frontier has undergone a simultaneous process of widening (geographical expansion) and deepening (social and technological innovations). Building on these ideas, we then turned to the literature on global value chains and global production networks. The framework we then developed on the basis of this (and other) literature, which we refer to as the global gold production system, provided the theoretical-analytical basis for our recent book (Verbrugge & Geenen, 2020a).

At the same time, global gold production is facing a number of systemic challenges. A first set of challenges is related to increased resistance to mining on the parts of governments and local communities, who often feel left behind by the global gold mining boom. A second set of challenges is related to rising cost pressures, due to (amongst other things) rising energy costs, labor costs, and the costs related to operating in increasingly remote environments. A third and final set of challenges is related to increased scarcity: the world is gradually running out of easily accessible gold deposits, and several observers are convinced that we have reached the point of ‘peak gold’ (the point at which maximum global production is reached).

In the first part of this book, we describe three structural trends in global gold production: global expansion, technological innovation, and informalization (i.e. an increased reliance on cheap and flexible labor). In the second part of the book, we invited colleagues who conduct empirical research on gold mining across the globe to apply our framework to ‘their’ case.

Together, these case studies detail how the global gold production system ‘touches ground’ in particular places, where it intersects with institutional and ecological structures. This process of touching ground produces what we refer to as gold mining crystallizations: dynamic and interconnected sets of gold mining activities with varying degrees of capital- and labor intensity, and diverging social relations of production. In this way, we are able to account for the growing diversity that characterizes contemporary gold mining.
References

Boris Verbrugge is a post-doctoral researcher at the Institute of Development Policy (IOB, University of Antwerp), and at the Research Institute for Work and Society (HIVA-KU Leuven). His research interests relate to working conditions in global value chains, with a primary focus on extractives.

Maria Eugenia Robles Mengoa is a PhD Candidate at the Institute of Development Policy (IOB, University of Antwerp). She has conducted field research in artisanal- and small-scale gold mining communities in Peru, Bolivia, Colombia, and the Philippines; focusing (amongst other things) on gender-based violence and illicit trade flows.
Teaching Extraction and its Discontents
A Conversation with Anna Zalik

Gayatri A. Menon

Keywords: extraction, minerals, sovereigntist movements, seabed mining

Anna Zalik, Associate Professor at York University’s Faculty of Environmental and Urban Change, teaches a course called Extraction and its Discontents: A Social History and Political Economy. The course builds on and extends her work on the politics of industrial extraction in Nigeria, Mexico and Canada, her more recent research on seabed mining, and her writing and reflections on the politics of fieldwork on natural resource extraction. What follows is a lightly edited transcript of an interview she had with Gayatri Menon, editor of the Teaching Commodity Frontiers section, in August 2020.

Gayatri Menon: One of the reasons I wanted to talk to you is because you work on seabed and ocean floor mining and I was wondering if you could talk about the distinctiveness of seabed mining, situating it within your broader work on extraction, and as well as how it informs your course? 

Anna Zalik: Sea-bed mining relates to my broader interest on resource nationalism and resource sovereignty, and the debates around ‘nationalisation’ of industry (including the critiques by indigenous sovereignties movements in Canada that highlight the colonial dimensions of ‘nationalisation’). But when we think about

Correspondence:
Gayatri Menon, gayatri.menon@apu.edu.in

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movements around resource sovereignty those, at least historically, had some very progressive dimensions, they were anti-colonial or anti-imperial in their formation. What makes seabed mining interesting is that the regulatory environment around it emerged out of the same movements and aspirations even though seabed mining is beyond national jurisdiction, falling under the auspices of the UN Convention of the Law of the Sea. What makes that significant and relates it to this resource sovereignties dimension is that in the lead up to the formation of the International Seabed Authority, which is the UN agency that is responsible for regulating minerals beyond national jurisdictions, the G-77, the New International Economic Order, and former colonized states were really important actors and they sought to create a regime that would be redistributive of these resources that were understood to be the common heritage of mankind, of humankind. So there were these redistributive, economic justice aspirations that undergirded the creation of the International Seabed Authority. The regulatory history of seabed mining is a complex one, but it was very much about reclaiming those resources from global capital.

For me the study of seabed mining evokes the longer history and debates around who would control the revenue from mining - so it allows students to think about mining outside of the purely anti-extractiveist, ecological mindset but one that also gets them to think about how humans sought to put more-than-human nature to use in a form that could be redistributive.

Seabed mining is also interesting because being the deep ocean it is perceived to be beyond spaces that humans were previously able to dominate. There is all of this elite interest and investment in oceans-oriented philanthropic endeavours to protect these zones, in ways in that in many respects are diametrically opposed to the Global South’s aspirations. Although they claim they have philanthropic interests, there is this notion of the ocean as external to human problems that somehow makes super-elites comfortable, it is this space where social inequity is somehow separated out because it is the oceans - and thus apart from human dynamics. One of things that I think is important for students to problematise in the contemporary conjuncture is the idea that there is this space that is external to the current sets of dynamics, and to understand that the ‘frontier imaginary’ is part of the problem because it allows for exploitation.

**GM:** How do you approach the pedagogical task of conceptualizing extraction, and more specifically mineral extraction?

**AZ:** While it is important to think through the concept of extraction in broader terms, there is the tricky problem of retaining a sufficiently bounded concept to make it meaningful. If extraction becomes synonymous with all forms of exploitation than it can mean both everything and nothing at once. While we talk about (human) labour exploitation as mutually constituted with the exploitation of nature, I tend to define extraction as the physical removal, through human labour or machines, of non-renewable (on most human timescales) non or more-than-human nature.

Part of the objective of the *Extraction and its Discontents* course is to think conceptually about the mutual constitution of nature and human labour. In the early weeks of the course, I’ve assigned readings by scholars such as Melissa Wright on the maquiladora sector, Nancy Scheper-Hughes’ work on organ trading, and others that push us to think through the ways in which the typical definition of extraction is part of broader processes and histories - among them the extreme exploitation of labour through enslavement and capitalist value chains. We also read a piece that Sonja Killoran-McKibbin and I wrote which talks about production and extraction as concurrent processes, to have students think a little more about the ways in which extraction...
cannot really be conceptualized apart from the broader value chains into which it feeds. Mining doesn’t just exist to extract the thing from the ground, it exists to make it into a commodity which involves processing natural resources and ways to sell it.

I also introduce students to different kinds of critical approaches to extraction – one being a Marxist perspective – and the other being one that is informed by indigenous epistemology (but that clearly also has dimensions that emerge out of post-structuralist thinking). There is concern to engage epistemologies that do not hold up western ontology’s separation of humans and ‘nature’. Understanding humans as embedded in nature conceptually requires us to complicate the idea of mineral extraction as only about the removal of physical material – and clearly the value chains to which it is connected.

**GM:** One issue with the sovereignty debates - as Greenpeace and other groups have pointed out - is the issue of ‘hiding behind the poor’ to justify extraction. Would you speak a little about how you engage that in your course?

**AZ:** Ultimately the overall thrust of the course does kind of support that ‘hiding behind the poor’ view. Certainly when we look at contemporary extraction, under neoliberalism, aspirations of some sort of redistributive model have been flushed down the toilet. Part of my research on the International Seabed Authority is around the ways in which those aspirations were basically shut down due to the fact that the International Seabed Authority was inaugurated into existence at the same moment as the WTO came into effect - with all sorts of neoliberal elements that privileged the contracting firm. The whole exploitation regime that is currently being rolled out is about privileging the contracting firm. Ultimately that is one of the key take-homes of the course.

There’s a lot of discussion right now about transition and renewable energy transition and so I’ve been involved in a few virtual groups recently talking about recycling of minerals and one of the things that is being promoted instead of ‘greenfield’ extractive sites is the recycling of existing minerals through proper waste management that would reduce the need for mineral extraction. There is debate around the extent to which these kinds of minerals are needed for the transition to renewable energy and so in the final weeks of the class we move away from the question of ‘hiding behind the poor’ to the debates around the ‘need’ for these minerals that are so-called ‘required’ for the transition to renewable energy.

Under our current economic model, unless we move to something that is low or no-growth, we are in a situation where the amount of resources that are required for the transition to renewable energy is going to bring about another round of over-exploitation of natural resources, that will lead to another boomerang effect that we might not yet foresee. This is the thing with seabed mining - the implications of seabed mining over the long term are unclear and we’ve not necessarily learned anything from the past - the disruption that this might potentially cause to oceanic ecosystems and the possible future implications of this are beyond current knowledge.

So I end the course with a discussion around debates about transition - what kinds of minerals are needed, alternatives that could involve recycling, the debates and struggles around lithium extraction for chargeable solar batteries etc. Even though there isn’t a climate change focus in this course it is always looming in the background and I feel like that the debate about alternatives to ongoing extraction for transition is particularly important to broach.

**GM:** You and Michael Watts wrote this interesting article about data and knowledge production around natural resource extraction which challenges people to think critically about data, and I was wondering
if you could talk about how that gets incorporated into your teaching practice.

AZ: That piece is a critique of transparency discourse and part of that broader project is recognising either when there is so-called transparency, (a) the data that is disclosed is not necessarily the data that is useful, (b) its disclosure doesn’t necessarily lead to any substantive actions against power holders and (c) the data itself is questionable. One of the reasons I got interested in industrial extraction when I set out to study corporate philanthropy was the level of opacity in these industries, there’s a lot of murkiness around the actual figures and this is recognised internationally. There are initiatives at the global level that are trying to create better knowledge about how these markets actually function that I think it is important for students to learn. It is not a radical relativist thing where any figure you read is incorrect but getting people to question official sources of data and look at different ways of interpreting the data that they are presented.

GM: What do you want a student of your course to walk away with?

AZ: It’s complicated in part because I teach this course to a very broad audience of students but I want them to come away with a bit of an understanding of the history of sovereigntist movements around natural resources because I think a lot of students now, younger students, aren’t aware of that history, that there was a significant history of mobilisation around such issues. I want them to understand the Latin American debates around neo-extractivism that shows that extraction in the current economic order is still for export and ends up primarily recreating the South to North flow of resources. I want them to come away with the interconnections between the exploitation of the earth and exploitation of human labour. I want them to have an understanding of the policy and regulatory context that is shaping the community struggles against particular mining or oil and gas projects.

References:

Gayatri Menon is Associate Professor in the School of Development at Azim Premji University, India. She works on the political economy of development, focusing on urbanization, displacement, and questions of home.

Anna Zalik is Associate Professor in the Faculty of Environmental and Urban Change at York University, Canada. Her current research centres on Canadian investment in the denationalization of the Mexican energy sector, and financial risk in new extractive frontiers in the global oceans/seabed beyond national jurisdiction.
Copper, Llamas and a Virus
A Tale of Historically Entangled Frontiers

Hanne Cottyn

During a visit to the copper mine in March 2018, I met don Cupertino, a man in his sixties living next to the administrative offices of the Bolivian-Chinese company “D’Cobre” which currently exploits the site. Along the dusty sand path from the highway towards his house, a rusty and damaged signboard reading “Cuprita” (literally cuprite, a cuprous oxide mineral) hints at a longer copper history. Just as numerous other remote sites that developed into tributary arteries of a globalizing mining sector, the memory of local communities often constitutes our main

Keywords: Bolivia, copper mining, llamas, Covid, Indigenous communities
The llamas grazing behind the new billboard seem to offer a contrasting sight, one of a traditional pastoralist world literally pushed into the background by a new regime of mineral extraction. However, it is a misleading sight. In fact, the local camelid economy is emerging as a new frontier. Where minerals and llamas were once in some way allied protagonists in the rise of capitalism, they now compete in the same space, although on different scales. This essay reflects on my re-encounter with the llama herders of Turco and their entanglement with histories of capitalism and indigenous resistance (after many years without visiting). The pandemic sheds a new light on these shifting entanglements. 2

Reappearing mineral frontiers – “it is a bit very uncomfortable”

Copper and China are two key factors that have been pushing global mineral frontiers over the last decades. Considered as the world’s most important industrial metal, global copper mine production has experienced a steady growth, supported in part by a strong demand from China. A consumer of half the world’s copper output, China has become progressively more invested in foreign reserves of the metal. This trend is particularly evident in Latin America. China’s copper supply relies heavily on South America, with particularly large investments in Peru and Chile. 3 Bolivia, caught between the two countries, remains a small player in the copper industry. Yet, in a context of rising resource security challenges, a relatively sound copper market, and new technologies, mining is re-appropriating marginal and abandoned frontier spaces.

One of those spaces is located in the Central Andean highlands, in Cupertino’s home community of Turco. “I am a native of this land and precisely with me the company has grown, because I have worked in the company before,” Cupertino told us. 4 According to local collective memory, mining arrived to this community with the Spanish, although the area has traces of Inca mining. Later on, in the early 20th century, Cupertino’s parents told him of the presence of the powerful Aramayo family. Possibly, the site became part of the operations of the “Aramayo Franke & Cía Ltd.” in hands of Carlos Víctor Aramayo, dedicated to silver, tin, copper and other minerals. 5 However, during the national revolution of 1952, around the time Cupertino was born, the

2 This reflection came out of a collaboration with Julián Arias Carballo and Norma Mollo Mollo from the NGO Centro de Ecología y Pueblos Andinos in Oruro, Bolivia. I also wish to thank don Cupertino and Mr. Gang for their testimonies.


5 Peñaranda Subieta, Jaime. 1996. Who is who? En la minería boliviana, Documento de Trabajo, No. 01/96. La Paz: Universidad Católica Boliviana, Instituto de Investigaciones Socio-Económicas (IISEC), 4.
Bolivian government nationalized the mining operations of the country’s dominant mining families, the so-called “tin barons” Patiño, Hochshild and Aramayo.

Relying on his own childhood memories, Cupertino reconstructs a fluctuating history of rudimentary and mostly failed attempts of turning “Cuprita” into a successful copper exploitation. He remembers how Max Biggeman, of German descent, became owner of the site in the 1950s; his family would keep this property until around 2005. Biggeman worked successively with a US Company named “Murillo”, the Japanese Mitsubishi, and a Yugoslav operation, yet by 1975, the National Council of Agrarian Reform reported that the “comfortable constructions” of the Cuprita mine’s administrative office had been abandoned. In 1988, a Chilean company tried to set up its operations, followed by another US company called “Discovery”, and then a French company in the 1990s. Biggeman eventually gave up and decided to turn the offices into a hotel in 1999, which was closed in 2003. Biggeman’s children wanted to continue the copper exploitation but their unstable financial situation led them to sell to the current Chinese operators, according to Cupertino. The company acquired legal presence by 2013, starting operations in 2016.

To Cupertino, having witnessed mining entrepreneurs removing sand and stones for decades at his doorstep, his terrain now seemed to have been “swallowed” by a copper mine of much larger proportions. The pickaxes and basic machinery have been replaced by open pit technologies, which involves perforation and detonation techniques to remove enormous amounts of waste rock. The former Azurita and Cuprita

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mines have been absorbed, and expanded with “Cuprita II”, an open pit project in the hands of the Bolivian company D’Cobre S.A. D’Cobre belongs to the Chinese company Chihong Zinc & Ge, which is part of the Yunnan Metallurgical Group Co. Ltd. During our visit to the mine’s processing plant, a Chinese banner at the site proudly stated that Yunnan Metallurgical Group represented a “green and low-carbon industry” and labelled Chihong as a pioneer in “circular economy pilot enterprises in China.”

When interviewing the current Chinese manager at the site, he underlined that “this form of mining means respect for the environment.” “Responsible, how?!” was don Cupertino’s reaction afterwards, when told of the Chinese claims. Cupertino recalls how his community was still a green space in the late 1950s. Yet, last year there was a drought and my animals have died, not only mine but those of several others too. Now those effects of dynamite what do I know, the fumes … Aww, it’s impossible. Every day there are explosions. … Every day about 40, 50 shots, something like that. They are breaking up the earth every day. Now, when I come with my llamas, it is a bit very [sic] uncomfortable … The llama is an animal and when it must eat, it wants to be calm. So, the llama feels half wrecked, and catches disease.

Cupertino now regrets that they, as a community, never opposed the mining operations, in the past and more recently. Over time, they have let these miners successively invade their lands and displace them. “In those times, they entered our [lands], they have discriminated us a little … totally.” When the Chines arrived, his community just agreed, in order not to cause problems or risk the total closure of the mine. Yet, “that’s what we needed [to have done], close [the mine] definitely,” Cupertino laments today.

An emerging llama frontier

The way in which llamas define production and trade patterns, local culture and identity in pastoralist communities such as Turco and its neighbours cannot be overstated. “To understand our history, you need to understand our llamas” I’ve learned from Jach’a Karangas’ indigenous leaders. The region is recognized as Bolivia’s epicentre and world leader in organic llama breeding and meat production, particularly of “charque” or jerked llama meat. Turco, which has been awarded the title of “Bolivia’s capital of South-American camelids”, is working hard to turn the llama into a success story. While charque is an ancestral practice still marked by a rudimentary level of technology, its production has received a boost since the 1980s. Contemporary llama meat producers still recall how popular urban belief rejected charque as “unfit for human consumption” and laws prohibited its commercialization in the city.

In urban eyes, the label of “human consumption” did not apply to indigenous people, who remained excluded from formal citizenship until the middle of the 20th century and continued to be harshly discriminated. Charque only got rid of the
stigma by the late 20th century when it started to enter the national market. The Programme for Peasant Self-development (PAC-Oruro, 1983-1997) – supported by the European Economic Community – was key in promoting llama meat, highlighting its high protein value and nearly zero cholesterol. Pastoralists began to organize in cooperatives to distribute the camelid meat they have been producing and processing for centuries across the country and beyond. Today, the dried llama meat is mainly commercialized through the supermarkets of Bolivia’s major cities.

**No llamas, no minerals, no capitalism**

Copper entering llamaland therefore appears as the tale of a strong global frontier displacing an emerging indigenous frontier. A tale of minerals dictating the rhythm of global capitalism and suffocating local economies. However, this is an area with a long and deep history of mining - in which llamas used to play a starring role. In contrast to the typical representation of indigenous pastoralist societies as isolated, un-innovative and static, camelid-based communities, like those I encountered in Jach’a Karangas, have successfully linked up to regional commodity markets. Meanwhile, their pasture lands, unfit for cultivation, remained out of the scope of land enclosure processes.

The same was true in the past. The exploitation of the *Cerro Rico* – “the rich mountain”- of Potosí, for example, constituted the structuring force behind the emergence of a capitalist world-economy. As Jason W. Moore writes, the developments in and around Potosí laid the groundwork for 17th century money capital-formation with worldwide reverberations. 10 But the mountains of silver that financed Europe’s wars would have never left Potosí if it were not for the llamas of Jach’a Karangas – then incorporated as the colonial province of Carangas. The region was not only the site of colonial mines that contributed to the Spanish Royal Treasury, but also home to vast herds of llamas which were mobilized in caravans between Potosí and the ports of the Pacific. Carangas was strategically situated on the “silver route” along which precious metals and essential mining supplies such as salt, wood and mercury were transported.

In the rise of global capitalism, then, Andean camels mobilized the mining frontier. Both mining and llamas are intrinsically part of Jach’a Karangas, yet llamas’ relation to mining has changed. The decay of the Potosí mining economy in late colonial times was followed by 19th century technological changes that reduced the role of llama caravans to that of indigenous long-distance barter exchange. Llamas continue to enter the market, yet no longer as beasts of burden nor in connection to the mining economy, but as meat for tourist and urban household consumption. Small-scale rudimentary mining became industrialized open pit mining; extracted minerals are transported on trucks and cargo ships towards China. Mineral frontiers move faster, suddenly reappear in marginal corners, and plan to leave within a decade or two. As Cupertino reflects: “Their aim is, well, to personally carry out the exploitation and then leave, because they are not interested in history.”

The growing llama economy informs local communities’ stance towards the new mining operations appearing in their territories. An extensive literature review on why and how local communities across continents resist mining “suggests that communities are more likely to resist when they are able to perceive a threat to their health or livelihood.”11 While boosting local identity and pride, they are substituting the promises of copper mining. Hence, indigenous leaders are framing the copper mine in terms of its potential impact.

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on the rise of their llama market leadership. Supported by local institutions, they have started to visit other mining sites to gain insight in the ways mining relates to pastoralist activities and the scaling up of meat production. The emergence of llamas as a viable alternative - and no longer an adjunct- to mining offers a source for resistance.

The virus as a window on entangled frontiers – magnifying glass or blindfold?

In late 2019, the indigenous authorities of Jach’a Karangas adopted the principle of “Zero Mining” in their territories. However, the lack of transparency on the part of the mining company and the indigenous leadership’s shifting political loyalty has prevented any concrete action in that direction. Indigenous authorities tend to pragmatically navigate Bolivia’s political landscape – in which all major players continue to heavily promote extractive sectors. On top of the political turmoil since November 2019 and the current pre-electoral atmosphere came COVID-19. The virus has hit the region hard. Jach’a Karangas has lost some of its key indigenous leaders to the virus, seriously affecting its capacity to respond to the political and sanitary crisis, let alone the impact of mining in its territory.

Oruro, the capital city of the department within which Jach’a Karangas is situated, was the first in Bolivia to go in lockdown, on March 31st 2020. With strict confinement measures in place, Oruro never experienced shortages in the food supply during the following months. Family agriculture, including the production of llama meat, played a key role in keeping up food provisions at the departmental level. It offers the cooperative- or family-based llama sector ammunition in defending family agriculture against the national government’s reliance on an agribusiness model, represented by large landowners in the eastern lowlands.

Little by little, the government - with support by the International Fund for Agricultural Development (IFAD) - now appears to be willing to incentivize local production such as charque as a strategy to feed the population and to reactivate the economy. At the same time, large mining operations across the country are paralyzed, jeopardizing local, regional and national governments’ social programmes, which importantly rely on revenues from mining. While the coronavirus crisis accentuates the vulnerability of the country’s extractive policies, it helps to unveil the historical indifference towards family agriculture and seems to open room for Turco’s llama economy.

Hanne Cottyn is a postdoctoral researcher at the Department of History, University of York (UK). Her research focuses on rural communities, land and socio-environmental conflicts, and landscape transformations in the Andean region. She is an affiliated to the Interdisciplinary Global Development Centre (University of York, UK), the Research Group Economies, Comparisons, Connections (Ghent University, Belgium), and an active member of CATAPA and the Belgian Latin America network ENCUENTRO.
Frontiers of the Green Energy Transition

An Interview about Lithium Mining in South America

Maria Cariola

Keywords: extraction, renewable energy, Andes, geopolitics

The growing consensus that the climate crisis poses an existential threat has fueled the transition away from fossil fuels. Lithium, the lightest metal on earth, is essential for storing energy in the ion-lithium batteries found in most rechargeable electric devises, including electric cars. Within this convergence between green transitions and emerging business opportunities, lithium extraction has become a frontier of the green energy transition. It has expanded rapidly throughout the past twenty years. Most of the world’s known lithium reserves are

Correspondence: Maria Cariola, maca@ifro.ku.dk


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found in the salt flats of the South American altiplano in the arid and semi-arid mountain landscapes between Argentina, Bolivia, and Chile. Here, lithium has transformed the brine beneath the surfaces of salt flats from being considered wastewater into possibly holding the key for the transformation of this so-called lithium triangle into what has sometimes been called the “possible Saudi Arabia of the 21st century”. But the rush of the “white gold” sparks local resistance from communities who have seen how the water-intensive extraction process is profoundly damaging the hydrological system of their homes, causing extensive droughts and thus obfuscating livelihood strategies. Meanwhile, promises of local development have yet to be fulfilled (e.g. Argento & Puente 2019).

I interviewed Melisa Argento and Bruno Fornillo from the Research Group on Commons and Geopolitics (Grupo de Estudios Sobre Bienes Comunes y Geopolítica) at the University of Buenos Aires, Argentina. They have investigated the expansion of the lithium frontier for well over a decade, and have published widely on a range of issues, including geopolitical movements, local resistance and technological aspects of battery production.

Their latest book Litio en Sudamérica: Energía, Territorio y Geopolítica (Lithium in South America: Energy, Territory, and Geopolitics) was published last year in Argentina and interrogates the politics of lithium extraction in South America.

The Interview

Maria Cariola (Q): First of all, could you briefly introduce your research group?

Bruno Fornillo (BF): The group started when some of us were doing our PhD theses in Bolivia in 2007 and got interested in lithium. When we got back to Buenos Aires, to Argentina, we realized that Argentina also had lithium and we began investigating and thinking through these things. In the beginning we had the idea of creating a group of people with different political and academic trajectories that would be able to think collectively. That is what we have done throughout the years. We grew from initially being five members to being 12-13 today, and with diverse disciplinary backgrounds; we count among us people from chemistry, physics, history, economy, political science, environmental administration, sociology, and of different nationalities. Frankly, as a research group we have something two-faced, a little schizophrenic, but of the best of schizophrenias; we would like to be a bit like one of Pessoa’s stories; one hyper-political part, another hyper-academic, and another one that no-one really knows what is.

Q: When we speak about lithium today globally and within the so-called “lithium triangle” of Argentina, Bolivia and Chile, there seems to be various desires and imaginaries involved, of energy transition, development opportunities as well as intense profits. You call it the “very aura” of lithium, as if the mineral were by itself charged with future”. It has been called the “white gold”, the oil of the 21st century, and it has been suggested that the countries with salt flats in their territories could

1 Maria Cariola conducted the interview in Spanish on 25 August 2020. She translated the text.
be the Saudi Arabias of the future. You call for caution against these narratives. So, what are we talking about when we talk about lithium?

**BF:** It’s very true that lithium, as signifier, in and of itself awakens a range of fantasies. It is an active signifier, imbued with diverse signification according to the type of approach that is realized. It is not the same for a company as it is for the communities. Lithium opens problems and hence allows for thinking through North-South relations in the parameter of exchange of a chemical element, a raw material. It allows for us to ask how different countries think of development in the present but most of all in the future. It allows for us to examine what occurs in the territorial dynamics of the communities that have inhabited the salt flats for centuries. It allows for questions into technological processes. To us, lithium is the opening into a great many pathways, and it is the indicator and pathway for thinking about a range of pressing problems in our contemporary world.

**Melisa Argento (MA):** In relation to that, if we were to define these multiple and narrative imaginaries, I’d say that there exist three large blocs, some of which we are interested in discussing and confronting, particularly regarding the narratives of El Dorado that would take lithium to be yet another resource, another commodity in the framework of opportunities for the so-called “lithium triangle”. This is the classic imaginary of lithium, the “white gold”. There is another line of narratives or future imaginaries that runs in the direction of the energy transition, where things get increasingly complex. Because within this framework, there are different visions. One is again absolutely commodified within the green transition or a paradigm of ecological modernization. It is only attempting to guarantee the transition for the Global North, extracting lithium from the territories and accelerating the same extractivism. This is the same as the story of El Dorado. But there are also other perspectives informed by the necessity of a just energy transition, an environmental version in which lithium could have a truly democratizing place.

**BF:** We have increasingly been deconstructing the image of the Saudi Arabia of lithium, in a process of initially strongly adopting it, as if this raw material in and of itself had an unusual value. In time the image lost more and more of its significance, due to different things, amongst them considering that it is really robust technological processes and the control over them that allows for generating autonomous politics with transformative capacities at a local level. I’m referring to the possibility of knowing how to make batteries, knowing how to insert those batteries into a new energy paradigm, knowing how to adapt that energy paradigm in order to foster the best conditions for equality and distribution and energy democratization in each of the countries in which the real value is. Not about having one or two raw materials. We have to do the arduous work of deconstructing the images in which the richness of Latin America is only found in its nature.

**Q:** The salt flats of the Altiplano are located in desert or semi-desert landscapes in very fragile hydrological ecosystems. Lithium mining is water mining, and the process of extraction requires large quantities of water, most of which evaporates along the way. What are the imminent dangers of the expansion of the lithium frontier in socio-environmental terms?

**MA:** The lithium is found in the salt flats that form part of a region, a social and cultural territory, a territory with identity, which is the Atacama region. There are memories, trajectories, a common past in the populations, and forms of life that are inherently tied to a territorial process that vastly precedes the emergence of lithium as a mineral for extraction. This is the first thing that we must say to question the notion of the desert, that is very utilized in order to justify the eldoradismo in Latin America. So in these territories the
communities argue basically that lithium mining competes with their ways of life, there usages and habits, with their knowledges, and with forms of control and collective use of the commons, including water, the salt flat, and territory.

When we say that lithium is competing [with ways of life], we want to point out that lithium extraction is pushing a boundary. Trespassing this boundary amounts to ecode. Why? Because lithium mining is effectively water mining because of the evaporative methods employed in the brine extraction process, which today is the most profitable and hence most widespread method. What is happening is an alternation of the hydrological system of the subterranean basins beneath the salt flats. This can produce risks of droughts of water sources, watering holes, peatlands, and wetlands that are used collectively by communities for human and animal consumption and the reproduction of life. We also see salinization of these waters due to their mixing in the boundaries of the aquifers of salt- and freshwater.

**Q:** Your book is a critical contribution to the debate on lithium in South America, and analyses the different political and historical realities of Argentina, Bolivia and Chile. What different state strategies have been assumed in the three countries regarding lithium?

**BF:** Bolivia decided in 2007 that there would be state control of the whole productive chain, only making alliances in the area of high technology, which have until now fundamentally been with a German company. This process was interrupted by a coup d’État and today its destiny is uncertain. So are current Bolivian politics. Rushing to conclusions would not be worthwhile. In Chile, a distinctly Chilean combination of radical predominance of the mercantile logic coupled with long-term state policies have given rise to the formation of a National Lithium Commission. This has brought about a renewed politics regarding lithium and that generated other contracts with companies. What fundamentally appears there is the a sort of strong predominance of the economic imprint, which under the idea of Shared Value calls for complicity in the poor treatment of the territories of some communities, who inevitably, are in need of resources.

Argentina has a neoliberal mining code that facilitates the installation of extractive companies in mining areas, and relates directly with the provinces because the control over resources in by constitution falls on the provinces. It happens in completely asymmetrical conditions, in which the companies triumph, with scant regard to local populations. Therefore, it is in Argentina where we see the most crude plundering by the more than 50 projects in different phases.

**Q:** And how have local communities responded to and resisted these respective strategies?

**MA:** That question was what we wanted to work through in the chapter of the book that I wrote with Florencia Puente. We wanted to know what the different responses had been, repertoires of mobilization, actions, legislations in which the communities are shielding themselves in the different territories in which lithium mining is advancing. In the case of Chile, we found that the communities first encountered the companies in the 80s and 90s, when the so-called Indigenous law was still not even in place. So you had a situation in which initially, the companies arrived and established individual, or rather, clientelist or direct relations with the communities. After that there was a framework of Corporate Social Responsibility (CSR),

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1 Shared Value is a doctrine of company-community relations that has advanced over the past decade. It relies on sharing economic profits with affected communities as a means of building local consent to extraction.
which as a relational paradigm is slightly more planned, but is still clientelistic and philanthropic, with very small actual contributions to the communities. Then, with time, certain events start occurring, amongst them the complaints regarding water usage, problems with fractures of the salt flat or the collapses in the salt flat. There is also learning process of the companies, who learn over time to intervene in the territories, and move towards a logic of Shared Value which replaces the clientelism of CSR and articulates itself within the paradigm of sustainable mining. So here we have a scheme that is clearly a configuration of capital in the territories, that has its international alignments.

If you go to the Argentinian side, lithium extraction is evidently in a very initial phase. The relationship between companies and communities is much more tied to CSR in the sense that the contributions to the communities is of a very small transference of resources, a chain or participation of the communities that promises a false solution of development. It is a growth free of any type of concrete state planning of these territories. To a large degree it depends on the company-community relationship, which gives rise to a severe territorial fragmentation. This brings to the territories a logic of winner communities, that remain close to the companies, and looser communities, that are left out of that possibility.

On the other hand, we have the very different case of Bolivia. This is a genesis of a project that was articulated within the horizon of the communities and the structures and mediations of the labor unions in these territories. The fight of the 90s against Lithco established a horizon of nationalization of evaporite resources\(^3\) in these territories from the peasant sectors. In Bolivia, there is an interplay in the southeast of the Potosi region of a long mining trajectory, a history of struggle for nationalization of resources preceding and protected by the nationalization process instigated when Evo Morales and MAS (Movimiento al Socialismo) rose to power.

Effectively, regarding the entirety of the ecosystem and the hydric equilibrium of these territories, you can see that in Chile the demands are much more radicalized, because of the passing of time and the different articulations with the companies. In the case of Argentina, there are demands related to two key bodies of law, which is the indigenous legislation, the demand for the compliance with the Free, Prior and Informed Consultation, but also the environmental law. On the other hand, you have the case of Bolivia, where really, due to the history of the project, you do not see demands framed within the indigenous question for the recognition of communities and peoples and first nations, nor do you see environmental demands. In any case, and I will close with this, what we have seen lately is that there is also today a demand of some communities with bonds to the Civic Committee of Potosi\(^4\). They oppose the project and fundamentally oppose the hegemonic role of the national government and La Paz in a very strong departmental dispute. This is strongly related to the mobilizations over the past year against Evo Morales and also strongly related to a historical question in which the Committee, having been protagonist over so many years in the demands related to lithium, reclaiming the tax as rightfully belonging to them.

\(^3\) Evaporite minerals like the brine containing lithium found on the high-altitude salt flats are formed through solar evaporation.

\(^4\) Civic entity conformed by members representing diverse institutions of the Potosi and civil society, and has played a crucial role throughout the past decades in disputing transnational control over natural resources of the department.
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Maria Cariola Eriksson is a PhD student at the Department of Food and Resource Economics, University of Copenhagen.

Melisa Argento is a PhD student at the Institute for Latin American and Caribbean Studies at the University of Buenos Aires (UBA). She works on conflicts over mineral extraction in Bolivia and Ecuador.

Bruno Fornillo holds a PhD in Social Sciences from the University of Buenos Aires (UBA) and in Geopolitics from the University of Paris 8. He is a researcher from CONICET (National Council of Scientific and Technical Research) in Argentina, and forms part of the Institute for Latin American and Caribbean Studies at UBA. He works on contemporary Bolivian history and natural resources, geopolitics and energy in South America.
Anti-Mining Conflicts and Degrowth

Julien-François Gerber

Keywords: mining; degrowth; post-extractivism; anti-mining conflicts; convergence

Is there a collective alternative vision emerging from the thousands of people involved in mining conflicts worldwide? Are the people involved in such conflicts promoters and practitioners of more sustainable economies? And if they oppose predatory forms of economic growth, aren't they the 'natural allies' of the degrowth movement? Examining these questions will be crucial for understanding the changing nature of commodity frontiers and their eventual possible dissolution. Whatever the answers are, it is clear that conflicts over extractivism are increasing and commodity frontiers are on an accelerated march. From the year 2000 in particular, the growth of Asian economies – especially China – has triggered an increasing demand for natural resources, pushing commodity frontiers further (Conde, 2017). India’s growth, in contrast, has relied so far on

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internal supplies, causing many fierce conflicts within its national boundaries (Bisht & Gerber, 2017). Furthermore, new technologies are allowing companies to go deeper and farther, into more ecologically vulnerable regions and new areas like deep sea extraction sites.

Very often, these areas are also inhabited or otherwise used by populations who must bear the costs of pollution and destruction, and who resist accordingly.

A key finding of Conde’s (2017: 81) important overview of mining conflicts is that “many movements create, recover or re-affirm a development path that rejects mining, in the process proposing alternative development models, or ‘alternatives to development’”. Conde’s overview also reveals that there has been a shift in the strategies and narratives mobilized by anti-mining movements in the last two decades. It appears that alliances with extra-local actors have played an important role in this shift – not only launching new movements, but also developing solidarities and political opportunities, and allowing for the emergence of alternative imaginaries of development.

Many movements, it turns out, explicitly reject the broader ‘development’ model that is imposed upon local communities and that is based on extractivism. Conde notes that “an emerging anti-capitalist and non-Eurocentric discourse articulated with local place-based demands [is increasingly visible]”, but she adds that “further research on new cases and with the specific objective of identifying this trend would be welcomed” (ibid: 87). She regrets that “there is a lack in much of this [mining conflict] literature of ‘strong sustainability’ views that explore the possibilities of an economy less based on extractive industries” (ibid.). Such economies would fall under the headings of ‘post-extractivism’ or of ‘degrowth’.

Post-extractivism, which was mainly developed in Latin America, calls for a societal change away from economies dependent on and guided by extractive industries (Gudynas, 2013), while degrowth refers to a radical politico-economic reorganization that leads to smaller and more equitable social metabolisms (Kallis, 2018). Degrowth not only challenges the hegemony of growth, but also calls for a redistributive downscaling of production and consumption – especially in industrialized countries – as a means to achieve sustainability, social justice and well-being.

It is usually associated with the idea that ‘smaller can be beautiful’, but the emphasis is not on 'less of the same': degrowth promotes a society with a smaller metabolism, but more importantly, a society with a metabolism which has a different structure and serves new functions. Degrowth was launched into the political arena as a provocative slogan by environmental activists in the beginning of the 2000s and it soon became a social movement and a concept debated in academic circles. Among the different forms of post-growth, degrowth has arguably the greatest potential to be transformative and extended into a social movement.

Anti-mining conflicts, post-extractivism and degrowth could indeed complement each other in important ways (Gerber et al., 2020). In a nutshell, struggles against extractivism provide a large-scale force of resistance, while post-extractivism and degrowth theorize a way towards social and ecological sustainability. There is little doubt that, taken as a whole, the myriad conflicts against various forms of extractivism represent a powerful socio-political force in the world today (see the Environmental Justice Atlas). However, this political strength has so far failed to translate into an equal strength in theoretical production, despite the fact that many creative concepts have been forged through environmental justice activism, such as ‘land-grabbing’, ‘ecological debt’, ‘climate
justice’ and ‘indigenous territorial rights’. Yet, there seems to be no common radical ideology emerging from all these movements.

But this is not to say that anti-mining movements lack conceptual frameworks within which the dynamics and relationships they emerge from are interpreted. Sarayaku’s resistance in Ecuador’s Amazon against oil exploration is a well-known example, as this community became the cradle of the concept of Sumak Kawsay, or Buen Vivir, whose influence became global. A Gandhian worldview has been mobilized in Indian conflicts, and particular cosmologies can be invoked for advocating a just order in indigenous lands. Yet, overall, many anti-mining struggles remain local or regional in their conceptual scope, and this fragmentation can obstruct wider synergies and the broader societal alternatives that can be imagined and constructed. In contrast, the labor movement, for instance, has given rise to rich (and at times competing) theoretical traditions, which could nourish debates and political strategies.

This is where the contribution of degrowth could be helpful. The degrowth movement has largely been an intellectual endeavor so far, albeit with numerous local experiments; but a good theory can be a powerful weapon for fostering understanding and action. The starting point of degrowth is the ‘impossibility theorem’, namely that the ‘imperial mode of living’ for a world of 8 billion people is neither possible nor desirable (Daly, 1991). On top of that, degrowthers remind us that it would be impossible, with current technologies, to reach Western levels of consumption for everyone only based on renewable energy.

A wind-hydro-solar economy could only support much smaller economies, and a transition to renewables would therefore have to be a degrowth transition. Production and consumption levels have thus to be tackled, and the proper way to rethink them can only be world-systemic and class-based, taking into account those who have ‘too much’ and those who have ‘too little’.

Capital has become so mobile that it has been able – with more or less success – to reorganize production worldwide in accordance with profit maximizing opportunities and resource locations. World-system theorists have thus argued that a single transnational global system has emerged, largely administrated by a global ruling class that shares a similar lifestyle and comparable consumption patterns. Accordingly, the degrowth critique applies to the global middle and upper classes regardless of whether they are located in the (so-called) Global North or South. As for the ‘global poor’, a degrowth scenario would not only leave some environmental space to them to determine their own futures, but also address the issue of the ecological debt that the ‘global rich’ historically owe to the rest of the world. In this way, “the small movement for degrowth […] finds natural allies in movements against extraction and for environmental justice in the Global South (movements that confront in practice, rather than in theory, the growth of the insatiable metabolism that supports the imperial mode of living)” (Kallis, 2018: 179-180).

However, some authors have been more skeptical about the ‘naturalness’ of the alliance. Scheidel and Schaffartzik (2019: 332), for example, argue that environmental justice protesters and degrowthers have not exactly the same aims: while the former often seek to protect “traditional livelihoods and ways of living”, the latter seeks “new livelihoods and new ways of living, within alternative societies”. Many grassroots resistance movements may indeed start with the defense of a local ‘status quo’, but this is why a radical ideology able to transcend this limitation is so needed. The key point, from a degrowth perspective, is to transform NIMBY movements (‘not in my backyard’) into NIABY movements (‘not in anyone’s backyard’). Degrowth is about taking sustainability seriously everywhere – not only in a few specific places – and this objective
has radical societal implications. In the long-run, only an integral transition to renewable resources could make this goal possible, and this would fundamentally transform economies as we know them (Georgescu-Roegen, 1975).

The key point is that without a broader degrowth/post-extractivist strategy, anti-mining conflicts will never fully succeed, and vice versa. Promising examples of such a convergence are already taking place in Ecuador and Germany. In Ecuador, an increasing number of anti-mining movements mobilize an alternative narrative articulated around post-extractivism at the national level (Riofrancos, 2020). In Germany, Ende Gelände (‘here and no further’) is a large civil disobedience movement seeking the phasing-out of fossil fuels. Every year since 2015 up to 4,000 activists carry out direct actions to stop open-pit coal mines and coal-fired power stations, and they explicitly link their actions to degrowth as a way to achieve climate justice. These examples show that the work of concrete articulation has already started and that similar convergences are likely to gain importance as the twenty-first century unfolds with a high risk of further multi-dimensional crises.

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Julien-François Gerber is Assistant Professor at the International Institute of Social Studies in The Hague. After completing his PhD in Barcelona and postdoc at Harvard University, he lived in India and Bhutan before moving to the Low Countries. He has published on the relationships between the economy and the conditions for sustainability, flourishing, alienation and resistance. He is also keen on bridging science and activism and has been active in the degrowth movement.
On-Trade-Off

Countering Extractivism by Transnational Artist’s Collaborations

Lotte Arndt and Oulimata Gueye
in close exchange with the members of On-Trade-Off

Keywords: extractivism, lithium, artistic research, transnational practice

The term extractivism designates far more than the literal extraction of raw materials from soils: it points in a wider sense to the structural foundations of global capitalism, its colonial history, and its ongoing afterlives, comprising contemporary ecocides. It refers to an “understanding that the world, and all its beings, are inherently commodifiable, violently turned into ‘things’, operating as a standing reserve for the accumulation of profit and power in the hands of a few.”

Global capitalism is fueled by fossil energies, which are most often extracted for the benefit of transnational companies.

On-Trade-Off: Countering Extractivism by Transnational Artist’s Collaborations

Le Vide, (The Void), Georges Sanga, Contour Biennale 9, 2019 (1).

Correspondence:
Lotte Arndt, lotte.arndt@gmx.de

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collaborating with national governments, but to the detriment of local populations. In the past decades, extractivism has been theorized mainly in South American scholarship highlighting the “dramatic material change to social and ecological life that underpins [racial capitalism]”.

In an extended view angle, the critical discussion of power structures in the global art world refers to extractivism to describe the frequent incorporation of artists from the Global South into galleries, biennales, fairs and exhibitions located mostly in the urban centers of the North, often without long-term engagement for the sustainable working structures in their countries of origin. While the symbolic surplus of the artist’s practice is appropriated unilaterally, the power of the metropolitan centers remains largely untouched.

How to address as an artist collective the profit-maximizing structures of extractivism? A collaboration between a dozen artists and writers on three continents, On-Trade-Off enters the “extractive zone”, critically examines its functioning, and searches for alternatives. Several artists and thinkers gravitating around the collectives Enough Room for Space (co-founded by Marjolijn Dijkman and Maarten Vanden Eynde, Brussels, 2005) and Picha (co-founded by Sammy Baloji and Patrick Mudekereza, Lubumbashi, 2009) pushed their long-term conversations further and started to inquire collaboratively about lithium mining in the Congo, the pitfalls of the promises of the green energy revolution, and more broadly, the unequal distribution of risks, destruction, wealth and opportunities along global value chains. The configurations of the group are evolving, and depend on the specific focus chosen for an exhibition or an event.” It is nevertheless of crucial structural importance that the project relies on a collaboration between a collective in Lubumbashi, in central Africa, and another Brussels, the middle of Europe, with members joining from changing geographical locations, including Australia, requiring constantly to take into account the realities experienced on all sides.

The geographical starting point for the project is a site of extractivism par excellence: the Manono mine, situated in the Tanganyika province of the Democratic Republic of Congo, 500 kilometers from Lubumbashi. While the mine has been exploited for its tin reserves since 1919, it entered recently in the focus of international speculation on a strategic raw material for the green revolution: as explorative drillings conducted by the Australian company AVZ in 2018 have shown, the soil contains high concentrations of lithium, an alkali metal with high capacities to store electricity. The

![Future Flora Manono II, Maarten Vanden Eynde, 2019, photo credit (c) Philippe De Gobert.](image.png)
prospection on the mine’s ores that also contain cassiterite and coltan, both metals of strategic importance for wireless communication, concentrates as a conundrum the contradictions that On-Trade-Off examines: While promising to provide a more sustainable technology, the future extraction of the ore will most probably replicate the exclusion of local populations from the wealth of their soils.

Working on a collaborative project between two artist’s collectives in the Democratic Republic of Congo and Belgium renders today’s asymmetrical structures of the world-economy and their colonial history a palpable reality on many levels. While being connected through the value chains of global industries, artists participating in the On-Trade-Off project do not experience the same realities, according to their geographical situation. They work with different tools, went to heterogenous journeys, and recur to diverse esthetic approaches. The frequently abstract terminology that conceptualizes extractivism materializes in the artworks as concrete takes on the world, engaging with the local effects of globally traded ores, and their transformation into consumer products. It is precisely this interconnected reality that the transnational artistic research project On-Trade-Off interrogates critically.

In this text we will stress that On-Trade-Off strives, by its very structure, its multi-sited geography, its collaborative intention, and the internal redistribution of resources, to resist the rampant extractivist logics of the global art field, including the neo-exotic tokenism of artists from the Global South. By developing On-Trade-Off as a permanent dialogue between artists living and working closely connected to the sites of extractive mining, and group members confronted in their direct environment rather to the seducing surfaces of the electronic end products, the project systematically connects the extremities of the world spanning value chains that oftentimes are dissociated. While it cannot pretend to mitigate the destructive power of capital, it “stays with the trouble” and engages enthusiastically in collaboration as a source of learning in multiple perspectives, and mutual transformation.

Ambiguous crossroads

How to work with the vocabulary of the neoliberal economy? On-Trade-Off advances in a field dominated by powerful corporate interests and the language of financial speculation. The collective’s work is permanently obliged to deal with forces that exceed by far its own possible impact. Reformulating Audre Lorde’s fundamental question, it has to ask incessantly if the available conceptual and esthetic tools can contribute to dismantle the extractivist house.

As a consequence, the group engages in continuous criticism and self-reflexivity, not only in the visual production, but also at a linguistic level. Beginning with the project’s title, the participating artists interrogate whether a transformative use of the very (visual and linguistic) vocabularies of global trade is possible: in neoclassical economic theory, a trade-off designates situations where increasing one part of an equation requires diminishing another. For example, the destruction of living environments in regions with strategic raw materials is the price to pay for augmenting international interconnectedness and increasing energy efficiency. Rather than to accept the fatalistic stance of this argument, the artists working together on the On-Trade-Off project question its assumptions, reconsider the material realities through research, and explore speculative scenarios inventing alternative modes to think about energy, global circulation, and transnational collaboration.

Thus, the group shares a common virtual and material space for textual and visual research, including images and footage by the artists themselves that can be re-
appropriated and used by other group members. Collaboration materializes as commonized material. It was first named Banque collective - and evolved after intense discussions on the role of banks in global investment into Common (Re-)source. The new name is referencing both, the material flow that originates outside of the group, as a source, requiring responsible uses in more-than-human assemblages, and the critical interrogation of digital information media. It points to the space of the commons, ie. to use values that can be of general benefit precisely because accessing them is not privatized.

Transnational collaborations and technology

On-Trade-Off develops through evolving iterations and context-specific exchanges, taking part in a growing network of activists, researchers, and fellow artists. Invitations to exhibitions and talks provide the framework for progressively inventing a working methodology to inquire about strategic raw materials for global communication industries, financial speculation, and the history of electricity. Knowledge is acquired in constant conversations. The group works with complementary perspectives, without unifying the esthetic and analytical approaches. It considers that

Le Vide, (The Void), Georges Sanga, Contour Biennale 9, 2019 (2).
the plurality of experiences allows for a more precise understanding of the global realities of extractivism. The photographic work of Georges Senga (DRC/NL, 1983) is for example closely tied to the mining history of Lubumbashi, testifying of the decisive impact of the mining giant Gécamines for generations of the cities’ inhabitants. In the past years, his residencies in several European countries have allowed him to access archives out of reach from Lubumbashi. Still, he returns regularly to the city, and feeds parts of his images into the Common (Re-)source.

The collaborations between artists are multiple, and take a variety of forms: The artists Musasa (DRC, 1950) and Maarten Vanden Eynde (BE, 1977) work for instance together on a series of tableaux representing the chemical elements, playfully quoting chalkboards and school charts and their educational usages (Material Matters, 2018-ongoing). Their approach breaks with the division of applied art and high art, brings together two artists of different generations and living situations, and explores how a collaborative learning and transmission process can look like. In their work, they make use of a classical pedagogical tool - the chalkboard - and use it to create connections between chemical elements and their industrial uses. Material Matters is one example for collaborative practice in the project.

But approaches can also remain distinct and still create strong resonances allowing for all parts to gain new dimensions. Such is the case for Jean Katambayi Mukendi’s (DRC, 1974) hand-made speculative drawings and machine-sculptures, and the slickly designed multi-media installations of Femke Herregraven (NL, 1982), that often draw on financial data sets and the visualization of speculation.

Katambayi’s work challenges the detrimental effects of mining on local populations by imagining how to appropriate the technological potential of the industrial tools, and to feed it into future design and urbanism. While he frequently draws from calculations of electric flows and technical drawings, Katambayi deliberately employs low-tech proceedings in easily available...
materials such as cardboard, paper, or copper wire. He thus claims that complex electric and industrial processes can be handled beyond the hierarchical control of enterprises, and thus appropriates the potential to invent the tools for the future. His personal trajectory led him from degrees in electricity and mathematics to art, and his artistic practice remains strongly informed by his solid technological knowledge.

The research of Herregraven examines the abstract financial renderings of the world, which she interrogates critically as a means of domination, but also explores as a source of imagination. Herregraven’s multimedia installations enquire how financial speculation streamlines the complexities of the material world into compact data, represents dramatic socio-ecological transformations - such as species extinction or the melting of the pole capes - as lucrative options for financial speculation, and digitally simulates future extraction sites. Flat screens, clean design, graphically efficient visual solutions, and cutting-edge technology are omnipresent in her artistic work that is comprehensively informed by the visuals and software of global companies.

Herregraven engages deeply with the ambiguity of visual abstraction in the field of finance: She develops narratives from distinct geographic and financial places that she visits materially or electronically, and translates them into images, objects, voices, and 3d-models. While her approach of financial speculation is critical, her work does not shy away from the fascination with the powerful realities generated by algorithms and vertiginous high-speed trade. Katambayi’s inventions of tools for shaping future environments and Herregraven’s investigative inquiries on the languages of digital trade are esthetically and biographically rooted in distant takes on the world. The collective allows them not only to become complementary, but also to inform each other mutually and contribute to an evolution. The connections between their work render the interdependence of the local contexts apparent that is frequently obscured by the celebratory discourses of the extractive companies.

**Digital working tools and their global entanglements**

None of the complex structural questions interrogated by *On-Trade-Off* are external to the group itself. Indeed, working in a transnational collective on three continents depends strongly on the very technologies scrutinized by the groups research: The Covid-19 crisis with its worldwide impact presented a particularly double-sided situation for the work of the highly mobile artists group. During the lockdown, members have been based in Lubumbashi, Sydney, Brussels, Paris, Amsterdam, and Zagreb. The transnational collaboration remained generally possible via computer and smart-phone screens, revealing the striking differences in quality, cost and accessibility of the internet connection, and more broadly electricity in each location. Even if the massive extension of internet-based communication led to decreasing international air-travel with its destructive ecological footprint, it remains nevertheless based on raw material consuming technologies, and their ongoing supply: We know about the energy consumption, water usage, toxicity, and waste caused by the production and use of digital media, that belie corporate myths of their immateriality. As several studies demonstrate, by 2030 communication technologies could consume 51 percent of global electricity, and produce 23 percent of greenhouse gas emissions. Another report predicts that by 2024, video will comprise 74 percent of data traffic; according to another, 89 percent in 2030. While the groups’ work visibilizes the production conditions of electronic communication devices, it is itself far from small footprint media practice. The research depends heavily on electronic media, and thus takes part in an economy that extracts labor from bodies; minerals, gaz, and oil from the ground, and that has
no inherent limits to the permanent accumulation process, as Karl Marx wrote in *Capital*, as early as 1884.

Still, the ongoing research demonstrates that transnational collaboration can contribute to counterbalancing the structural exploitation. While the artists of the group living in the Democratic Republic of Congo are facing unstable electricity supply, rising consumer good prices, and repressive political uses of the sanitary crisis, those based in the European Union observe daily increasing nationalism, militarised border policies, and incitement to consumerism. Efficient technologies, presented as the solutions of the ecological crisis in the North; the concentration of extraction and outsourcing of hazardous waste in the South, and anti-migration laws, and increasing social exclusion go hand in hand.

From Australia, where he is based, Alexis Destoop (BE/AU, 1971) works on a film on the history and becoming of lithium, reaching from cosmological tales of origin to its role as a supercharger in energetic cycles, and (re)tracing the journey of the transformation of this volatile element. From the vantage point of the Asia-Pacific, he sees the geopolitical struggle over the control of strategic resources intensifying.

His research spans several technological sites, among which a wind-powered energy storage system located at the edges of the Arid Zone of the Eyre Basin and pastoral lands, a site whose efficiency negates the arguments against renewable energy sources put forward by the powerful fossil fuel lobbies. Destoop’s research engages with the blind spot of his life in between Australia and Belgium, and their particular colonial histories, and strives for narrative and visual elements allowing to navigate a horizon obstructed by dystopia.

Equally following wide-spanning connections, Pélague Gbaguidi’s (BJ/BE, 1965) work addresses the existential urgencies generated by technocapitalist exploitation, and connects its local realities to global entanglements. During a residency in 2019, she traveled from Brussels to Lubumbashi, where she worked with women laboring in an informal mine close to the nearby town Kipushi, where cobalt, another central ingredient for the production of lithium batteries, is extracted in health-threatening conditions. Bringing these insights together permits understanding the interdependency for finding sustainable solutions. But the
collective also allows very materially to apply for funding together, to facilitate visa-proceedings, to meet at a workshop, or to share the recordings made by one member at a site hardly accessible for the others.

**Unraveling Speculation**

The group evolves between analytical criticism of extractivism in the artworks, and its own implication in the asymmetries of the global economy, without ever claiming to remain unaffected by the powerful structures that it interrogates. Speculation itself is approached in a double perspective: As the financial translation of future values, a bet on the capitalization of not-yet-exploited wealth, speculation is a subject of critical investigation. But it is also understood as a generative artistic proceeding to resist positivism and to draw alternative scenarios for the future.

In this sense, Marjolijn Dijkman (NL/BE, 1978) dives into the history of electricity, its pre-scientific staging as a spectacle, and the constitution of scientific electrical knowledge in the 18th century. In a highly experimental process, she recurs to high-voltage photography, and creates, with *Earthing Discharge* (2020), a glooming custom collage of images depicting ores from Manono, e-waste such as circuit boards, and the remnants of a clockwork from the “age of enlightenment”. The photographs capture the objects’ electrical fields, called corona discharge, caused by the ionization and electrical disturbance of adjacent air. In the image, the extremities of the extractive chain connect, as the conductive glass is sourced from the touchscreens of smartphones - the seductive surface of communication devices visible for the consumers - while the depicted matter - raw minerals and e-waste - constitute the invisible parts of the production and dumping process.

Dijkman’s research highlights the parallels drawn by Benjamin Franklin, author of core elements of today’s electricity storage, such as the plus and minus symbol of battery poles and the term of an electric discharge, between economy and electricity. For Franklin, the control over power promised to master nature, and to counterbalance poverty by wealth. Dijkman questions his faith in progress, and connects it to the promises of today’s green revolution. While she appropriates high-tech-material in developing her own experimental devices, the glowing, wall covering images create themselves a mythic appearance, reminding the power of spectacular electric displays and stagings.

**Making and crashing together**

Today, the rhetoric of sustainability and global responsibility is common language in the communication of global companies. The US-American company Tesla Inc. for
instance announces to accelerate the “world’s transition to sustainable energy” by selling high-end electric cars, designed to move with regenerative energy, stored in lithium batteries. The company under the directorship of CEO Elon Musk is named after Nikola Tesla, a scientist born in Smiljan (today Croatia) in 1856, and inventor of the Wardenclyffe Tower: a technology promising to provide free wireless electricity for whole societies. While Nikola Tesla’s utopian idea has never become real, and many of his patented inventions have been attributed to his part-time employer, and concurrent Thomas Edison, his name is now featured by a strongly profit-oriented global enterprise selling electric cars and batteries as green technologies for the future. For its batteries, Tesla Inc. requires huge amounts of lithium and may thus be one of the clients of the prospective mining of the ore in the city of Manono.

In the present distribution of power, it is likely that “the promise of the green car of the future is valid only for the part of the world that will enjoy its use, [while] the environmental impact is displaced in the areas of extraction and refining of materials that compose it.” Challenging this situation, the artists Jean Katambayi Mukendi, Sammy Baloi (DRC/BE, 1978) and Daddy Tshikaya (DRC) conceived and constructed in their hometown Lubumbashi a real-size Tesla car in copper wire: Tesla Crash: A Speculation. The remarkable object is an outcome of collective intelligence and collaboration, using copper, a raw material that is present in high quantities in the soils of the Katanga region, and has been mined extensively since pre-colonial times. The copper-wire Tesla car has been skillfully constructed over several months at Picha in Lubumbashi (2018-2019), gathering numerous concerned and interested audiences around the daily construction process, or in workshops dealing with energy and technologies for the future. The car playfully and ironically speaks back to the industrial Tesla car, and upholds the utopian potential of the name-giving engineer against its capitalist usurpation, but it also references and magnifies the ubiquitous self-made children’s toys in cities where recuperation and raw materials are more accessible to large populations than consumer goods. While the life-size original of Tesla Crash: A Speculation stayed in Lubumbashi, the miniature version sketched after it traveled to exhibitions in Europe, inverting thus well-established hierarchies.
Far more than an object, the car is still generating collaborations. During the Lubumbashi Biennale in 2019, artist Dorine Mokha (DRC, 1989) knitted the narration of his performance around it, entering into call-and-response with the audience, and initiating future collaborations with the On-Trade-Off project.

In close conversation with the three conceivers of the wire car, Marjolijn Dijkman prepared the performance Charging Tesla Crash: A Speculation. Jean Katambayi led through the ceremony, while Dijkman discharged from a home crafted electric Tesla coil 3 million volts over a distance of 2 meters on the highly conductive copper car. With great noise, accompanied by the acclamations and comments of the audience, the car was symbolically called into “life” through electricity - just as at the beginning of science fiction writing in Europe Mary Shelley had awakened Frankenstein from the dead by the power of electricity. But the spectacularity of the discharge did not animate the car. It rather pointed to the dead-ends of the asymmetrical benefits from the raw material exploitation.

While it is clear that the “future of the electric car, just as so many other technologies, lies largely in the DRC, one can doubt if the future of Congo lies in the Tesla.”

With the current crisis deepening the social divides on a global scale, and promoting green technologies for wealthy consumers, largely forgetful about the conditions of their production, and the deep structural asymmetries of global capitalism, On-Trade-Off continues to insist on the interconnectedness of living situations across the globe and the urgency for environmental justice.

As authors like Vandana Shiva, Ghassan Hage, and Malcom Ferdinand have highlighted for long, decolonial ecological practices require to acknowledge the unequal structures of racial capitalism, and its colonial foundations. At the modest scale of an artist collective, On-Trade-Off strives to counter extractivist structures and to collaboratively speculate on possible scenarios for alternative manners to live together on an interdependent planet, to open ideas beyond the protective localism of wealthy ecological policies, and the structural racism of global technocapitalism. Examining future modes of travel and transnational collaboration, and the continuous self-reflecting on the group’s structure and its inherent biases, are among the challenges for the coming months and years.

This is pre-publication version of the piece that will appear in the upcoming Vertical Atlas book produced by Digital Earth in collaboration with Het Nieuwe Instituut.
Lotte Arndt is a writer and curator based in Paris. She works on long-term artistic research projects in shifting transnational geographies and in close collaboration with artist. Her current research critically inquires toxic conservation in Western museum collections.

Oulimata Gueye is a Senegalese and French art critic and curator who has been studying the impact of digital technology on urban popular culture in Africa. She has been conducting research projects which explore digital culture, science and the potential of fiction to develop critical analysis and alternative positions.

3 Ibid.
4 At different moments, the group involved so far the artists Sammy Baloji, Alexis Destoop, Marjolijn Dijkman, Pélage Gbaguidi, Femke Herregraven, Jean Katambayi Mukendi, Dorine Mokha, Musasa, Alain Senga, Georges Senga, Daddy Tshikaya, Pamela Tulizo, Maarten Vanden Eynde, and the writers and curators Lotte Arndt, Oulimata Gueye and Rosa Spaliviero.
10 Ibid.
12 Ibid.
“COVID-19 has Crippled Our Struggle.”

An Interview with Pinky Langa, environmental justice and feminist activist, on the experiences of women organising against extractivism in South Africa during the COVID-19 pandemic

Sithandiwe Yeni

Keywords: women against extractivism, organising, coal mining, resistance, solidarity

The spread of COVID-19 has interrupted fieldwork for activists and academics alike. Meanwhile, local voices in mineral frontiers across the globe attest to the mining industry’s quest to capitalize on the pandemic, often in conjunction with local governments. In this context when mineral frontiers continue to expand and people’s freedom of movement is restricted, community activists are facing extraordinary organizational challenges in their work.

This From the Field contribution to the first issue of Commodity Frontiers is dedicated to women defending human rights against extractivism. We shine a spotlight on Pinky Langa (31), a gender activist and feminist from Emalahleni (“the place of coal”) previously known as Witbank in South Africa.

Correspondence:
Sithandiwe Yeni, sthayeni@gmail.com

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Her activism began in 2013, when she realised how mining companies were grabbing land from the residents and polluting air and water in Emalahleni, a process with which she was all too familiar. Pinky’s family was evicted from the land by a global mining company, Anglo American, in 1990 and had to seek alternative land to live. Anglo American arrived – unannounced - to extract coal. They paid no compensation and provided no alternative land to families who lost their land and homes.

It was learning about this awful experience of eviction from her grandmother that influenced Pinky’s activism. She came across an organization called Southern Africa Green Revolutionary Council (SAGRC), fighting for environmental justice through community education and awareness raising based in Emalahleni. As a volunteer at SAGRC, she built and deepened her knowledge of the rights of people living in mining towns and the relevant laws to protect them, in order to help residents confront and engage with mining companies from an informed position. After a year as a volunteer, Pinky and other activists convened all the members of the community who had been evicted because of mining and they began to fight for their land and compensation for their losses. This is an on-going battle that remains unresolved, and Pinky continues to fight.

Sithandiwe Yeni (SY) spoke to Pinky Langa (PL) about her activism and her reflections on organising during the COVID-19 pandemic.

THE INTERVIEW

**Gender and Activism**

**SY**: Please tell us about your role as a gender activist and feminist in the structures that you are part of and what are some of the struggles you are fighting?

**PL**: I am the organizer and I focus on the impact of mining on women in our areas. We are affected differently. My role is to make sure women have their own safer spaces, and are free to debrief and engage on issues that only affect them with no men in sight. **We need such spaces, where women set the agenda and think through the solutions to the problems they face.**

This can be hard in the presence of men as there is power imbalance as men often want to dominate the conversations.

Let me give you examples of some of the issues we seek to address that affect only women.

1. Women do unpaid care work, if children go swimming in polluted water due to coal mining and become sick, it is the women that must take care of them. This is hardly men’s responsibility.

2. If their husbands or boyfriends work in the mine, women do all the social reproduction work, they ensure that the men are well fed and clean and in good conditions to go to work.

3. When the mines are blasting, the dust makes the homes dirty, and that’s more work to clean especially curtains and linen which is not easy to wash but has to be washed regularly. It takes a lot from us.

4. Many women engage in sex work in the mine and experience both physical and sexual harassment.

5. It is a huge challenge for women to get employment in the mines, in some cases mine bosses demand sex from women in exchange for jobs.

6. There is a gender wage gap where often men and women do the same job, but women are paid less. This is in addition to the fact that we are always doing unpaid care work, and we are constantly worrying about kids at home.
7. Mining has contaminated our soil and water, as a result we are unable to produce crops. Small-scale farming is largely practised by women, but due to poor soil the produce have also been bad and for some it became useless to continue. This is a loss of livelihoods.

It is quite stressful and we know that it is us women who need to stand together and fight for change. My activism is not only limited to the struggles related to mining in our area, I do more than that. I belong to a group of young people in Witbank. It doesn’t have a name. We are just young people who are concerned with injustices we experience. Our main focus is to make sure that young people get jobs, and victims of gender based violence get support. We ensure those who’ve been abused go through counselling, we do that by finding sponsors for them to attend hospitals.

I also belong to a women-led group, also it has no name. We focus on elderly women and those living with disabilities, and albinism. Two years ago a young girl was kidnapped and found dead with missing body parts, she was living with albinism. They are not catered for. The state does not understand and can’t even give them proper medication for their skin. We have been doing awareness in the community, especially around the stigma. We educate people in our community, that these are humans too.

SY: What are some of the demands that your community has made and to whom?

PL: Employment opportunities in mining is a major demand. There are so many mines in the area yet we are jobless, the rate of unemployment is very high. Women and young people in general want skills development and opportunities to farm. We want the mining companies to build clinics, with medication and there must be a doctor in every clinic. Our schools are built of asbestos, with no toilets yet in the social labour plans mining companies make promises to build schools and proper toilets.

Communities around here do not have running water and electricity, but the mines do. We demand accountability from them. We know that mining companies pay royalties to municipalities which should be used for development but we do not see any development. They are failing to fix roads even though they promised to in the social labour plans. When the mine is gone, we will be left with a liability. Anglo American won’t be here in 30 years’ time, and we are not getting services yet they are making money. We want the money to be spent here to improve our quality of life. The only thing Anglo American has done was build a water purification plant, so we can now drink clean water.

SY: What are some of the strategies you use to confront these challenges?

PL: We use a range of strategies for different issues. On the problem of contaminated soil, we have been working with organisations like Rural Women’s Assembly to learn of ways to clean the soil using organic soil material. On fighting against sexual harassment we went to a mine owned by the state president and picketed demanding that women are hired, our slogan was “My vagina is not my CV”. Four women were later hired because of this action. On issues pertaining to holding the mining accountable, we engage in protest actions and make sure the media is there to cover it. Sometimes it’s difficult for us to access the social labour plans, and so we work with NGOs who are our allies and they help us to obtain these plans and scrutinize them.

But none of this is smooth and easy. Mining companies like to divide and rule. They target certain individuals, bribe them and turn them into their informers. So when we organise protest actions or plan to go to the mine to confront the management, the informers tell them behind our back. I think we will always have such people, especially if they get bribes from the mine. This delays the progress, however we will not be tamed.
SY: Who would you say are your allies, apart from other activists in other communities fighting similar struggles?

PL: I would say NGOs give us support in different ways, for example the Legal Resources Centre are our allies. We have always relied on them for legal support, if we have cases we can always check with them. Oxfam South Africa has been supporting us financially and very useful to give knowledge training on issues like social labour plans. Other NGOs such as Action Aid, Norwegian people’s AID have also supported us by connecting us to resource people we need.

SY: What are some of your challenges as a woman activist in your struggles?

PL: There are so many: number one, in most of these organisations and forums we are with men. They always want to be in the front. Once women want to rise and make things happen, they see you as a threat. They cause conflict around you, call you names. It has been one of the challenges for me. In addition, fighting and leading the struggle while unemployed is a challenge, when opportunities come you can’t prioritize yourself. You put others before you and this can be problematic.

During this time of COVID-19, I felt the heat more, being a woman, unemployed and leading others. When others look at you they see someone who can help, even when you are struggling and feeling helpless. Some days you wake up and want to give up, but you remember that justice has not happened, you can’t stop. That keeps me moving.

Organizing During the COVID-19 Pandemic

SY: What were you up to when the COVID-19 lockdown was implemented in March?

PL: I was busy. In February, when the minister of finance made the budget speech, we were still organising the unemployed people in our area. We were organising people to go with us to make inputs when the minister made his speech in parliament. We were in Cape Town, we had a caravan coming from various places across the country. We were in parliament, we were discussing basic income grant, climate change, illicit financial flows, mining affected communities and gender based violence. We were looking forward to getting more people in our communities to participate in budget speeches in our various provinces and municipalities and boom COVID-19 hit us.

We were angry and revolting. We stopped everything. We didn’t have resources such as airtime to shift to online communication. Remember we are unemployed and most of the people in the struggle do not have data, smartphones and laptops, we could not host zoom meetings. In the provinces, nothing moved. Nationally, we have through the help of some NGOs who offered to provide us airtime managed to join a few meetings online but not much.

SY: How has the pandemic and the lockdown affected your work as a woman activist?

PL: It has dealt with us drastically. Gender Based violence cases have increased, we could not go to support women in court which we normally do. We had healing sessions over the phone with some, but we needed more of these in person. It has created a gap and a void in my life, I am longing for a moment to be in the same room with women to cry.

It has affected me psychologically, I’m stuck at home and it is not going well. The conversations are different at home. I get strength from being in groups with other activists. I am going through my own stuff and I have nowhere to offload
SY: Were there new challenges related to mining in your community that came about due to the lockdown? How were you and your community affected?

PL: No nothing new, we still have the same old problems. However, we are scared because we already breath polluted air, so when we hear COVID-19 attacks the lungs we already anticipate what will happen to the most of us.

People are already sick from mining related infections, many people here have lung issues and Tuberculosis. So it is quite scary because Covid19 is more harmful to people with existing illnesses.

SY: Looking at the impact on mining in your community both before and during COVID-19 pandemic, what do you think are the alternatives?

PL: Mining needs to stop and allow the earth to rehabilitate. We have taken from the soil, that’s enough. Let’s rehabilitate, plant trees because climate change is real, we should not deplete the coal. There are other ways of generating electricity, not coal. There are so many ways to create other forms of jobs such as recycling and generating energy through solar power. These have not been explored. What will happen after coal is depleted? Let’s find other ways. I would say renewable energy is the way to go.

The crazy thing is that in countries where minerals go, there is no unemployment like here. We are the ones suffering. We need to push for alternative agriculture as well, one that does not depend on fertilizers and chemicals because that is bad for the soil and environment in general. There are alternatives, it’s just that they are not favoured by those in power because all they care about are profits.

Organising Beyond COVID-19

SY: What do you think organising and activism is going to look like going forward?

PL: It is going to be difficult, we have lost each other while others have moved forward especially those with resources. We will find each other, but it will be hard. I think COVID-19 will be here for a while, it is still going to be hard. The lockdown regulation prohibits gatherings of more than 50 people, now imagine what that means for our community meetings and protest actions? We can’t be 50 or less, we can’t call the masses and protest at the union building where the state president is.

COVID-19 has crippled our struggle, this is killing us. I am hoping things will work out, but it will not be the same.

Sithandiwe Yeni is a PhD Candidate at the University of the Western Cape in Cape Town, South Africa. Her research is on land access, property rights, livelihoods and notions of belonging amongst former labour tenants on land reform farms.

Pinky Langa is a gender activist and feminist from Emalahleni, South Africa. She is a volunteer with the Southern Africa Green Revolutionary Council (SAGRC) and works with other local organizations.
Mining and Historical Capitalism
A Review

Leonardo Marques


From smartphones to so-called green technologies, including Elon “We will coup whoever we want” Musk’s electric cars, the production of many contemporary commodities continues to depend on the extraction of various raw materials from different parts of the world. Salar del Carmen, in Chile, for example, produces around 48,000 tons of lithium a year, a volume that could be used to produce 43 billion iPhones (Arboleda, p.76). The centrality of mining to modern life - a theme that appears in the two books reviewed here - can be found in “those unspectacular, nearly imperceptible practices and habits that constantly weave together the fabric of everyday life in the twenty-first-century city: sending an email, driving to work, ordering groceries through the internet” (Arboleda, p.13). This urban experience appears to us in fragmented and ahistorical forms, something that the analysis of mining commodity chains helps dissipate, as these books show. From

Correspondence:
Leonardo Marques, lm@id.uff.br

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violence against workers and militants to multiple environmental disasters, they offer detailed depictions of the impacts of mining enterprises in Latin America. In *Mineração, genealogia do desastre* [Mining, Genealogy of Disaster], Horácio Machado Araóz connects the colonial experience of Potosí to the broad expansion of mining in contemporary Latin America as a whole. In *Planetary Mine*, Martín Arboleda also makes important incursions into the longer history of extractivism in Latin America, but his focus is on recent transformations in northern Chile and their relationship to global economic developments, especially the rise of Asian nations. There is much in common in these two books, but also some clear differences, especially in their theoretical frameworks.

The core of *Mineração, genealogia do desastre* is the idea that mining in colonial Latin America is at the center of modernity. Historians of mining in Latin America have raised several questions about its relationship to the development of capitalism as a historical system. They have shown the highly modern aspects of mining enterprises since the sixteenth century, their social and environmental impacts in places like Potosí (perhaps the world’s most commodified city by the late sixteenth century), and the importance of bullion flows to the development of the Old World, from the creation of a world economy to the development of Europe. Machado Araóz builds his argument using part of this scholarship and suggests that he is doing an archaeology of modernity by exploring two key archaeological sites: Santo Domingo and Potosí.

On Santo Domingo the reader learns very little; this section appears mainly as a strategy to discuss the emergence of a modern subject whose main motivation is greed, as evidenced by the European search for precious metals. His focus is really on Potosí and for good reason: this was by far the world’s main source of silver in the long sixteenth century. The author describes the social and environmental consequences of mining in the Andes and the central role played by the Spanish state in its development. On the other side of the Atlantic, the Spanish state financed the war against other European states and contributed to the commodification of the modern *raison d’État*. The main contribution of the mining periphery, according to Machado Araóz, can be found in this articulation between the accumulation of capital, the financing of war, and the making of modern states. This is a powerful idea, but a number of additional aspects that would strengthen the argument could have been explored with a more careful look at the historiography, such as the role of precious metals in European financial developments (which appears but receives scant attention here) or the modernity of state practices in the periphery (such as in the counting of local populations for the *mita*).

Machado Araóz also offers an extended discussion of mining in the contemporary world. The recent Brazilian edition includes a preface and a postface by Brazilian scholars updating the discussion with references to the disasters of Mariana and Brumadinho, Minas Gerais. These are obviously only the last chapters of a long history of disasters and violence in all of Latin America and Machado Araóz does offer a comprehensive list of these events in the last section of his book. One of the most interesting (and tragic) aspects of this recent expansion of mining appears in the massive use of water by open-pit mining...
enterprises. By using much of the water from local reservoirs they affect local populations and their economic activities not only by limiting their access to water, but also by transforming hydrographic circuits and polluting such a vital resource in various ways. In Chile, the water code of 1981, passed under the Pinochet dictatorship, was a key step in all this, a process that appears in Machado Araóz’s book but is described in more detail by Arboleda. In an excellent chapter, the latter shows the role of technocrats in the creation of the necessary structure for the expansion of mining in Chile and its use of water resources, a process that - surprise, surprise - had very little to do with free market mechanisms. Machado Araóz in turn explores this and other recent Latin American transformations largely based on David Harvey’s concept of accumulation by dispossession, a concept that has been widely used in the scholarship on (neo)extractivism.

In theoretical terms, Machado Araóz draws on a large number of authors and traditions besides Harvey, from Michel Foucault to dependency theory and decolonial studies. The return to dependency theory is at times too crude and many of the arguments are more affirmed than substantiated by the data. There is a strong reaffirmation of the center-periphery divide, for example, but nothing on the more complex relations produced by the “economic space” of silver, as described by Carlos Sempat Assadourian (who nonetheless makes a few brief appearances in the text). A similar problem appears when discussing contemporary developments and the idea that “enclave economies” are becoming the norm in Latin America. In one of the book’s tables (Machado Araóz, p.204), the author shows the role of mining in exports, in the GDP, and other aspects of the national economies of Chile, Peru, and Argentina. While minerals are responsible for 63% of all Chilean exports, in Argentina they amount to 2,55%. This does not invalidate the thesis of a new extractivism, but it does point to some complicated aspects that tend to be neglected in such a broad overview of the region.

Moreover, the eclectic use of authors in the book does not always work. Araóz makes, for example, a critique of Dennis Flynn and his view that the Spanish expenditure on war was irrational, followed by a broader take on the historiography that tends to consider Spain a feudal, backward economy (Machado Araóz, p.158). This is an important critique, but at other moments he builds on Ellen Meiksins Wood’s idea of an “Empire of Capital” (Ibidem, p. 89-90). Like many other authors within so-called “Political Marxism,” Wood dismisses the history of the Iberian empires as feudal or non-capitalist. Recent efforts by scholars working within this tradition to understand slavery within the history of capitalism, such as David McNally’s Blood and Money (2020), which appears in Arboleda’s book, remain strikingly Anglocentric. By simply dismissing the Iberian empires as feudal (McNally has a few pages on them before moving from Antiquity to Modernity), these scholars have neglected the role played by extractivism in the mines and rivers of Latin America in the establishment of British hegemony within the capitalist world system in the long eighteenth century. In sum, the critique that Machado Araóz correctly makes for Flynn could be extended to a number of authors that he uses in his narrative (as does Arboleda, for that matter).

Finally, Machado Araóz’s effort to show the centrality of mining to capitalist
development also leads to some exaggerated statements that tend to obscure the more specific elements of this articulation. “In any of its modalities,” he argues, “modern power, a form of domination that is historically specific and starts with modernity, cannot do without mining. The latter was born from and with colonialism.” (Machado Araóz, p.179). Extractivism is indeed a key part of capitalism and has become increasingly central to modern life over the centuries, but it was not born with it. The argument only makes sense if the author is thinking along the lines of colonialism as a longer aspect of human history, but Jack Goody is not one of the references here. A similar problem appears in his discussion of greed as a guiding principle of the modern subject.

On this last point there is a clear difference in relation to Martin Arboleda’s Planetary Mining. Unlike the conflation that at times appears in Machado Araóz, mining here is described as “not historically specific, and for this reason it has evolved alongside the modalities of personal dependence most characteristic of premodern societies (chattel slavery, pillage, feudal extortion, conquest, and so forth)” (Arboleda, p.172). Such a conception brings a different set of problems, especially the assignment of personal forms of violence and dependence to a sphere outside capitalism. This is also the basis of Arboleda’s critique of some of the recent uses of the concepts of primitive accumulation and accumulation by dispossession. While sympathetic to these perspectives in that they show how violence is a key part in the constitution of capitalist property regimes, he ultimately thinks it necessary to analytically separate this from actual capitalism, which for him depends on purely economic forms of coercion. Here one of the main theoretical inspirations of the book becomes clear: the Marxist debate on value form theory, especially Moishe Postone’s Time, Labor, and Social Domination (1993). This bibliography is usually very abstract and frequently appears largely disconnected from concrete realities. Arboleda (p.30) is aware of this when pointing out the distinction between an essential content of capitalism and its multiple historical appearances, and one of the many qualities of this book is the effort to actually bridge this chasm. But outlining the exact mediations between these different levels is not an easy task and at times Arboleda presents the empirical material as an automatic expression of the so-called real abstraction that is at the center of value form interpretations of capitalism. At the same time, he rejects the “Saint-Simonian moral reading[s] of primitive accumulation” that have emphasized violence and pointed fingers to specific companies and states. While he is making an important political point here (rejecting the idea that the state is a neutral vehicle that can be correctly guided if driven by the right pilot), it is not always clear why these historical manifestations are in contradiction to his emphasis on the capitalist world market or the real abstractions of capitalism.

Still, Planetary Mine is an impressive book in many different ways. While the literature on the new extractivism in Latin America describes the rise of China as one of the key motors of these recent transformations, Arboleda offers a more detailed and interesting take on this connection, outlining the main transformations within China itself that have generated this great hunger for primary resources from different parts of the world. The theoretical framework is also richer than many works on extractivism, despite some unresolved problems and
tensions. Arboleda is at his best in a remarkable chapter on the relationship between global finances, resource extraction, and the production of urban environments in northern Chile based on Henri Lefebvre, whose concept of totality offers ways of understanding the dynamics of the local and the global, or “how the whole expresses itself through the part and how constant flux between parts reconfigures the whole” (Arboleda, p.178). One of the greatest strengths here is the move between different scales of observation, with the author constantly shifting his analysis between Antofagasta in northern Chile, Asian nations, and the capitalist world economy. Such a relational perspective could in fact help solve some of the problems outlined earlier in both books.

Let me conclude with one last comment on the relationship between mining and historical capitalism. As Arboleda argues, mining did not emerge with capitalism, but there is a clear difference between capitalist mining and pre-modern versions of the practice. A contrast with the capitalism and slavery debate could be helpful here: an institution from the ancient world that was nonetheless re-created by capitalism in the early modern era. These are not simply pre-modern institutions that are opportunistically explored by capital, as more traditional readings of merchant capital would have it; they are to a large extent capitalist reconstructions. Moreover, mining (like slavery) changes over time even in its capitalist forms. Machado Araóz hints at this when describing how industrial developments in the nineteenth and twentieth centuries led to an intensification of the demand for old and new minerals, with British and US capital increasingly spreading over Latin America in search of copper, zinc, tin, bauxite, iron, among other resources. Unfortunately, this line of inquiry is not developed further by the author, who sticks to his idea of an “archeology,” moving from the colonial period to contemporary developments. Arboleda also hints at this when mentioning the long history of extractivism within capitalism based on the fundamental works of Stephen Bunker and Paul Ciccantell, who argue that each cycle of accumulation (an idea that is obviously indebted to Giovanni Arrighi’s seminal work) is marked by technological changes that revolutionize transport and allow for greater access to both existing and new extractive frontiers. This is an excellent framework for understanding the role of mining within capitalism as a historical system that has changed over time.

Leonardo Marques is professor of History at the Universidade Federal Fluminense (Brasil) and author of *The United States and the Transatlantic Slave Trade to the Americas (1776-1867)* (Yale University Press, 2016). He is currently working on a global history of gold and slavery.
Op-Ed

Commodity Frontiers Initiative Coordinator, Ulbe Bosma, reflects on the WWF’s “Living Planet Report 2020” and the long history of capitalism

Ulbe Bosma

Keywords: Living Planet Report 2020, Commodity Frontier Initiative, unequal exchange, countryside, history of capitalism, biodiversity

The countryside has been a crucial but also underappreciated driver of capitalist growth, which indeed explains the rationale of the Commodity Frontiers Initiative (CFI). The world’s countryside is more over the place where, until recently, most people have lived and where the overwhelming majority of living organisms still reside. The countryside has always been ruled by a precarious equilibrium of many different species, a balance that has, however, become radically upset over the past centuries. In order to provide rapidly growing human societies with the necessary food and raw materials, flatlands, valleys, mountains, forests, savannahs, wetlands, lakes and seas of the world have been transformed at astonishing speed.

Correspondence:
Ulbe Bosma, ubo@iisg.nl

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This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.
Obviously, CFI is just one and certainly not the most prominent among the agencies, networks and research initiatives that has made concerns about global environmental transformation the focus of their work. Recently, the World Wildlife Fund (WWF) published its Living Planet Report 2020 to give us a wake-up call about the pace at which our global economy has been destroying nature:

Since the Industrial Revolution human activities have increasingly destroyed and degraded forests, grasslands, wetlands and other important ecosystems, threatening human well-being (p.6).

Based upon the research of an impressive line-up of scientists, the Living Planet Report 2020 concludes that the world has lost 68 percent of its vertebrates over the past half century. In the report’s introduction WWF’s Director General Marco Lambertini puts the blame not only on modes of production and consumption patterns but also on dominant economic orthodoxies:

The way we produce and consume food and energy, and the blatant disregard for the environment in our current economic model, has pushed the natural world to its limits (p.4).

This outspoken rejection of the “current economic model” is remarkable for an organization whose objectives are not at all served by making ideologically charged judgements. This judgement is made, however, harshly and repeatedly:

A key problem is that mismatch between the artificial ‘economic grammar’, which drives public and private policy and ‘nature’s syntax’ which determines how the real world operates (p. 98).

The WWF report makes the pointed argument that dominant economic schools do not consider biodiversity as an economic asset but something that is beyond the realm of scarcity. It is an economic reasoning that assumes we can continue producing and consuming as if we had 1.56 planet Earths at our disposal (p.56).

This scholarly logic underpins our “current economic model,” allowing for the externalization of social and ecological costs, while perpetuating unequal social and ecological exchange; many would say these are simply inherent to capitalism. Although neither the word “capitalism” nor “ecological injustice” are mentioned in the above WWF report, in substantive terms, the report’s assessment comes close to taking on both. It observes that while high income countries protect their nature, they add to their consumption by “nature’s contributions imported from lower-income countries, which are sometimes surrendered for little economic growth” (p. 52).

The supply chains through which these transactions take place are often dominated by large corporations, the WWF report notes. This is unavoidable, one might add, because of the sheer scale of the current exploitation of nature. It is crucial to note, moreover, that we are talking about transnational agricultural corporations, of which quite a few use their considerable economic and political weight to engage in large-scale landgrabbing. Half of the loss of the world’s fauna is the consequence of a massive expansion of unsustainable agriculture, according to the WWF report. Although mining and industry are responsible for environmental destruction and dispossession too, it is particularly the spatial expansion of the agricultural
commodity frontiers that ruins our biodiversity.

The WWF report’s aim is not only to make us more aware of the immensity of the irreversible catastrophe we are heading at but also to show that we can change course. “Bending the Curve” is the subtitle of the report and a key recommendation in this regard is to encourage economic modelling that considers biodiversity as a crucial source of future economic growth. The report emphasizes that scenarios to bend the curve are available and feasible without endangering food security. It seems a perfectly reasonable position, but also one that relies on the political determination of the international community of states and hence, is surrounded by question marks. Why should actors such as transnational corporations and states change their behavior tomorrow when they’ve already known for half a century that the current economic model is not sustainable?

In order to bend the curve, we need to know what historical forces have shaped it. The report identifies the Industrial Revolution as the starting point of the rapid ecological deterioration of the Earth, but this historical phenomenon is neither an economic model nor can it be considered as the starting point of ecological degradation. The rapid deforestation of the Baltic countries for western European construction and shipbuilding, for example, began as early as the late Middle Ages. It was of structural importance for the economy of Holland, identified by the prominent economic historians Jan de Vries and Ad van der Woude as the “world’s first modern economy”.

It is the very long curve of global capitalism, spanning 600 years, which has created tremendous human progress but also unfathomable concentrations of power and wealth, which in turn have evoked heroic attempts to create better and more equitable worlds. On its march through history capitalism has shown an incredible adaptability, which in a way is good news because it might offer us the wiggle room to bend the curve towards a more equitable and ecologically responsible world. Any scenarios that can help us to do so require, however, a deep understanding of the history of capitalism that has drawn the shape of this curve.


Ulbe Bosma is Senior Researcher at the International Institute of Social History, in Amsterdam and Professor of History at Vrije Universiteit Amsterdam. He is the Coordinator of the Commodity Frontiers Initiative.
Op-Ed

The End of Naïve Europe, The Rise of Green Imperialism

Alberto Vázquez Ruiz

On 29 September 2020, the European Commission officially launched the European Raw Materials Alliance (ERMA), a publicly supported “industrial alliance dedicated to securing a sustainable supply of raw materials in Europe”. The announcement amounts to the firing of a starting pistol for a publicly-funded race to explore and extract mineral deposits outside the European Union and especially within its borders.

Previously, the EU only financed private mining and metallurgical companies under the pretext of improving technological innovation and market competition. Since the launch of Horizon 2020 in 2014, the Commission has assembled the institutional tools (e.g. EIT Raw Materials, the Partnership Instrument) to finance private technology developments inside the EU for exploration, exploitation and metallurgy. Horizon 2020 is ending this year, but its financing instruments will remain, although the justification of technological innovation seems no longer necessary.

Correspondence:
Alberto Vázquez Ruiz, alberto.vazquez@catapa.be

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“The era of a naïve Europe that solely relies on soft power is behind us.” With these words, Internal Market Commissioner, Thierry Breton, announced earlier this month the “EU action plan for critical raw materials.” This is the EC’s strategy for facing the consequences of the commercial war between the USA and China, embedded in the context of COVID-19.

While the COVID-19 pandemic has indeed created the perfect conditions for rallying support for this industry, it is well-known that resource extraction and its processing together represent 90% of biodiversity loss and water stress in the world.

What’s more, it is impossible for the EC to ignore last year’s report by the International Resources Panel (UNEP), which clearly warned humanity that metal extraction and production doubled health and climate change impacts from 2000 to 2015 solely. And today, mining and metallurgy already represent 20% of all health impacts from air pollution and more than a quarter of global carbon emissions. So why is the Commission making this change of course?

Behind the shift in position is the justification that “access to resources is a strategic security question for making the green and digital transformations a success”. Although the Commission claims to share the widespread willingness in Europe to combat climate change and leave no person and no place behind in the process, it openly calls for an increased mining boom which will reinforce pressing systemic problems on people and planet.

While green technologies are based on energy sources which are renewable, their machines are not. Generators for solar, eolic (wind), and tidal energy rely on metals (many metals if you consider off-grid technologies). The planned transition to a “green economy” without socio-economic restructuring that pushes for a drastic reduction in energy consumption will simply move us from an energy matrix based on the extraction and combustion of fossil fuels towards a loop of increasing extraction and processing of metals for the manufacturing of metal-based solutions.

It could be argued that a society based on metal-based technologies is a sustainable scenario, since we could recycle these elements in the future. But the reality is very far less rosy. The IRP-UNEP also warned us that “only 18 metals have recycling rates higher than 50%”. For the rare earths elements (REEs) needed in most green energy technologies, the recycling rate is 1%. What will happen in 30 years when today’s new renewable energy-generating machines are already obsolete and fossil fuels are no longer efficient for extraction? Mining, metallurgy and manufacturing industries are the biggest energy consumers. “What is happening today is nothing less than a massive PR campaign to sell the idea that mining is not only necessary, but it can also be sustainable,” said Nick Meynen, Policy officer at the European Environmental Bureau (EEB).

While the EC’s Action Plan does recognise the need to improve recycling rates and the importance of reinforcing the circular economy, it lacks a coherent set of proposals that could tackle the reasons behind low recycling rates and the slow implementation of a circular economy. There are no regulations for recyclability (including no restrictions for production, materials are mixed in a way that makes products poorly recyclable, but cheaper - it is not simply an end-of-use technological
issue), repairability (modularity in products and end of the monopoly on spare parts production) or reusability (plans on how to proceed with older machines).

Internal Market Commissioner Breton recognises that the “post-war world architecture is faltering.” The proposed treatment in the form of ERMA, however, seems to confuse the disease with the cure. Rather than rebuilding our strained political, economic, social, and ecological systems, ERMA will contribute to and even accelerate their decline by failing to recognize root causes. The Alliance and its action plans can be seen as both a symptom of political negligence, and a part of a more complex agenda towards green imperialism.

Europe has expressed its aim to become the green energy superpower. However, the quantity of minerals that the EC considers necessary for this future transition is extreme, even as global metal demand already increased by 87% from 1980 to 2008. “Critical raw materials” (a techno-political rebranding of the elements the EC considers necessary today) are increasingly demanded for batteries in electric vehicles, off-grid generation and storage, and other “green” uses. Fulfilling these resource demands is simply impossible without pushing social peace to its limits, inside and outside the EU.

As reported in 2018 by the International Institute for Sustainable Development (IISD), “the transition to a low-carbon economy - and the minerals and metals required to make that shift - could affect fragility, conflict and violence dynamics in mineral-rich states”. A similar and more straight-forward analysis was made by the EEB that year: “More mining leads to more fighting”. This is the reality that local communities and civil society organisations are facing all around the world. Global Witness has even named mining as the sector most responsible for the killing of land and environmental defenders across the globe. While this reality has been commonly associated with the Global South, the Due Diligence voluntary process supported by the EU to guarantee responsible sourcing of metals is far from being useful to avoid human rights violations.

Now, in the middle of the COVID-19 crisis, Europe seeks to compensate its weaker commercial share in raw materials, and to reinforce its aim to secure supplies, through insourcing. Breton mentions that the Action Plan seeks to “protect our democracies against the menace of disinformation”, but at the same time points out that the major barrier to developing insourcing is a lack of “public acceptance” in Europe to allow new mining projects. Therefore, many EC financed research projects have been looking for increasing “public acceptance” for this sector in local communities across the European Union affected by proposed and/or operating extractive projects.

There is still no democratic capacity for local communities and municipalities to makes decisions about allowing mining projects that will drastically change their land and very possibly leave tonnes of reactive waste in their wake. The discourse of the EC is that there is a lack of understanding of the mining sector by local communities and that there is a need to educate Europeans on the current reality of the mining sector (a false mantra by the sector is that the environmental issues of mining and metallurgy are a matter of the past). The discourse mixes the real needs of
our planet with the demand for resources enshrined in the Commission’s plans for an ominous green EU. Localities are asked to sacrifice their water, land, environments and people in service of Europe’s future.

“By building, today, the foundations of tomorrow’s autonomy, our Continent has the opportunity to **establish a set of rules, infrastructures and technologies that will make it a powerful Europe, without ostracism or discrimination**, states Breton. This sentence provides an insight into the future the Commission is constructing in Europe. A “powerful Europe” directed by the privileged few living in Europe’s main cities and enjoying access to green energy, but a nightmare of inequality for local communities around the world that will be negatively impacted by the increasing environmental, social and political issues on which the *Green Empire* will rely. To prevent this upcoming reality, many organisations today state **“We can’t mine our way out of the climate crisis”**.

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Alberto Vázquez Ruiz holds a MSc. in Conflict and Development (UGent, Belgium) and is specialized in topics related to mining and electronics. Since May 2018 he has been Project Coordinator at CATAPA (Belgium), researching on metal supply chains, on socio-environmental impacts of mining operations on local communities and on extractive waste in the EU.
Events and Announcements
Claudia Bernardi

This section aims to improve communications between initiatives, artists, activists, scholars, and research groups engaged in the study and politics of commodity frontiers. Here you will find the latest news recommended by people participating in the Commodity Frontiers Initiative.

The focus of this issue is mineral frontiers. Announcements below are for research schools, workshops, social movement calls for action, conferences, exhibitions, and calls for papers from various regions of our planet for fostering debate about mineral frontiers, extractivism, environmental humanities, ecologies, and other issues.

This is a first selection, and we would be happy to add further events on our website and in future volumes of Commodity Frontiers. Please send your announcements to Claudia Bernardi (clod.zeta@gmail.com) and Mindi Schneider (mindi.schneider@wur.nl), or contact us through the website, Twitter, or Facebook.

Correspondence:
Claudia Bernardi, clod.zeta@gmail.com

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Upcoming Workshops, Webinars, and Conferences
ETROD- Extractivism and Transition Research Online Dialogues
14/09/2020- 08/02/2020
CityIndustries. International Research Network

Several workshops and conferences bring together social science scholars to discuss, exchange and further develop research particularly on transition to post-carbon futures, resources, energy, infrastructures and extractivism.


Webinar Series “Towards a Responsible Supply Chain for Electronics. From Mining to Manufactory”
28/09/2020-02/10/2020
Make ICT Fair project

In three webinars, the different links of the ICT supply chain, from mineral extraction to manufacturing and assembly are analysed to stimulate an open discussion with the sector to achieve a fairer supply chain for electronic devices.


European Webinar on the Right to Say No! European Struggles and Successes
29/09/2020
CIDSE- Together for Global Justice

The Webinar series is a continuation of the work of the TSF in terms of consolidating a broad movement of resistance in order to build common struggles for solidarity.

https://www.cidse.org/?event=the-right-to-say-no-european-struggles-and-successes

Interdisciplinary Autumn Research School: Rethinking Extractivist Capitalism
10-18/10/2021
University of Bremen

The Autumn School will address the political economy of extractivist accumulation, its ecological and social implications, and questions of dissent, protest and resistance.

https://yisares.uni-bremen.de/

EXALT Symposium 2020. Extractivisms and Alternatives
21-23/10/2020
EXALT- Initiative
The event draws together diverse critical analyses of the phenomena of global extractivisms and the myriad alternatives pursued both in theory and practice.


Conference “Challenging Crops and Climates” - AHS conference 2021
2-5/06/2021

People have transformed environments to meet the demands of agricultural production through both private and state-sponsored actions. The Agricultural History Society encourages submissions that explore how farmers and other rural people wrestle with challenging and changing environments.

https://www.aghistorysociety.org/2021-meeting

Calls for Papers

CFP: Extractivism in the Americas working group: call for participants and paper proposals
Deadline: 15/10/2020

This working group provides a network to appraise the histories and legacies of neoextractivism in Latin America and the Caribbean. Our immediate aims are to organize panels for the 2021 Congress of the Canadian Association of Latin American and Caribbean Studies, and to produce a special edition of the Canadian Journal of Latin American and Caribbean Studies.

https://networks.h-net.org/node/23910/discussions/6447896/postextractivism-americas-working-group

CFP: Comparing the Copperbelt: Social History and Knowledge Production in Central Africa
Deadline: 15/10/2020
University of Oxford

The project aims to examine the Copperbelt (in both Zambia and the DR Congo) as a single region divided by a (post-)colonial border, across which flowed minerals, people and ideas.

http://copperbelt.history.ox.ac.uk/

CFP: Rethinking Tobacco History: Commodities, Empire and Agency in Global Perspective, 1780-1960
Deadline: 15/11/2020
University of Cologne

The conference will be held at the University of Cologne, December 1-4, 2021. We seek to have a good representation of women, scholars based in the Global South, postdocs, and doctoral candidates.
CFP: Routledge Handbook of the Digital Environmental Humanities
Deadline: 01/01/2021

DEH is empirically, critically and ethically engaged in exploring digitally mediated, visualized, and parsed framings of past, present and future environments, landscapes and cultures, as well as the ways in which these operate to produce scale, from the intimate and personal to the global and planetary.

Calls for Proposals
CfP: Unskewing the Data Value Chain – A Policy Research Project for Equitable Platform Economies
Deadline 20/10/2020

IT for Change seeks to collaborate with researchers and scholars working on issues of the digital economy and data governance in the Global South for our exciting new research project, ‘Unskewing the Data Value Chain – A Policy Research Project for Equitable Platform Economies’. Supported by the Omidyar Network, this project aims to generate high-quality, original, evidence-based research, and build a robust body of work to inform policymakers and practitioners and recommend policy directions for inclusive and equitable data value chains in the platform economy. Towards this, we seek to forge collaborations for research studies outside India* and build an interdisciplinary network of scholars and researchers in a cutting-edge policy domain. We will award up to seven grants of USD 13,500 each for a period of 12 months.

Vacancies and Residencies
Assistant/Associate Professor in Environmental Humanities
Deadline: 16/10/2020
Swarthmore College

We seek applications from scholars who foreground Indigeneity in their environmental research and whose work seeks to advance humanistic understandings of environmental challenges such as climate change, water and land access and governance, food sovereignty, and public health.
Assistant Professor
Deadline: 17/10/2020
Ashoka University

The Department of History at Ashoka University invites applications for full-time faculty positions. The positions are in Ancient History/Archaeology, Modern Indian History and Global History.
https://facultypositions.ashoka.edu.in/JD/History_JD_1st_September_2020.pdf

Residency Program
Art Explora – Cité Internationale des arts

The Art Explora Foundation together with Cité internationale des arts collaborate to co-construct a unique program for French and international artists and researchers. The first residency session will begin in March 2021.
https://artexplora.org/en/residency-program-art-explora-cite-internationale-des-arts/?fbclid=IwAR2haqNEExA6NsBiGwjc6duXZ4axldhy260IYbobVqXLpMHRN8gPge5eN8

Exhibitions
Raw Materials
Johann Jacobs Museum
Zurich, Switzerland

What is human history about if not the distribution of scarce resources? Entire epochs (think the Iron Age) are named after raw materials. And people are prepared to kill to secure sources of raw materials, we know that. Cocoa and the coffee are rife with nice and terrible stories. The same can be said of gold, crude oil, rubber and rare earths. Telling these stories is one thing. Being able to interpret them is another matter entirely. And yet that is exactly what our exhibitions aim to do: use raw materials as a guide for deciphering how our modern world works.

Other Announcements
Open Letter to European Commission from CSOs on Critical Raw Materials Plans
10/04/2020
Civil Society Organizations

A group of civil society organizations are coordinating a sign-on letter calling on the European Commission to change course on its proposed policies on mining raw materials critical for renewable energy. You can view the letter in the link below, and find information on the Yes to Life No to Mining global and EU groups.