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Les vies d'après de l'extraction

Las vidas después de la extracción

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1. Introduction

1 Debates around resource extraction, capitalism and development are situated within broader discussions about the relationship between economic growth and socio-environmental sustainability. On the one hand, proponents of the familiar developmentalist approach argue that extraction is a necessary precondition for socio-economic development and poverty reduction, and could be carried out in a socially and environmentally responsible manner. Recently, the mining industry adopted this narrative to position itself, which it has done successfully, at the centre of discussions around green transitions and sustainable futures, arguing persuasively that *more* rather than *less* mining is necessary to achieve decarbonisation goals while maintaining economic growth. Critics of extractivism, on the other hand, argue that environmental degradation, social inequality and human rights abuses are an inevitable consequence of resource extraction and perpetuate a system of accumulation that prioritises profits over people and the planet. Attempts to improve the purported 'sustainability' of mining operations, it is argued, are little more than 'greenwashing'.

2 These debates have taken on added urgency in recent years, as concerns about climate change and the limits of natural resources have come to the fore. There is now growing recognition that the current model of economic development based on fossil fuels and

resource extraction is not sustainable in the long term and that alternative models of development are needed. These alternative models of development prioritise social equity, environmental sustainability, and the well-being of people and communities over the interests of multinational corporations and global capital. More radical proposals, however, critique these 'alternative models *of* development' and argue instead for 'alternatives *to* development'. Gudynas, for example, argues that alternative models are locked into and operate within the dominant development logic. These models call for minor adjustments here and there, be it reducing harm, improving societal contributions, or the inclusion of those previously excluded. 'Alternatives *to* development', meanwhile, critique the development logic and its institutions altogether, advocating instead for 'radically different strategies, based on other ideological foundations' (Gudynas, 2013,169).

3 As we engage with these critical debates, several questions emerge that speak to the complex and contested nature of extraction and its afterlives: Is the move towards responsible extraction accompanied by a new politics of resistance? Can the predatory logic of extractivism be reformed to maintain only those activities necessary for the reproduction of life and not the extraction of natural resources for profit, or would such concessions require the fundamental alteration of processes of resource extraction? Are different modes of extraction possible within current structures of production and accumulation? Can extraction be decolonised? And what could post-extractivist futures look like?

4 Social scientists have contributed to these debates by offering critical analyses of the social, cultural and political dimensions of resource extraction and by documenting the impacts of extraction on local communities, cultures and environments. Through a study of the power relations and political processes that shape resource extraction and its impacts, these scholars have also highlighted the agency and resistance of communities and social movements that seek to challenge the dominant model of resource extraction and to advocate for alternative models of development that prioritise social and environmental justice. In the current moment, when technical solutions for decarbonisation, mining electrification, and the digitalisation of mineral supply chains are being developed, a sociocultural perspective on these challenges and opportunities is more important than ever.

5 This volume of *International Development Policy* on the lives and afterlives of extraction focuses on landscapes, economies and practices of post-extractivism. Our use of 'afterlives' and 'post-extraction' in this, the second volume does not imply a complete departure from the themes explored in the first volume, such as community, identity, and social reproduction. Nor does it necessarily imply a neat teleological temporal conception of 'phases' of extraction. Instead, we view these phases and themes as entangled with and integral to the larger debates on the lives and afterlives of extraction, and seek to build on the critical insights offered in the first volume by exploring alternative pathways for development and sustainable futures. Where the first volume asked how people are involved in, impacted by, and responsive to extractive processes, the second volume asks how the logic of extractivism persists—and is resisted—as the contested futures of extraction continue to unfold. Taken together, the two volumes show how the pasts, presents and futures of mining, the spaces and places of extraction, and the logics of extractivism and anti-extractivism are invariably mediated by politics that transect spatial and temporal scales. In what

follows, we briefly situate the vigorous debate around extractive capitalism and extractivism, and industry approaches to sustainability and responsibility, before presenting conclusions on alternative pathways for life beyond extractivism.

2. Extractive Capitalism

6 The neo-liberal reforms that followed structural adjustment programmes in Africa in the 1970s and 1980s and the Latin American debt crisis in the 1990s opened economic sectors across the global South to increased private and foreign participation. In Latin America in particular, the fast-paced growth of the Chinese economy created a commodities super-cycle that hampered industrialisation. In response, national governments expanded and deepened industrialisation efforts based on resource extraction, causing a 're-primarisation' of Latin American economies in what has been described as a shift from the 'Washington Consensus' to the 'Commodities Consensus' (Svampa, 2015). The development model implemented by various Latin American 'post–neo-liberal' governments in the early twenty-first century, known as 'neo-extractivism', increased dependency on international commodity markets, foreign currency and transnational corporations, whereas the state would be assigned the role of a mere regulator of extractive activities, with responsibilities for capturing resource rents (Acosta, 2013; Burchardt and Dietz, 2014). The economic development policies that buttressed resource nationalism across the continent in turn provoked fierce contestation from anti-extractive and Indigenous movements (Riofrancos, 2020).

7 Against this backdrop, extractive activities have intensified and expanded across the world. Extraction has been described as 'any form of economic activity that relies on or benefits from resources or relations that are external to it' (Mezzadra and Neilson, 2019, 134), commonly denoting the appropriation of natural and human resources for profit, often with little to no regard for the social and environmental impacts of these practices, at a high volume and intensity with little or no processing and mainly geared towards exports (Gudynas, 2018; Pereira and Tsikata, 2021; Ye et al., 2020). It conventionally operates by appropriating lands and resources and women's social reproductive forces, and disproportionately impacts Indigenous peoples, Black communities, and people of colour, who are all subject to displacement, dispossession, and environmental degradation. This highlights the need for intersectional approaches to both extractivism and resistance to it (Hernández Reyes, 2019).

8 The long-standing interdisciplinary literature on resource extraction has sought to broaden its conceptual purview and empirical horizon by questioning resource extraction's underlying patterns, logics and systematicity. In so doing, scholars have examined how the inherent violence, injustice and inequality of capitalism as an extractive regime structurally sustains its operations and permeates its exploitative logics. This system of value extraction is historically indebted to colonial and plantation economies and to contemporary imperialist projects, or the ways in which capitalism has been and continues to be shaped by racial hierarchies and inequalities (Appel, 2019). 'Racial extractivism' (Preston, 2017) perpetuates forms of violent white settler colonialism, imperialism and logics of modernity that attempt to erase Indigenous jurisdiction, government and life itself. The systemic and structural nature of the problems associated with both extractive capitalism and racial capitalism are most apparent at the sites where they intersect.

9 Likewise, new propositions around the concept of extractivism (oftentimes pluralised to denote the diverse forms it can take and the diverse processes and impacts involved) define it as a widespread modality of capital accumulation, characterised by dispossession, heightened value extraction and planetary spatial reach (Arboleda, 2020; Nygren et al., 2022; see Post, this volume, for a more comprehensive overview of these debates and the co-extensive duality of capitalism and extractivism). Chagnon et al. (2022, 762) define extractivism as an 'organizing concept' that 'arranges and synthesizes a body of knowledge to serve as the basis for progressive interventions', reflecting the emergence of global extractivism as a way of organising life. For Mezzadra and Neilson (2019), extractive logics appear to be spreading to other realms of capitalist activity, leading some to argue that capitalism has entered a new stage of extractivism and giving rise to a plethora of plural 'extractivisms': financial, intellectual, digital, or green, to name only a few. Indeed, as several contributions to this volume demonstrate, both the logic of extractivism and efforts to resist it have spread far beyond the confines of more conventional extractive zones to enter what Watts (2021) calls an age of 'hyper-extractivism'.

10 In order to facilitate the superseding of extractivism, this volume strives to clarify some of the analytical muddiness associated with the concept. As important as these conceptual debates are, however, the remainder of this introduction focuses on specific pathways being carved out by the extractive industry to shield itself from criticism, and on the delineation of an alternative programme for a post-extractivist world.

3. Extractivism and Sustainability

11 As humans become a new geological force to be reckoned with in the Anthropocene (Chakrabarty, 2021), the need for sustainable alternatives to extractivism is more urgent than ever. Sustainability and extractivism are often at odds with each other, and with good reason: the social and environmental impact of extractive industries has been amply documented (see chapter 1 in Calvão, Archer and Benya, 2023). For its detractors, sustainable mining is a strategic ploy that inadvertently generates new conflicts, human vulnerabilities and environmental degradation, even as it seeks to mitigate the effects of extractivism or develop new sustainable alternatives. In diverse contexts, anthropologists and political ecologists have shown how corporate social responsibility and corporate sustainability initiatives often contribute to the entrenchment of corporate rule, particularly vis-à-vis dispersed, less organised workers such as artisanal miners, and the communities they inhabit (Welker, 2014; Calvão, Mcdonald and Bolay, 2021). For some, the very idea of environmentally and socially responsible extractive industries is an oxymoron (Benson and Kirsch, 2010). Notwithstanding, the field of sustainable and responsible initiatives has gained prominence in the extractive landscape to preclude potential criticism, warranting its closer scrutiny.

12 Critical work on transparency and traceability initiatives in particular has shown how purported efforts to enhance the visibility of minerals and other globally traded commodities as they move from sites of extraction through sites of processing and exchange often generate new spaces of opacity and reinforce the value-extracting potential of multinational corporations (Calvão and Archer, 2021; Thylstrup et al., 2022). Under the guise of ethics or responsibility, accountability or transparency,

approaches to sustainability and sustainable development in the extractive sector have spurred important conversations in both policy and academic circles. Is it possible to leverage mining for sustainable development, or to conceive of truly sustainable and socially responsible action within the horizon of the contemporary economic model of production? Can we have impactful action without significant structural transformations at the political and economic levels?

13 As we understand it, sustainable development must always acknowledge the historically imbricated structural and systemic inequality of the current political–economic model. We also seek to identify the blind spots and potential structural gaps associated with programmes, initiatives and discourses of sustainability—namely in the following three areas: ethical commodities, certification initiatives, and corporate governance.

14 The emergence of a global 'register of responsibility' in the field of ethical consumption (Barnett et al., 2011, 2) is best illustrated by what James Carrier (2010) calls 'ethical commodities', or material objects infused with value-producing moral attributes rendered legible as 'ethical'. Consumers become arbiters capable of distinguishing between objects with seemingly identical properties, where one has verifiable standards ensuring respect for certain ethical qualities, of which 'conflict-free' diamonds is perhaps the most widely and arguably successful case (Bell, 2023; Calvão, 2020). Notwithstanding, the ethical label offers limited avenues for actual social change, and fails to address the structural dimensions of human insecurity or environmental destruction.

15 This consumer legibility is often achieved through certification practices, whereby an independently accredited entity validates the ethical qualities it seeks to make transparent. Over the last two decades, certification regimes have become an industry in their own right, mobilising trade organisations, certification management organisations, and, increasingly, due diligence and traceability mechanisms. And yet traceability and certification regimes presuppose an unbroken chain from producer to consumer where a product can retain its 'ethicality' within a system of economic and social relations that actively reproduces existing power relations. New, digital-based solutions for certification and traceability, including the implementation of blockchain-based traceability and tracking initiatives, are presented as an alternative to paper-based forms of certification. These are aimed at disintermediating the certification process by creating alternative modalities for data input and management, although informational asymmetries emerge among participants in the supply chain, often reinforcing already existing exclusionary practices (Calvão and Archer, 2021) to the detriment of an 'ethics of invisibility' aspired to by some as an alternative to colonial forms of predation, as in the case of Congolese 'digital miners' (Smith, 2021, 27).

16 Corporations have been commonly associated with the implementation of sustainability programmes, from corporate social responsibility (CSR) initiatives to the more recent environmental, social and corporate governance (ESG) framework. With the support of proponents of so-called philanthro-capitalism and benefit sharing arrangements, the business case for corporate responsibility has gathered support by extending economic value to social welfare and sustainability. By the same token, its critics argue that the power of corporations should be curtailed rather than extended into new arenas of economic and social life often at the expense of the state's responsibilities. We see CSR as integral to an emergent 'ethical' capitalism, but not as

dissociated from other corporate social technologies of coercion, co-option and control (Kirsch, 2014; Welker, 2014; Verweijen and Dunlap, 2021; Frederiksen and Himley, 2019). Rather than seeing CSR as the silver bullet for underdevelopment, we follow research that seeks to understand how corporate power is exercised through CSR programmes and what is the corporate vision of progress, sustainability and development underpinning such initiatives.

17 Finally, the ESG framework—environmental, social and (corporate) governance—has emerged as a financial response with which to remedy some of the woes in the extractive industries. For fund managers and investment companies, a financial product packaged around the idea of 'doing good' now offers a plausible alternative to the costs – financial or other – of doing 'bad' or non-sustainable business. Yet, these ESG products still comprise only a tiny fraction of the total capital invested in private equity, and it is far from consensual that the problems in the sector can be addressed within the horizon of these financial mechanisms, let alone that the responsibility for sustainable investment should be assigned to Wall Street executives. Proponents of the power of ESG (and of finance more broadly) as a force for good in the context of global sustainability claim that various indices and ratings of companies' ESG performance allow investors to account for reputational, regulatory and other risks, especially in 'dirty' businesses like mining. In effect, however, a focus on ESG allows investors to justify their continued support for extractive, carbon- and pollution-intensive industries while enhancing their own power over the invested firms, shifting the terms of the conversation around sustainability from social and environmental risks to a concern with the extent to which these risks 'translate' to financial risks for investors themselves (Archer, 2022). In our understanding, the growing focus on ESG in the context of extractive industries reveals the naked truth of the oxymoronic relationship between (moral) purpose and profit, and may offer only a limited solution to a problem that requires a far more muscular intervention.

4. Whose Responsibility, for What?

18 In addition to these sustainability initiatives, mineral supply chains have been differently codified in terms of standards, legal frameworks and guidelines, in a precipitous rush for 'responsible' schemes. The dual effect of the increased complexity of this regulatory landscape and the fragmented nature of the field of voluntary initiatives raises important questions regarding the inevitable overlap between standards, the lack of clarity on their purpose and scope, and the extent to which these corporate-led 'technical fixes' (Le Billon and Spiegel, 2022) may serve to render opaque problems of unequal wealth distribution and of labour or environmental exploitation.

19 These initiatives coalesce around due diligence mechanisms and responsible sourcing programmes. With the Voluntary Principles on Security and Human Rights, established in 2000, extractive companies sought to institutionalise human rights due diligence mechanisms. Through modes of interpellation, disclosure and mitigation—mostly focused on human rights violations—due diligence was eventually extended to the entirety of mineral supply chains with the rise of conflict minerals. The Organisation for Economic Co-operation and Development (OECD) Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, first launched in 2010 with subsequent later editions in 2013 and 2016, operationalised a due

diligence framework, in what was to become a foundational moment for responsible sourcing within licit production networks. Though fundamental, the OECD guidance offers only an open and voluntary framework, but it has been complemented with other initiatives with regulatory force, from the US Dodd–Frank Act (2010) to the European Union's Conflict Minerals Regulation (2021), each correspondingly drawing from international law agreements, from the International Labour Organization's Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy (1977) to the UN Guiding Principles on Business and Human Rights (2011).

20 For some, these regulations are toothless in the face of the overwhelming task at hand. These due diligence mandates and guidelines are mostly operationalised through voluntary adherence to their principles—when not developed by corporate standards—and remain contingent upon their specific target commodity, region or segment of the supply chain. If subject to compliance, accreditation and external verification procedures, these responsibility initiatives and standards still represent a form of self-legitimacy in the eyes of consumers, while overlooking environmental dimensions not addressed in most existing dimensions. More broadly, if increased transparency is assumed to enhance accountability, the exclusionary effects of (digital) data production become more prominent in the critical discussion over the distribution of benefits and costs along the extractive process.

21 Aside from abiding by—and at times embracing—a growing body of standards and regulations, the mining industry has pre-emptively sought to 'offset' its most direct environmental harms, often reinforcing the influence of major multinational corporations in the process. Biodiversity offsetting schemes in an 'extraction–conservation nexus' (Le Billon, 2021) attempt to compensate for biodiversity loss in one place by protecting biodiversity somewhere else, essentially granting mining companies a license to destroy vulnerable habitats as long as they channel a negligible amount of money towards these purported offsets (Seagle, 2012; Brock, 2020). Apart from the mind-boggling 'logic' of such schemes, recent work has highlighted the way these offsetting mechanisms add yet another layer of dispossession and land grabbing (Kill et al., 2016; Bidaud et al., 2018).

5. Greening Extractivism for the 'Clean' Energy Transition: Mining the Future

22 Extractivism is marked by a range of temporalities, expectations and futures. These include predictions and orientations towards past and future resource booms and busts, as well as the ways in which different actors anticipate future resource needs and scarcities. One of the key ways in which extraction is situated in dominant visions of a sustainable future—paradoxically, according to many critics—is as a necessity rather than a hindrance. Organisations such as the International Energy Agency and the European Commission anticipate significant increases in the amount of rare earth elements and other metals and minerals required to meet the rising 'clean' energy demand seen as necessary for the green transition.

23 This apparent contradiction, referred to as 'green extractivism' by a growing number of scholars (Bruna, 2023; Voskoboynik and Andreucci, 2021), has emerged as a defining feature of contemporary discussions around sustainability and sustainable

development. The notion of green extractivism highlights the persistence of both extractivism as an ideology and extraction as a resource-intensive practice of removing non-renewable resources from the earth, highlighting how technological and spatial fixes to global sustainability threaten to reproduce and even extend the long colonial shadows of extraction into the future (Jerez and Garces, 2021). Green extractivism perpetuates and expands so-called extractive zones and land grabbing across Indigenous lands in particular (Dunlap, 2019).

24 One important stepping stone towards the energy transition has been the adoption of new technologies capable of holding true to the promise of that transition while fostering the expansion of new extractive frontiers, from the depths of deep-sea mining to so-called rare earth elements (Klinger, 2017). Electrification, automation and digitalisation have become integral to mining operations, with various case studies highlighting the use of these technologies, from fully automated electric truck fleets and drilling operations to data analytics, remote operations, digital sensors, asset tracking, blockchain technology and drone mapping (Bellamy and Pravica, 2011; Ellem, 2015; Dadhich, Bodin and Andersson, 2016; Calvão and Gronwald, 2019; Kiziroglou et al., 2017). Sensors and sensing technology are playing a significant role in mining operations by analysing and modeling different variables in real time, helping detect potential spillages and breakdowns in shafts, or other hazards (Ralston et al., 2014). These real-time monitoring sensors are meant to protect workers and prevent accidents, despite troublesome surveillance and privacy concerns. Algorithms have also become integral to sourcing minerals, in part given declining ore grades and a decrease in mineral deposit discovery rates (Kaplan and Topal, 2020). From machine learning techniques to 3D models to optimise ore control, digital software solutions are now part and parcel of exploration and geologic settings. In yet another pivotal development, some critical minerals such as graphite or, more commonly, gemstones such as diamonds can be fully produced in specialised laboratories, away from nature (Ali, 2017; Calvão and Bell, 2021). These developments are, as it were, also a key component of the mining industry's claim that it is becoming more responsible—a claim often employed in the face of criticisms that more mining is specious in the context of sustainable development—since they improve the lives of workers by making extractive processes safer and more efficient.

25 The rise of these digital technologies introduces a range of new challenges and opportunities. On the one hand, they can enable greater precision in mining operations, reducing waste and minimising the environmental impact of extractive activities. They can also provide new opportunities for data collection and analysis, potentially leading to more informed and sustainable decision-making (Cosbey, 2016). However, digital mining also raises questions about the ownership and control of data, the potential for increased surveillance and control over workers, and the potential for the continued exploitation of natural resources. With these technologies, there is an accentuated expansion of new resource frontiers, as new mineral deposits become reachable by robotised and remote-controlled machines, reproducing old patterns of accumulation and dispossession, oftentimes in the name of the 'green transition'.

26 In these different instances, automation and digitalisation are presented as twin pathways to increased efficiency, safety and productivity in mining operations, despite diminishing job availability and, importantly from the industry standpoint, the risk of labour strife. More broadly, these innovations would seem to anticipate a future that

seeks to partially replace human labour with intelligent machines, and, in the case of digital solutions, with intermediaries with unmediated accountability. The consequences of these transformations, and the ulterior motive of the reduction in what is after all the most 'tangible benefit' for communities in the vicinity of extractive operations—waged labour—warrant reflection, and a novel conceptualisation of the emergent relationship entangling humans and machines, material and digital processes, and synthetic and natural resources (Calvão, Bolay and Bell, 2021). In other words, these transformations question the very role of nature in largely synthetic and artificial processes, and the various political, epistemological, ecological and social conditions underpinning a future that looks like it will be increasingly defined by the emergence of synthetic products, digital technologies and autonomous machines.

6. Alternatives: Decoloniality, Degrowth, Resistance

27 The first step towards an alternative post-extractivist world entails undoing a pattern of exploitation resting on inequality, violence, and dispossession, or what Anibal Quijano (2000) calls the 'colonial matrix of power'. Developing his critique of the 'European paradigm of rationality/modernity', Quijano calls for this epistemic delinking by pointing out the need 'to extricate oneself from the linkages between rationality/modernity and coloniality, first of all, and definitely from all power which is not constituted by free decisions made by free people' (2007, 171). The framework of decoloniality, drawing from the original impulses of Caribbean intellectuals and later expanded by Latin American scholars (Mignolo and Escobar, 2009; Mignolo and Walsh, 2018), has gained widespread traction in the critique of extractive capitalism (Murrey and Jackson, 2019; Yusoff, 2018; Gómez-Barris, 2017).

28 Race, like gender, is one central vector by which this colonial matrix of power operates. It is widely recognised that capitalism is shaped and maintained by specific articulations of race and gender. As such, race and gender are integral to the extraction of value from people and the environment (Robinson, 1983; Tilley and Shilliam, 2021). Despite formal decolonisation in the mid-twentieth century, the hierarchies of power that structured colonial forms of domination have not subsided. For Nelson Maldonado-Torres (2007, 243), coloniality 'refers to long-standing patterns of power that emerged as a result of colonialism, but that define culture, labour, intersubjective relations, and knowledge production well beyond the strict limits of colonial administrations', impacting at once logics of economic extraction and knowledge structures. The crisis of the neo-liberal model, in Artur Escobar's (2007) 'modernity/coloniality research program', has fundamentally paved the way for imagining a new post-moment, be it of development, capital, or extraction.

29 This decolonial turn calls, first, for a moment of 'epistemic disobedience' (Mignolo, 2011) that breaks with the historical amnesia and silences (Trouillot, 1995) imposed by Euro-modernity and its structures of power. This includes practices of 'localwashing'—akin to 'greenwashing'—by corporate extractive actors as they seek to accrue legitimacy in the process of erasing, racialising, and making invisible the violence of appropriation, displacement and extraction (Murrey and Jackson, 2019). Second, this project involves developing a decolonisation programme that fosters alternatives conceived as the 'radical deconstruction of the cultural base of development' (Gudynas, 2011, 442).

30 For the extractive industries, as shown in many of the chapters in both of the present volumes (Calvão, Archer and Benya, 2023 and this volume), this would involve recognising and respecting Indigenous sovereignty and self-determination, significant structural and systemic changes, and addressing the historical and ongoing harms caused by extractive activities. The return of land and resources to local communities, the recognition of local and Indigenous knowledge and governance systems, or the establishment of alternative economic models that prioritise the well-being of local communities and environmental sustainability would be possible pathways in the decolonial programme. In that regard, a decolonial critique has been productively deployed to question existing power relations and reaffirm a sense of place by setting a new framework for environmental and energy justice (Tornel, 2022; for a critique of environmental justice, see Dunlap, this volume).

31 A post-extractivist degrowth approach holds the potential of challenging the dominant paradigm of neo-liberal capitalism and its reliance on extractivism for economic growth by offering alternative pathways towards more sustainable and equitable modes of production and consumption. Degrowth advocates a deliberate contraction of economies, particularly in the global North, to reduce resource use and prioritise social and ecological well-being over economic growth (see Gezon and Paulson (2017) for a review). This means adopting a post-extractivist focus beyond extractivism as the primary driver of development and promoting alternative forms of production and governance that prioritise social and environmental sustainability (Escobar, 2015). Degrowth strategies, however, come with their own limitations—namely the exacerbation of existing global inequalities (Huber, 2022). As Jason Hickel recently pointed out in his call for an 'anti-colonial politics of degrowth' (2021), what lies ahead —and is no small task—entails reconciling eco-socialism with anti-imperialism, degrowth with class politics.

32 However, the feasibility and potential impact of these alternative approaches remain contested, particularly within the context of the current global economic system, and the present volume contributes to the reconsidering of resistance from a decolonial, post-extractivist perspective. Certainly, protest and resistance movements opposed to extractivism have gained visibility and prominence throughout the world. In some instances, particularly in Latin America, notions of *buen vivir* (*Sumak kawsay* in the original Quechua formulation, or *Suma Qamaña* in Aymara, often reduced to its simpler denotation of living well or good living) have informed state and social policies and directly contributed to the vitality of social movements. In 2008 and 2009, respectively, the constitutions of Ecuador and Bolivia adopted the principles of *buen vivir* (Gudynas, 2011), with the former recognising the rights of nature. And yet the effects of this adoption—and the risks of the 'metaphorization of decolonization' (Tuck and Yang, 2012)—are not without shortcomings that call for reflection by researchers and activists alike.

33 First, the constitutional inscription of these ethical and social principles, and the support of grassroots anti-extraction movements and Indigenous communities for progressive governments in Latin America, did not signify the end of state-led resource nationalism policies. In fact, as Thea Riofrancos suggests for Ecuador (2017, 11), the 'transition from neoliberalism to a new, post-neoliberal version of resource nationalism was not a total rupture with prevailing power structures'. Instead, this strategic adoption of radically critical and plural epistemic traditions laid bare the firm

establishment of extractivist principles and the difficulty of superseding them in the existing socio-economic order. In some cases, again in Ecuador, these principles of *buen vivir* are deployed to justify development initiatives in direct opposition to the well-being of Indigenous communities. For the Amazonian Waorani nation, according to Bravo Díaz (2021), development infrastructures associated with oil extraction recast *Sumak kawsay* as 'harmful'. As extractive actors reposition themselves at the forefront of a sustainable transition to a low-carbon economy, it bears remembering that similar strategies may be deployed to oppose anti-extractive movements and justify expanded extractive activities.

34 Second, there is oftentimes an underlying expectation that all Indigenous peoples ought to resist extractivism, at the risk of not being 'properly' Indigenous or defenders of nature and sustainable ecological livelihoods if they do not. For myriad reasons—including jobs and tangible material benefits—consent, rather than resistance, can at times be the chosen pathway for Indigenous communities, and is not always at odds with the commoditisation of value (see Babidge (2016) for a discussion of the 'indigenous ethics of resources' in light of the contested value of water in the Atacama desert). Researchers and activists risk instrumentalising and essentialising Indigenous world views in the name of an idealised view of what their legitimate concerns should be. In the process, anti-extractivist positions may be blind to more subtle renditions of the divide between support for and opposition to extractivism. In Michael Cepek's (2016 633) 'cautionary tale for advocates of indigenous struggles', there are limits to the imposition of a cosmological view for the purpose of political action, regardless of how righteous said positions may be. In fact, he argues, turning 'Cofán [Amazonian people] anti-oil activism into a cosmopolitical war for the coancoans' well-being would carry significant risks[1]'—namely, limiting and delegitimising the possibility of pursuing a politically engaged alliance between communities and activists. These are important lessons to retain as social movements across the world seek to mobilise new energy to craft expanded alliances against extractivism (see Hamilton and Trölenberg, Prause, and Gilbert, this volume).

7. Chapter Overview

35 The volume is organised into three sections, each unfolding different aspects of the afterlives of extraction and exploring various alternatives and possibilities for the future. The first section, 'Post-extractivism: Debates and Practices', critically engages with the concept of post-extractivism and the various political, economic and social practices that emerge in the aftermath of extraction. The underlying question is tied to the (im)possibility, within existing structures of production and accumulation, of alternative models of extractivism that prioritise social and environmental sustainability. While resource efficiency, circular economies and alternative ownership models could offer plausible—and potentially palliative—measures, the existing structures of production and accumulation are deeply entrenched in profit and growth interests that trump sustainability and equity, which will inevitably condition the feasibility of these alternative models.

36 Erik Post opens the volume with a wide-ranging analysis of the plural and often contested notion of 'extractivisms', tracing its genealogy from the specific context of the exploitation of Latin American natural resources to the more recent—but very

clearly related—debates around 'clean' and 'renewable' energy. In doing so, Post theorises extractivisms as 'modes of extraction' facilitating the exploitation of mineral and energy resources that are fundamental to the reinforcement of an 'imperial mode of living' wherein the structures of everyday life are reliant on an exploitative relationship with both labour and the natural world. His analysis yields a complex understanding of extractivisms as deeply entangled with capitalism, even if the two are not, to use Post's phrasing, 'coterminous'.

37 In a critical examination of green growth and its chameleonic ability to camouflage itself within apparently different discourses, Alexander Dunlap questions the extent to which 'justice' remains a useful analytic with which to critically theorise and contest the ever-expanding logic of extractivism. He observes that the ambiguity of the notion of 'environmental justice' has enabled its co-option by actors perpetuating modernist visions of development that remain deeply committed to growth. Like Post, Dunlap pushes us to consider the substantial overlaps between industrialism, capitalism and extractivism, calling for renewed attention to be paid to the structural factors undermining both the notion and the pursuit of environmental justice. Dunlap argues that large-scale mining and infrastructure projects, including—and perhaps especially—those labelled necessary for the so-called green transition, perpetuate violence against Indigenous people and other groups that are often marginalised, often to an extent that is essentially indistinguishable from the more blatant instances of violence that mining companies and other multinational corporations inflict.

38 Shifting away from these expansive theoretical concerns, Ryan Parsons offers a detailed ethnographic analysis of what happens after the mining industry leaves a particular area, focusing on a town surrounded by increasingly defunct iron ore mines. His account resonates with the concerns raised by Post and Dunlap, showing how post-extraction does not necessarily mean post-extractivism and signalling an important distinction present in both volumes of this double volume—that between extraction as a set of practices and extractivism as a political–ideological approach to the exploitation of resources, natural or otherwise. In this village in Yunnan, which has now come to rely on tourism to support its population, Parsons shows how local cultural practices quickly took the place of iron ore as an exploitable resource, reproducing the logic of extractivism in the assumption that 'peripheral' cultures are there to be commodified and consumed by relatively well-off people living in the 'core'.

39 Emille Boulot and Ben Collins find a similar tension between post-extraction and post-extractivism. In their comparative analysis of mine closures on Indigenous lands in Australia and Canada, they argue that even extensive legal frameworks for the closure and rehabilitation of mining sites are insufficient without the active participation and ownership of Indigenous peoples. Importantly, they suggest, legislation often pertains only to environmental indicators, with little regard for the social, cultural and economic afterlives of polluted mine sites, or the Indigenous people inhabiting them.

40 The second section, 'Resilience, Contestation and Resistance', explores the strategies that communities, social movements and organisations use to resist extractivism and create alternative pathways for development, demonstrating the value of a comparative approach in particular. This section speaks to the tension between the growing calls for responsible extraction and the resistance movements that have emerged in response to the harms caused by extractive industries. While some argue that responsible extraction can be achieved through technological and regulatory

means, others contend that true responsibility can only be achieved through a fundamental shift in the politics and power dynamics underlying extractive industries. This includes giving voice and agency to affected communities, respecting Indigenous land rights, and promoting alternative economic models that prioritise environmental and social sustainability.

41 Simon Lobach's chapter offers an important cautionary tale of resource extraction failing to deliver on its promise of modernity and development, and of the limits to formal decolonisation when one disregards human, social, and environmental contexts. The chapter meticulously examines the complex history of Suriname's bauxite and aluminium sector, and the country's industrialisation efforts with regard to bauxite mining and hydroelectricity generation. Suriname was the world's main exporter of bauxite in the 1940s, but the chapter sheds light on the confluence of technical, economic, political and social factors leading to the withdrawal of foreign investors and the demise of the country's project of bringing the entirety of the bauxite–alumina–aluminium value chain to Suriname. This post-extractive 'aluminium landscape', Lobach suggests, requires that attention be paid to the consequences of industrialisation efforts that disregarded the livelihoods and well-being of local Maroon communities, be it through displacement, environmental damage, or political violence, all of which persisted beyond the original bauxite boom.

42 Dorothea Hamilton and Sina Trölenberg examine protests against the felling of 85 hectares of forest in central Germany, which they interpret through the lens of 'contested extractivism'. Alongside rich empirical evidence of the protesters' complex and diverse relationships with the forest they were trying to protect, Hamilton and Trölenberg contribute to our understanding of anti-extractivism by probing the limits of the notion of extractivism's applicability outside the specific Latin American mining context from which it emerged. They argue that the felling of trees to build an *autobahn* between industrial centres in Western Europe is also an example of extractivism and that through engaging with theories of the 'good life' that are fundamental to anti-extractivism in Latin America, commonalities between geographically dispersed anti-extractivist activities and post-extractivist imaginaries start to cohere.

43 Where Hamilton and Trölenberg compare anti-extractivist protests in German forests to anti-extractivist movements around mining sites in Latin America, Luisa Prause examines a case where the distinct modes of extractivism associated with mining and with industrial agriculture overlap. In Senegal, those seeking better working conditions in either the agricultural or the mining sector often have similar goals to one another and even employ similar strategies. They also face comparable threats from extractivist development projects. There are differences, however—namely, the distinct temporalities of the impact of mining and of industrial agriculture on land, as well as the different laws regulating these industries. Prause finds that these differences make coalition building between the two sectors difficult, and calls for critical attention to be paid to the differences between modes of extractivism—even as the idea that 'everything is extractivism' grows in popularity—in order to understand the diverse ways people might resist their logics.

44 Through his analysis of resistance to coal mining and both offshore and onshore gas exploration in Bangladesh, Paul Robert Gilbert shows how different priorities can lead to similar forms of resistance. While some oppose the extraction of hydrocarbons because of concerns around climate change and land tenure, others (namely resource

nationalists) are less concerned about the social and environmental impacts of extraction than what they perceive as the exploitation of Bangladesh's resources by foreign corporations. Gilbert's account highlights a key facet of extractivism, the extraction of a resource in one place for the benefit of people living in a different place, marking an important distinction between extractivism as a logic (which, from the perspective of some global or local 'centre' views the 'periphery' as a source of raw materials) and extraction as a practice.

45 Finally, the third section, '"Green" Extractivism and Its Discontents', interrogates the growing trend of 'green' extractivism and the contradictions and tensions inherent in the promotion of natural resource extraction as a means to transition to a low-carbon economy. Taken together, these authors offer critical insights into the complex and paradoxical relationship between extractive industries and the future of sustainability and climate change mitigation driven by the imperatives of more 'green' extraction.

46 James Blair, Ramón Balcázar, Javiera Barandiarán and Amanda Maxwell examine the mineral most commonly associated with the green transition: lithium. Deploying and developing the notion of 'alterlives', they show how brine evaporation in the Puna de Atacama affects the lives of Indigenous people in particular, but also plant and animal life, not only at the sites of extraction but both upstream and downstream in the lithium supply chain, where chemicals are manufactured and where they pollute surrounding environments for generations. Having expounded what they refer to as the 'alterlives of green extractivism', Blair and co-authors helpfully indicate several directions in which policies to address these inequities might move, from integrating Indigenous knowledge and science into the environmental monitoring framework to a precautionary moratorium on brine evaporation.

47 Michelle Pressend similarly problematises the ostensible benefits of the 'green' energy transition. Through extensive fieldwork, she shows how a community in South Africa's Eastern Cape, despite its early and largely enthusiastic embracing of wind energy, has failed to profit from the material benefits of the green transition and the promises of the renewable energy technological 'fix'. This is due, in part, to the fact that so-called clean energy developments do little to address the underlying structures of exclusion and dispossession that are fundamental to neo-liberal development. Despite their land being expropriated for the installation of windmills, members of the community Pressend studies are unable to access the energy those windmills produce, which remains prohibitively expensive.

48 Finally, through a case study of the global supply chains of the raw materials necessary for Norway's celebrated embrace of electric vehicles (EVs), Devyn Remme, Siddharth Sareen, Håvard Haarstad and Kjetil Rommetveitand probe the tension between 'sustainability' efforts in the global North and the extractivist logic that such efforts reproduce and rely on in their orientation with regard to the global South. It might come as no surprise that a petro state like Norway externalises the social and environmental impacts of its relatively sparse population's welfare. However, in advocating a global value chains approach to this complex relationship, Remme and co-authors offer a way of organising critical analyses of green extractivism around both the nodes that constitute global value chains and the way these nodes relate to one another.

49 By contrasting post-extractivist imaginaries, diverse and ever-evolving forms of resistance and contestation, and a growing recognition of the paradox of 'green'

extractivism, this volume acknowledges the complex and ongoing legacies of extraction and the urgent need to move beyond extractive models of development and towards alternative pathways that prioritise social justice, environmental sustainability, democratic governance, and the well-being of both human and non-human beings. Through different conceptual approaches and in different empirical contexts, the contributions to this volume demonstrate the alarming obduracy of the logic of extractivism, even—and perhaps especially—in the growing support for the so-called green transition. These interventions caution us against the assumption that anti-extraction is anti-extractivist, that post-extraction is post-extractivism, and they critically attune us to the systemic nature of extractivism in a way that both connects and transcends any specific site or scale.

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NOTES

1. Coancoans, in the A'ingae language spoken by the Cofán people, are mythical subterranean beings; the association of oil with their blood remains a disputed point.

ABSTRACTS

This volume of *International Development Policy* brings together post-extractivist imaginaries, diverse and ever-evolving forms of resistance and contestation, and a growing recognition of the paradox of 'green' extractivism. Despite the pervasive narrative that more rather than less mining is necessary to achieve decarbonisation, there is now growing recognition that the current model of economic development based on fossil fuels and resource extraction is not sustainable in the long term. The introduction to this volume acknowledges the complex and ongoing legacies of extraction and the urgent need to move beyond extractive models of development and towards alternative pathways that prioritise social justice, environmental sustainability, democratic governance, and the well-being of both human and non-human beings.

Ce volume rassemble des imaginaires post-extractivistes, des formes de résistance et de contestation diverses et en constante évolution, ainsi qu'une reconnaissance croissante du paradoxe de l'extractivisme 'vert'. Malgré le discours omniprésent selon lequel il faut plus et non moins d'exploitation minière pour parvenir à la décarbonisation, il est de plus en plus admis que le modèle actuel de développement économique basé sur les combustibles fossiles et l'extraction

des ressources n'est pas viable à long terme. L'introduction de ce volume reconnaît les héritages complexes et continus de l'extraction et le besoin urgent de dépasser les modèles extractifs de développement et d'emprunter des voies alternatives qui donnent la priorité à la justice sociale, à la durabilité environnementale, à la gouvernance démocratique et au bien-être des êtres humains et non-humains.

Este volumen reúne imaginarios postextractivistas, formas de resistencia y contestación diversas y en constante evolución, y un creciente reconocimiento de la paradoja del extractivismo "verde". A pesar de la omnipresente narrativa de que para lograr la descarbonización se necesita más y no menos minería, cada vez se reconoce más que el actual modelo de desarrollo económico basado en los combustibles fósiles y la extracción de recursos no es sostenible a largo plazo. En la introducción de este volumen se reconocen los complejos legados de la extracción y la urgente necesidad de ir más allá de los modelos extractivos de desarrollo y avanzar hacia vías alternativas que den prioridad a la justicia social, la sostenibilidad medioambiental, la gobernanza democrática y el bienestar de los seres humanos y no humanos.

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