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The rise and fall of Brazilian extractivism in Africa: Taking stock of Vale's mining operations on the continent (2004–2022)[☆]

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ABSTRACT

At the turn of the millennium, the rise of Southern powers and their firms was filled with a sense of positive change and possibility. The advent of the Brazilian mining giant, Vale S.A., in Africa tellingly captured such ideals and ambitions. Spanning activities from the continent's Atlantic to Indian coasts, Vale went on to become Brazil's largest-ever corporate presence in Africa. Yet, over the years, caught up in complex challenges, business underperformances, and socio-environmental controversies, Vale's operations on the continent have been brought to a halt after nearly two decades (2004–2022). This Special Section reflects on the full cycle (political, environmental, economic, and social) of Vale in Africa, where the expansion of extractive promises and projects by a major Southern multinational turned out to be not so tractable as initially envisioned. This introductory article sets the scene for the Special Section. It provides a background to Vale, offers an overview of its presence in Africa, revisits how its engagement on the continent has been discussed in the literature, and accounts for how this Special Section furthers existing debates. It then describes the empirical and theoretical contributions to emerge from the six articles that make up the collection.

1. Introduction

"Africa sits on oil and minerals in abundance; Brazil has the firms to get them out" (The Economist, 2012, para. 3)

A little over a decade ago, *The Economist* hailed the upbeat potentials and possibilities unlocked by the advent of Brazilian firms in Africa. This was at the heyday of a "Brazil/Africa rising" sentiment, enveloped by the appeal of South-South cooperation and propelled by the favorable winds of a global commodity bonanza (see Frankema and Van Waijenburg, 2018; Seibert and Visentini, 2019; Alencastro and Seabra, 2021). There was also a geopolitical and development case to be made. According to Brazil's President Lula da Silva, due to cultural and geographical affinities, Brazilian businesses were the optimal solution for the continent. They adopted a different approach than what Africans were used to: "[Different] [f]rom the colonizers that go there to own the country. Or from what the Chinese were trying to do", declared Lula at the time (as cited in Rossi, 2015, p. 328). Similarly, for the late and renowned Kenyan Professor Calestous Juma: "For every African problem, there is a Brazilian solution" (Toth, 2011, para. 7). Evoking Juma's assertion, which became a sort of motto for the Brazilian diplomacy, Brazil's Foreign Minister Celso Amorim (2003–2010) explained how such qualities "favor the Brazilian presence, technical cooperation, and also companies, naturally, in Africa".[1]

Over the 2000s and early 2010s, the advent of the Brazilian mining giant, Vale S.A. (henceforth Vale), in Africa tellingly captured such ideals and ambitions. Spanning activities from the continent's Atlantic to Indian coasts, Vale went on to become Brazil's largest-ever business presence on the continent. It also evidenced the emergence of Southern firms as important players in the contemporary global economy, with South–South mining investments touted to bring better modes of engagement, long-awaited development and employment opportunities, and a diversification away from Western arrangements. Yet, over the

☆ Introductory article by the guest editors to Special Section "The rise and fall of Brazilian extractivism in Africa: Taking stock of Vale's mining operations on the continent (2004–2022)". For a complelte overview of all articles published in the Special Section, see: https://www.sciencedirect.com/journal/the-extractive-industries-and-society/special-issue/102HGDPQ5NJ

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[1] Personal communication, Mr. Celso Amorim, former Foreign Minister of Brazil (2003-2010) and current Chief Advisor of the Presidency of Brazil (2023-present). Rio de Janeiro, April 2019.

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years, such expectations have been frustrated by a myriad of controversies, complications, and misalignments. By the early 2020s, caught up in complex challenges and underperformances, Vale's operations in Africa have been brought to a halt, marking the end of a trajectory of nearly two decades on the continent (2004–2022).

This is a story worth telling, unpacking, and reflecting upon, as it accounts for the full cycle of a major Southern business presence in Africa's extractive industries. It is also a story entangled with geopolitical and commercial interests, spatial impacts and social disruptions, and distinct lived experiences. It reveals the multiple and diverse facets of global and, more specifically, of South-South encounters in extraction. What have been the macro- and ground-level implications of Vale's engagement in Africa? How have projects been governed, transformed, and contested along the way? What kind of transnational and local interactions have emerged out of these dynamics? And what lessons can be drawn for the extractive industries more broadly? By covering and examining Vale's trajectory in Africa from rise to downfall and withdrawal, this Special Section engages with such questions, reflecting on the lasting, longer-term significance and consequences of a foregone extractive presence on the continent.

This introductory article sets the scene for the contributions that make up this Special Section. We begin by providing a brief background to Vale, contextualizing the firm's international expansion in the 2000s. We then account for its presence in Africa more specifically, from arrival to withdrawal, offering an overview of Vale's activities on the continent and describing the strategic, commercial, and operational aspects of engagements. This is followed by a review of how Vale's expansion into Africa has been approached, conceptualized, and problematized in the literature, as we account for how this Special Section furthers existing academic conversations. The final section is devoted to introducing the six articles in the Special Section, describing their empirical and theoretical contributions.

2. Vale S.A.: background

Known prior to 2007 as *Companhia Vale do Rio Doce*, Vale was born out of the originally British-based Itabira Iron Ore Company Ltd., and then nationalized in 1942 by the Getulio Vargas government during Word War II. As a state-owned enterprise, it exploited the iron ore riches of Brazil's southeastern state of Minas Gerais. During the 1970s and 1980s, the development of the Carajás Mining Complex in the Brazilian Amazon – the world's largest known iron ore reserve to date – turned Vale into one of the main global producers of the commodity (Triner, 2015). This also established Brazil as the world's second biggest exporter of iron ore after Australia, with the South American steadily contributing to between 20 % and 30 % of total global supplies since the 1990s (Statista, 2023). Vale is thus regarded as a strategically significant company, deemed critical for the advancement of Brazilian national interests and overall development. In 1997, in the wake of a series of controversial neoliberal policies adopted by the Fernando Henrique Cardoso administrations (1995–2002), Vale underwent a privatization process, completed in 2002 (see Baer, 2003). Yet, it remained associated with the Brazilian state through a persistent "capitalism of linkages", evidenced through the ownership by the government of "golden shares" (which entails veto rights on the firm's strategic affairs) and state support in the form of favorable legislation and policies, subsidized finance, and diplomatic backing (Lazzarini, 2011).

For the once typically discreet, domestically focused company, privatization brought in a new generation of executives who saw in Vale's internationalization an opportunity to expand and diversify away from overreliance on iron ore. This resonated well with a global conjuncture of sustained high commodity prices in the 2000s (Erten and Ocampo, 2013) and Brazil's foreign policy objectives of boosting and supporting the corporate internationalization of its "national champions" (Garcia, 2015; Hochstetler, 2014; Dye and Alencastro, 2020). Vale's acquisition of the Canadian mining multinational Inco in 2006 had that precise effect, providing the Brazilian firm with the world's largest nickel reserve base and allowing it to expand operations to mining sites in Canada, Indonesia, and New Caledonia (AIAAV, 2010, 2012; Vodopives, 2015). In 2007, to position itself as a global company, the company undertook a major rebranding strategy, which included the adoption of Brazil's green and gold national colors in its corporate logo and shortening its name (from *Companhia Vale do Rio Doce*) to Vale for ease of pronunciation abroad. By 2013, a decade after privatization was completed, Vale was the world's second largest mining company by revenue and the leading iron ore and nickel producer, overseeing activities in more than 30 countries (see Vale, 2013, p. 16). Between 2001 and 2013, Vale's net profits went from US$1.3 billion to US$22.9 billion, and its stock price rose by 1500 % (Paulo, 2016), epitomizing the growing role of Southern mining firms in global value-chains and becoming an important cornerstone of the "Brazil rising" narrative in the post-2000s (Casanova, 2009; Cezne, 2019).

3. Vale in Africa, from rise to downfall and withdrawal

Africa was a key pillar of Vale's post-privatization strategy and internationalization. For the firm, expanding into Africa, particularly in the 2000s and early 2010s, obeyed five interlinked logics. First, Africa was regarded as the world's major resource "frontier", with large, unexploited swaths of available mineral wealth. Second, and relatedly, Vale stood to make profits in resource-rich countries that were overlooked by Northern firms, then struggling with the effects of the 2008 global financial crisis (Burges, 2017, p. 117). Third, comparatively to Brazil, Africa's geographical location closer to China and other emerging markets in Asia – the main destinations of Vale's commodities exports – was seen as a logistical advantage. As reported by a Vale executive, "exporting minerals from Africa would considerably cut the distance and delivery time to our major clients in Asia".[2] Fourth, a cojuncture of expanding Brazil-Africa political and economic ties, particularly during Lula da Silva's first presidency (2003–2010), facilitated the forging and implementation of business deals through financial and diplomatic backing for Brazilian multinationals (Garcia, 2015; Dye and Alencastro, 2020). Furthermore, the establishment of large-scale mining operations involving Vale had the potential to create a "sheltered environment" through additional opportunities for other Brazilian firms, for example through engineering contracts and agribusiness projects (Burges, 2017). Fifth, these developments were usually underpinned by Brazilian presumptions of a natural suitability to operate on the other side of the South Atlantic, often based on ideas of cultural and geographical affinities with Africa (see Cezne and Hönke, 2022). This aided (self-)projections of Vale's comparative advantages on the continent, including through claims that it forged friendly and positively differentiated relations with locals and of the firm's distinctive experiences in harsh, tropical environments. According to Vale's executives, the company had converted hostile Amazonian landscapes into one of the world's most successful mining enterprises and was therefore able to overcome challenges and do the same in Africa (Alencastro and Cezne, 2023, p. 7).

Such trends, expectations, and bets have led Vale to establish activities in a host of African countries: Mozambique, Malawi, Guinea, Zambia, Gabon, the Democratic Republic of Congo (DRC), Angola, Liberia, and South Africa – among mining sites, logistical operations, joint ventures, and corporate offices (see, e.g., Vale, 2011, pp. 4–5; Vale, 2013, p. 16). By far, Mozambique has become Vale's largest and most important investment on the continent. It involved the development of an open-pit mining complex at the Moatize coal mine, located in the Mozambican central province of Tete. The mine is home to Africa's largest untapped deposits of coal, particularly the most valuable coking coal type, used for steel production. Vale's expansion into Mozambique formally started in 2004, when it won a bid for the Moatize mine. This

[2] Interview, former Vale executive. São Paulo, Brazil, April 2019.

was then followed by the award of the concession agreement in 2007 and the start of mining operations and production in 2011. The overall project also included the development of the 912 km-long Nacala Corridor, an integrated mine-rail-port infrastructure that passes through Malawi and cuts across northern Mozambique, serving as a main export route for the extracted coal (see Gonçalves, 2020; Kirshner and Baptista, 2023). The Nacala Corridor would connect mining activities in Tete with agribusiness projects to be implemented through the trilateral Brazil-Japan-Mozambique ProSAVANA rural development program (Garcia and Kato, 2016; 2020). Vale's overall investment involved a combined sum of US$8 billion, making it the single largest economic project to date financed and operated by a Brazilian firm in Africa (Rossi, 2013). This was also Mozambique's largest foreign direct investment (FDI) in the 2010s, with Vale being the country's main exporter between 2016 and 2019 (EITI, 2020, pp. 20–21).

Elsewhere, from 2010 to 2014, Vale attempted – though unsuccessfully – to exploit the coveted Simandou iron ore deposits in Guinea, which included building an export rail line through Liberia. In Zambia, the firm entered into a joint venture with African Rainbow Mineral (ARM) in 2010 to develop and operate the Lubambe copper mine (African Rainbow Minerals, 2010). It also established corporate offices in resource-rich countries such as Gabon, the DRC, Angola, and South Africa for prospecting or administrative purposes.

Yet, over the years, mired by loss-making projects, strategic miscalculations, and socio-environmental controversies, Vale's activities in Africa have withered and, by 2022, the company had completely withdrawn from the continent. In 2014, after a deal valued at as much as US$2.5 billion, Vale was forced out of Guinea with massive losses after being implicated in fraud and bribery accusations, which embroiled the firm in international scandals and long-lasting judicial litigations (see Alencastro and Cezne, 2023). In Zambia, due to financial losses and structural problems at the mine, Vale and ARM announced the complete sale of their Lubambe site in 2017 (McKay, 2017). Most tellingly, in 2021, Vale decided to divest from its major African asset in Mozambique. It alleged poor business performances and a strategic, climate-driven move to exit coal production (Reuters, 2021). After ten years of extractive operations, Vale's Moatize mine and Nacala Corridor were sold in December 2021 to Vulcan, a subsidiary of India's Jindal Group, for US$270 million, in a deal that was concluded in April 2022 (Araujo, 2021). The firm also left Mozambique amid intense social contestation and resentment, marked by contentious dispossession practices, hazardous pollution, and insufficient job creation (see Wiegink, 2018; Lesutis, 2019a, 2019b; AIAAV 2021). If, around the early 2010s, Vale's corporate maps would display an African continent dotted with projects from coast to coast (see, e.g., Vale, 2011, 2013), Africa was no more than a large empty space in the firm's latest reports (see Vale, 2022, p. 13).

Vale's story in Africa is thus seemingly a story of a foregone epoch. Meanwhile, the initial enthusiasm for South–South cooperation somewhat waned, Brazil's engagement with Africa experienced a pronounced retreat since the mid-2010s, and the commodity supercycle that characterized the period between the 2000s and early 2010s gave ground to a more complex, turbulent era of commodity market dynamics. Attention in the extractive industries – in Africa and beyond – is also shifting to so-called "critical minerals" such as rare earth, graphite, lithium, and cobalt, which are key to energy transitions and central pillars of today's geopolitical calculations (Kalantzakos, 2020; Namaganda et al., 2023). Therefore, why should we look at the (now concluded) trajectory of a Brazilian mining firm in Africa – one based on the exploitation of traditional resources such as coal and iron ore? In the next section, we revisit the state-of-the-art on Vale's presence on the continent and justify why the topic deserves sustained attention and reflection, what can be learned from it, and how this Special Section furthers existing debates.

4. Framing Vale in Africa: state-of-the-art

Vale's decades-long centrality to Brazil's economy and specific territories in the country has made it a consistent and relevant subject of academic appraisals and discussions, particularly in Brazilian scholarly circles. Analyses have ranged from business- and market-oriented studies of Vale's management practices, value chains, and corporate responsibility (Reginato and Dalla Pozza, 2013; Sabino, 2015) to assessments of the firm's role and influential power in Brazil's political economy (Hochstetler and Montero, 2013; Musacchio et al., 2016), to critical investigations of its socio-environmental impacts and harms (Coelho, 2014; Milanez and Losekann, 2016; Milanez and Dos Santos, 2019; Saes and Muradian, 2021) and accounts of resistance and social contestation against the company (Lyra, 2016, 2019). This critical scholarship accompanied the formation of a new nationwide Movement for Popular Sovereignty in Mining (in Portuguese, MAM) (see Lyra, 2016).

Yet, as a first for the historically domestic-oriented company, Vale's ambitious internationalization stint in the post-2000s has generated a great deal of curiosity. In light of the firm's relevance to global commodities markets and a contentious socio-environmental track record at home, scholars have proceeded to raise questions about the strategic and operational implications of Vale's presence abroad. This has led analysts to account for the firm's involvement in places as varied as Canada (King, 2017), Indonesia (Murdifin et al., 2019), and New Caledonia (Levacher and Le Meur, 2022), observing dynamics such as business-society relations, labor disputes, and environmental consequences in and around Vale's mining landscapes.

In Africa, Vale's engagement has been examined in the literature along three major lines of inquiry: the first as an instance of South-South relations between Brazil and Africa; the second concerned with its socio-spatial impacts; and the third looking at how the corporation fitted into local political economies – though some works reflect varied juxtapositions of the three. Across the overall literature, Vale's presence in Mozambique has understandably drawn the overwhelming share of attention. The investment is among Brazil's largest and longest business operations in Africa.[3] Moreover, its trajectory in Mozambique has evolved over different stages between 2004 and 2022: from negotiations (2004–2007) to installation (2007–2011), to operations and expansion (2011–2021), to divestment and withdrawal (2021–2022). Unlike other projects which either failed (e.g., Guinea), were considerably smaller in scale (e.g., Zambia), limited to bidding processes (e.g., DRC, Gabon), or merely token presences in the form of corporate offices (e.g., DRC, South Africa, Angola), the investment in Mozambique – due its size, economic importance, and extensive infrastructural development –resulted into a range of tangible, lasting impacts to local societies and environments.

4.1. South-South relations

The first line of inquiry – Vale in Africa as an instance of South-South relations between Brazil and Africa – mainly relates to debates in disciplines such as International Relations, Development Studies, and Global Political Economy. Two distinct tones can be discerned in the literature: an earlier one marked by greater enthusiasm and a subsequent one defined by more skeptical takes. Published in the late 2000s and early 2010s, the initial set of commentaries and analyses of Vale's advent in Africa, particularly in Mozambique, were colored by the promising prospects that the then-ongoing rise of Southern powers and consequent expansion of South–South relations triggered. Observing the centrality of the Brazilian state amid attempts to strengthen ties with other regions of the Global South, some interpreted Vale's arrival in Africa as a sign of Brazil's Southern solidarity in the pursuit of socio-

[3] Before the 2000s, Brazilian construction and oil companies had been operating in Africa since the late 1970s.

economic development across the world's periphery (Saraiva, 2010; Visentini, 2010). Others argued that it offered a means to combine, through South–South cooperation, the transfer of development experiences with investments and new economic partnerships (Seibert, 2011; Stolte, 2015). For Van Agtmael (2007) and Casanova (2009), Vale's global expansion into Mozambique occurred against the backdrop of a fundamental and unprecedented shift of economic dynamism towards the Global South. Spearheaded by China and the other Southern B(R)ICS, this gained impetus amid the commodities boom of the 2000s and in the aftermath of the 2008 financial crisis (for a detailed account, see Hönke et al., 2024).

By the mid-2010s, as Brazil's rapprochement with Africa became the subject of a growing number of country-specific and field-based works, the tone of research has become increasingly critical. In this light, many have drawn on Vale's presence in Mozambique to problematize the "Brazil in Africa" story altogether. A recurrent, general critique is that the notion of South–South cooperation – deployed "from above" and by powerful state-business alliances – has offered a convenient discursive device to "wash" otherwise controversial corporate engagements and conceal neocolonial interests (Garcia et al., 2012; Bond and Garcia, 2015; 2020; Marshall, 2015). These interpretations have been centrally voiced in the case of the ProSAVANA rural development program in Mozambique, which sought the creation of agribusiness value-chains along Vale's Nacala Corridor, based on the transfer of Brazilian agricultural experiences (Garcia and Kato, 2016, 2020; Monjane and Bruna, 2019). Critics have highlighted how Vale's mining venture in Mozambique, through synergies with exclusionary agribusiness initiatives, threatened land tenure, human rights, and food security under misleading guises of South–South "cooperation" and "solidarity" (Shankland and Gonçalves, 2016; Milhorance and Bursztyn, 2017; Milhorance, 2018; Gonçalves, 2020; Kirshner and Baptista, 2023). In this vein, scholars have noted how such dynamics have offered opportunities for grassroots groups in Brazil and Mozambique to forge new transnational alliances of struggle, drawing on common experiences of being negatively affected by Vale in the two countries and evidencing the formation of South-South counter-movements "from below" (Marshall, 2015; Cezne, 2019; Waisbich, 2020).

Others have pointed at Vale's highly impactful activities at home (e.g., its responsibility for Brazil's deadliest mining catastrophe in Brumadinho) to make the case for how its South-South investment links with Africa were no more than problematic transfer devices that enabled poor domestic business standards and practices to be exported and internationalized (Abelvik-Lawson, 2014; AIAAV, 2021). Contrasting Vale's engagement in Mozambique with other mega-projects in Africa operated by multinationals from Southern powers such as China and India, studies have also highlighted how, despite different corporate cultures, these investments shared similar patterns of inequality, contention, and hostility at the ground-level (Garcia, 2017; Shipton and Dauvergne, 2021; Cezne and Wethal, 2022; Hönke et al., 2024). Such takes have often questioned the empowering and transformative pledges evoked by South-South investments, claiming that they have largely replicated (and at times intensified) exclusionary patterns long associated with Western presences in (post-)colonial Africa.

4.2. Socio-spatial impacts

The second line of inquiry on Vale in Africa moves away from a specific interest in the ways in which South–South relations are (contentiously) articulated and manifested through large-scale economic projects. Rather, in dialogue with critical takes on the extractive industries, anthropologists and geographers in special have situated Vale's presence in relation to its social and spatial impacts at local levels. Discussions have questioned the ability of Vale's resource extractivism to generate livelihood opportunities, promote development, and respect human rights. In this vein, much of the focus has been directed to Vale's project-induced dispossession practices, particularly the firm's controversial and disruptive Cateme rural resettlement in Mozambique,[4] which is home to about 750 families evicted to make way for the Moatize mine. Researchers have described – sometimes through thick ethnographic accounts (see Lesutis, 2021) – the precarious social and material conditions experienced by the Cateme residents, among which are deficient and unsuitable housing infrastructures, food and water insecurity, and absence of livelihood opportunities (Pedro, 2017; Wiegink, 2018; 2020; Lesutis, 2019a, 2019b).

Others have monitored the development of Vale's Moatize mine and Nacala Corridor infrastructures through the angle of Corporate Social Responsibility (CSR) or rights-based approaches, revealing shortcomings such as insufficient compensation for displaced populations, poor livelihood restoration, lack of transparency in procurement processes, and sub-optimal technical capacity to implement construction projects (AIAAV 2012, 2015, 2021; Kabemba and Nhancale, 2012; HRW, 2013; Abelvik-Lawson, 2014; Van der Ploeg and Vanclay, 2018; Hönke et al., 2023). Labor regimes and workplace interactions at Vale's mining spaces in Mozambique have also merited dedicated attention. Analysts have asserted how expectations of local hiring, skill formation, and social mobility for host populations were overblown, as most jobs ended up going to outsiders and capacity building schemes were limited (Mosca and Selemane, 2011; Marshall, 2015; Lesutis, 2019a; Cezne and Wethal, 2022). In addition, mineworkers have exposed grievances over precarious working conditions, low wages, uncertain employment prospects, and discriminatory practices at the workplace (Cezne and Wethal, 2022). Scholars have also looked at processes of rapid, unplanned, and speculative urbanization that have accompanied the Vale-led extractive boom in the Mozambican province of Tete, observing how ordinary citizens had little input in planning strategies despite being disproportionately affected by harms such as air and water pollution, displacement, and soaring living costs (Kirshner and Power, 2015).

Across this literature strand, many works have engaged with conceptualizations of Vale's mining spaces as "neoliberal enclaves" (Sidaway, 2007). Vale has thus been largely perceived as a key driver of processes of accumulation by dispossession, securitization, social differentiation, and labor and land commodification, whereby investments are fenced off from the surrounding social fabric (see Ferguson, 2006).

4.3. Local political economies

The third line of inquiry, furthered by Africanists and political economists, has examined more specifically how Vale fitted into and reproduced African countries' existing patterns of politics and business. Focusing prominently on Mozambique, analyses have denounced Vale, as the country's main investor and exporter, for consolidating the power of a small elite while exposing local populations to hardships (see Sumich, 2010; Mosca and Selemane, 2011; Castel-Branco, 2014; Macuane et al., 2018). Such perspectives have been usually followed by broader critiques of Mozambique's extractive mode of development, which is seen as maximizing corporate transfer of surplus abroad through both licit and illicit fiscal benefits. Arguably, this has been done while enabling elite capture of the little surplus that remains in the country, particularly by actors inside or linked to the Mozambique Liberation Front ruling party (*Frente de Libertação de Moçambique*, Frelimo) (see also Cezne and Hönke, 2022).

Commentaries have similarly stressed how Vale's investment in Mozambique was largely devoid of significant local content formation and economic diversification (Hansen et al., 2016; Dietsche and Esteves, 2018; Monjane, 2019) – trends which have also been extended to the country's emerging natural gas and graphite extractive sectors (Namaganda et al., 2023). This has been accompanied by a growing consensus

[4] For a broader discussion on displacement and resettlement in Mozambique, see Otsuki, 2019.

among scholars on how Mozambique's lingering conflict in its resource-rich Cabo Delgado province is intrinsically connected with the shortcomings of its late extractive discoveries, including Vale's coal-driven extractive boom, with the insurgents capitalizing on feelings of exclusion among local populations (Feijó, 2021; Namaganda et al., 2022).

4.4. Special section's contributions

Taken together, these distinct strands in the literature on Vale in Africa – notwithstanding the dominant focus on Mozambique – have made great strides in moving away from what were initially enthusiastic interpretations of the firm's expansion to the other side of the South Atlantic. Through conceptual and methodological pluralism and aided by a rich array of field-based investigations and critical accounts from frontline scholars and activists, these works have highlighted key contextual nuances, varied lived experiences, and asymmetrical power dynamics. In so doing, they have problematized Vale's presence in Africa, the disruptive effects of its extractive landscapes, and the ambivalent South-South interactions its investments engendered.

Yet, while bringing important empirical and critical enhancement to debates, this literature has prominently addressed Vale in Africa in conjunctures of project arrival, implementation, and consolidation. The firm's now completed cycle on the continent opens up a unique opportunity to study less explored – but not less interesting – conjunctures of project downfall, termination, withdrawal, and failure, based not only on scholarly-academic views but also different kinds of actors and agencies. This ranges from labor union partnerships and exchanges to educational and capacity building initiatives, to the construction of the International Articulation of those Affected by Vale, which has connected struggles taking place in Tete to those in the Canadian mining town of Sudbury, to Açailândia, Brumadinho, and Mariana in Brazil. On this account, this Special Section furthers existing conversations in three ways.

First off, with the benefit of hindsight, we reflect on the full cycle (political, economic, environmental, and social) of a major Southern firm in Africa, one in which the expansion of extractive promises and projects turned out to be not so tractable as initially envisioned. What have been the causes and what can be learned from Vale's downtrend and exit from the continent? While Vale itself has withdrawn from Africa, the implications, resonance, and reverberations of its presence have a longer-term temporality that overcomes projects' official timelines and life cycles. For instance, how will existing liabilities be addressed and transitions to other investors managed (and resisted)?

Second, although Mozambique remains a central empirical referent in this Special Section, we extend the literature on Vale in Africa, overwhelmingly centered on the country, by uncovering critical cases which have largely remained off the radar (i.e., Guinea) and by drawing parallels with Vale's trajectory in other continents.

Third and finally, while Vale – as of this writing in 2023– no longer holds any major operations in Africa, this Special Section reflects on how its now concluded trajectory on the continent might affect (or not) the firm's activities elsewhere and future. Since its withdrawal from Mozambique in 2022, Vale has not only continued to grow in market value, but it has also been able to adapt its business strategy in face of new global and domestic challenges. The company is Brazil's largest by value, accounting for a whopping 15 % of the São Paulo stock exchange index (B3, 2023). It remains central to domestic politics, to the economies of the Southern and Amazonian regions, and to Brazil's international trade. Yet, has Vale been able to draw any lessons from episodes of violence and human rights violations in Africa? What is to remain and change when it comes to (transnational) contestation alliances and practices around the firm? As Brazil's sets its eyes on Africa again following Lula's re-election in 2022 for a third term in office, will Brazilian extractivism – with Vale at its forefront – see a comeback to the continent?

In pursuing these endeavors, we outline next how the contributions to this Special Section engage with such questions and intents.

5. Rethinking Vale's extractivism in Africa, from Mozambique to Guinea and beyond: Special Section contributions

This Special Section assembles a diverse and plural array of authors, both in terms of disciplinary and professional backgrounds, as well as geographical origin and affiliation. This includes early-career scholars who have conducted their PhD research on and in areas affected by Vale (Eric Cezne, Hiroyuki Tsuji, Isabella Alves Lamas), established academics who have long monitored expanding frontiers of various development projects in Africa (Kei Otsuki), contributors who have been directly involved in activist and solidarity networks against the company (Ana Saggioro Garcia, Karina Kato, Judith Marshall), and analysts with policymaking and consultancy experiences in Africa's extractive sectors (Mathias Alencastro, Thomas Selemane). The collection also taps into original materials and empirical evidence, benefitting from a string of field experiences by the authors, as well as different language skills (Portuguese, English, French) that allow for the inclusion of diverse literatures, voices, and nuanced knowledge about the realities under investigation.

The six articles in this Special Section cohere around three overlapping and intersecting themes, which we categorize as: (i) resistance; (ii) withdrawal and transition; and (iii) beyond Mozambique.

The first theme – resistance – explores the politics and practices of contestation, advocacy, and counter-extractivism that have emerged in opposition to Vale's presence in Africa (and beyond). The examination of resistance offers important doorways to understand the extensive repertoires of actions, shaped over several years of struggle, that have crucially contributed to the firm's delegitimation and demise on the continent. Here, drawing on own personal experiences in and with activist circles, the papers by Kato and Saggioro Garcia (2023) and Marshall (2023) both highlight the centrality of transnational activism, configured by multi-sector alliances and solidarity networks, in challenging Vale's internationalization and extractive mode of development. Both papers also discuss the prospects and challenges for the future of anti-Vale and anti-mining resistance, considering current trends in the extractive industries. Kato and Garcia (2023) zoom in on the International Articulation of those Affected by Vale (IAAV): a transnational, multi-sector, and contestation-oriented network established against Vale at the height of the firm's global expansion in the late 2000s. Focusing on the connections between the Brazilian and Mozambican groups within the IAAV, the authors analyze the network's main repertoires of action, which ranged from the organization of international meetings to shareholder activism, and discuss the opportunities and limitations of its transnational activism.

Marshall (2023) in turn reviews Vale's labor and local development implications in Mozambique during more than a decade of mining activities. She highlights how transnational labor alliances and solidarity initiatives became crucial instruments in denouncing and addressing violations against workers and local populations. In particular, Marshall offers a first-hand account of how Vale workers in Mozambique built connections with their counterparts in Brazil and Canada, using union structures to improve health and safety standards at the workplace and to defend themselves against the firm's arbitrary power. As the author herself has initiated and supported such connections, the article is subsidized by a rich auto-ethnography, offering privileged insights into global resistance movements against Vale linking both Global North and Global South contexts and groups.

Based on the two articles by Selemane (2023) and Tsuji and Otsuki (2023), the second theme – withdrawal and transition – approaches the consequences of Vale's divestment and exit from Mozambique for the spaces and populations it has impacted. Both papers also reflect upon what the transition to a new investor – in this case, the Indian corporation Vulcan – means for the handling of business-society relations and to mining-affected urban spaces. On this account, Selemane (2023) draws on dependency theory and Harvey's (2005) still very timely notion of "accumulation by dispossession" to demonstrate how the withdrawal of Vale from Mozambique only epitomizes the failure of extractive-oriented development models that are not premised on justice and internal redistribution concerns. He argues how this is evidenced by the formation of exclusionary spaces of capital accumulation, whereby resources and profits are channeled through global commodity markets, leading to mobile and "divestable" private gains at the expense of (permanent) social losses. Selemane also notes how in the transition to Vulcan it remains uncertain by whom and to which extent unsolved liabilities towards workers and affected communities will be addressed.

Tsuji and Otsuki (2023) add to such revelations by examining the specific consequences of Vale's investment and withdrawal to different urban and peri-urban areas in and around the cities of Tete and Moatize, which experienced rapid yet unplanned urbanization following the start of Vale's operations in the 2000s. The authors challenge hypotheses of the "shrinking city" for these coal mining towns, noting how – in spite of energy transition-spurred intents of coal downscaling that led to Vale's withdrawal – the coal frontier as an "urban frontier" in the area is expanding through the excavation of new pits and development of new projects. They also show the importance of paying attention to urban spaces other than mining enclaves and resettlement areas in order to highlight the wider consequences that the change of the company would mean to the people living in these spaces. In short term, Tsuji & Otsuki argue that it is unclear to what extent Vulcan will honor Vale's promises to communities awaiting financial compensation and resettlement due to an expanding coal frontier. In long term, the authors contend that the new company is likely to replicate, if not worsen, Vale's problematic ways of not engaging with local urban development.

The third theme – beyond Mozambique – contributes to this Special Section's aim of situating Vale's presence in Africa beyond the literature's dominant, narrow focus on Mozambique, while also comparing the firm's trajectories across different continents and contexts. In this regard, Alencastro and Cezne (2023) explore the much-less discussed case of Vale's troubled and unsuccessful entry in Guinea, which was motivated by ambitions to develop the coveted Simandou iron ore deposits. In what they call the "South-South investment that never happened", the authors analyze how Vale's presence in Guinea was signified among Brazilian political and business leaders and how the investment crumbled, assessing the interactive influences of Guinean ruling elites and the role of wider economic and political disputes in the West African country. Alencastro and Cezne (2023) argue that Vale's ambitions in Guinea were centrally nurtured by imaginaries of developing a "new Carajás" (Vale's all-important mining site in the Amazon) but overlooked significant red flags relating to business partnerships, a highly complex Guinean political environment, and immense infrastructural difficulties. The (failed) investment, they note, implicated Vale in longstanding judicial litigations and led to massive financial and reputational losses.

Finally, by putting Vale's activities in an international perspective, the article by Isabella Alves Lamas (2023) provides a welcome complement to the other papers in this Special Section, which are mainly centered on specific case studies. Lamas (2023) approaches and contrasts dynamics of corporate governance around mining areas in three host countries where Vale operates (or operated): Brazil, Canada, and Mozambique. The comparison also involves different types of resource extraction – respectively iron ore, nickel, and coal – as well as empirical contexts in the Global South and Global North. While the author shows that there are important differences in the exercise of everyday governance by the corporation, molded by distinct political economies in each context, all countries nonetheless share similar patterns of oppression and conflict with workers and surrounding communities. Lamas contends that Vale's violation of human rights and environmental destruction are not constricted to African and Global South contexts, with seemingly weak state structures and regulatory capacity. Rather, such practices expose broader coercive strategies and tactics adopted by mining multinationals for ordering and controlling territories, such as corporate surveillance, privatization of security, and judicialization in conflict management.

CRediT authorship contribution statement

Eric Cezne: Conceptualization, Funding acquisition, Methodology, Writing – original draft, Writing – review & editing. **Ana Saggioro Garcia:** Conceptualization, Validation, Writing – original draft.

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References

Abelvik-Lawson, H., 2014. Sustainable development for whose benefit? Brazil's economic power and human rights violations in the Amazon and Mozambique. The Int. J. Hum. Rights 18 (7–8), 795–821. https://doi.org/10.1080/13642987.2014.946800.

African Rainbow Minerals (ARM). (2010, August 27). *ARM and Vale approve release of new copper nine in Zambia*. https://arm.co.za/news_press/arm-and-vale-approve-release-of-new-copper-mine-in-zambia/.

AIAAV – Articulação, 2010. Internacional dos Atingidos e Atingidas pela Vale. *Dossiê dos Impactos e Violações da Vale no Mundo*. AV, Rio de Janeiro. https://atingidosvale.com/relatorios/dossie-dos-impactos-e-violacoes-da-vale-no-mundo/.

AIAAV – Articulação, 2012. Internacional dos Atingidos e Atingidas pela Vale. Relatório de Insustentabilidade da Vale 2012. AV, Rio de Janeiro. https://atingidosvale.com/relatorios/insustentabilidade-da-vale-2012/.

AIAAV – Articulação, 2015. Internacional dos Atingidos e Atingidas pela Vale. Relatório de Insustentabilidade da Vale 2015. AV, Rio de Janeiro. https://atingidosvale.com/relatorios/insustentabilidade-da-vale-2015/.

AIAAV – Articulação, 2021. Internacional dos Atingidos e Atingidas pela Vale. *Vale Unsustainability Report 2021*. AV, Rio de Janeiro. https://atingidosvale.com/relatorios/vale-unsustainability-report-2021/.

Alencastro, M., Cezne, E., 2023. The South–South investment that never happened: Vale in Guinea. Extr. Ind. Soc. 13, 101147 https://doi.org/10.1016/j.exis.2022.101147.

Alencastro, M., Seabra, P. (Eds.), 2020. Brazil-Africa Relations in the 21st Century: From Surge to Downturn and Beyond. Springer.

Araujo, G. (2021, December 21). ***Brazil's Vale to sell Moatize coal mine, Nacala corridor to Vulcan***. Reuters. https://www.reuters.com/article/vale-divestiture-moatize-idUSKBN2J011Z.

B3. (2023, October 10). Índice Bovespa (Ibovespa B3). https://www.b3.com.br/pt_br/market-data-e-indices/indices/indices-amplos/indice-ibovespa-ibovespa-composicao-da-carteira.htm.

Baer, W., 2003. The privatization experience of Brazil (Eds.). In: Parker, D., Saal, D. (Eds.), International Handbook on Privatization. Edward Elgar, pp. 220–234.

Bond, P., Garcia, A., 2020. BRICS from above, commoning from below (Eds.). In: Hosseini, H., Goodman, J., Motta, S.C., Gills, B.K. (Eds.), TheRoutledgeHandbook of Transformative Global Studies. Routledge, pp. 165–180.

Bond, P., Garcia, A. (Eds.), 2015. BRICS: An anti-Capitalist Critique. Pluto Press.

Burges, S., 2017. Brazil in the world: the International Relations of a South American Giant. Manchester University Press.

Casanova, L., 2009. Global Latinas: Latin America's Emerging Multinationals. Palgrave Macmillan.

Castel-Branco, C.N., 2014. Growth, capital accumulation and economic porosity in Mozambique: social losses, private gains. Rev. Afr. Polit. Econ. 41 (1), 26–48. https://doi.org/10.1080/03056244.2014.976363.

Cezne, E., 2019. Forging transnational ties from below: challenging the Brazilian mining giant Vale SA across the South Atlantic. Extr. Ind. Soc. 6 (4), 1174–1183. https://doi.org/10.1016/j.exis.2019.10.007.

Cezne, E., Hönke, J., 2022. The multiple meanings and uses of South–South relations in extraction: the Brazilian mining company Vale in Mozambique. World Dev. 151, 105756 https://doi.org/10.1016/j.worlddev.2021.105756.

Cezne, E., Wethal, U., 2022. Reading Mozambique's mega-project developmentalism through the workplace: evidence from Chinese and Brazilian investments. Afr. Aff. (Lond) 121 (484), 343–370. https://doi.org/10.1093/afraf/adac019.

Coelho, T.P. (2014). *Projeto Grande Carajás: trinta anos de desenvolvimento frustrado*. Ibase.
Dietsche, E., & Esteves, A.M. (2018). *What are the prospects for Mozambique to diversify its economy on the back of "local content"?* [Working paper]. UNU-WIDER. https://www.econstor.eu/bitstream/10419/190160/1/wp2018-113.pdf.
Dye, B.J., Alencastro, M., 2020. Debunking Brazilian exceptionalism in its Africa relations: evidence from Angola and Tanzania. Glob. Soc. 34 (4), 425–446. https://doi.org/10.1080/13600826.2020.1722617.
Erten, B., Ocampo, J.A., 2013. Super cycles of commodity prices since the mid-nineteenth century. World Dev. 44, 14–30. https://doi.org/10.1016/j.worlddev.2012.11.013.
Extractive Industries Transparency Initiative (EITI). (2020). *Mozambique 2017-2018 EITI Report*. https://eiti.org/document/mozambique-20172018-eiti-report.
Feijó, J. (2021). *The role of women in the conflict in Cabo Delgado: understanding vicious cycles of violence*. Observatório do Meio Rural and Friedrich-Ebert-Stiftung. http://library.fes.de/pdf-files/bueros/fes-pscc/17970.pdf.
Ferguson, J., 2006. Global shadows: Africa in the Neoliberal World Order. Duke University Press.
Folha de S. Paulo (2016, March 19). *Agnelli conduziu a Vale ao topo durante o boom de commodities*. https://folha.uol.com.br/cotidiano/2016/03/1751999-agnelli-conduziu-a-vale-ao-topo-durante-o-boom-de-commodities.shtm.
Frankema, E., Van Waijenburg, M., 2018. Africa rising? A historical perspective. Afr. Aff. (Lond) 117 (469), 543–568. https://doi.org/10.1093/afraf/ady022.
Garcia, A., 2015. *Multinacionais Brasileiras Durante O Governo Lula:* uma análise crítica da relação entre estado e capital no brasil contemporânea. Novas Edições Acadêmicas.
Garcia, A., 2017. BRICS investment agreements in Africa: more of the same? Stud. Polit. Econ. 98 (1), 24–47. https://doi.org/10.1080/07078552.2017.1297018.
Garcia, A.S., Kato, K., Fontes, C., 2012. A História Contada Pela Caça Ou Pelo caçador? Perspectivas do Brasil em Angola e Moçambique. [Publicações Temáticas, Instituto PACS]. http://biblioteca.pacs.org.br/publicacao/a-historia-contada-pela-caca-ou-pelo-cacador-perspectivas-sobre-o-brasil-em-angola-e-mocambique/.
Garcia, A., Kato, K., 2016. Políticas públicas e interesses privados: uma análise a partir do Corredor de Nacala em Moçambique. Caderno CRH 29 (76), 69–86. https://doi.org/10.1590/S0103-49792016000100005.
Garcia, A., Kato, K., 2020. A road to development? The Nacala Corridor at the intersection between Brazilian and global investments (Ed.). In: Satgar, V. (Ed.), BRICS and the New American imperialism: Global rivalry and Resistance. Wits University Press, pp. 105–123.
Gonçalves, E., 2020. Agricultural corridors as 'demonstration fields': infrastructure, fairs and associations along the Beira and Nacala corridors of Mozambique. J. East Afr. Stud. 14 (2), 354–374. https://doi.org/10.1080/17531055.2020.1743094.
Hansen, M.W., Buur, L., Mette Kjær, A., Therkildsen, O., 2016. The economics and politics of local content in African extractives: lessons from Tanzania, Uganda and Mozambique. Forum Dev. Stud. 43 (2), 201–228. https://doi.org/10.1080/08039410.2015.1089319.
Harvey, D., 2005. The New Imperialism. Oxford University Press.
Hochstetler, K., 2014. The Brazilian National Development Bank goes International: innovations and Limitations of BNDES' Internationalization. Glob. Policy 5 (3), 360–365. https://doi.org/10.1111/1758-5899.12131.
Hochstetler, K., Montero, A.P., 2013. The renewed developmental state: the national development bank and the Brazil model. J. Develop. Stud. 49 (11), 1484–1499. https://doi.org/10.1080/00220388.2013.807503.
Hönke, J., Cezne, E., Yang, Y., 2023b. Liminally positioned in the South: reinterpreting Brazilian and Chinese relations with Africa. Glob. Soc. 37 (2), 197–224. https://doi.org/10.1080/13600826.2022.2094222.
Hönke, J., Cezne, E., & Yang, Y. (Eds.). (2024). *Africa's Global Infrastructures: South-South Transformations in Practice*. Hurst Publishers.
Human Rights Watch (HRW). (2013). *What is a House Without Food?": mozambique's Coal Mining Boom and Resettlements*. https://www.hrw.org/report/2013/05/23/what-house-without-food/mozambiques-coal-mining-boom-and-resettlements.
Kabemba, C., Nhancale, C., 2012. *Coal Versus Communities: Exposing poor Practices By Vale and Rio Tinto in Mozambique* [SARW Report]. Southern Africa Resource Watch (SARW). https://landportal.org/library/resources/coal-versus-communities-exposing-poor-practices-vale-and-rio-tinto-mozambique.
Kalantzakos, S., 2020. The race for critical minerals in an era of geopolitical realignments. Int. Spectator 55 (3), 1–16. https://doi.org/10.1080/03932729.2020.1786926.
Kato, K.Y.M., Garcia, A.S., 2023. Valeu a pena?" An assessment of Vale's operations in Mozambique through the prism of the International Articulation of those Affected by Vale. Extr. Ind. Soc. 14, 101235 https://doi.org/10.1016/j.exis.2023.101235.
King, A.D., 2017. Memory, mobilization, and the social bases of intra-union division: some lessons from the 2009-2010 USW local 6500 strike in Sudbury, Ontario. E-J. Int. Compar. Lab. Stud. (EJICLS) 6 (3).
Kirshner, J., Baptista, I., 2023. Corridors as empty signifiers: the entanglement of Mozambique's colonial past and present in its development corridors. Plann. Perspect. 1–22. https://doi.org/10.1080/02665433.2023.2173636.
Kirshner, J., Power, M., 2015. Mining and extractive urbanism: postdevelopment in a Mozambican boomtown. Geoforum 61, 67–78. https://doi.org/10.1016/j.geoforum.2015.02.019.
Lamas, I.A. (2023). Governance gap? Vale's corporate action and socioenvironmental conflicts in an international perspective. *Extr. Ind. Soc.*, 13, 101172. https://doi.org/10.1016/j.exis.2022.101172.
Lazzarini, S.G., 2011. Capitalismo De laços: Os Donos Do Brasil e suas Conexões. Elsevier.
Lesutis, G. (2019a). Spaces of extraction and suffering: neoliberal enclave and dispossession in Tete, Mozambique. *Geoforum*, 102, 116–125. https://doi.org/10.1016/j.geoforum.2019.04.002.
Lesutis, G., 2019b. The non-politics of abandonment: resource extractivisim, precarity and coping in Tete, Mozambique. Polit. Geogr. 72, 43–51. https://doi.org/10.1016/j.polgeo.2019.03.007.
Lesutis, G., 2021. The Politics of precarity: Spaces of extractivism, violence, and Suffering. Routledge.
Levacher, C., Le Meur, P.Y., 2022. The compensation arenas in south New Caledonia. Minescape, governmentality and politics. Extr. Ind. Soc. 11, 100999 https://doi.org/10.1016/j.exis.2021.100999.
Lyra, M., 2016. The beginnings of the anti-mining movement in Brazil. Peace Rev. 28 (1), 38–45. https://doi.org/10.1080/10402659.2016.1130376.
Lyra, M.G., 2019. Challenging extractivism: activism over the aftermath of the Fundão disaster. Extr. Ind. Soc. 6 (3), 897–905. https://doi.org/10.1016/j.exis.2019.05.010.
Macuane, J.J., Buur, L., Monjane, C.M., 2018. Power, conflict and natural resources: the Mozambican crisis revisited. Afr. Aff. (Lond) 117 (468), 415–438. https://doi.org/10.1093/afraf/adx029.
Marshall, J., 2015. Behind the image of South-South solidarity at Brazil's Vale' (Eds.). In: Bond, P., Garcia, A. (Eds.), BRICS: An anti-Capitalist Critique. Pluto Press, pp. 162–181.
Marshall, J., 2023. Vale in Mozambique: creator and destroyer of jobs, livelihoods and communities. Extr. Ind. Soc. 13, 101190 https://doi.org/10.1016/j.exis.2022.101190.
McKay, D. (2017, August 15). *ARM, Vale to sell JV shares in* $400m Lubam*be mine for $97.1m. Min*ingMX. https://www.miningmx.com/news/ferrous-metals/30273-arm-vale-sell-jv-shares-400m-lubambe-mine-97-1m/.
Milanez, B., Dos Santos, R.S.P., 2019. Embedded corporate strategies and power: the case of Vale SA in Itabira, Brazil. Extr. Ind. Soc. 6 (3), 889–896. https://doi.org/10.1016/j.exis.2019.05.015.
Milanez, B., Losekann, C., 2016. Desastre No Vale do Rio Doce: antecedentes, Impactos e Ações Sobre a Destruição. Letra e Imagem.
Milhorance, C., 2018. New Geographies of Global policy-making: South-South networks and Rural Development Strategies. Routledge.
Milhorance, C., Bursztyn, M., 2017. South-South civil society partnerships: renewed ties of political contention and policy building. Develop. Policy Rev. 35, O80–O95. https://doi.org/10.1111/dpr.12218.
Monjane, B., Bruna, N., 2019. Confronting agrarian authoritarianism: dynamics of resistance to ProSavana in Mozambique. J. Peasant Stud. 117 (1), 69–94. https://doi.org/10.1080/03066150.2019.1671357.
Monjane, C.M. (2019). *Rethinking the political economy of commodity-based linkages: insights from the coal sector in Mozambique* [PhD dissertation, Roskilde University]. RUC database. https://forskning.ruc.dk/en/publications/rethinking-the-political-economy-of-commodity-based-linkages-insi.
Mosca, J., Selemane, T., 2011. El Dorado Tete: Os mega Projectos De Mineração. Centro de Integridade Pública. https://landportal.org/pt/library/resources/el-dorado-tete-os-mega-projectos-de-minera%C3%A7%C3%A3.
Murdifin, I., Pelu, M.F.A., Putra, A.A.H.P.K., Arumbarkah, A.M., Muslim, M., Rahmah, A., 2019. Environmental disclosure as corporate social responsibility: evidence from the biggest nickel mining in Indonesia. Int. J. Energy Econ. Policy 9 (1), 115. https://doi.org/10.32479/ijeep.7048.
Musacchio, A., Lazzarini, S.G., Schneider, B.R., 2016. The reinvention of state capitalism in Brazil (Ed.). In: Schneider, B.R. (Ed.), New Order and Progress: Development and Democracy in Brazil. Oxford University Press, pp. 107–133.
Namaganda, E., Otsuki, K., Steel, G., 2022. Learning from Africana critical theory: a historicized contextualization of the impacts of Mozambique's natural gas project. Extr. Ind. Soc. 10, 101075 https://doi.org/10.1016/j.exis.2022.101075.
Namaganda, E., Otsuki, K., Steel, G., 2023. Understanding the cumulative socioenvironmental impacts of energy transition-induced extractivism in Mozambique: the role of mixed methods. J. Environ. Manage. 338, 117811 https://doi.org/10.1016/j.jenvman.2023.117811.
Otsuki, K., 2019. Who is in'the public'? Infrastructure of displacement and urban resettlement in Mozambique. Built Environ. 44 (4), 493–508. https://doi.org/10.2148/benv.44.4.493.
Pedro, J., 2017. Resettled by Coal: vale in Mozambique (Eds.). In: Alden, C., Chichava, S., Alves, A. (Eds.), Mozambique and Brazil: Forging New Partnerships Or Developing dependency? Fanele, pp. 194–213.
Reginato, G.D., Dalla Pozza, D.F., 2013. O discurso da responsabilidade social e da sustentabilidade na comunicação organizacional da Vale. Organicom 10 (18), 138–150. https://doi.org/10.11606/issn.2238-2593.organicom.2013.139175.
Reuters. (2021, January 21). *Brazil's Vale to divest troubled coal assets in Mozambique*. https://www.reuters.com/article/us-japan-mitsuimitsui-co-coal-idUSKBN29Q08C.
Rossi, A. (2013, October 31). *Vale se torna a maior investidora do Brasil na África e é alvo de críticas*. Estadão. https://brasil.estadao.com.br/noticias/geral,vale-se-torna-a-maior-investidora-do-brasil-na-africa-e-e-alvo-de-criticas,1091746.
Rossi, A. (2015). *Moçambique, o Brasil é aqui: uma investigação sobre os negócios brasileiros na África*. Record.
Sabino, T.H.V. (2015). *Governança corporativa: um estudo de caso na empresa Vale SA* [Master's thesis, Universidade Federal de Minas Gerais, UFMG]. Repositório Institucional da UFMG. http://hdl.handle.net/1843/BUBD-AA3P7C.
Saes, B.M., Muradian, R., 2021. What misguides environmental risk perceptions in corporations? Explaining the failure of Vale to prevent the two largest mining disasters in Brazil. Resour. Policy 72, 102022. https://doi.org/10.1016/j.resourpol.2021.102022.
Saraiva, J.F.S., 2010. The new Africa and Brazil in the Lula era: the rebirth of Brazilian Atlantic Policy. Revista Brasileira de Política Int. 53, 169–182. https://doi.org/10.1590/S0034-73292010000300010 (SPE).
Seibert, G., 2011. Brazil in Africa: Ambitions and achievements of an emerging regional power in the political and economic sector, 4. ECAS, pp. 1–16.

Seibert, G., Visentini, P., 2019. Brazil-Africa Relations: Historical Dimensions and Contemporary Engagements, From the 1960s to the Present. Boydell & Brewer.
Selemane, T., 2023. From Vale to Vulcan: 'new wine in old bottles?'. An analysis of Vale's exit from Mozambique. Extr. Ind. Soc. 15, 101302 https://doi.org/10.1016/j.exis.2023.101302.
Shankland, A., Gonçalves, E., 2016. Imagining agricultural development in south–south cooperation: the contestation and transformation of ProSAVANA. World Dev. 81, 35–46. https://doi.org/10.1016/j.worlddev.2016.01.002.
Shipton, L., Dauvergne, P., 2021. The politics of transnational advocacy against Chinese, Indian, and Brazilian extractive projects in the Global South. J. Environ. Develop. 30 (3), 240–264. https://doi.org/10.1177/10704965211019083.
Sidaway, J.D., 2007. Enclave space: a new metageography of development? Area 39 (3), 331–339.
Statista. (2023). *Distribution of global iron ore exports in 2022, by major country*. https://www.statista.com/statistics/300328/top-exporting-countries-of-iron-ore/.
Stolte, C., 2015. Brazil's Africa strategy: role conception and the drive for international status. Springer.
Sumich, J., 2010. The party and the state: Frelimo and social stratification in post-socialist Mozambique. Dev. Change 41 (4), 679–698. https://doi.org/10.1111/j.1467-7660.2010.01653.x.
The Economist. (2012, November 10). *A new Atlantic alliance: brazilian companies are heading for Africa, laden with capital and expertise*. https://www.economist.com/business/2012/11/10/a-new-atlantic-alliance.
Toth, S., 2011. African Farmers Face Resistance to Technology. Agribus. Glob. https://www.agribusinessglobal.com/markets/africa-middle-east/african-farmers-face-resistance-to-technology/.
Triner, G.D., 2015. Mining and the State in Brazilian development. Routledge.
Tsuji, H., Otsuki, K., 2023. The trajectory of extractive urbanism: examining the implications of Vale's presence and withdrawal for the coal frontier and its urban spaces in Tete. Extr. Ind. Soc. 13, 101170 https://doi.org/10.1016/j.exis.2022.101170.
Vale. (2011). *2011 Sustainability Report*. https://www.vale.com/documents/d/guest/2011-sustainability-report-investors.
Vale. (2013). *2013 Sustainability Report*. https://www.vale.com/documents/d/guest/2013-sustainability-report.
Vale. (2022). *2022 Integrated Report*. https://vale.com/documents/d/guest/vale_relatointegrado2022-en-final-1?_gl=1*wrtxpz*_ga*MTQyMzQzMzI5LjE2OTU3MzcxNzM.*_ga_BNK5C1QYMC*MTY5Njk1MDc5Ni44LjEuMTY5Njk1MTI2MS42MC4wLjA.
Van Agtmael, A., 2007. The Emerging Markets century: How a new Breed of World-Class Companies is Overtaking the World. Simon & Schuster.
Van Der Ploeg, L., Vanclay, F., 2018. Challenges in implementing the corporate responsibility to respect human rights in the context of project-induced displacement and resettlement. Resour. Policy 55, 210–222. https://doi.org/10.1016/j.resourpol.2017.12.001.
Visentini, P.F., 2010. Cooperação Sul-Sul, diplomacia de prestígio ou imperialismo" soft"? As relações Brasil-África do governo Lula. Século XXI 1 (1), 65–84.
Vodopives, H.D.M., 2015. The globalization wave rolls towards Canada, with Vale's acquisition of Inco. Revue française d'histoire économique (1), 146–156. https://doi.org/10.3917/rfhe.003.0146.
Waisbich, L., 2020. Participation, critical support and disagreement: Brazil-Africa relations from the prism of civil society (Eds.). In: Alencastro, M., Seabra, P. (Eds.), Brazil-Africa Relations in the 21st Century: From Surge to Downturn and Beyond. Springer, pp. 113–132.
Wiegink, N., 2018. Imagining booms and busts: conflicting temporalities and the extraction- "Development" nexus in Mozambique. Ext.r Ind. Soc. 5 (2), 245–252. https://doi.org/10.1016/j.exis.2018.02.012.
Wiegink, N., 2020. Learning lessons and curbing criticism: legitimizing involuntary resettlement and extractive projects in Mozambique. Polit. Geogr. 81, 102192 https://doi.org/10.1016/j.polgeo.2020.102192.