ARTICLE IN PRESS

Geoforum xxx (xxxx) xxx



Contents lists available at ScienceDirect

Geoforum

journal homepage: www.elsevier.com/locate/geoforum



Articulating sedimented subjectivities: Extractive subject formation in eastern DRC

Judith Verweijen^{a,*}, Sara Geenen^b, Anuarite Bashizi^c

ARTICLE INFO

Keywords:
Subjectivity
Extractive industries
Articulation
Corporate-community relations
Colonial residue

ABSTRACT

In this contribution, we examine how people living around industrial gold mining concessions in eastern Democratic Republic of Congo (DRC) view themselves in relation to the extractive industries. We apply Hall's notion of articulation to grasp the layering of extractive subject formation in time and space, or what we call the "sedimentation of subjectivities". The lens of articulation allows for a better understanding of how people engage with the subject positions they are interpellated into. Specifically, it helps uncover how this engagement is imprinted by subjects' socio-economic position and historically shaped forms of social identification. The notion of sedimentation, in turn, enables us to trace how the crystallization of subjectivities in one particular conjuncture influences subsequent processes of subject formation – a dynamic with distinct spatial dimensions. People's sense of place, including how they relate to the soil and subsoil, is an important vector of these historical influences. In sum, the notion of sedimented subjectivities captures the spatio-temporal dimensions of subject formation over the longue durée. It therefore helps establish the enduring influence of "colonial residue" on contemporary subject formation. In addition, our approach sheds further light on the overall modest imprint of the governmental schemes of extractive corporations on extractive subject formation. We ascribe this to the heterogeneity and sedimentation of the elements that shape subject formation and the dispersed nature of processes of interpellation. These observations further underscore the pertinence of a spatio-temporal perspective on subject formation.

1. Introduction

The ways in which people understand and define themselves in relation to the extractive industries have long been the object of scholarly inquiry. Commonly inscribed in Marxist thinking, earlier generations of scholarship often drew on the terminology of social consciousness to describe this aspect of selfhood. This work explored mine workers' and members of mining communities' sense of self and its interrelations with their attitudes towards the extractive industries, in particular, resistance and acquiescence (e.g., Nash, 1972; Van Onselen, 1973; Phimister, 1976; Perrings, 1977; Gaventa, 1982).

More recently, scholars have come to use the concept of subjectivity to grasp how people view and position themselves vis-à-vis the extractive industries (Loder, 2016; Frederiksen & Himley, 2020). This places

such scholarship within the vivid debates on environmental subject-making that have unfolded in the field of political ecology (for recent overviews see Fletcher & Cortes-Vazquez, 2020; González-Hidalgo & Zografos, 2020; Jakobsen, 2022). These debates focus, inter alia, on the different factors shaping subject formation and the ways in which these factors interact. Scholars attach variegated weight to factors such as socio-economic position, registers of social identity (e.g., gender and race), affect and emotions, place and socionatures (Sultana, 2009; Nightingale, 2011, 2013; González-Hidalgo & Zografos, 2020). Relatedly, they differ on the extent to which Foucauldian theoretical frameworks allow for adequately capturing the most salient factors that shape processes of subject formation (Mann, 2009; Cepek, 2011; Singh, 2013; Cortes-Vazquez & Ruiz-Ballesteros, 2018; Fletcher & Cortes-Vazquez, 2020).

E-mail addresses: j.e.c.verweijen@rug.nl (J. Verweijen), sara.geenen@uantwerpen.be (S. Geenen), anuarite.bashizi@uclouvain.be (A. Bashizi).

https://doi.org/10.1016/j.geoforum.2022.10.009

Received 8 September 2021; Received in revised form 14 October 2022; Accepted 20 October 2022 0016-7185/© 2022 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

a University of Groningen, the Netherlands

b Institute of Development Policy, Antwerp University, Belgium and Centre d'expertise en gestion minière (CEGEMI), Université catholique de Bukavu, Democratic Republic of the Congo

c Université catholique de Louvain, Belgium and Centre d'expertise en gestion minière (CEGEMI), Université catholique de Bukavu, Democratic Republic of the Congo

^{*} Corresponding author at: Department of International Relations & International Organization, University of Groningen, Oude Kijk in 't Jatstraat 26, PO box 716, 9700 AS Groningen, the Netherlands.

Despite these differences, there is a growing consensus that the governmental technologies of institutions such as states, corporations and international NGOs ultimately have only a limited imprint on people's lived sense of self. To explain this modest imprint, scholars commonly point to the agency of the governed, including what has been conceptualized as counter-conduct (Gupta, 2005; Cepek, 2011; Singh, 2013; Silva, 2015; Cortes-Vazquez & Ruiz-Ballesteros, 2018; Asiyanbi et al., 2019; Nepomuceno et al., 2019; Choi, 2020; Robinson, 2021). Relatedly, it is increasingly acknowledged that processes of subject formation generally do not lead to the production of "new subjects" in the singular, but generate a multiplicity of different subject positions (Choi, 2020), which are "fluid" (Sultana, 2009), "fragmented" (Collins, 2019), "ambivalent" (Nightingale, 2013) and "incoherent" (Jakobsen, 2022).

Debates on subject formation have important theoretical and political ramifications. Theoretically, they are inscribed in wider discussions in the field of political ecology about the nature of power and the structuring effects of economic relations. These debates centre on the convergences and divergences between Marxist, in particular Gramscian, perspectives on the one hand, and Foucauldian perspectives on the other (Ekers & Loftus, 2008; Mann 2009; Svarstad, Benjaminsen & Overå, 2018). Politically, debates on subject formation are important as they help explain how subjects position themselves vis-à-vis dominant power structures and when, why and how they reject, resist, renegotiate, accommodate, acquiesce or subject to them. Within the context of socioenvironmental conflicts, understanding this positioning provides a better insight into the (im)possibilities of transformative action and the conditions in which such action is more likely to occur (Nightingale, 2013; González-Hidalgo & Zografos, 2017; 2020; Nepomuceno et al., 2019).

Presenting a case study of subject formation in industrial gold mining concessions in eastern Democratic Republic of Congo (DRC), this article makes a threefold contribution. First, we demonstrate the analytical pertinence of Hall's notion of articulation to capture how people's socioeconomic position interacts with forms of social identification in shaping how and why subjects invest or do not invest in the subject positions they are hailed into (Hall, 1996). Second, taking inspiration from Massey (1984), we introduce the notion of sedimentation to capture the spatio-temporal dimensions of processes of articulation and the layering of subject formation in time and space. Third, we shed further light on the puzzle of why governing institutions-in this case extractive corporations-ultimately shape the subjectivities of the governed only to a limited extent, despite the vast power differentials at play. We ascribe this to the heterogeneity and sedimentation of the elements that shape subject formation and the dispersed nature of the processes through which subjects are interpellated.

We prefer the term "subject formation" over alternatives such as subject-making as we believe it better reflects the evolving nature of the process, its layering in time and space and the overall modest role of governmental schemes. We follow Foucault (1982) in approaching subject formation as a two-pronged process of at once fashioning a sense of selfhood and subjection to power or having power exercised over oneself. Paying heed to "the political" in political ecology, our discussion foregrounds the dimension of subjection to power, more specifically, subjection to the power of the extractive industries. Acknowledging that "extraction" is the defining logic of all projects entailing extensive control over and the large-scale transformation of natural resources, including mining, conservation, energy production and agriculture (Gudynas, 2010; Dunlap & Jakobsen, 2020; Le Billon, 2021), we do not consider the processes of subject formation described in this article to fundamentally differ from those taking place in other contexts of socioenvironmental struggle. However, as argued by Frederiksen and Himley (2020), large-scale mining projects have a specific and far-reaching impact on landscapes and ecosystems, on the socio-economic and political make-up of particular social formations and on how people are socio-economically positioned in these formations. The term "extractive

subjectivities" draws attention to how these transformations affect the ways in which people subject themselves (or not) to the power of the extractive industries.

The remainder of this article is structured as follows. The next section outlines our theoretical approach. This is followed by a description of the research context and the methods used. We then describe how two critical conjunctures, the late Belgian colonial era and the late Zaire era, gave rise to four subject positions that continue to shape the contemporary extractive self: 1) the subjugated colonized subject; 2) the client of the benevolent corporate patron; 3) the rights-bearing autochthonous subject and; 4) the self-governing artisanal miner. We conclude by outlining the theoretical implications of our approach.

2. Articulating sedimented subjectivities

Reflecting on Althusser's intellectual legacies, Hall (1985: 103) laments how the two-part structure of his famous 1970 essay "Ideological State Apparatuses" led to a "bifurcation" in efforts to conceptualize the relations between ideology and subjectivity. For Hall, it isolated the discussion of how the subject is constituted through the interpellation of ideological discourses from the broader question of how ideology enables the reproduction of the social relations of production. Resultantly, the analysis of social relations and productive systems, situated in Marxist scholarship, evolved largely separately from the analysis of subjectivity, which became dominated by discourse theory and linguistically-oriented psychoanalysis.

Political ecology has inherited--and tried to overcome-this bifurcation, as reflected in debates on the place of class analysis in subject formation and the extent to which Foucauldian theoretical frameworks can adequately incorporate such analysis (Mann, 2009; Ekers, 2015; Jakobsen, 2022). Foucault himself did not explicitly discuss how class and subjectivity relate to one another. In his essay "The subject and power", he writes that mechanisms of subject formation entertain "complex and circular relations" with mechanisms of exploitation and domination (Foucault, 1982: 782), but he does not further conceptualize these relations (Flew, 2014). Some political ecologists have therefore verged towards other theoretical traditions, including Gramscian approaches, to better account for the role of the economic in subject formation (Ekers & Loftus, 2013; Jakobsen, 2022). Political ecologists have also drawn on non-Foucauldian theoretical tools, in particular from feminist and postcolonial theory, to better conceptualize how subject formation is shaped by registers of social identity, such as gender and race (Nightingale, 2013; González-Hidalgo & Zografos, 2017; Sultana, 2021). These theoretical tools allow for developing a more detailed understanding of why, when and how certain subject positions take precedence over others in everyday life (cf. Hall, 1996).

Following Li (2000) and Robinson (2021), we make use of Hall's notion of articulation as a heuristic device to grasp how subject formation is informed by at once social identities and socio-economic position (see also Short, 2013). Hall uses articulation in two senses. First, it signifies how people express their subjectivities for and make them discernible to an audience (Hall, 1996). Second, it describes the contingent, but still essential character of the linkages between economic and other aspects of social formations, such as the ideological and the political, which are "structured in dominance" (Hall, 1980: 325). These two dimensions of articulation are related in that how people express their subjectivities is imprinted by their position within the social formations they are situated in.

Hall emphasizes that the subject's relation to discursive formations—which arise from social formations—is structured by processes of identification. He defines identity as the "meeting point, the point of suture, between on the one hand, the discourses and practices which attempt to 'interpellate', speak to us or hail us into place as the social subjects of particular discourses and on the other hand, the processes which produce subjectivities, which construct us as subjects which can be 'spoken'" (Hall, 1996: 5-6; see also Hall, 1995). It is in this very point

of suture that we should locate the processes that shape how people engage with and enact the subject positions they are hailed into, or in other words, how they articulate their subjectivities. As Hall (1980) demonstrates in relation to race, these processes are imprinted by historically formed subjectivities and registers of social identity, the evolution of which has been shaped –but not determined– by economic relations. People's engagement with interpellations is also impacted by how they are situated vis-à-vis the structures of power that permeate the social formations they are part of. This location is the product of a multitude of historically specific social relations (economic, political, ideological) (Hall et al., 2017). It is here that the second sense of articulation becomes pertinent, which foregrounds economic relations within the analysis of particular conjunctures, but without falling into economic reductionism (Hall, 1985).

While Hall's work displays clear spatial sensibilities (Rose, 1997; Keith, 2014), his account of subject formation does not systematically engage with its socio-spatial dimensions. Recent work in political ecology and geography, however, highlights how subjectivities emerge in and through space. To start with, where and how subjects are interpellated is spatial (Probyn, 2003). Following Foucault's (1980) understanding of power as capillary and dispersed, we argue that interpellation is not the preserve of social and political institutions—an idea that reflects the "centred" view of power that governmentality rejects (Allen, 2003). Rather, interpellation is the product of the complex interaction between an ensemble of heterogeneous and often dispersed elements, such as classificatory schemes, the historically inscribed meanings of places and socionatures, and techniques of spatial ordering. Furthermore, space and subjectivity co-constitute one another (Probyn, 2003). Subjectivities are constructed through everyday practices that are enacted in and structured by places (Nightingale, 2011, 2013). This structuring process is shaped by people's subjective and affective orientation towards place, or what humanist geographers call a "sense of place" (Tuan, 1975: 161). Sense of place is a product of and informs everyday practices (Agnew, 1987). These practices, in turn produce and reproduce places, including their material dimensions (e.g., the built environment, "nature") (Pred, 1984). As a result, place-making and subject formation are intricately bound up with one other.

Within political ecology, analyses of the relational construction of subjects and their (bio)physical environment increasingly zoom in on socionatures. These analyses foreground subjects' emotionally laden and dynamic interactions with the non-human world, for instance, with landscapes, waterscapes, forests, fish, and lawns (Sultana, 2009; Nightingale, 2011, 2013; Eden & Bear, 2011; Robbins, 2012; Singh, 2013; González-Hidalgo & Zografos, 2020). Examining how socionatures and places are historically produced, we argue, offers another route to tracing the complex interaction between economic and other social relations within subject formation. Massey's (1984) approach to the construction of place as "sedimented" or the product of a historical and spatial layering process offers a fruitful analytic to this end. While she acknowledges that this layering process is imprinted by distinct spatial divisions of labour as structured by capitalist relations, she contends that "the layers of history which are sedimented over time are not just economic; there are also cultural, political and ideological strata, layers which also have their local specificities" (1984: 116).

Transposing the notion of sedimentation onto subject formation allows for capturing how subjectivities are dynamically formed through a set of historically produced factors, including registers of social identity, previous subjectivities, subjects' socio-economic position and their affective ties to places and socionatures. Each of these factors is the product of spatio-temporal layering processes unfolding in different social formations that consist of articulated social relations (Hall, 1980). This emphasis on spatio-temporal layering, we argue, facilitates tracing how contemporary subject formation is imprinted by colonial residue, or "the continued and performative colonial presence embodied by people and societal structures" (Collins, 2019: 38). It is important to highlight that while the historically produced factors outlined above heavily

shape subject formation, they do not fully determine the process. When interpellated by dominant discourses, subjects draw on these factors to engage with the subject positions they are hailed into. Yet how and to what extent they do so, hence how they articulate their subjectivities, ultimately also reflects their agency.

In this article, we examine how people living on or next to industrial gold mining concessions in eastern DRC articulate their subjectivities vis-à-vis the extractive industries. Specifically, we show how the subject positions they come to inhabit are shaped by different forms of social identification (e.g., race, ethnicity, occupational identity), historical subjectivities (e.g., being colonized, fending-for-oneself); their socioeconomic position (e.g., belonging to the poorest strata, being elites) and their sense of place (e.g., experiences of spatial segregation, feelings of indigeneity). In addition, we show how these different factors are the product of spatio-temporal layering processes that have been heavily imprinted by the extractive sector, zooming in on two historical conjunctures: colonial-era industrialization and the post-colonial rise of artisanal mining. As we show, the extractive subject positions emerging out of these processes are incoherent and unevenly shaped by the power of the extractive industries.

3. Research methods and case studies

We ground our analysis of extractive subject formation in a variety of qualitative data collected among populations living in and around two industrial gold mining concessions in eastern DRC. These data were gathered periodically between 2009 and 2018, over a period of in total 13 months, by each of the three authors independently for different research projects. While each research project had a distinct focus, they all explored how different groups of people, including artisanal miners, subcontracted workers, farmers, local entrepreneurs, civil society organizations and local authorities, relate to, view and behave towards the extractive industries. As a result, our questions steered people into talking about themselves in relation to the mining company, which we consider a crucial way of gauging the subject positions that they inhabit in relation to the extractive industries. Many of our research projects also looked at how power operates in mining areas. Therefore, we studied dominant governmental rationalities and techniques of power, including those enacted by the corporation's staff, local authorities and other elites, and tried to identify how they imprint people's sense of self. We primarily used qualitative methods, including focus groups, semistructured interviews, informal talks, document analysis (e.g., petitions and letters) and (participant) observation.

Detecting recurring patterns in how people talked about themselves in relation to the extractive industries, we were able to identifyfour overlapping extractive subject positions that people regularly inhabit in a shifting and fluid manner. Although these four were articulated most strongly, we do not deny the existence nor the importance of other subject positions. Moreover, we acknowledge that there are individual variations in how these subject positions are experienced and expressed, as their articulation draws on configurations of factors, such as socioeconomic location and gendered identities, that differ per individual.

Our research focuses on two gold mining concessions held by Canada-listed Banro Corporation: one in Maniema province, operated by its local subsidiary Namoya Mining and one in South Kivu province, operated by its subsidiary Twangiza Mining. Banro was a pioneer in resuming industrial exploitation in eastern DRC in the wake of two wars (1996–1997 and 1998–2003) that ravaged the country. It launched exploration activities in 2004 and 2005, when the central government was still struggling to extend authority over former rebel-held areas. In 2012, Banro started commercial production in Twangiza, followed by Namoya in 2016. The production phase was preceded by the forced displacement of artisanal miners and farmers from the core mining perimeters, which created severe economic shocks and disrupted many people's lives and livelihoods. These disruptions led to intense grievances, which in the case of Namoya were capitalized on by armed

groups. The latter undertook a spate of violent attacks on the company and its subcontractors between 2016 and 2019, including hostage taking (Geenen & Verweijen, 2017; Verweijen, 2017). In addition, in both concessions, a complex micro-politics emerged around accessing the benefits of the company's presence, such as employment, contracts for goods and services, social investments and payments to local authorities. These power struggles implicated competing local elites, including customary chiefs and their broader political networks, leading to significant turbulence (Geenen & Claessens, 2013; Geenen, 2015; 2019a). This insecurity took a financial toll on the company, which delisted from the Toronto stock exchange in early 2018. In 2020, it announced that it was seeking to sell both concessions (Reid, 2020). Twangiza Mining was eventually taken over by the Chinese investment group Baiyin Mining, while the Namoya concession was sold mid-2021 to a company owned by Paris-listed Auplata Mining Group, which is headed by a politically influential Congolese businessman (Africa Intelligence, 2021; La Prunelle, 2021).

The post-war re-industrialization sparked by Banro's arrival in eastern DRC was but the latest phase of a long history of mineral extraction in the area. This history has left deep traces on local social formations and landscapes as well as on how people view themselves, the extractive industries and their environment. We found that two specific historical conjunctures have had overbearing influence on contemporary processes of extractive subject formation: first, the late Belgian colonial era (ca. 1930s–1960) heralding the emergence of industrial mining and ethnicized local government; and second, the late Zaire era (1980s–1990s, when the DRC was named Zaire), characterized by the development of artisanal mining and new forms of self-government triggered by the demise of the Zairian state (Young, 1994).

4. Critical conjunctures

Industrial mining in the DRC developed under the Belgian colonial regime (1908–60) that succeeded the Congo Free State (1885–1908). From the start, it was driven by chartered companies linked to foreign financial groups. In the Kivu region in the east, the mining landscape was dominated by subsidiaries of the business group of Belgian baron Edouard Empain, which had received vast land and mining concessions in exchange for creating a rail and waterway system. In the area that is now South Kivu, gold and cassiterite (a tin ore) were mined by the Compagnie minière des Grands Lacs Africains (MGL), while in present-day Maniema, the dominant player was the Compagnie belge de gestion d'entreprises minières (Cobelmin). Both these companies were linked to the Empain Group (Hillman, 1997).

MGL was granted far-reaching powers to govern the areas where it operated, creating self-administered enclaves with their own infrastructure and facilities. Kamituga was the main gold mine and administrative seat of MGL's southern division. The strict spatial segregation in this mining town illustrates how colonial companies used spatial arrangements as technologies of rule (Rubbers, 2019). Different categories of workers (e.g., skilled, unskilled, administrative and management positions) lived in segregated neighbourhoods and had differentiated access to facilities such as hospitals, canteens, schools and leisure activities (Geenen, 2015). While Zone A was only accessible to company workers and the original inhabitants of the villages located there, Zone B was reserved for agriculture and the provisioning of the workers. Here, farming populations were governed through customary chiefs, akin to the system of indirect rule that the colonial administration had adopted in rural zones. In Zone A, by contrast, workers and their households were governed directly by the company through a combination of paternalism and more direct forms of coercion.

To enhance workers' productivity and keep them under control, the company tried to mould their subjectivities around the notions of cosmopolitanism, modernity, and Christian family values, implying ethnicity was played down. In addition, befitting its fatherly role as provider, MGL fostered the self-identification of its workers as

"children" of the company (Kyanga Wasso, 2013). One former company worker expressed it as follows:

Everyone was relying on the company, so it was in their interest that its structure remained as it was. You could not touch the company, since it was like a parent to all of us. There was a degree of paternalism, yes. But it was difficult to step out of this logic. One could not imagine living without the company (interview, July 2009, Kamituga).

How urban workers were governed differed considerably from Belgian colonial rule over rural areas, where ethnic identity was emphasized rather than downplayed. To create an efficient system of local rule, the colonizers set out to organize "the natives" into ethnically homogenous units administered by customary chiefs, who were seen to represent particular ethnic groups. As chiefs came to monopolize local political representation and the regulation of access to land, this model of local administration made ethnicity a defining frame of reference for socio-political organization (Muchukiwa, 2006; Hoffmann, 2021). As a result, local power struggles in the Kivus became increasingly framed in the languages of autochthony and ethnicity (Mathys, 2017). Autochthony refers to the idea of being the first or original inhabitants of a particular area and therefore feeds deeply into subjectivities and people's sense of place (Geschiere, 2009).

While ethnicity remained important throughout the post-independence era, it would become even more salient in the 1980s and 90s, the second conjuncture that has a key influence on present-day extractive subject formation. The second half of President Mobutu's long reign (1965–1996) was characterized by drastic economic and state decline (Young, 1994). These adverse circumstances gave rise to what the Congolese refer to as *la débrouillardise* (from *se débrouiller*-fending for one-self), referring to the notion of self-reliance and employing creative and ingenuous manners to survive and ensure social order. State and economic decline also reinforced rationalities of patronage, as people became increasingly dependent on social connections to access social services and economic opportunities. These developments led to important shifts in how people saw themselves as subjects and as subjected to state power (Bilakila, 2004; Trefon, 2009).

Economic decline also had a profound impact on the mining sector in Kivu. Owing to heavy fluctuations in world mineral prices and the general deterioration of infrastructure and economic conditions, industrial mining output dwindled. In 1976, a series of mergers of smaller mining companies linked to the Empain Group resulted in the creation of the *Société minière et industrielle du Kivu* (SOMINKI), 28 % of which was owned by the Zairian state. While gold production remained relatively stable, SOMINKI was unable to halt a downward trend in the industrial production of cassiterite (a tin ore), wolframite and coltan. After a huge crash in the world market price of tin in 1985, the company started to look for a buyer for its concessions (Kyanga Wasso, 2013).

Meanwhile, artisanal mining activity - a clear manifestation of débrouillardise-boomed. Already since the late colonial period, people in Kivu had been searching for gold, mostly by panning in rivers. In the 1970s, the nature and the scale of these activities expanded dramatically. Miners started to dig at night in SOMINKI's underground tunnels, setting up an elaborate system of illegal exploitation and trade (Kasele & Kasongo, 1979; Geenen, 2015). As the formal economy crumbled and agricultural production decreased, artisanal mining became an increasingly important part of the economy. Its salience only grew after President Mobutu's decision to liberalize the gold and diamond sector in 1982, causing rural populations to move en masse to the mines (Dupriez, 1987). This movement intensified during the Congo Wars (1996–2003), when world market prices for certain minerals soared. Agglomerations that had emerged around colonial mining towns and new rush sites further expanded, leading to profound socio-spatial transformations. Aside from a wide range of workers involved in mining and processing (crushing, sifting, washing, burning), these towns drew traders, motor-

taxi drivers and people opening shops, restaurants, brothels and pharmacies (Büscher, 2018). Artisanal mining now became a distinct occupation with a related occupational identity and culture, including a particular vocabulary, lifestyle and (gendered) professional norms and values (De Boeck, 1998; Cuvelier, 2014; Geenen, 2015; Bryceson & Geenen, 2016). Because of its intimate connections to *débrouillardise*, this occupational identity is closely linked to a particular subject position that stresses self-reliance, freedom and independence from the state.

In sum, in both the late colonial and the late Mobutu era, new subjectivities and technologies of rule emerged. Both periods also saw important changes in regimes of accumulation that left deep sociospatial traces: the late colonial era witnessed the development of industrial mining by foreign capital and the integration of Kivu into the global imperial order, while the late Mobutu era was characterized by deindustrialization and the decline of foreign direct investment. The arrival of Banro in the early 2000s heralded yet another wave of economic transformation. Artisanal mining was partly banned and displaced, but few alternative livelihoods options emerged. While Banro displaced around 12,000 artisanal miners from its concessions, in 2016, Twangiza and Namoya Mining combined employed only 1,301 workers directly and another 1,813 indirectly (Banro, 2017). Of this last category, no more than an estimated 15 % were former artisanal miners (Geenen & Gleiberman, 2021).

In light of these profound livelihood effects and the general context of deep poverty, it may not be surprising that we found people's socioeconomic location and how it had been affected by Banro's presence to importantly shape the articulation of extractive subject positions. Yet, socio-economic location did not imprint subject formation in a straightforward fashion but through a complex interplay with other factors, all of which bore clear traces of the two historical conjunctures outlined above. In the following, we further describe this interplay by zooming in on four distinct subject positions we observed people to frequently inhabit in relation to the mining corporation, centring on (1) being colonized, (2) clienthood, (3) autochthony and (4) artisanal mining, respectively.

5. The subjugated colonized subject

In our conversations about Banro, we noted that people regularly expressed the sense of being subjugated subjects similar to the colonial era, invoking deeply rooted feelings of injustice. In such cases, they painted a picture of the company as predatory, exploitative, and displaying contempt for "the natives", while emphasizing the vast power differentials separating them from the company. These power differentials were sometimes also framed in racial terms and linked to the dichotomy between black peoples' inferiority vs white peoples' superiority that was deeply ingrained in the subjectivities of the colonized (Fanon, 1961). Indeed, creating hierarchies between more and less civilized peoples, bodies and spaces through spatial and social techniques of classification was a crucial technology of colonial government. The result was a complex system of stratification both between and within colonizers and colonized that had pronounced spatial dimensions (Overton, 1987; Stoler, 1995; Njoh, 2009; Geenen, 2019b). People's sense of place in relation to the mining concession clearly reflected these stratifications, as it was imbued with memories of colonial practices of segregation, such as in Kamituga's Zone A and B.

One situation in which people regularly came to inhabit a colonial subject position was when discussing unequal labour conditions, discriminatory hiring practices and the devaluation of Congolese workers' skills compared to expatriate staff. Pointing to the long working hours and large pay gaps between Congolese and expat staff, a local leader called Banro's employment practices "a system of slavery" (interview, April 2016, Namoya). Another interviewee stressed that heavy duty tasks were always given to the Congolese workers, although "some of them are more skilled than the white workers" (interview,

April 2016, Namoya). Meanwhile, the white workers "who cannot even lift a light weight are paid 50,000 USD, and the Congolese 500 USD" (idem). Although these figures are not necessarily correct, the pay gap they refer to is real. In this context, a pamphlet from MGL workers from 1962 (two years after Congo's independence) appears to be very contemporary. It closes as follows:

The black man is considered as a human being during the working hours, when he can yield a good return to the European agent who controls him. European agents are automatically considered as chiefs, even if they do nothing all day long. The colour of his skin alone makes the difference... The black man works hard and the white man gets a better salary. The colonial period is not over in the southern mines (Norbert, 1962, cited in Geenen, 2015: 30).

Evoking this history of racial divisions of labour, current employment practices within the extractive sector were often described as echoing colonialism. A civil society activist in Namoya compared locals' recruitment for only unskilled or low skilled jobs to colonial rule, commenting that: "They [Banro] only recruit people locally to wash their clothes, because since the Belgians we are used to washing their [the colonizers'] clothes" (interview, April 2016, Namoya). Furthermore, the expat management of Namoya Mining were often referred to as "colonizers". This occurred, for instance, in accounts of an incident whereby the company's Ghanaian manager allegedly spat twice on a Congolese worker. This incident was commonly framed as a form of total humiliation akin to-or even worse than-what happened in the colonial era. One commentator said: "Even the Belgians did not do that. They were our colonizers. They whipped people, but they did not spit on them like that" (conversation, April 2016, Namoya). In early 2016, when dissatisfaction with the expat management of Namoya Mining reached a boiling point, anonymous pamphlets were distributed at night. One of them read: "We ask the Congolese government to end the colonial rule of the Ghanaians in Banro's camp, because otherwise there will be grave consequences".

The reference to Banro's camp in the pamphlet is not coincidental, but reflects the spatial inscription of colonially established hierarchies, in particular, practices of segregation that inform people's sense of place. Both the Namoya and the Twangiza concession have a "Banro camp", a gated site where the company offices are located and where a part of the workers stay -those who work directly for the corporation, have a permanent contract, and do not originate from the area. Because Banro staff rarely venture out of the camp, they are generally isolated from the population. Moreover, the population cannot enter the camp. As one civil society activist in Namoya commented: "We cannot go there [the camp], they will never let in ordinary people (batu ya chini, literally 'low people')" (interview, April 2016). This sense of inaccessibility is compounded by safety measures, such as high fences, barbed wire and private security guards, which are seen to symbolically mark the privileges and superiority of Banro staff. For many people, walking past this fortified compound serves as a permanent reminder of their inferiority.

Because of its historically inscribed signification, we believe that the Banro camp itself and the ways in which it affects people's sense of place play an important part in interpellating people as colonial subjugated subjects. This interpellation works via complex interactions with the practices and discourses of the corporation and its staff. The company's official discourse is replete with references to development, akin to the colonial mission civilisatrice. It promotes the model of the modern, industrial mine as the only path to "progress" for what are generally called "local communities" (Banro, 2015: 5). The implicit flipside of this is that these communities are currently considered to be in a state of underdevelopment and un-civilization. The discourses and practices of higher placed Banro staff-whether expats or Congolese-strongly reflect this classification. A Congolese community relations officer commented on artisanal miners that they were "lazy" and that "lazy people have to be rendered active" (interview, April 2016, Bukavu). This comment echoes colonial discourses of transforming the natives into civilized and

industrious subjects. Similarly, a Congolese manager of Banro's charitable arm qualified local people who were reluctant to participate in the charity's brick-making project as "lazy". He emphasized that "we don't give anything for nothing, you have to work for it.....but they don't understand" (interview, April 2016, Bukavu).

The discourses of high-ranking Congolese Banro staff show the importance of socio-economic location for extractive subject formation. Rather than articulating the position of colonial subjugated subject, elites who are able to move through expat places adopted colonial discourses framing local inhabitants as unproductive and reluctant to participate in their own development. Congolese elites' adoption of colonial tropes also demonstrates that socio-economic position does not always neatly map onto racial identification. This is further evidenced by the fact that, depending on their practices and attitudes, Ghanaian and Congolese managers were likened to "colonizers". These variations underscore that the relative salience of the different factors that shape the articulation of subjectivities and how their interplay works can vary per context.

6. The client of the benevolent corporate patron

When talking about Banro, many interviewees would portray the company as a potential provider and protector of the community –ideals it was seen not to live up to. People did not only expect the company to provide employment, but also to build transport infrastructure, health care centres and schools. Such expectations are shaped by (idealized) collective memories of past mining projects, when concession companies assumed state-like functions and acted as providers. These past projects pertain to both the colonial and the postcolonial era, pointing to a layering process whereby new iterations of industrial mining are assessed in terms of multiple past experiences. We cannot deduct from these idealized memories any broader evaluations of the eras they stem from- in particular colonialism-nor is that our objective. What interests us here is that cumulatively, memories of past mining projects have fed into the emergence of particular norms regarding the proper behaviour of mining companies that in turn inform and are shaped by a certain subject position.

These norms and the related subject position are strongly inscribed in rationalities of patronage. This notion refers to a powerful patron providing protection to and guarding the wellbeing of a network of clients, including by demonstrating largesse and representing them symbolically, in exchange for (political) support, loyalty and obedience (Erdmann & Engel, 2006). Notions of patronage are engraved in a gendered "moral matrix" of authority in which kinship looms large, in particular, the archetypal figure of the benevolent but stern father who protects and provides for but also corrects his offspring (Schatzberg, 1991: 89). Transposed onto extractive companies, they become seen as providers that guarantee communities' wellbeing in exchange for loyalty and obedience, giving rise to a type of corporate paternalism (Rubbers, 2013; Henriet, 2021).

In our research, notions of client subjectivity came strongly to the fore when people contrasted mining companies in both the colonial and the Mobutu era favourably with Banro. In their eyes, the former had created more employment, made more social investments and had constructed more durable and amicable social relations than the latter. During a focus group discussion in Namoya, participants said that in contrast to Banro, SOMINKI had provided "electricity, tarred roads, running water, and beautiful schools" (focus group, April 2018, Namoya). One interviewee lauded the colonial company Cobelmin for its investment in training, which had benefited his father who worked as a mechanic: "That I call a good policy of training local labour" (interview, May 2018, Twangiza). Others highlighted how durable employment and related social benefits had created a sense of identification with past mining companies. A civil society activist whose father had worked as a driver first for Cobelmin and then for SOMINKI said "They took care of him; they treated him well. He proudly worked his whole

life for them". He further added that back in the days, the company staff felt like a "family" (interview and conversation, April 2016, Namoya).

The benevolent patronage of past mining companies did not only have specific temporalities, relating to durable relations and long-term investments, but was also seen to entail distinct spatial practices, such as asphalting roads or constructing brick buildings. As a pastor explained:

The Europeans built in brick. They were there to stay...... But today, Banro has just put up containers. They even live in containers. They are not interested in building a house here, in investing in the community. They just want to extract gold as rapidly as possible and then leave (interview, April 2016, Namoya).

The remnants of past practices of corporate patronage are often still visible today, in the form of the presence-often in ruinous state- of buildings in brick or tarred roads, or their layout where they have disappeared. This debris has become an integral part of people's sense of place, reminding them both of what was and what should be. For instance, in Namoya, people often complained about the bad state of the road connecting Salamabila to South Kivu province, which Banro had slightly improved but was still seen to be below colonial standards. As a motor-taxi driver commented: "only when the whites [bazungu] were here did we have good roads" (conversation, April 2016, Namoya).

The strong inscription of corporate patronage-or the lack thereof- in people's sense of place points to the latter's role in interpellating people as clients of the benevolent corporate patron. Within these processes of interpellation, a sense of place interacts with an array of discourses and practices enacted by corporation as well as by local authorities, businesspeople and NGOs. One important focus of these discourses and practices is the notion of corporate social responsibility as embodied in the so-called cahier des charges -an institution that goes back to colonial concession companies in Central Africa (Coquery-Vidrovitch, 1972). The cahier des charges is a contract signed between the corporation and surrounding communities detailing the social interventions that the corporation will realize (Cordaid, 2020). This contract crucially positions the corporation as a benevolent patron demanding obedience and loyalty in exchange for providing social services. The contract with the Luhwindja community in the Twangiza concession, for instance, stipulates that "the relationship between the corporation and the community is reciprocal. Therefore, the corporation expects the community of Luhwindja to fully support the establishment and successful operation of the Twangiza Mine" (Protocole d'Accord, 2010).

Another set of discourses and practices that contribute to interpellating people as client subjects relates to employment, which is presented and experienced as a favour of the company to the select few. Those on the receiving end of the "gift" of employment are therefore expected to refrain from scrutinizing violations of the labour code and from participating in industrial action. As one worker explained: "To work well here, you have to pretend to be ignorant, to know nothing of the law" (interview, April 2016, Namoya). It is not only company staff who frame employment as a favour: the hiring practices of subcontractors and labour hire firms are also deeply shaped by rationalities of patronage. In order to get any job in the industrial mine, including manual labour or cleaning, you must have "connections", that is, a powerful patron. In this way, everyday experiences with obtaining or not obtaining a coveted job remind people of their client position and dependency on the corporate patron. This goes to show that rather than only emanating from clearly identifiable centres (in this case the corporation) interpellation is the product of a dispersed but interacting set of micro-practices, which are nevertheless imprinted by past and present corporate discourses and rationalities of government.

7. The rights-bearing autochthonous subject

A third subject position that people often articulated with regard to the extractive industries relates to autochthony. The notion of

autochthony revolves around a dichotomy between the first or original inhabitants of a certain place - "the sons/daughters of the soil" - and strangers or newcomers (Geschiere, 2009). This dichotomy can be operationalized both within and between pre-existing social groups, including those designated as ethnic, reflecting its fluid character (Jackson, 2006). In eastern DRC, autochthony is closely associated with the idea of ancestral land, given that it is the spirits of the firstcomers' ancestors who are seen to inhabit and guard the land. In addition, it is connected to "the right to have particular rights" (Côte, 2020, drawing on Arendt), notably, to land, local authority and citizenship. Autochthony has therefore been at the heart of contestations around these issues since at least the late colonial era (Verweijen & Vlassenroot, 2015; Mathys, 2017). This rights-bearing aspect came clearly to the fore when people articulated the subject position of being autochthonous, which most often occurred in two situations: first, when discussing attachment and rights to the soil and subsoil, and violations of those rights by the corporation; and second, when discussing the distribution of benefits related to the corporation's presence.

Even if according to Congolese law, the soil and subsoil are owned by the state, in a context of legal pluralism, people lay claim to land and everything underneath it by referring to customary and ancestral norm systems (Geenen, 2015). Interviewees would say, for instance, "this is the land of our ancestors", "this is our land" or "this is our hill". In Namoya, customary chiefs, who continue to be seen as the custodians of communally owned land, articulated the notion of autochthony particularly strongly. This was especially the case when describing how the corporation had dispossessed them of their ancestral lands, which, they believed, entitled them to compensation for the loss of income from customary taxes on land use and mining. The autochthonous subject position was also forcefully expressed by people describing how they had been displaced from the concession perimeters, which they similarly experienced as an act of dispossession. "They have taken our land away from us" was an often-heard expression.

In our interviewees' testimonies, the experience of being dispossessed of one's ancestral lands and the loss of the related livelihoods generally gave rise to a set of claims and entitlements pertaining to jobs and economic benefits. In both Twangiza and Namoya, communities have pressured the company into giving priority to "local labour" in recruitment, in line with local content policies that are becoming increasingly prevalent in industrial mining operations (Geenen, 2019). Yet the resulting arrangements have provoked fierce discussions about who is local and who is not, reflecting the malleability of the autochthony discourse. For instance, within the sector (local administrative entity) of Salamabila, where Namoya Mining is located, the Bangubangu claim to be the autochthonous population, who are therefore entitled to most of the benefits related to Banro's presence. Yet, the sector is also home to Bashi and Barega, who have often lived there for a long time, and therefore believe they should have access to the same benefits as other locals. But even the supposedly autochthonous Bangubangu feel discriminated against. An artisanal miner from this group commented: "Banro, they employ batu ya huko (people from elsewhere), Bamushi, Bafuliiru, but we batoto ya bulongo (children from the soil) we don't get work at Banro, therefore life brings us much hardship" (interview, April 2016, Namoya). Furthermore, several interviewees complained how people coming "from Bukavu" (the provincial capital) have been hired under the local content regulations, pretending they are originally from the Twangiza or Namoya area. One interviewee explained:

I'm telling you, I have seen someone working for Banro. He said he was from Kabalole [name of a local area] but he didn't know the way to Kabalole. Another one said he was from Karhundu, but he couldn't situate the place. True, someone can be *originaire* (native) from this area and be born elsewhere. But at least they would know the names of their grandparents!" (focus group, April 2017, Twangiza).

These quotes illustrate the centrality of references to the soil and attachment to place within the autochthonous subject position and how

this attachment is expressed in terms of knowing the local environment. They also show how this subject position is activated through everyday practices, such as hiring decisions and encounters with locals of "suspect" origins. Most of the practices and discourses that prompt people to define themselves as autochthonous are not directly shaped by the corporation. Yet the corporation does influence them in indirect ways. For instance, local content policies put a premium on people's status as "locals", as being "originally" from the area where industrial mining concessions are located. Furthermore, the mass displacement and dispossession induced by industrial mining have reinforced discourses of attachment to people's ancestral lands. The autochthonous subject position thus shows how socio-economic transformations interact with forms of social—in this case ethnic— identification and people's sense of place in interpellating people as extractive subjects.

8. The self-governing artisanal mining subject

A final subject position that people often enacted when expressing their sense of selfhood in relation to the mining corporation was that of self-governing artisanal miner. This subject position was not the preserve of those doing the actual work of mining (for whom it was closely linked to their occupational identity) but was also inhabited by those living in the settlements close to artisanal mining sites, whose lifeworlds and livelihoods are equally centred on artisanal mining. Similar to Peluso (2018), we found that artisanal mining subjectivities evolve largely outside of state control and are shaped by particular production processes and situated knowledges that revolve around gold. In the DRC, the artisanal miner subject position closely relates to the ethos of débrouillardise and related views on state-society relations. One expression of this is that people generally consider artisanal mining to be licit, even when it is technically illegal, hence prohibited by the state. Interestingly, to justify this activity on Banro's concessions, several interviewees referred explicitly to how Mobutu sanctioned débrouillardise:

Mobutu chased away MGL and instructed all of us to use our own force, he chased the white people... And when they had left, we stayed here. When the president told us to fend for ourselves, we started this work of digging gold (interview, January 2011, Luhwindja).

This quote indicates how people contrast artisanal mining as a self-organized activity associated with freedom with industrial mining as controlled by external forces. In addition, it points to how these meanings are the product of a historical layering process. Notions of control associated with colonialism become entangled with ideas of self-regulation and *débrouillardise* developed in the late Mobutu era and are reinterpreted in light of the contemporary situation.

Owing to artisanal mining's perceived legitimacy and its crucial role for the local economy, miners in both concessions put up considerable resistance against being displaced. In narratives of this resistance, the subject position of artisanal miner, generally associated with (masculine) toughness, perseverance and determination, came clearly to the fore. As one miner in Namoya said "we artisanal miners, we won't cede. We rather get killed" (interview, April 2016) (see also Geenen & Verweijen, 2017). These narratives of resistance reflected a strong attachment to artisanal mining sites, which were portrayed as belonging to those who work there every day, digging, shovelling and panning. This sense of belonging often centred on particular hills and rivers. As one interviewee said: "Banro chased them [artisanal miners] away from their hill where they found money" (interview, April 2018, Namoya). Another said "Mwendamboko [hill with artisanal mining site] belongs to us!" (interview, April 2016, Namoya). The idea that artisanal mining sites belong to those working there also extends to the gold found in these sites. "Banro is now exploiting our gold", commented a gold trader (conversation, April 2016, Namoya).

Aside from its material value, gold is inscribed with meanings that are deeply entwined with artisanal mining subjectivities. For many

people, gold means life, both in terms of survival and the "good life". "We lived a good life here before Banro came. The hills were ours" said a focus group participant in Twangiza (focus group, April 2017). Gold is associated with the ever-present possibility to strike it rich, albeit with the right dose of luck or adequate intervention in spiritual processes (Geenen, 2018). From this point of view, the mining corporation's appropriation of gold signals an end to all the hopes, dreams and aspirations associated with the mineral, as well as an end to a lifestyle marked by freedom and self-regulation. This changing way of living, connected to a changing relation to gold, explains why many artisanal miners were initially reluctant to take up a job at Banro. As a displaced miner commented: "We were all satisfied with artisanal mining production. With Banro, you have to shovel all day long, and in the end the machine will come to take all the gold away" (interview, April 2017, Twangiza).

From the above discussion, it emerges that people are interpellated as artisanal miner and shape their engagement with such interpellations through a multitude of factors, including: everyday livelihoods activities, registers of occupational identity, interactions with (the idea of) gold, and attachment to artisanal mining sites. None of these factors is a direct product of the corporation's governmental schemes, although Banro staff occasionally do interpellate people as artisanal miners. This occurs, for instance, when offering alternative livelihoods programmes, training opportunities and employment specifically aimed at displaced artisanal miners. Yet in such instances, the artisanal mining subject position that is appealed to is not associated with self-reliance and freedom but with transforming former miners into industrious subjects that are enrolled in the corporation's modernist vision of "progress" and "development". These efforts, however, had limited success, as artisanal miners hesitantly engaged with the offered programmes. These difficulties confirmed ideas among Banro staff about artisanal miners as unruly and ungovernable, or as one informant put it "the most complicated fringe" (interview, April 2016, Bukavu). Banro thus failed in having artisanal miners inhabit the new subject positions it had defined for them. Yet the corporation did contribute to activating the subject position of artisanal miner with its historical connotations of selfreliance and freedom in an indirect and unintentional manner. It did so by posing an existential threat to both the material and symbolic foundations of this subject position. This further demonstrates how the effects of economic relations on extractive subject formation are always mediated by and generated through interactions with non-economic factors.

9. Concluding thoughts

Exploring four subject positions that people living in industrial gold mining areas in eastern DRC fluidly articulate in relation to the extractive industries, this contribution has traced the sedimentation of extractive subjectivities in time and space. Specifically, we have shown how subjectivities are fashioned from the material deposited by dominant rationalities and practices of power—and their socio-spatial translations— of past conjunctures. This material imprints registers of social identity, socio-economic locations and people's relations to place and matter, which all interact in shaping what subjectivities people articulate and how.

In our case study, analysing subject formation through the lens of sedimentation uncovered the importance of what Collins (2019) calls "colonial residue" in the articulation of contemporary subjectivities. The profound transformations and "colonization" of lifeworlds (Bebbington et al., 2008: 2890) induced by industrial mining are read through and resonate with understandings of the self that are deeply shaped by the colonial past, in particular the legacies of racialized hierarchies, identity essentialism and corporate paternalism. Our findings therefore confirm other studies that demonstrate the multi-faceted and at times contradictory ways in which imaginings of the past, including past experiences with extractive corporations, come to shape present-day engagement

with the extractive industries (e.g., Himley, 2014; Davidov, 2013). We further add to these studies by showing how the influence of the past is in part transmitted through people's sense of place, for instance, contemporary experiences of spatial segregation that are read through colonial registers.

Starting from the understanding that subject formation and placemaking are closely entwined, we have followed the current emphasis within the field of political ecology on the role of people's everyday, emotionally-laden interactions with the non-human world within subject formation (Sultana, 2009; Nightingale, 2011, 2013; Robbins, 2012; González-Hidalgo & Zografos, 2020). This emphasis raises two inter-related questions regarding extractive subject formation that our contribution helps to further think through. First, acknowledging the dispersed nature of power, what role do extractive corporations play in the ways in which people are interpellated as subjects in relation to the extractive industries? Second, how can we make sense of the fragmented outcomes of subject formation processes and the highly variable ways in which lived subjectivities are shaped by governmental schemes, including those enacted by corporations (Moore, 1999; Gupta, 2005; Cepek, 2011; Silva, 2015; Choi, 2020)? While corporations significantly imprint processes of extractive subject formation, their efforts to directly mould subjectivities seem to have only a modest impact. To understand this paradox, we argue, it is not sufficient to point to subjects' agency: we must also acknowledge the complex nature of interpellation processes, which consist of fine-grained interactions between heterogeneous and dispersed elements. These elements include: the everyday practices and discourses of local leaders, company staff and other elites; interactions with matter, in particular, gold; livelihoods activities and disruptions thereof; and (transformations of) the places where people live and work, including buildings and spatial arrangements. The extractive corporation shapes these elements both directly and indirectly, but to different degrees and with varying levels of intent. What importantly circumscribes the corporation's possibilities for determining how these elements shape subject formation is that they are all the product of complex spatio-temporal layering processes. As a result, they have historically inscribed meanings and are part of deeply rooted social-spatial relations that can be difficult to radically change at the short term.

Emerging theorizations of extractive subjectivities should take the complex and dispersed nature of interpellation processes as their analytical point of departure, rather than focusing on corporations' technologies and techniques of power. Such a focus might lead to reproducing the centred view of power (in this case as invested in corporations) that Foucault exposed as reductionist. A decentred approach to interpellation is less likely to overemphasize the coherence of the outcomes of processes of subject formation and overestimate the imprint of corporate power thereon. Similar to Asiyanbi et al. (2019: 129), we believe that stronger attention to the "spatio-temporal dynamics" of subject formation, in particular approaching subjectivities as "sedimented", can help address these challenges.

While we concur with Jakobsen (2022: 580) that recent work on extractive subject formation does not always fully capture the complexities of the process, we do not believe, as he alleges, that it approaches subject-making as a relatively linear process whereby the more successful (corporate) power works "the more coherently discernible new subjects are produced". For Jakobsen, most Foucault-inspired accounts of subject formation in political ecology foreground linearity and coherence, as opposed to Gramscian notions of fragmented personhood. However, many political ecology studies working within Foucauldian frameworks emphasize that people fluidly perform multiple and often contradictory subject positions that are never finished (e.g., Collins, 2019; Choi, 2020). As Foucault (1994:75) himself stated: "In the course of their history, people have never ceased to construct themselves, that is to say, to continually displace their subjectivity, to constitute themselves in an infinite and multiple series of different subjectivities which are never finished (translation, ours)". In sum, we should not exaggerate

the divergences between Foucauldian and Gramscian-oriented approaches to subject formation. This is all the more so since Foucauldian approaches, as Hall's work indicates and as we have shown herein, can seamlessly accommodate a more systematic emphasis on "the economic".

CRediT authorship contribution statement

Judith Verweijen: Conceptualization. Sara Geenen: Conceptualization. Anuarite Bashizi: Conceptualization.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The data that has been used is confidential.

Acknowledgements

We acknowledge funding from the Research Foundation Flanders (FWO) through the projects FWO KAN 1514117N, FWO G056718N, and from the Flemish Interuniversity Council (VLIR-UOS) through the IUC with the Catholic University of Bukavu and the Center for Mining Governance (CEGEMI).

References

- Agnew, J.A., 1987. Place and politics: The geographical mediation of state and society. Routledge, New York.
- Allen, J., 2003. Lost geographies of power. Blackwell, Maiden.
- Asiyanbi, A.P., Ogar, E., Akintoye, O.A., 2019. Complexities and surprises in local resistance to neoliberal conservation: Multiple environmentalities, technologies of the self and the poststructural geography of local engagement with REDD+. Political Geography 60, 128-138.
- Banro, 2015. Creating jobs and economic opportunities. 2015 Sustainability report. Toronto: Banro Corporation.
- Banro, 2017. Investing in community development. 2017 Sustainability report. Toronto: Banro Corporation.
- Bebbington, A., Bebbington, D.H., Bury, J., Lingan, J., Muñoz, J.P., Scurrah, M., 2008. Mining and social movements: struggles over livelihood and rural territorial development in the Andes. World Dev. 36 (12), 2888–2905.
- Bilakila, N.A., 2004. The Kinshasa bargain. In: Trefon, T. (Ed.), Reinventing Order in the Congo. How People Respond to State Failure in Kinshasa. Zed Books, London and New York, pp. 20–32.
- Bryceson, D.F., Geenen, S., 2016. Artisanal frontier mining of gold in Africa: Labour transformation in Tanzania and the Democratic Republic of Congo. African Affairs 115 (459), 296–317.
- Büscher, K., 2018. Urbanisation and the political geographies of violent struggle for power and control: Mining boomtowns in Eastern Congo. In: Amman, C, and Förster, T. African cities and the development conundrum, Leiden, Brill, pp. 302–324.
- Cepek, M.L., 2011. Foucault in the forest: Questioning environmentality in Amazonia. American Ethnologist 38 (3), 501–515.
- Choi, M.A., 2020. Multiple environmental subjects: Governmentalities of ecotourism development in Jeungdo, South Korea. Geoforum 110, 77–86.
- Collins, Y.A., 2019. Colonial residue: REDD+, territorialisation and the racialized subject in Guyana and Suriname. Geoforum 106, 38–47.
- Coquery-Vidrovitch, C., 1972. Le Congo au temps des grandes compagnies concessionnaires, 1898–1930. De Gruyter, Berlin.
- Cordaid (2020) Deux ans après la révision du Code Minier en RDC. Les communautés locales en attente des retombées sociétales. Rapport d'évaluation de la mise en œuvre du code minier révisé sur le développement communautaire Kinshasa : Cordaid.
- Cortes-Vazquez, J.A., Ruiz-Ballesteros, E., 2018. Practising nature: A phenomenological rethinking of environmentality in natural protected areas in Ecuador and Spain. Conservation and Society 16 (3), 232–242.
- Côte, M., 2020. Community-based citizenship: Autochthony and land claim politics under forest decentralization in Burkina Faso. Geoforum 109, 171–179.
- Cuvelier, J., 2014. Work and masculinity in Katanga's artisanal mines. Africa Spectrum 49 (2), 3–26.
- Protocole d'Accord (2010) Protocole d'accord signé entre la compagnie Twangiza Mining Sarl et la chefferie de Luhwindja, 05/06/2010.

- Davidov, V., 2013. Mining versus oil extraction: Divergent and differentiated environmental subjectivities in "post-neoliberal" Ecuador. J. Latin Am. Caribbean Anthropol. 18 (3), 485–504.
- De Boeck, F., 1998. Domesticating diamonds and dollars: identity, expenditure and sharing in southwestern Zaire (1984–1997). Dev. Change 29 (4), 777–810.
- Dunlap, A., Jakobsen, J., 2020. The violent technologies of extraction. Political ecology, critical agrarian studies and the capitalist worldeater. Palgrave MacMillan, Cham.
- Dupriez, H., 1987. Bushi: l'asphyxie d'un people. ADI-Kivu, Bukavu.
- Eden, S., Bear, C., 2011. Reading the river through 'watercraft': Environmental engagement through knowledge and practice in freshwater angling. Cult. Geogr. 18 (3), 297–314.
- Ekers, M., 2015. On the concreteness of labour and class in political ecology. In: Perreault, T., Bridge, G., McCarthy, J. (Eds.), The Routledge handbook of political ecology. Routledge, New York, pp. 545–557.
- Ekers, M., Loftus, A., 2008. The power of water: developing dialogues between Foucault and Gramsci. Environ. Plan. D: Soc. Space 26 (4), 698–718.
- Ekers, M., Loftus, A., 2013. Revitalizing the production of nature thesis: A Gramscian turn? Prog. Hum. Geogr. 37 (2), 234–252.
- Erdmann, G., Engel, U., 2006. Neopatrimonialism revisited. Beyond a catch-all concept. German Institute of Global and Area Studies, Hamburg.
- Fanon, F., 1961. Les damnés de la terre. François Maspero, Paris.
- Fletcher, R., Cortes-Vazquez, J.A., 2020. Beyond the green panopticon: new directions in research exploring environmental governmentality. Environ. Plan. E: Nature and Space 3 (2), 289–299.
- Flew, T., 2014. Six theories of neoliberalism. Thesis Eleven 122 (1), 49-71.
- Foucault, M., 1980. Prison talk. In: Gordon, C. (Ed.), Power/knowledge: Selected interviews and other writings 1972–1977. Pantheon Books, New York, pp. 37–54.
- Foucault, M., 1982. The subject and power. Critical Inquiry 8 (4), 777-795.
- Foucault, M., 1994. Dits et Écrits, vol. IV. Gallimard, Paris.
- Frederiksen, T., Himley, M., 2020. Tactics of dispossession: access, power, and subjectivity at the extractive frontier. Trans. Inst. Brit. Geogr. 45 (1), 50–64.
- Gaventa, J., 1982. Power and powerlessness: Quiescence and rebellion in an Appalachian valley. University of Illinois Press, Champaign, IL.
- Geenen, S., 2015. African artisanal mining from the inside out. Access, norms and power in Congo's gold sector. Routledge, Abingdon.
- Geenen, S., 2018. Underground dreams. Uncertainty, risk and anticipation in the gold production network. Geoforum 91, 30–38.
- Geenen, S., 2019a. Gold and godfathers: local content, politics, and capitalism in extractive industries. World Dev. 123, 104605
- Geenen, K., 2019b. Categorizing colonial patients: Segregated medical care, space and decolonization in a Congolese city, 1931–62. Africa 89 (1), 100–124.
- Geenen, S., Claessens, K., 2013. Disputed access to the gold mines in Luhwindja, eastern DRCongo. J. Modern African Stud. 51 (1), 85–108.
- Geenen, S., Gleiberman, M., 2021.Superfluous jobs in extractive industries. The usefulness/uselessness of job creation after dispossession. Work, Employment and Society.
- Geenen, S., Verweijen, J., 2017. Explaining fragmented and fluid mobilization in gold mining concessions in eastern Democratic Republic of the Congo. The Extractive Industries and Society 4 (4), 758–765.
- Geschiere, P., 2009. The perils of belonging: Autochthony, citizenship, and exclusion in Africa and Europe. University of Chicago Press, Chicago.
- González-Hidalgo, M., Zografos, C., 2017. How sovereignty claims and "negative" emotions influence the process of subject-making: Evidence from a case of conflict over tree plantations from Southern Chile. Geoforum 78, 61–73.
- González-Hidalgo, M., Zografos, C., 2020. Emotions, power, and environmental conflict: expanding the 'emotional turn'in political ecology. Prog. Human Geogr. 44 (2), 235–255.
- Gudynas, E., 2010. The new extractivism of the 21st century: Ten urgent theses about extractivism in relation to current South American progressivism. Am. Progr. Rep. 21, 1–14.
- Gupta, A., 2005. Comment on environmentality. Curr. Anthropol. 46 (2), 181. Hall, S., 1985. Signification, representation, ideology: althusser and the post-structuralist
- debates. Crit. Stud. Media Commun. 2 (2), 91–114.

 Hall, S., 1995. Fantasy, identity, polities. In: Carter, E., Donald, J., Squites, J. (Eds.),

 Cultural remix: Theories of politics and the popular. Lawrence & Wishart, London,
- pp. 63–69. Hall, S., 1996. Who needs 'identity'? In: Hall, S., du Gay, P. (Eds.), Questions of cultural identity. Sage, Los Angeles, pp. 1–17.
- Hall, S., Critcher, C., Jefferson, T., Clarke, J., & Roberts, B. (2017) [1978] Policing the crisis: Mugging, the state and law and order. Red Globe, London.
- Hall, S., 1980. Race, articulation and societies structured in dominance. In: United Nations Education, Scientific and Cultural Organization (ed.) Sociological theories: Race and colonialism, Paris: UNESCO, 305–345.
- Henriet, B., 2021. «Zaïrois, qui est ton père?»: Syndicalisme et parentés multiples dans la Copperbelt zaïroise, 1970–1980. Revue d'histoire contemporaine de l'Afrique.
- Hillman, J., 1997. Chartered companies and the development of the tin industry in Belgian Africa, 1900–1939. African Economic History 25, 149–173.
- Himley, M., 2014. Mining history: Mobilizing the past in struggles over mineral extraction in Peru. Geogr. Rev. 104 (2), 174–191.
- Hoffmann, K., 2021. Ethnogovernmentality: The making of ethnic territories and subjects in Eastern DR Congo. Geoforum 119, 251–267.
- Africa Intelligence, 2021. RDC: Ambassadeur et proche de Tshisekedi, Luc Gérard Nyafé sur le rang pour le rachat de la mine d'or de Namoya [accessed 7 September 2021]. https://congovirtuel.com/information/rdc-ambassadeur-et-proche-de-tshisekedi-luc-gerard-nyafe-sur-le-rang-pour-le-rachat-de-la-mine-dor-de-namoyaai/.

ARTICLE IN PRESS

J. Verweijen et al. Geoforum xxx (xxxx) xxx

- Jackson, S., 2006. Sons of which soil? The language and politics of autochthony in Eastern DR Congo. African Studies Review 49 (2), 95–123.
- Jakobsen, J., 2022. Beyond subject-making: Conflicting humanisms, class analysis, and the "dark side" of Gramscian political ecology. Prog. Hum. Geogr. 46 (2), 575–589.
- Kasele, L., Kasongo, K., 1979. La fraude de l'or et son impact sur le développement. Cas de Kamituga dans la zone de Mwenga (unpublished document).
- Keith, M., 2014. Urbanism and city spaces in the work of Stuart Hall. In: Alexander, C. (Ed.), Stuart Hall and 'race'. Routledge, London, pp. 90–110.
- Kyanga Wasso, A., 2013. Sominki en liquidation: aide-memoire sur l'evolution de la societe à Kamituga. Sominki, Bukavu.
- Le Billon, P., 2021. Crisis conservation and green extraction: biodiversity offsets as spaces of double exception. J. Polit. Ecol. 28.
- Li, T.M., 2000. Articulating indigenous identity in Indonesia: resource politics and the tribal slot. Comparat. Stud. Soc. History 42 (1), 149–179.
- Loder, T., 2016. Spaces of consent and the making of fracking subjects in North Dakota: a view from two corporate community forums. Extractive Ind. Soc. 3 (3), 736–743.
- Mann, G., 2009. Should political ecology be Marxist? A case for Gramsci's historical materialism. Geoforum 40 (3), 335–344.
- Massey, D., 1984. Spatial divisions of labour: Social structures and the geography of production. Macmillan, Basingstoke.
- Mathys, G., 2017. Bringing history back in: Past, present, and conflict in Rwanda and the Eastern Democratic Republic of Congo. J. African History 58(3), 465-487.
- Moore, D.S., 1999. The crucible of cultural politics: Reworking "development" in Zimbabwe's eastern highlands. Am. Ethnol. 26 (3), 654–689.
- Muchukiwa, B., 2006. Territoires ethniques et territoires étatiques: pouvoirs locaux et conflits interethniques au Sud-Kivu (RD Congo). L'Harmattan, Paris.
- Nash, J., 1972. The devil in Bolivia's nationalized tin mines. Sci. Soc. 36 (2), 221–233.
 Nepomuceno, Í., Affonso, H., Fraser, J.A., Torres, M., 2019. Counter-conducts and the green grab: Forest peoples' resistance to industrial resource extraction in the Saracá-
- Taquera National Forest, Brazilian Amazonia. Global Environ. Change 56, 124–133.
 Nightingale, A.J., 2011. Beyond design principles: Subjectivity, emotion, and the (ir) rational commons. Society and Natural Resources 24 (2), 119–132.
- Nightingale, A.J., 2013. Fishing for nature: The politics of subjectivity and emotion in Scottish inshore fisheries management. Environment and Planning A 45 (10), 2362–2378.
- Njoh, A.J., 2009. Urban planning as a tool of power and social control in colonial Africa. Plan. Perspect. 24 (3), 301–317.
- Norbert, W., 1962. Declaration in name of Congolese MGL workers, 01/09/1962, MGL archives KMM.
- Overton, J., 1987. The colonial state and spatial differentiation: Kenya, 1895–1920. J. Hist. Geogr. 13 (3), 267–282.
- Peluso, N.L., 2018. Entangled territories in small-scale gold mining frontiers: Labor practices, property, and secrets in Indonesian gold country. World Dev. 101, 200, 418.
- Perrings, C., 1977. Consciousness, conflict and proletarianization: An assessment of the 1935 mineworkers' strike on the northern Rhodesian copperbelt. J. Southern African Stud. 4 (1), 31–51.
- Phimister, I., 1976. African worker consciousness: origins and aspects to 1953, South African. Labour Bull. 3 (1), 31.
- Pred, A., 1984. Place as historically contingent process: Structuration and the timegeography of becoming places. Ann. Assoc. Am. Geogr. 74 (2), 279–297.

- Probyn, E., 2003. The spatial imperative of subjectivity. In: Anderson, K. (Ed.), Handbook of cultural geography. Sage, London, pp. 290–299.
- La Prunelle, 2021. Maniema: la nouvelle société minière STRATEGOS débute bientôt ses activités à Salamabila, https://laprunellerdc.info/maniema-la-nouvelle-societe-miniere-strategos-debute-bientot-ses-activites-a-salamabila/ [accessed 7 September 2021]
- Reid, H., 2020. Banro agrees sale of troubled Namoya gold mine in Congo, Reuters 23

 June, https://www.reuters.com/article/us-congo-mining/banro-agrees-sale-of-troubled-namoya-gold-mine-in-congo-idUKKBN23U1T9?edition-redirect=uk
 [accessed 7 September 2021].
- Robbins, P., 2012. Lawn people: How grasses, weeds, and chemicals make us who we are. Temple University Press, Philadelphia, PA.
- Robinson, E., 2021. Citizens, custodians, and villains: Environmentality and the politics of difference in Senegal's community forests. Geoforum 125, 25–36.
- Rose, G., 1997. Spatialities of 'community', power and change: the imagined geographies of community arts projects. Cult. Stud. 11 (1), 1–16.
- Rubbers, B., 2013. Le paternalisme en question. Les anciens ouvriers de la Gécamines face à la libéralisation du secteur minier katangais (RD Congo). Paris: L'Harmattan.
- Rubbers, B., 2019. Mining towns, enclaves and spaces: a genealogy of worker camps in the Congolese copperbelt. Geoforum 98, 88–96.
- Schatzberg, M.G., 1991. The dialectics of oppression in Zaire. Indiana University Press, Bloomington, IN.
- Short, N., 2013. Difference and inequality in world affairs. A Gramscian analysis. In: Ekers, M. et al., (Eds) Gramsci, space, nature and politics, pp. 197-216.
- Silva, L., 2015. Foucault in the landscape: Questioning governmentality in the Azores. Landscape Res. 40 (4), 397–410.
- Singh, N.M., 2013. The affective labor of growing forests and the becoming of environmental subjects: Rethinking environmentality in Odisha, India. Geoforum 47, 189–198.
- Stoler, A.L., 1995. Race and the education of desire: Foucault's history of sexuality and the colonial order of things. Duke University Press, Durham, NC.
- Sultana, F., 2009. Fluid lives: subjectivities, gender and water in rural Bangladesh. Gender Place Cult. 16 (4), 427–444.
- Sultana, F., 2021. Political ecology 1: From margins to center. Prog. Hum. Geogr. 45 (1), 156–165.
- Svarstad, H., Benjaminsen, T.A., Overå, R., 2018. Power theories in political ecology. J. Polit. Ecol. 25 (1), 350–363.
- Trefon, T., 2009. Public service provision in a failed state: looking beyond predation in the Democratic Republic of Congo. Rev. African Polit. Econ. 36 (119), 9–21.
- the Democratic Republic of Congo. Rev. African Polit. Econ. 36 (119), 9–21. Tuan, Y.F., 1975. Place: an experiential perspective. Geogr. Rev. 65 (2), 151–165.
- Van Onselen, C., 1973. Worker consciousness in black miners: Southern Rhodesia, 1900–1920. J. African History 14 (2), 237–255.
- Verweijen, J., 2017. Luddites in the Congo? Analyzing violent responses to the expansion of industrial mining amidst militarization, City 21(3-4), 466-482.
- Verweijen, J., Vlassenroot, K., 2015. Armed mobilisation and the nexus of territory, identity, and authority: the contested territorial aspirations of the Banyamulenge in eastern DR Congo. J. Contemporary African Stud. 33 (2), 191–212.
- Young, C., 1994. Zaire: The shattered illusion of the integral state. J. Modern Afr. Stud. 32 (2), 247–263.