Book Review: Cobalt Red: How the Blood of the Congo Powers Our Lives by Siddharth Kara

By Eugene Lancaric*

Cobalt Red: How The Blood of trhe Congo Powers Our Lives by Siddharth Kara 2023. St. Martin's Press, 287pp.

I. Cobalt in the 21st Century World-Economy

Cobalt Red's mission is to inform Western readers about how cobalt, indispensable for electronic devices and electric vehicle batteries, is mined. The single largest source of cobalt today is the Democratic Republic of the Congo (DRC), whose nearly unique geology (Kara, 2023, 23-25) gives it 50% of the world's cobalt reserves and allowed it to produce more than 70% of cobalt mined globally in 2022 ("Cobalt Facts"). Even as technical advances make battery recycling economically practical, demand for cobalt is expected to grow faster than available recycled supplies Crownhart (2023). While vast cobalt deposits exist on the floors of earth's oceans, marine ecologists believe that extracting them poses serious risks Lipton (2024); McKie (2023). The DRC is likely to remain a principal source of cobalt until a superior battery technology emerges or its reserves are exhausted.

The cobalt commodity chain combines ores extracted at industrial mines, some of which may use advanced technologies and offer protection to workers and the environment, with ores dug by artisanal miners using the crudest techniques imaginable. While about 30% of DRC cobalt production is extracted by artisanal miners (Kara, 2023, 7), the blending of artisanally and industrially mined metal makes identifying the ultimate origin of any cobalt shipment and the conditions under which it was extracted impossible Gulley (2023). Such mixing has enabled companies to evade legal responsibility for harming miners. In November 2021, for example, a U.S. court dismissed a suit against Apple, Dell, Google, Microsoft and Tesla by families of children injured in DRC artisanal cobalt mining because the plaintiffs could not show that the harms they suffered were "directly traceable" to these firms' sourcing activities Rizzi (2021).

Artisanal mining involves a gendered labor process in which men and boys normally dig for raw ores, while women and girls rinse and pack the raw material Baumann-Pauly (2023). The diggers sell it to traders (négociants) who typically carry it via motorbike to depots (comptoirs), where it is sold on to representatives of mining or processing companies (Kara, 2023, 194). Alongside this, however, industrial mines practice large-scale extraction. Contrasting the two methods helps explain why artisanal mining persists:

> Industrial mining is like doing surgery with a shovel; artisanal mining is like doing it with a scalpel. During industrial excavation, tons of dirt, stone and ore are gathered indiscriminately with large machinery, crushed down to pebbles, and processed to extract minerals of value. It is by design a blunt-force, low-yield high volume business. Artisanal miners, on the other hand, can use more precise tools to dig or tunnel for high-grade deposits of ore, extract only the ore, and leave the valueless dirt and stones behind. Artisanal mining techniques can yield up to ten or fifteen times a higher grade of cobalt per ton than industrial mining can. (Kara, 2023, 187)

In 2021, an estimated 150,000 to 200,000 people worked directly in artisanal cobalt mining in the DRC, while as many as a million people depended on income from their labor Skidmore (2021).

II. Nine Circles of Hell

Cobalt Red is a travelogue, moving through some of the largest artisanal sites in the DRC's cobalt-rich provinces of Haut-Katanga and Lualaba. Like Virgil leading Dante through the nine circles of hell,

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local guides and activists take Kara to successively more gruesome artisanal mines, at one of which he is nearly killed by an armed gang (Kara, 2023, 94-95)[1]. Accounts of relatively less dangerous surface mining soon give way to miners' descriptions of underground tunneling, where diggers (creuseurs) are at constant risk of being seriously hurt or buried alive. Kara interviews injured creuseurs no longer able to work and parents of children killed in collapses. "We work in our graves," the father of one creuseur tells him (Kara, 2023, 233) Kara's guides are knowledgeable and insightful. Philippe, an artisanal miner until injured, explains that Kara must understand the DRC's colonial and neocolonial history:

> After independence, the mines were managed by the Belgians. They took all the money, and there was no benefit for the people. After the Belgians, we had "Africanization" with Mobutu. He nationalized the mines, but again, they only benefited the government, not the people. With [Joseph] Kabila, we created the Mining Code in 2002, and this brought foreign investment into the mining sector. They said the Mining Code would improve the lives of the Congolese people, but today, their lives are much worse. Now you can see – never have the people of Congo benefited from the mines of Congo. We only became poorer. (Kara, 2023, 66)

Philippe stresses that the transparency and supply-chain-monitoring programs of cobalt-using firms blunt genuine efforts at change:

> They tell the international community about their programs in Congo and how the cobalt is clean, and this allows their constituents to say everything is okay. Actually this makes the situation worse because the companies will say – "GBA [Global Battery Alliance] assures us the situation is good. RMI [Responsible Minerals Initiative] says the cobalt is clean." Because of this, no one tries to improve the conditions. (Kara, 2023, 67)

Kara's ninth circle of hell is Kasulo, a relatively placid district of the city of Kolwezi until a piece of heterogenite with a high 20% cobalt grade was discovered there in 2014. The find set off a boom in the area during which more than 500 households were displaced, and where forced displacements continue Makal and Cibamba (2023). While higher ore quality allows Kasulo's creuseurs to earn more than diggers elsewhere—U.S.$5.00 to $7.00 per day compared to $1.00 to $2.00— the risk of injury or death is far higher because few tunnels have adequate support or ventilation (Kara, 2023, 216). Kara personally witnesses a tunnel collapse at the Kamilombe site on September 21, 2019, where 63 miners, including children, were buried alive but only four bodies were retrieved. "No one has ever accepted responsibility for these deaths," he writes (Kara, 2023, 240). After recounting how COVID-19 worsened conditions further, Kara concludes by outlining a "realistic path forward to alleviate most, if not all, of the harms [artisanal miners] are suffering" (Kara, 2023, 244). Since the ultimate reason behind the conditions faced by artisanal miners is the refusal of cobalt-consuming companies to accept responsibility for them, Kara proposes that firms simply treat DRC miners the same way they treat employees in North America or Western Europe:

> Rather than issue vacant statements on zero-tolerance policies and other hollow PR, corporations should do the one simple thing that would truly help: treat the artisanal miners as equal employees to the people who work at corporate headquarters. We would not send the children of Cupertino to scrounge for cobalt in toxic pits, so why is it permissible to send the children of the Congo? (Kara, 2023, 244).

This proposal contrasts with other more detailed recommendations. Dorothée Baumann-Pauly of NYU, for example, recommends that cobalt-reliant firms transition to formal wage payments, promote open pit rather than tunnel mining and move to empower women so as to reduce child labor Baumann-Pauly (2023). Kara's proposal contrasts even more dramatically with an eloquent anti-imperialist affirmation he quotes from assassinated Congo prime minister Patrice Lumumba:

[1]The danger to which Kara exposes himself in conducting these investigations is underlined by, for example, the 2017 murder of Zaida Catalán and Michael Sharp, two United Nations investigators ("DR Congo: Sham Trial for Murderers of UN Experts" 2022).

> I know and feel in my very heart of hearts that sooner or later my people will rid themselves of all their enemies, foreign and domestic, that they will rise up as one to say no to the shame and degradation of colonialism and regain their dignity in the pure light of day. (Kara, 2023, 249).

Echoing Joseph Conrad's "the horror, the horror," *Cobalt Red's* narrative structure gives voice to the miners and their families, who often challenge Kara (Conrad, 2017, 85). A woman near Kolwezi questions his project:

> "Why have you really come here?" she asked.
>
> I had already explained the purpose of my visit when I first sat down with her, so I repeated that my intention was to document the conditions of artisanal cobalt mining.
>
> "Why?" she asked again, as if my reason made no sense.
>
> "If I can describe the conditions accurately, I hope it may inspire people to help improve things here."
>
> Lubuya looked at me as if I were a fool.
>
> "Every day people are dying because of the cobalt. Describing this will not change anything." (Kara, 2023, 164)

This narrative approach, however, leaves fundamental questions unresolved. For example, estimates of annual artisanal mining deaths in the DRC range from 65 in a World Bank study to 2000 based on a survey Kara undertakes (Arvidsson, Chordia and Nordelöf, 2022, 1109-1110). While Kara details extensive child labor, Andrew Gulley of the U.S. Geological Survey claims that "there would be a 98% chance that randomly selected cobalt mine material from the DRC was not linked to child labor in 2020" (Gulley, 2023, 9). Such large differences require Kara to present as much and as reliable data as possible, and to highlight controversies such as these. Otherwise, recommendations such as Baumann-Pauly's proposal for formalization of artisanal mining remain difficult to evaluate (Baumann-Pauly, 2023, 11-12). Kara's narrative approach likewise complicates understanding how gender operates in the artisanal mining labor process.

III. Unanswered Questions

How can a system such as artisanal cobalt mining come into being, persist, and apparently expand? What logic drives it forward? Kara touches on these issues, only to draw back from a full answer. At Kasulo, for example, he first sees only a "grim circus" of "huts, digging supply shops, food and alcohol markets, hair salons, mobile phone top-up kiosks, motorbikes, bicycles, piles of rubble, stacks of raffia sacks, and copper-cobalt deposits" (Kara 2023, 219). After speaking to some creuseurs, however, Kara finds that "a semblance of order emerged beneath the chaos. There was a well-established system that included a micro-economy of sponsors, diggers, sellers, buyers and enforcers" (Kara, 2023, 220).

Yet Kara never analyzes the order he discerns. The logic is in our view that of the capitalist process of accumulation, which Karl Marx defines as "the employment of surplus-value as capital, or its reconversion into capital" (Marx 1976, 755). The agent or subject of this process becomes value itself:

> [Value] is constantly changing from one form to the other, without becoming lost in this movement; it thus becomes transformed into an automatic subject. If we pin down the specific forms of appearance assumed in turn by self-valorizing value in the course of its life, we reach the following elucidation: capital is money, capital is commodities. In truth, however, value is here the subject of a process in which, while constantly assuming the form in turn of money and commodities, it changes its own magnitude, throws off surplus value from itself considered as original value, and thus valorizes itself independently. (Marx, 1976, 255)

Each link in the cobalt commodity chain is mediated by the process of commodity exchange Marx characterizes. The value involved transforms itself into money, into commodities, and back, any number

of times in this process. Surplus value is produced or thrown off at every stage. Marx understands value as the ultimate subject or agent of this process because in the capitalist mode of production individual human beings act according to its imperatives. Kara recognizes that responsibility for conditions in artisanal mining transcends the individuals involved:

> It is tempting to point the finger at local actors as the agents of the carnage – be it corrupt politicians, exploitative cooperatives, unhinged soldiers, or extortionist bosses. They all played their roles, but they were also symptoms of a more malevolent disease: the global economy run amok in Africa. The depravity and indifference unleased on the children working at Tilwezembe is a direct consequence of a global economic order that preys on the poverty, vulnerability, and devalued humanity of the people who toil at the bottom of global supply chains. (Kara, 2023, 154)

Few readers of *Cobalt Red* will disagree. Yet the conclusion Kara appears unwilling to draw is that conditions in DRC cobalt mining do not signal a global economy that has "run amok," but rather result from processes intrinsic to capitalism since its origin. The logic that drives cobalt production, artisanal and industrial, is that of capital's inherent drive toward self-valorization and reproduction.

Applying Marx's analysis of the self-valorization of value to artisanal mining, however, is not straightforward. Marx characterizes the process through which capital creates a proletariat of wage laborers obliged to sell their labor time in order to earn their subsistence by dispossessing them of land and other means of production, and which creates a capitalist class in which ownership of the means of production becomes concentrated. Workers at industrial mines form part of such a proletariat, and mining companies are capitalist profit-maximizers. Artisanal mining seems to involve different relations of production, however. Kara notes one difference:

> Employees of industrial mines were paid fixed salaries that did not fluctuate based on the price of the underlying commodity, so why should artisanal miners be any different? Piece-rate wage systems by nature shifted market risks from mining companies to workers. Doing so placed substantial pressure on artisanal miners to dig themselves to the bone, take more risks, and bring their children into the mines to boost incomes. (Kara, 2023, 200)

While artisanal mining is not a piece-rate wage system (which for Marx is "nothing but a converted form of the time-wage"), Kara correctly highlights the shift in risk-bearing artisanal mining involves relative to industrial work (Kara, 2023, 200). Since artisanal miners receive payment only for what they sell, they have an incentive to increase production regardless of the dangers. In this respect, they are closer to peasant agriculturalists growing cash crops than to wage workers. Only where artisanal mining is "formalized" will miners receive a wage. We submit, however, that an analysis of artisanal mining must include the labor process as well as the formal structure of production relations. Integrating both aspects may lead us to see artisanal miners as part of the global "precariat" analyzed by Nancy Fraser 2017, 29-42 and others (Standing, 2014, 963-980), a class whose exploitation runs deeper than that of wage workers.

A related question is the coexistence of artisanal and industrial mining and its consequences for the value of cobalt. If, as Marx famously maintains, the value of any commodity is "exclusively" determined by "the labor-time socially necessary for its production," how does this determination operate when a commodity is produced simultaneously according to two systems as different as artisanal and industrial mining? (Marx, 1976, 129). What economic forces determine the changing proportion of artisanal and industrial production over time?

Questions such as these are beyond our scope but highlight the necessity to understand the complex relations of production in extractive industries in order to support struggles for the realization of Lumumba's vision of freedom. Despite its limitations, *Cobalt Red* contributes to this understanding. It is up to committed social scientists to carry it forward by moving from narrative to analysis.

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