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Title: Cobalt mining and responsibility : An analysis of the meaning of ethical products

Year: 2024

Version: Published version

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Please cite the original version:

Eskelinen, T., Khan, J., & Härrä, A. (2024). Cobalt mining and responsibility : An analysis of the meaning of ethical products. *Etikk i Praksis*, Early view . <https://doi.org/10.5324/eip.v18i1.5128>

Cobalt mining and responsibility: An analysis of the meaning of ethical products

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Early View publication date: 30 May 2024

DOI: <http://dx.doi.org/10.5324/eip.v18i1.5128>



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The article discusses the meaning of “ethical” in the context of ethical goods. Terms like “ethical” or “responsible” have assumed new meanings when used to indicate the quality of a product or material. In the article, we analyse the transformed notion of “ethical”, its limits and extensions, using the case of cobalt mining and electronics as an illustrative example. As a non-substitutable material needed by the booming electronics industry and mined in horrendous conditions, the use of cobalt brings forth difficult questions about responsibility. We approach this question from the perspective of the meaning of “ethical” cobalt, and thereby ethical laptops. We use data collected in the context of a CSO project focused on “ethical laptops” and a literature review, and place this in the context of applied ethics. In conclusion, we show how the notion of “ethical products” is complicated by the various possible meanings of responsibility and difficult choices between disengagement from unethical practices and deeper engagement for changing these practices.

Keywords: Ethical trade, Global value chains; Ethical theory; Developing countries; Electronics; Stakeholders

Introduction

Today many consumers express preference for, even commitment to, ethical products. Indeed, such products are widely available even in ordinary supermarkets. But it is difficult to say what kind of criteria should be applied in assessing whether a product can be legitimately called “ethical”. Curiously, attempts to analyse this are rare, relative to the large literature on ethical motivations of consumers.

This paper contributes to the analysis of the meaning of “ethical” in the context of goods. As an illustrative case, we use cobalt mining in the Democratic republic of Congo (DRC), a case involving severe human rights violations. While there are numerous existing studies on corporate social responsibility in the context of mining (e.g. Yakovleva 2016; Vintró and Comajuncosa 2010; Rajak 2006), we here take a more philosophical approach and ask: what does “ethical” as a

quality of a good or a product mean? The case, then, is used to illustrate this broader question, rather than being the sole object of research.

We begin by noting the problems characterising cobalt production in the DRC. Subsequently, we discuss the various meanings of ethical products. Beginning from minimum criteria, we analyse particularly the levels of responsibility of companies, the connection between ethical products and social change, and the extension of the responsibilities of companies. This discussion then forms a framework for analysing various aspects of what can it mean for a product to be ethical.

Context: cobalt mining

Cobalt mining in Congo is deeply connected to contemporary lifestyles. While it is questionable if we really *need* cobalt – often natural resources are rather wanted than really needed (Stabell 2021) – cobalt can be claimed to be necessary for life in contemporary society, to the extent that life in contemporary society requires laptops and smartphones. Itself a by-product of other metals (Olivetti et al., 2017; van den Brink et al., 2020), cobalt provides stability and high energy density to lithium-ion batteries so that they can be safely recharged again and again. The Democratic Republic of Congo (DRC) produces 65% of the world's cobalt (Frankel, 2016; Nazarewicz, 2016). Given the exponential increase in the global demand for lithium-ion batteries (Deetman, et al., 2018; Tisserant and Pauliuk, 2016), it is impossible that the existing demand could be satisfied without such a major producer.

Yet especially in the continent of Africa, the track record of big business involves political corruption, environmental destruction, exploitation of labour, and social disruption (e.g. Middleton, McIntosh & Visser 2006), continuing a long history of colonial relations. Moreover, cobalt mining is associated with poverty despite the enormous value of the produce. There is also ample evidence of human rights violations in the DRC, such as child labour, low or non-existing wages, and gender-based violence. Cobalt production is also associated with concerns related to conduct in a situation of conflict: while the cobalt mining zone in southern DRC is relatively peaceful compared to the war-torn eastern zone¹, it lacks effective rule of law and is affected by the country's general instability.

The most severe exploitation connected to cobalt mining in the DRC is largely associated with informal Artisanal Scale Mining (ASM). The estimated number of people involved in ASM ranges between 50,000 to 250,000 (World Bank, 2015). Almost 20% of the cobalt exported globally comes from artisanal mines (Amnesty International, 2017a). Labour in ASM is cheap compared to industrial scale mining. Miners dig using their hands and regulations related to working hours, wages and safety are routinely overlooked. ASM is associated with work-related diseases and lack of basic protective gear (Amnesty International, 2016; Cheyns et al., 2014; KU Leuven, 2018; Meger, 2010; SOMO, 2016; Walther, 2012, World Bank, 2015).

The World Bank (2015) has reported that children constitute 40% of the workforce in artisanal mining. According to a UNICEF report from 2012, almost 40,000 children were involved in mining of cobalt and copper in the southern Katanga province (Walther 2012). The number of fatal accidents in those mines is very high (Amnesty International, 2016). Working in underground tunnels without protective equipment such as gloves, work gear or facemasks also causes health issues such as respiratory problems (Amnesty International 2016; Hahn, Hayes & Kacapor 2013). Wages are not only very low, typically between 2 or 3 dollars per day, but also precarious as they are conditioned on the daily supply of metal or the

miners (Frankel 2016). Sometimes wages are withheld, and disproportionate wage deduction is common. The miners often fall into debt bondage, at worst resembling slavery, as they are unable to cover their expenses and resort to buying necessities on credit (The World Bank, 2015).

Importantly, the social impact of mining is not restricted to these immediate working conditions. Rather, mining affects broader communities directly and indirectly. Mining damages the surrounding environment and causes health problems to people living nearby the mining areas. Research conducted in the heart of a mining area in the DRC showed traces of cobalt in the blood and urine samples of the residents, DNA damage and birth defects (KU Leuven, 2018).

Furthermore, indirect problems are related to cultures emerging or sustained in the mining community. Women living in mining towns and exposed to the masculine cultures around ASM are specifically vulnerable to gender-based violence (Kelly, King-Close & Perks 2014, Meger 2010), and transactional sex when seeking employment in ASM (World Bank 2015). The eastern zone of the country has often been referred to as the “rape capital of the world” (Kelly, King-Close & Perks, 2014; Lindsey and Toft, 2014; Meger, 2010; Prendergast, 2009). Moreover, a World Bank study (2015) reported that vulnerable populations and economically desperate individuals dependent on informal economies tend to populate the areas nearby the mines. Furthermore, mining towns are plagued with socioeconomic challenges related to alcohol and drug abuse (ibid., 15).

Research problem, data and approach

Noting all of the above, ethical deliberation in this context is not about whether the conditions in the DRC are good or bad: they are no doubt deeply problematic. Rather, important questions concern what should be done to overcome the existing situation. Typically, such discussions are related to the “division of moral labour” (Eskelinen & Mäkinen 2014) between governments and firms. In this discussion, some argue that firms have no ethical responsibilities outside profit seeking and observing “the rules of the game” (e.g. Heath 2020, Friedman 1962), while others hold that corporations are responsible actors with a large manoeuvring space. Without making any specific argument about the matter, we assume that firms have at least *some* ethical manoeuvring space and note that the very concept of ethical products would be meaningless if this were not the case.

While the work on this paper is normative by nature, it benefits from existing data. Our research was aligned with a project called “The Ethical Laptop”, carried out by the Finnish CSO Pro Ethical Trade² (PET). The project, active from 2018 to 2020, aimed at analysing existing challenges of responsibility around cobalt mining and disseminating information about them in a creative way: constructing a model ethical laptop and reflecting on the obstacles in the way of this enterprise. The project focused particularly on cobalt, as it is both a non-substitutable and by far the most ethically problematic raw material used in laptops³. The project generated data in the form of interview and video material collected in Lubumbashi and Kolwezi in the DRC, with local CSOs, government representatives, several artisanal miners (n=10-20), along with members of communities around industrial mines and depots where artisanal miners sell their cobalt. For the research, this data was complemented with a literature review comprised of relevant reports and research, including market reports, scientific papers, newspaper articles, company annual reports and CSO reports.

The empirical data is used in our analysis in a facilitating manner. In other words, our purpose is not to analyse it systematically as would be done in an empirical case study, but to use it as background information to deepen our awareness of the issues at hand. While our use of data is unsystematic in this sense, it helps us formulate questions related to applied ethics. Methodologically, this comes close to what Ackerly et al. (2021) refer to as “normative political theory” or “grounded normative theory”. This means using empirical data to “diversify, broaden, and deepen the range of insights, claims, interests, and actors they bring to bear on arguments in normative political theory” (Ackerly et al 2021). This form of theorising is kept distinct from sociological theorising with focus on inductive development of empirical theories (ibid.).

On this basis, we approach the following research problem: what does “ethical” mean in the context of ethical products? This does not involve discussing ethical consumerism as such⁴, but rather the possible extensions of corporate responsibility and the specific meaning “ethics” has in the context of “ethical products”, whether we talk about coffee, clothes or electronics. The significance of the question arises partly from the dearth of such definitions and partly from the very unorthodox use of the word “ethical” in this context. In standard use, “ethical” refers to the legitimacy or justification of an act, as can be noted from the routine framing of ethics in textbooks, as a matter of “what you should do” (Suikkanen 2014, xvi) or “what to do” (Tännsjö 2008, 4). Yet in the discourse on fair trade and ethical consumption (e.g. Brown 2013), it refers to a quality of a product or raw material. Naturally, a product as physical matter cannot be “ethical” as such, but it “can be augmented by ethical considerations or attributes that are positively perceived” (Bezencon & Blili 2010). The question then is, what brings about these attributes?

Minimum criteria and definitional difficulties

Interestingly, while the concept of ethical trade is routinely used in studies on consumer motivation (e.g. Pinna 2020, White, MacDonnell & Ellard 2012, Osburg et al 2017, Chatterjee, Sreen & Rana 2022, Kossmann & Gómez-Suárez 2018), actual definitions of ethical goods are hard to come across. Some studies even dismiss the need for definitions. To cite a few: “no strict definition of ethical trading exists. Every respondent had a view of what they thought ethical trading was [...] its definition was determined by the different perspectives of the respondents” (Browne et al 2000); “...there is no consensus on the definition of ethical trade...” (MacEwan & Bek 2009). Ethical trade is often defined very vaguely as retailers and brands “taking responsibility over the working conditions” (Lund-Thomsen & Lindgreen 2018), or as “sound sourcing” (MacEwan & Bek 2009). Sometimes the concept of an “ethical product” is used simply as shorthand for fair trade labelling (White, MacDonnell & Ellard 2012), and sometimes it is connected to environmental responsibility (Chatterjee, Sreen & Rana 2022, Pinna 2020). The notion can also be defined ambiguously by maintaining that ethical products “exhibit one or several social or environmental principles” (Bezencon & Blili 2010), without further elaboration of such principles.

Most often, the ambiguous notion of ethical trade/ethical products is interpreted as following minimum standards: if a corporation complies with *some* regulatory framework or certification system and abstains from evident abuse, it can claim to be producing ethical products. In the most common approach to corporate responsibility, ethical labelling, the minimum standard approach is given

some more substance. For example, fair trade labelling of coffee requires that the producer community receives a guaranteed minimum price for its produce (e.g. Weber 2011). However, the minimum criteria approach has been criticised for making too many compromises, and responsibility initiatives are regarded by many as nothing but “box-ticking exercises” (Ruwanpura 2013).

The implicit promise of the minimum criteria approach is that a constant and objective baseline for responsible corporate conduct can be defined. Yet in practice it is impossible to define ethical principles that would not leave room for interpretation. Even human rights involve definitional issues⁵. There is also the practical problem that companies might have the incentive to only meet these bare minimum standards with no further ambitions, given that this suffices for being recognised as ethical. Such definitional issues severely limit the transformative potential of ethical products. In the context of cobalt, not even these minimum criteria have been sufficiently formalised within a certification system: the few existing responsibility initiatives lack rigidity and binding criteria⁶.

The minimum criteria approach then turns “ethics” into a quality that a product clearly has or does not have. The remaining problem is then to decide the appropriate level of rigidity for these standards. In an imperfect world, however, we must resort to non-ideal ethics⁷. Ethical standards form a continuum, and even Fair Trade emphasises *improving* the practices of producers they have certified: in other words, they encourage the movement towards better standards rather than a clear demarcation between ethical and unethical.

Responsibility, then, is a more nuanced issue than the minimum criteria approach suggests. This is well known by actors in fair trade (Brown 2013). There have been ongoing debates about whether the scale of production and ownership structure should figure as criteria in certification systems (e.g. Naylor 2014). For example, in the production of bananas, wine and flowers, minimum criteria related to wages can be met, as well in large plantations and small producer co-operatives, yet the inclusion of the former in the fair trade system has generated criticisms over compromising with corporations (Fridell 2009).

If a certification system for cobalt would be launched, it would face similar questions related to the extension of criteria to the scale of production, and possibly to the pressure from corporations to compromise the criteria. Yet interestingly, the relation between scale and ethics is inverse in this case. As noted above, most severe problems are associated with artisanal scale mining, while the nature of industrial mining is more transparent and under better scrutiny. Industrial mining is most certainly not devoid of problems, but one can ask if these different realities should be reflected in a potential future labelling system.

In sum, while minimum criteria aim to set clear and unambiguous standards, they unavoidably involve definitional issues, and possibly limit the transformative potential of ethical products. While some minimum criteria for ethical conduct are certainly needed, fixed criteria make a possibly too sharp demarcation between ethical and unethical, and thus risk diluting the very notion of ethics.

Awareness/ignorance

In practice, ethical issues in products are related to the supply chains of large corporations (on supply chains, e.g. Kampourakis 2021, Manners-Bell 2017). Many brands communicate good intentions, but in reality they may be unwilling to act accordingly. In the case of cobalt, supply chains are fragmented: one company

mines, another refines, the third makes the battery cells, the fourth assembles the battery into electronic products like laptops and the fifth sells the final product (Patterson & Gold 2018, Clarke and Boersma 2017)⁸. It is challenging for the final seller to ensure that the whole supply chain follows expected standards. Difficulties exist in tracking the origins of cobalt: artisanal and industrial cobalt get mixed together (Amnesty 2016), and so does cobalt from the DRC and other source countries. It is difficult to prevent any ASM cobalt from the DRC entering a company's supply chain. Supply chain management is indeed a growing concern (Quarshie, Salmi & Leuschner 2016), especially in the context of the Global South (e.g. Nath, Eweje & Bathurst 2019).

Yet the existence of such challenges is too easily used as an excuse for inaction. Currently, only niche market actors see responsibility as a competitive advantage and address the need to ensure responsibility throughout the supply chain seriously⁹. Such cases demonstrate existing possibilities, but hardly function as norm-setters. Big brands might claim ignorance about the possible problems within the supply chain and portray themselves as mere purchasers of material (Manners-Bell 2017, 1).

Importantly, lack of awareness about the supply chain is not a legitimate excuse. While it can be fair to assume that some companies using cobalt were at some point genuinely unaware of the human rights situation in the DRC, this can no longer be claimed. The above-mentioned report published by Amnesty International in 2016 caused a firestorm among big brands and tech giants who were using cobalt mined from artisanal mines in the DRC. Awareness about the problems in cobalt mining has also generally increased, including mainstream media coverage (e.g. Kara 2018). This renders unawareness a less credible reason, while valid questions of course remain. To what extent, for example, is a brand company with cobalt in its supply chain responsible for making changes to a corrupt deal that was made by a mining company years ago?

Furthermore, companies might downplay their manoeuvring space. This can mean presenting themselves as mere purchasers without power to affect local conditions. Or they might choose to focus strictly on their immediate responsibilities related to contractual fairness in the agreements with the suppliers. Such issues can be addressed by negotiating with industrial mining companies, as wages and other conditions should be improved significantly within this sector as well. Yet as noted, corporate conduct carries broader implications for a large domain of the affected, including the unofficial ASM sector. These implications range from direct matters such as subsistence and health and safety issues – whether miners get adequate compensation for their work, health hazards caused by mining, and the like – to indirect impacts on mining communities.

Ignorance about wrongdoings within the chain can also be deliberate. Confirming this, a CSO representative said in an interview for the project: “I believe there are enough competent people here who can say what comes from where”. A later reassessment by Amnesty International (2017b) showed the same major players in the electronic industry still lagging behind in ensuring accountability in their cobalt supply chain. In this reassessment, companies ranged from those classified as having taken action (Apple, Samsung) to those having taken no action (Microsoft, Lenovo, Vodafone, Huawei, etc.). Likely, awareness about the grave problems related to cobalt mining makes the need to establish what should be expected from these companies ever more pressing.

Spheres of responsibility

The complexity of the supply chains makes it challenging to assess the most appropriate *normative* conceptualisation in the case. The normative question can be formulated basing on the responsibility not to harm: there is a strong negative responsibility not to harm others, but do outsourcing firms harm the exploited miners? Many theorists argue that while we are bound by a strong responsibility to assist those in need, merely being wealthy in a world of mutual dependency does not imply harming those who are the poor (Rierik 2013, Reitberger 2008). In the case of the companies, this would mean that binding duties could be restricted to complying with minimum criteria, with further “responsibility initiatives” being commendable. Others state that any action in the context of the existing institutional arrangements constitutes harm to the impoverished, if this action functions to uphold the given arrangements and if feasible alternative arrangements exist (particularly Pogge 2005, 2002). Sourcing cobalt surely upholds existing arrangements and there are feasible alternative orders, in which cobalt mining happens without the current human rights violations, but it is questionable if all kinds of corporate conduct in this context should indiscriminately be seen as harming.

A way forward can be found in Christian Barry and Gerhard Øverland’s (2016) more nuanced distinction, which includes the category of *enabling* harm. Instead of directly harming the miners, the companies could indeed be seen as enablers of harm. This is also distinct from failure to assist: indeed, given the highly unequal global economic structures, the absence of active and deliberate acts of harming does not guarantee moral conduct (Pogge 2002, Eskelinen 2011). This means that they are deeply involved in the problematic practices, provide financial incentives, and therefore have concrete responsibilities, even in the absence of immediate causally relevant harm. Looking away rather than investigating the source of purchased raw materials can count as enabling harm. This could also function as the basis for a criterion for ethical products.

Yet this does not suffice to answer questions regarding what the companies should do. Based on our analysis, we suggest making a distinction between three levels of responsibility related to the supply chains: abidance to norms and minimum criteria, active risk identification, and modification of the supply chain. They are cases with different levels of ethical rigidity, yet we argue that all should be seen as cases of enabling harm.

The most obvious level is *abidance to norms and minimum criteria*. In addition to the definitional problems noted above, there are institutional problems related to norms. In countries like the DRC, rule of law is weak, and the risk of corruption is high¹⁰. Furthermore, existing formal international regulation of the conduct of multinational companies is largely limited to voluntary frameworks. The United Nations’ “Guiding Principles on Business and Human Rights” define human rights due diligence as a process that all companies with global supply chains should carry out and commit to (United Nations 2011)¹¹. But in the absence of binding and sanctioned regulations, responsible conduct is largely a matter of choice for individual companies. At worst, “ethical conduct” or “corporate citizenship” (Crane & Matten 2010), are diluted to meaning nothing more than compliance with the law on minimum wages, taxation and worker protection, and abstaining from corruption. Even this could be difficult to verify. Furthermore, while governments are usually seen as the agents setting “the rules of the game”, in the context of poor

and unstable states of the Global South, their power can be limited by global trading rules, corruption, and the fear of losing investments (Kelly & Marfeet 2004), reducing the effect of legislative tools.

Active identification of risks associated within the supply chain is already a more substantial requirement (Manners-Bell 2017, 241-244). In the case of cobalt, it can be difficult to implement effective due diligence because of long supply chains, limited transparency and an unclear situation on the ground. One possible solution is the cooperation with other companies through for example industry associations or certification bodies, although current certification systems clearly need to be developed. Research literature shows that blockchain based traceability systems could also be a possibility (du Venage 2018; Hastig & Sodhi 2020). This development would give the companies better access to information by tracking activity of production at every step, including the cobalt's origin, size, weight and ownership at every stage, and thus signal potential "red flags". Such a system would indicate if the metal has been procured from unethical mines involved in human right abuses or legislative manufacturing abuses (Hastig & Sodhi 2020).

As a third category of responsibility, we suggest the concrete demand that the companies could actively *shorten their supply chains*. Typically, the supply chains are seen as fixed, and questions about ethics and responsibility are asked from this angle. This does not, however, need to be the case. If there are responsibilities related to overseeing the supply chain, there can also be responsibilities to amend the supply chain. Indeed, much of the difficulty in knowing the origins of cobalt is due to the absence of any direct relationship with the miners. Companies could source directly from miners or cooperatives to improve the situation.

Purposes of ethical products

Furthermore, questions concerning ethics of cobalt are more complex than the individual companies' responsibilities over their supply chains. The aim of constructing an ethical laptop eventually leads to reflections on the *purpose* of ethical products. To answer the question about what ethical products are, one needs to ask why they exist. There can be various reasons for introducing such products, and these ideas should also be articulated. Therefore, we will next sketch a classification of possible purposes of "ethical products".

First, in classical market terms, ethical products can be seen as merely *servicing given preferences*: consumers value different things, and as some value ethical production quite like some value a certain colour, taste or brand, and goods corresponding with these preferences should be supplied. Second, the purpose of ethical products can be seen as an attempt to *create a "model microcosm"* for non-exploitative production and trade: this economic domain can then hopefully serve as a model for others to follow. Third, ethical products can be seen as *leverage for social change*, so that the existence of ethical production would, hopefully, change practices around it.

For the purpose of producing a single "ethical laptop", a model product, the required cobalt could surely be sourced ethically, even given the existing circumstances. For instance, using only recycled cobalt could clear the immediate supply chain from unethical practices. In this way, ethical products could cater for an ethical niche market, which to a limited extent is already the case today. Nonetheless, this would leave most concrete problems related to cobalt mining unaddressed, and even relieve the pressure for responsible production, as the niche

market would cater for the wants of ethical consumers. In a very conceivable scenario, global cobalt sourcing could assume a kind of twisted “division of labour”, in which ethical brands source all available non-suspect cobalt while others use cobalt from ethically problematic sources. Nothing in the production conditions would necessarily change – at least until there is large enough demand for the ethical products to create a shortage of responsibly sourced cobalt. For these kinds of reasons, attention has been paid to the limits of ethical trade (McEwan & Bek 2009, Robinson 2009).

One possible way forward would be to assess the possibilities of mass production of ethical laptops. One candidate for a criterion of what is “ethical” could be generalisability. That is, that a sufficient amount of such products *could* be produced, in order to ensure social change instead of the outcome being a mere reallocation of available raw materials.

As noted, the most ambitious interpretation of ethics in this context is then to see ethical production as a pathway or leverage towards social progress, as opposed to a quality of a product or material. It is one thing to attempt to select given sources of cobalt, and another thing to try to *influence other actors* (governments, mining companies, traders of ASM ore) within the supply chain. To give one practical example, the companies could work actively to provide the miners avenues for fair selling. Not only is the miners’ income very low¹², their selling price for a common type of cobalt is also less than half and can be as low as 6% of the price that traders receive. Some miners interviewed for the project reported being cheated by traders deliberately assessing the quality of the ore incorrectly. Thus, strictly understood, “ethical” qualities of goods can be defined by the commitment of involved corporations to use their existing powers for social progress, rather than merely creating a contained supply chain devoid of suspect practices (which, of course, is commendable as such).

Disengagement and engagement

One insight emerging from the “Ethical Laptop” project was that there is a need to focus on the situation of artisanal miners and mining communities in the DRC, rather than following the production chain of a single product. This is in line with the strict notion of ethical products mentioned above, which includes the goal of facilitating social change. In the case of artisanal mining, the difference between supply chain control and social progress is particularly visible. Disengaging from artisanal mining altogether can seem like a convenient solution to uncomfortable reputation risks for the companies/brands that use cobalt in their products. Avoiding ore originating in artisanal mines could indeed be possible, if difficult, by asking for calculations from industrial mines to make sure that no ASM cobalt is mixed in the ore.

But while ore originating in artisanal mines could be avoided, negative outcomes of such disengagement could well outweigh the positive ones. Disengaging from artisanal mining could lead to these miners losing desperately needed income, pushing the whole community into deeper poverty. Vulnerability could also increase, as the miners would possibly have to “work underground” and smuggle the ore across borders. The expansion of industrial mining pushes aside ASM, causing displacement of artisanal miners from their excavation sites. Several miners interviewed for the “Ethical Laptop” project reported that their former digging locations had been taken over by industrial mines and that they had to

move to illegal sites with poorer ore quality. The problematic scenario is easy to recognise: formal employment with tolerable conditions serving ethically stamped brands, while the informal layer is pushed ever deeper into marginalisation and poverty.

In addition, two communities around industrial mines as well as CSOs raised the concern that land and water in many places has been polluted due to industrial mining, potentially depriving the community of clean drinking water. Research also shows that pushing out the artisanal miners can result in contestation, conflict and even death of miners, caused by state security forces (Katz-Lavigne 2019). The arbitrary displacement of communities and artisanal miners without consultation is exacerbated by corruption.

Moreover, expanded industrial mining is not an automatic substitute for lost employment. Two CSO representatives interviewed for the “Ethical Laptop” project argued that Congolese workers are not even wanted in the workforce in industrial mines as they are perceived to “lack the qualifications”. Instead mining companies prefer to bring employees from abroad (particularly China). “Ethical sourcing” could then, in extreme cases, turn out to be an excuse for discrimination. The main issue remains: do companies approach the social conditions in the DRC as a risk to their reputation or as genuine concerns? In the “Ethical Laptop” project, the former was expressed through the fear of miners that their interviews would scare away companies and thereby affect their employment situation.

Practically, if ethical consumption is meant to generate positive social change, cobalt sourcing must address the general situation in the DRC. Thereby, a complex set of problems needs to be considered. For example, the root causes for child labour are diverse, from the lack of access to education to poverty of the parents (Faber, Krause & Sanchez 2017). Continued engagement with affected mining societies and the planning of a policy to address child labour are needed (ibid.). It is crucial to try to improve the livelihoods of the miners. In other words, disengagement does not suffice if the label “ethical” should indicate that the production line changes things for the better.

It is in the power of companies to ensure decent wages, or at least make a significant contribution towards this end. This could for example include providing tools for miners to test the quality of the ore, or as noted, trading directly with miners and ensuring a decent price. Action could also be taken to use leverage over the industrial mines to come to agreements with surrounding or forcedly evicted communities, by providing them employment, compensation or safe places to dig, etc. Formalising mining and giving miners access to safe artisanal mining zones could decrease the risk of accidents, while accidents are very commonplace as work is done in the shade of the night.

If companies sourcing cobalt would see themselves having broader social responsibilities, they would engage in serious discussions with communities around the mines and local organisations that might know the background of the mine, and also build capacity for these discussions (Kapelus 2002, Carter 1997). While many matters may lie beyond the powers of corporations, much can be achieved through active engagement, at least in the short term.

In practice, recognising responsibilities over direct and indirect impacts on communities of cobalt sourcing means relying on the idea of assessing company conduct based on their commitment and engagement, and the transparency of their communication of achieved progress, as opposed to merely evaluating them based on some minimum criteria. The case for highlighting commitment is supported by

research showing that even companies seen as ethical model cases can cause harmful outcomes when stakeholders broadly understood are not consulted (Ballet & Randrianalijaona 2014). This ethical approach also involves risks, especially as the lack of explicit criteria could lead to attempts of diluting ethics into a kind of marketing communication without substance. On the other hand, it could function as a strategy for a world of committed companies. Fundamentally, however, the idea of ethical products should align with commitments to social improvement if ideas like the ethical laptop are to be truly meaningful in the consequentialist sense.

Conclusions and discussion

Above, we have sought to unfold a meaningful understanding of “ethical” as a quality of a good, a product or materials. The “Ethical Laptop” project, along with which this analysis was conducted, poses the questions of which criteria should be established for the label “ethical goods” and related complexities. What needs to happen before cobalt as a material, and thus the laptop as a product, can be considered ethical? Interestingly, the matter of the meaning of terms like “ethical products” is typically surpassed in studies of ethical and responsible trade, or, at least, the use of the word “ethical” is vague and unsystematic. Therefore, the notion of “ethical” in this context should be explicated and analysed.

Constructing “an ethical laptop” was thereby used as an entry point, shedding light on related problems and dilemmas. As noted, the case is of high importance due to the lack of responsibility initiatives, massive problems in the DRC, and the indispensability of cobalt for contemporary lifestyles. We began by noting the existing problems, the currently largely voluntary nature of corporate responsibility, along with the difficulties (and excuses) related to controlling the dispersed supply chains in the electronics industry. Subsequently, we discussed levels of responsibility over the company’s supply chain, and the extent to which one should demand that products labelled as “ethical” contribute to social change.

The complexities related to ethical products arise from the fact that there must be some positive qualities or attributes related to the product, but it is difficult to determine what these attributes should be. It is convenient to lay out minimum criteria for ethical corporate conduct and/or clean the company’s immediate supply chain from clearly harmful practices. By disengaging from suspect practices, one could possibly create ethical model products for niche markets. Yet this shows the limitations of the idea of “ethical products”. There are good reasons to believe that “ethical” understood in this sense does not necessarily imply any ambitious attempts of improving the problems at hand, and such disengagement can even turn out to be harmful. Noteworthy, much has been written on stakeholder theory (e.g. Friedman & Miles 2006), also in the context of mining (Muttia et al. 2012), but much less has been written on the implications on informal workforce, which constitutes the core of the problem in the case of cobalt.

Philosophically speaking, key issues are related to the normative assessment of company actions and the scope of responsibility. We have argued that the company’s actions should be considered in terms of enabling harm – engaging in and incentivising harmful practices – and the criterion of ethical products should extend beyond a niche market of ethical sourcing. For companies to comply with their responsibility not to enable harm to the members of the mining communities, they should actively engage in modifying their supply chains, as well as more generally making a positive contribution to the local community. Seen from this

perspective, “ethical products” are goods produced by companies committed to proactive conduct for social change. This means affecting the supply chains and improving the living conditions of the communities.

We have based this analysis on the assumption that companies have real power and that they make ethically relevant choices. As noted, this assumption can be disputed and it can be argued that companies should only aim at profit maximisation in the context of existing legislation, and that it is only this regulative framework that should be changed. Moreover, there are different ideas as to how much weight should be put on consumer power as opposed to corporate initiative. Proponents of market-based strategies for social justice (e.g. Barry & MacDonald 2018) would argue that sufficient demand for ethical products would make away with the problems. Yet, if companies have manoeuvring space and the capability of taking initiative, the matter of defining “ethical” in ethical products is relevant, even if the extent of corporate responsibility can be debated.

The approach adopted in this article, taking an individual ethical product as a starting point and then contemplating ethics without too many preconceptions, can be seen as somewhat similar to the deliberation that an ethically committed company goes through when confronted by the necessity to consider ethical concerns. As the existing responsibility initiatives are few and weak, this deliberation is likely to continue to take place. We hope that the distinctions made above can assist in such deliberation as well.

Notes

¹ Specific legislation is applied to materials originating in areas where a violent conflict is ongoing. For example, the Dodd Frank Act “requires companies listed on the US stock exchange to provide specific assurances that any products that they have manufactured or contracted to manufacture do not contain minerals ‘that directly or indirectly finance or benefit armed groups’ in the DRC or its neighbours’ (Cuvelier et al 2014, 1). See Sutherland (2011) and Eichstaedt (2011) on conflict minerals and the DRC.

² More information about the organisation can be found at: <https://eetti.fi>.

³ See Helbig et al. (2019) concerning the supply risks related to other battery materials.

⁴ The potential of ethical consumerism is a debated issue. On the one hand, some ethical theorists display optimism about the potential of enlightened consumerism (e.g. Barry & MacDonald 2018), On the other, reliance on ethical consumerism has been criticised for reproducing a neoliberal rationality and particularly its very individualist orientation, turning structural social problems into problems of individual valuations and motivations (Carrington, Zwick & Neville 2016, Jones 2017, Fridell 2017).

⁵ Definitional issues include, for example, what constitutes a living wage: to what extent it should include possibilities of feeding dependants or acquiring semi-essential goods such as new clothing. For a general list of relevant conventions on human rights, see Telkki (2015, 14).

⁶ The existing responsibility initiatives include Responsible cobalt initiative, Responsible Mineral Initiative, and The Cobalt Industry Responsible Assessment Framework.

⁷ See Sreenivasan (2016) on non-ideal theories.

⁸ A complete ethical analysis on the relations around cobalt would also include e-waste handling procedures (e.g. Omokaro 2018).

⁹ The most noted example is likely to be Fairphone.

¹⁰ The existence of corruption practically also means that mining rights are granted behind closed doors (Callaway 2018).

¹¹ It consists of four core components: 1) identifying and assessing actual or potential adverse human rights impacts; 2) integrating findings from impact assessments across relevant functions and company processes and taking appropriate action; 3) tracking the effectiveness of measures and processes to address impacts; and 4) communicating on how impacts are being addressed (Working Group Report for UN General Assembly 2018).

¹² The level of income was estimated in 2017 to be around \$1-2 per day, or a mean of 34,5 dollars PPP per mining household per month (Faber, Krause & Sanchez 2017).

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