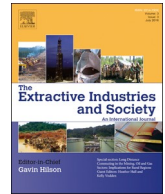




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Mining companies and gender(ed) policies: The women of the Congolese Copperbelt, past and present

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ABSTRACT

Mining companies of the past and present have promoted specific roles for men and women through their management practices. In DR Congo, first colonial and then state-owned companies naturalised the role of men as employees and breadwinners. At the same time, women were assigned responsibility for reproduction and were understood as being financially dependent on men's salary, either that of their fathers or husbands. By contrast, some LSM (large-scale mining) companies today support gender equality programmes, mainly to improve their corporate reputation. Drawing on the literature on women in the industrial extractive sector elsewhere in the world, I show how these discourses and processes continue to produce Congolese Copperbelt mines as masculine spaces at different levels. I then move to the ethnographic component of the paper by arguing that new investors' gender practices and equality policies are not easily implemented in the area. On the contrary, they have to confront a region marked by the paternalistic social policies of mining companies in the past, which have entrenched a certain gender hegemony. Through the biographies of different women involved in the industrial mining sector past and present, I show the effects of mining companies' policies on gender roles in Haut-Katanga Province.

1. Introduction

On their way home, two young women wearing provocative clothes met a wise man. After looking at them straight in the eye, he said something that the women will never forget: 'Young ladies, everything precious God made in this world is well hidden and difficult to see, find and obtain. Where do you find the diamonds? Deep in the earth, hidden and protected. Where do you find the pearls? Deep in the sea, hidden and protected by beautiful shells. Where do you find gold? Way down in the mine, covered with layers of rock, and to obtain it, you have to work hard and dig deeper to get it [...]. Your body is holy and unique, you are way more precious than the gold, the diamonds and the pearls, and you should be covered as well [...]. If you guard your precious minerals like the gold, the diamond and the pearls, deeply covered, a reputable mining company with the required machines will

carry out years of intensive exploration. First, they (the prospective fiancé) will discuss with the government (the family), sign the professional contract (the customary marriage) and then operate professionally (civil/legal marriage). But if you leave your precious minerals exposed on the surface of the earth, you are always going to attract many illegal miners to come and exploit you illegally. Everybody will be there just to pick up their tools and just have a dig at you freely like that. Keep your bodies deeply covered to invite the professional miners to run after you. Let's encourage all our wives, friends and daughters to dress well and, especially, decently!' (ECHOS DE KIPUSHI's Facebook page, 2018)¹.

I found this story on a Facebook group for people from a mining town in DR Congo's Haut-Katanga Province, in which members share suggestions, advice and jokes as well as comments on news from the town. This shared post is a fascinating illustration of the way the mining

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¹ ECHOS DE KIPUSHI's Facebook page. 2018 'Sage Conseil'. <https://www.facebook.com/groups/100118726706970/permalink/2124462524272570/> (20th, February 2020). Author's translation from French.

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context is dominant and pervasive in people's thoughts. The story conveys the exhortation of dressing modestly to secure an official and decent marriage through the association of industrial mining with respectability and of artisanal mining with anti-values or 'voyoucratie' (yob rule). In Haut-Katanga Province, mining companies provide useful insights into shifting gender dynamics; the story's use of metaphors that connect the mining sector and gender roles is not a coincidence. Today as in the past, as Section 2 describes, the mining industry is not gender-neutral (see Acker, 1990). Instead, mining companies worldwide have been ascribed a 'masculinity' (Lahiri-Dutt, 2006b, p.72): they follow specific masculine ideals and promote attributes associated with idealised gender roles (see Cornwall, 2003).

The mining sector of the Congolese Copperbelt has been the subject of extensive research diversified in time and topics (see Fabian, 1971; Higginson, 1989; Jewsiewicki, 1986; and more recently Dibwe, 2001; Cuvelier, 2011; Hönke, 2013; Makori, 2013; Katz-Lavigne, 2019; Rubbers, 2013). Many scholars in the past have focused on masculine identities in Haut-Katanga Province and their relationship with the mining industry (see Cuvelier, 2011, 2014; Dibwe, 2001; Rubbers, 2013, 2015). Research on feminine identities in the Katangese mining context, however, has primarily focused on women's dependence on the salaries of men who work in the mining industry, either their fathers or their husbands, or women's contributions to the household through non-waged activities unrelated to the mining sector (Dibwe, 2001; Rubbers, 2013). The studies on women who work in the extractive industry in DR Congo mostly refer to those who are active in artisanal mining (see Bashwira et al., 2014, 2019; Byemba, 2020; Hayes and Perks, 2012; Reichel, 2020). Extensive research on women formally employed in LSM (large-scale mining) companies operating in DR Congo is still lacking, mostly due to their small share in the industry. This article seeks to address this gap by focusing on this particular group of women to make broader observations about the relationship between the Congolese Copperbelt mining sector and gender dynamics. Central to my argument is the female's workers challenging of and conformity to normative expectations (see Hodgson and McCurdy, 2001).

The article is built around two interconnected arguments. The first component is that the mining industry in DR Congo and elsewhere has contributed to the shaping of a certain idea of being a man or a woman through management practices in the past (Gier and Mercier, 2006; Lahiri-Dutt, 2019). This has in turn excluded (see Section 2) or limited (see Section 3 and 4) the access of women to the mining industry. I contend that mining companies' discourses on women were part of a "civilising" mission during colonial time, which was endorsed by the state-owned company until the 1990s, and is currently present in the developmental engagement of some LSM companies. Drawing on Lahiri-Dutt (2012), I show how these discourses and processes at different levels continue to produce mines as a masculine space. I then move to the ethnographic component of my argument. In Section 5, I argue that new investors' gender practices and equality policies are not easily implemented, since they have to confront a region marked by the paternalistic social policies of mining companies in the past, which have entrenched a certain gender hegemony (see Hönke, 2013 on the local challenges confronted by multinational companies).

Through the biographies of different women directly or indirectly involved in the mining industry past and present, I scrutinise the effects of mining companies' policies on gender roles in Haut-Katanga Province. To analyse their experiences, I consult the extensive corpus of research on women in the industrial extractive sector elsewhere in the world. More specifically, I draw on this literature to discern parallels and divergences with specific case studies in other countries (Benya, 2016; Lahiri-Dutt, 2006a, 2006b; Kaggwa, 2020; Rolston, 2014), and to contextualise my findings within broader overview studies identifying global challenges that women in industrial mining are confronted with (Eftimie et al., 2009; Jenkins, 2014; Lahiri-Dutt, 2012; Perks and Schulz, 2020). Ultimately, I show how specific

companies' practices, together with other elements as well, linked to the different situations of the women (social and economic background, family support, level of education, marital status and roles within the couple), to the country's features (market conditions, legislation and gender diversity policies, wider beliefs and stereotypes) or to global expectations on women (the essentialist perception on female technical incompetence or, on the contrary, greater reliability), play a role in individual choices and life stories.

In terms of methodology, this research is the result of an 11-month fieldwork in Haut-Katanga Province of DR Congo during 2017 and 2018. During this time, I conducted over one hundred interviews with various people directly or indirectly involved in the mining sector. Most of the research participants were former workers at Gécamines, the state-owned mining company, or current employees of different transnational mining companies that operate in the province. Some of the respondents were chosen specifically for their role in the companies vis a vis gender issues, while others were identified through snowball sampling. I seldom needed a research assistant, and in the vast majority of cases, I conducted the interviews in French at the research participants' homes or workplaces. Part of my fieldwork was held during the two internships I completed at two transnational mining companies and while living in different villages and towns, both with Congolese families and in mining camps with Congolese and expatriate workers. The long time spent with workers and their families during working hours and free time allowed me to get more familiar with the research participants and discuss gender issues in a more profound and complex way. Especially during the internships, being a white, educated woman, and in some cases, an inhabitant of the expatriates' camps, played a significant role in the way employees perceived me: many considered me as an employee of the companies involved in the gender equality projects. To blunt the bias, I counted on a long path of acquaintance with the research participants dedicating much time in the explanation of my profession and research's purpose.

2. The masculinisation of the Congolese mining industry

In 1990, in her most famous article, Joan Acker criticised the supposed sex and gender neutrality of work organisations while instead theorising the idea of gendered organisations. Her definition underscores "that advantage and disadvantage, exploitation and control, action and emotion, meaning and identity, are patterned through and in terms of a distinction between male and female, masculine and feminine" (Acker, 1990, p.146). In other words, gender is a socially constructed organising principle, which structures workplace relationships and regulates "the subordinated or excluded place of women" (ibid, p.154). Following this interpretation, Lahiri-Dutt (2012, p.201) reflected on the 'masculinities' of industrialised mining by exploring different inter-linked contexts where gender inequalities manifest themselves. She identified three spaces: the structure and mining project practices, the "abstract space [of the] gendered representations of mining realities", and the "global culture and controls of the international organisation of capitalised mining" (ibid). In all these spaces, she recognised the production and reproduction of gendered identities. In this article, I look at these three connected spaces in the Congolese mining context of Haut-Katanga Province by analysing previous and current management practices and their impact on individual women's lives.

It is crucial to consider the past when researching women in transnational mining companies as previous mining companies operating in DR Congo strongly impacted the construction of gender identities, and thus the male-female division of labour. Indeed, the first colonial companies, such as UMHK (Unione Minière de l'Haut Katanga) and later Gécamines, the state-owned company, were engaged in promoting a single model of masculinity and femininity to optimise their vision of business efficiency and production². As Rubbers (2013, p.23) described, from the 1920s on and especially after the second world war, colonial mining companies together with Catholic missionaries strongly

urged employees to follow the Western model of the nuclear family founded on monogamy, domesticity and patriarchy to stabilise its workforce. Companies were concerned about a possible “contamination” of workers and their wives with outsider influences, particularly alcoholism and prostitution associated with town life (Higginson, 1989; Hunt, 1990). Like most mining companies that practised corporate paternalism worldwide, the UMHK expected male employees to perform the role of the breadwinner while demanding that women living in mining towns and camps take care of their children and their husband's wellbeing. Following Lahiri Dutt's theoretical argument of the three spaces, this division of gender roles was structurally achieved in the first space of the practices of the mining project by excluding African women from job positions in the companies³ (Chauncey, 1981; Dibwe, 2001) and through gendered education aimed to teach men technical skills and to women domestic tasks via specific courses⁴. In his study on women's labour in the Zambian Copperbelt, Chauncey (1981) described the everyday life of a miner's wife: “Before the husband left for work in the morning, a woman needed to prepare his breakfast; while he was gone she cleaned the house, collected rations, visited the market, worked in the garden, or made trips to the shops in town, returning in time to prepare his bathwater and dinner before his return from work” (p.150). As Gier and Mercier (2006) explained: “women's unwaged household labor was given minimal recognition, despite the fact that their work preparing meals and baths and managing the household was critical to the support of the miner and thus, the industry itself” (p. 91). This analysis brings out the third Lahiri-Dutt's space regarding the capitalised mining that required the same gendered structure worldwide for its functioning.

Moreover, the companies viewed both women and men as pillars of a moralising project of domestication of their respective partners. Women would maintain a caring attitude and take on the responsibility of household chores, while men would assume the authority over the family accorded to them by the company. Indeed, as Cuvelier (2011, p.78-79) described, as men worked officially for the company via wage labour, they were also the head of the household and dependent for their entire family. Women and children were aware that if a family member engaged in misconduct, the man would be held accountable and the company would reprimand him and, consequently, his family by, for instance, reducing food rations (Dibwe, 2001, p.65-66). Fundamentally, the company tried to reproduce its hierarchical structure within the family: women were subordinate to their husbands, which in turn were subordinate to the company organisation (Rubbers, 2013, p.24-25). In so doing, the company and the couple both contributed to shaping new gender roles and to separating the home from the workplace. The second abstract space of the gendered representation of mining reality emerged here when it became “natural” to associate the mining sector with male jobs. As Lahiri-Dutt (2006b) argues, “women

become “protected” within the family and the home; “work” in the mines becoming a mode of access to the public space, the mines. Mining becomes constructed as a “masculine” world, where the jobs are gendered and codified as women's and men's” (p.83). While some women resisted the model (see Cuvelier, 2011; Hunt, 1991; Lauro, 2020), middle and upper-class couples, in particular, tended to conform to this gendered division of roles as they saw it as a means of social distinction from rural labour contexts where female work was indispensable (see Dibwe, 2001, p.61-64; Rubbers, 2013, p.186-187). In this way, married non-working women gradually became the ideal category to which to aspire to in order to gain respect within the mining communities.

However, already in the mid-1950s and especially from the 1970s, when Gécamines' profit margins began to decline, women's work became increasingly necessary to make up for the lack of a stable salary in the household. As Dibwe (2001) and Rubbers (2013) argued, the economic activities women managed in the household such as small farming or petty trading were the primary means through which mining communities could cope with the economic crisis. This is echoed in Pauline's story.

Pauline is 64 years-old. Her father was a driver, and the mother used to sell vegetables at the market. She studied commercial subjects at high school and at 19 years old, she got married to Luc. She was thrilled with the marriage because Luc was working at Gécamines in a well-paid position. For one year, they even went to Europe for executive officer training. During that time, she participated in Gécamines-sponsored sewing classes for the employees' wives. She found these and the other Gécamines' courses quite useful, particularly for uneducated women who had to learn how to cook, sew and carry out other housekeeping chores. Pauline believes that being able to perform these tasks and taking care of the children are the women's responsibility. She was committed to these activities until the 1990s, when, following Gécamines' economic problems and, accordingly, those of her husband, she decided to contribute to the household budget. As part of a voluntary severance program implemented in 2003, Luc had to quit his job, and the family had to adapt their bourgeois lifestyle. While Luc and one of their sons started working on a small farm, Pauline, with the husband's support, opened a grocery shop in her house for their neighbours. Soon, this activity became the family's main income and, nowadays, the couple counts on this business for their basic needs. Pauline is very proud of her shop, and she works there all the time. Both Luc and Pauline believe that it is crucial for women to get a higher education, in order to be useful, especially during emergency times when the husband cannot adequately perform the role of breadwinner. That is the reason why all of Pauline and Luc's children, boys and girls, finished university and work full-time.

Pauline's story is exemplary of the life of most of the women married to a mine worker, past and present. Indeed, currently, with the huge unemployment rate in DR Congo and the high turnover in the mining companies, employees are forced to move regularly to towns or remote villages to look for new job opportunities in greenfield or brownfield mining projects. As a result, entire families regularly have to relocate, and it is particularly challenging for employees' spouses (mostly women) to find employment nearby the mining project. Faced with these circumstances, it is common for women to primarily take care of the household or to engage in small business activities, as was the case with Pauline. Nevertheless, as I illustrate in the following sections, not all the women fell into this category, and from the end of the 1960s onwards, in the Congolese Copperbelt, it became possible for a tiny minority group of women to be employed at the Gécamines.

² In her text on women in Northern Rhodesian copper mining communities, Jane Parpart (1986) quotes the opinion of a compound manager in 1943 regarding the advantages of the stabilisation project for the mining company's productivity: “the married employee is undoubtedly more content than the single, he is better fed, looked after and clothed and has the rudiment of a sense of responsibility which tends to make him more stable and efficient worker” (RCM file 202.7, 1 and 2, as cited in Parpart, 1986, p.37-38). See also Chauncey (1981, p.141) on the significant lower turnover of married employees in the Zambian Copperbelt compared to single workers.

³ In the annual reports of the UMHK, the category of African women is absent in the employee count.

⁴ In an article on Belgian colonialism and domesticity, Hunt (1990) describes the role of the *foyers sociaux*, educational programs aimed to teach married women how to do domestic tasks and “instill a Western family ideology” into the couple (ibid, p.449). According to Hunt, unlike the paternalistic model directed at the Congolese male workforce, the colonial companies endorsed a sort of maternalism where European women working in a state-sponsored programme aimed at achieving “discipline and trust” (ibid., p. 462) through a “maternal tone” (p.473).

⁵ In order to protect the privacy of the research participants, all the names and the personal information have been anonymized.

3. Female work at Gécamines

Beginning in 1967, Gécamines began recording the number of women employed in its different departments in their annual reports. As *Dibwe (2019, p.4)* noted, this decision is in all likelihood linked to Mobutu's presidential regime and his “*émancipation de la femme*” (women's emancipation) campaign, aimed at promoting the work of educated women and giving them positions of responsibility across the public sector (*ibid.*).

At Gécamines, this national campaign led to a steady growth in the number of female workers employed at the mine over twenty years⁶. In 1990, just before the economic crisis, the mine reported the highest number of female workers at 2074, meaning 5.8% of the entire workforce. Moreover, 10.1% of leadership positions were held by women, while 5.4% were ordinary workers. This figure is not surprising. Many Congolese women who entered the workforce were highly educated and belonged to upper or upper-middle-class families and were thus generally trained for higher-level positions.

In terms of job type, women at Gécamines were represented in all the jobs related to the services the company provided, including, among others, those in the education and healthcare sectors. Therefore, the women evidenced in these figures, both ordinary and executive employees, are those who occupied positions such as office workers, nurses and midwives, or teachers and social workers (see *Lando, 1978, p.23*). Women were thus mostly employed in the mining company's auxiliary departments, far from the production and exploitation sectors, which were reserved for male workers and were generally better paid. As I show in *Section 4*, this pattern continues to persist in the present and reflects the situation of female workers in mining companies worldwide.

Among the life stories I heard during my fieldwork, Sylvie's particularly struck me for three key reasons: firstly, because she had been employed at Gécamines in the late 1970s; secondly, because she was the primary breadwinner in the couple; and, lastly, because she was a nurse who also worked night shifts. Her story encouraged me to consider the present-day situation of female workers in the extractive sector and led me to reflect on the actual changes brought about by new mining companies.

Maman Sylvie is 69 years old and comes from a small mining town close to Lubumbashi (the capital of Haut-Katanga Province). Her father used to work as a primary school teacher at the UMHK, while her mother was a housewife. She had nine siblings and all, boys and girls, finished school at Gécamines. Coming from a large family, she soon realised the importance of having two salaries in the household. Sylvie did not like to stay home all day and feel financially dependent like most of the women living in the neighbourhood. Her parents always encouraged her to enhance her education, and after school, she studied nursing. During her studies, she was already engaged to Vincent, a secondary school teacher, who decided to wait to marry her until she got the diploma. Sylvie liked the fact that in the couple, they always had a dialogue and she could put some conditions on the marriage. For her, the most important thing was to be able to contribute to the family budget and thus to have work authorisation from her husband⁷. Even today, she thinks it is important to have marital authorisation to work without worries and avoid problems. For instance, if she does a night shift, the husband has to give permission. The authorisation has to be written because

husbands can always change their minds, and it is important that women can defend themselves from second thoughts. According to Sylvie, women have difficulties working if they do not plan well with their husband. They should first organise the household to be able to perform well at work. Vincent easily accepted her conditions, and Sylvie was hired at the Gécamines hospital as a nurse. However, Vincent encouraged her to further her studies and to get a more advanced diploma. While studying, she used to work at night. From 5.30 pm, she took the night shift at the hospital, and then at 7 am, she returned home to direct the maid's work and to take care of her six children. Unlike many jealous husbands, Vincent always trusted her even when she worked at night. In her career, she experienced harassment from the male doctors, but most of the problems came from her female colleagues' envy, especially those in lower positions. As a strategy, she always avoided discussions or becoming too close with someone in her professional sphere. Finally, she got the diploma and was promoted to the status of executive ‘*cadre*’ in the Gécamines ranks. Her salary increased significantly, eventually exceeding her husband's. During her life, she had the impression many times that unemployed women living in her neighbourhood were jealous of her job and accused her of dominating her husband due to her role as the main breadwinner. However, this did not represent a problem for the couple, as, according to her, she was not ‘*orgueilleuse*’, meaning arrogant at home. On the contrary, she accepted her husband's authority as the ‘*chef de famille*’ (head of the family), and she liked to be transparent about her wage. For the couple, it was imperative that they invest in their children's education, both boys and girls, and Sylvie always encouraged her daughters to work. According to Sylvie, women have to first be humble and refrain from criticising others. At the same time, they have to learn to express themselves openly in front of others.

In her interview, Sylvie mentioned many topics that are still pertinent in the present-day discussion on women in the mining sector and their role in society: women working at night, the couple's negotiations, gender roles, the harassment and jealousy at the workplace, women's solidarity at work, etc. All these subjects were recurrently brought up during my internships and discussed with female and male employees in the transnational mining companies. Sylvie spoke about widespread work dynamics, but she did not engage in more recent debates about whether women should be performing ‘*masculine*’ tasks in the Congolese mining sector. In the next section, I analyse the different opinions on these new limited job possibilities for women.

4. The goats and the leaves: women exclusion from productive sectors

In *Section 2*, I showed how the mining companies were shaped as masculine environments and relied on female unpaid work for the wellbeing of their employees. In *Section 3*, with Sylvie's story and her female colleagues' experience at Gécamines, I instead described a situation, largely unacknowledged, where women were formally employed in mining companies but were and are still widely excluded from the productive sectors considered the company's core business⁸. Such marginalisation is not specific to DR Congo and can be explained by different reasons related to the idea of women as being hazardous for business, particularly in the artisanal mining sector (see

⁶ Rapports annuels de la Gécamines, 1970-1988.

⁷ Until 2016, married women were obliged to ask for marital authorisation to engage in business (Law N. 16/008 promulgated on 15th July 2016 amending and complementing the law N. 87/010 of 1st August 1987, <https://www.leganet.cd/Legislation/Code%20de%20la%20famille/Loi.15.07.2016.html>). See *MacGaffey, 1991, p.34-36*.

⁸ In one of the companies analysed in DR Congo in 2019, the proportion of female in comparison to male workers employed in departments related to production activities was 2.9%, taking into account the subcontracted companies. On the contrary, female employees in auxiliary departments, such as HR, Training, Health, Safety and Security, Finance, Document Control, Social Development, cleaning and kitchen services was 9.6%.

Cuvelier, 2011)⁹, or not suitable for mining tasks since they are considered weak and in need of protection. During an interview at a large transnational mining company, the Congolese HR manager summarised his opinion on women working in male-dominated departments, underground or doing night shifts, as such: “*you cannot put goats where there are cassava leaves*”. Even if professionally he could not think of any problems, as he considered female workers as capable as their male counterparts, he deemed the environment to be too full of friction and too risky for vulnerable women as the leaves are in ‘danger’ in the proximity of the goats. As in the story at the beginning of the chapter, women are depicted as something precious to be protected, guarded and sometimes hidden for their own good. This rationale is the most recurrent one in my interviews and is, in fact, legally enshrined. Like in many other mining countries, in DR Congo, women were and are still not allowed to work underground or engage in dangerous tasks¹⁰. The legislation reflects and normalises the widespread beliefs in women's fragility and unsuitability to work in industrial environments, regardless of requirements concerning physical strength. As Lahiri-Dutt (2006b) explains in her work on female mining workers in India: “*The various protective legislations developed for women miners, though probably designed to improve their working conditions, have acted as instruments to exclude them from the formal mining sector*” (p. 83).

A similar analysis can be read in an issue of the *Gécamines'* quarterly magazine from 1978, where the author describes a series of prejudices responsible for women's positions and tasks inside the company:

“The alleged physical weakness, the fragility, the feminine ability for delicate manual works, lack of logical consistency, tendency to make decisions based on emotional considerations, etc., seems like pure ideological pretexts that tend to ensure the reproduction of women's dependence. They are prejudices internalised through the socialisation process [...] that can orient the motivation of women at work. [...] The choice of the job they are drawn towards are thus professional activities considered feminine” (Lando, 1978, p.30, author's translation).

It is revealing to find analogous arguments in more recent literature on women's career choices. Many scholars have indeed stressed the similarities between women's expected domestic duties and professional tasks, arguing that they both involve a caring attitude either towards the family, the customers or the bosses (Acker, 1990; Gier and Mercier, 2006). In Lahiri-Dutt's analysis, these abstract gendered

representations of “suitable” feminine tasks are responsible for (re)producing economic inequalities to the detriment of women. The high number of women employed as nurses, schoolteachers, social workers or secretaries is acknowledged worldwide and reflects the data on women studying scientific subjects (see for instance *Global Education Monitoring Report, 2018*, p.15). In DR Congo, this trend is even more pronounced. According to the secretary of the faculty of engineering at the University of Lubumbashi, in the 2012–2013 academic year, only 72 women out of 874 students were enrolled in the three year-bachelor curricula within the different departments. Such trends are shaped by different social classes and families' preference for boys rather than girls to pursue higher education, especially in the sciences. From childhood on, girls are taught about caring and domestic activities, while boys are almost never required to do housework (see Masandi, 2004 on women's education in the Belgian Congo). As a result, women's interest in working in mining companies for better-paid positions, particularly as engineers, chemists, mining or laboratory technicians, is very limited.

5. Gender equality in transnational mining companies

Similar to other provinces in DR Congo, mining companies operating in Haut-Katanga Province are different in terms of the technology they use, the minerals they extract, as well as their size and origins. Large transnational mining companies usually have the highest number and percentage of female employees, when supporting gender equality within the CSR (corporate social responsibility) agenda (see Hönke, 2013 on CSR agenda in the mining sector). In the vast majority of companies, women's employment rate rarely reaches 10% of the workforce (World Bank, 2017; Rubbers, 2019, p.16), but have reached 14% in one or two companies particularly committed to promoting gender equality. These figures are more or less in line with the data coming from other Sub-Saharan African countries¹¹ and, as described in Section 3, with the percentage of women employed in Gécamines at the end of the 1980s in different services. In DR Congo, companies do not have to observe any particular quota set by the government regarding women participation in the mining sector, meaning that each company follows its own corporate policy and internal guidelines. Most mining companies do not engage in any extensive campaign in favour of recruiting female labour, adapting instead to the general consensus on gender roles in Haut Katanga Province. Nevertheless, for the largest transnational mining companies, the positions can vary. High percentages of women over 10% are extremely rare and concern just the employees of one specific mining company analysed, excluding the totality of the subcontracted companies. If the subcontractor's workforce is included, the percentage of women reaches a maximum of 6%. This is an interesting data if considering that in the vast majority of the companies, the female workforce is made up of women hired for lower-paid outsourced tasks, which results in an externalisation of gender inequalities (Acker, 2006, p.458; on the inequalities experienced by the employees of subcontracted mining companies, see Lee, 2010; Geenen, 2019). Higher rates of women can be found employed by subcontractors that provide cleaning and kitchen services where the female workforce can reach one-third of the workforce or more. Moreover, companies committed to increasing the percentage of women can ask subcontracted companies to adhere to their policy. In some interviews with female workers, it was alleged that subcontractors hire more women at the beginning of the year as a form of window-dressing, only to fire them once the figures are recorded.

According to Eftimie et al. (2009), employing more women in a

⁹ The artisanal and small-scale mining sector (ASM) in DR Congo began in the 1990s with the decline of Gécamines and the liberalisation of the mining sector. Today, Congolese women working in ASM are about 40% of the workforce (World Bank, 2017), engaging in tasks directly related to mining, such as processing and washing minerals, or indirectly by providing sexual or food services around the mining sites. Generally, women do not work as diggers underground due to the superstitions and beliefs that women and feminine spirits will bring bad luck when in the proximities of the mining sites. For similar dynamics in other Sub-Saharan countries, see Hilson et al., 2018.

¹⁰ The article 21, section 2 of the Arrêté ministériel 68/13, 17th May 1968, concerning the work conditions of women and children (<http://www.droitcongolais.be/Legislation/DroitSocial/AM.68.13.17.05.1968.htm>), forbids employing women in different tasks/environments. In Haut Katanga Province, most of the mining sites are open-pit, meaning that women are not much concerned with this part of the law regarding underground work in mines and quarries. On the contrary, the law does primarily affect female work in industrial and technical environments when forbidding women to operate or work in the proximities of specific tools, machines or mechanisms considered dangerous. Nevertheless, it is important to note that today, different from the colonial and Gécamines' period, women are entitled to work in positions related to extractive and production sectors. Moreover, recently, the law 16/010 from July 2016 (<https://www.leganet.cd/Legislation/DroitSocial/Loi%2016.010.15.07.html>) has made it possible for women to work night shifts and to equally profit from the bonus given to employees undertaking shift work. See Lahiri-Dutt (2019, in press) for a historical overview of international legislation regulating women's labour in the mining industry.

¹¹ See the research on female workers in South African mining companies in Benya, 2016. In South Africa, the rate of 10% of female employees is one of the specific targets set by the Mining Charter with which all the mining companies have to comply. Companies that do not stick to this rule can be penalised.

company has a double advantage: it facilitates the companies' ability to obtain the social licence needed to operate by improving the reputation of the company, and it increases business productivity, as there is a wide-shared opinion that female workers are safer and more scrupulous when operating the equipment (on women's greater 'efficiency' or 'nimble fingers' critique, see Cornwall et al., 2008; Jenkins, 2014; Lahiri-Dutt, 2006a; Rolston, 2014). Both these opinions were largely acknowledged among the management staff of the large transnational mining companies where I conducted my research. In one of the companies analysed, the campaign to reach a threshold of a female workforce of 10% had been adopted as a real business strategy, which is advertised on its website and job applications as a means to improve its global corporate image. As Acker (2004) describes: "*Gendered images and ideologies of femininity and masculinity are used in various sectors of international capital to construct desirable workers (and managers) and desired behaviours*" (p.34). When asked about women's job performance, it was commonplace for HR managers and directors to speak about women's lower rate of risk-taking behaviour when driving, the rarity of women drinking on the job and women's general greater sense of responsibility towards their jobs, the company and the family. The latter quality relates to the idea mentioned above that hiring more women would make the companies look better in the eyes of the stakeholders and the local population living around the mining site. As women are deemed to spend more of their income on their family (Eftimie et al., 2009, p.6), giving them more job opportunities would eventually benefit the entire society. During my fieldwork, however, many were reluctant to ascribe to such a view, and instead strongly criticised it. They claimed that giving a job to a woman is a waste as it takes away a man's ability to perform his role as the breadwinner. People blame large companies for favouring women in the hiring process and accuse them of profiting merely from positive discrimination. The small percentage of women formally employed by mining companies, nevertheless, demystifies these allegations and shows that the hiring process and especially the career progression continues to favour a male workforce. Indeed, in line with the literature on women in mining (Eftimie et al., 2009; Jenkins, 2014; Lahiri-Dutt, 2012; Perks and Schulz, 2020), during the interviews, it emerged that Congolese women are strongly penalised in the hiring and retrenchment processes due to their possible maternity leaves, the multiple roles and responsibilities outside working hours and the gender bias vis-à-vis the mining space and female occupations. Only one of the companies under scrutiny had policies in place for pregnant or breastfeeding women or to promote work-life balance. None of the companies had an official quota for women in the recruitment committees. Moreover, despite the possible directives coming from specific companies' management to increase the number of women in the workforce, the decision to hire is ultimately up to the heads of the various departments, usually more interested in specific skills of the candidates than in prioritising the few applications from women.

This new '*culture de la parité*' (culture of gender equality) promoted by companies has nonetheless provided some women with an opportunity to enter the mining workforce. Rosine is one of them. She works at a large mining company as a truck driver.

Rosine is forty years old, and she recently moved to a small Congolese town to work in a mining company. Her father was a Gécamines employee, and her mother was a housewife who married three times and raised her and her siblings. Since childhood, she has always been interested in technical and mechanical subjects, but her parents did not agree with her study choice and wanted her to learn pedagogy and to find a husband early. Rosine followed that path, and she married Christian, a Gécamines employee, and had her first child at seventeen. However, without saying anything to her parents, she attended a one-year course to learn how to drive loader trucks. At the beginning of the marriage, she worked as a housewife, but soon her husband started having problems with his job, and she

realised that she had to contribute to the household income as well. Christian gave her the authorisation without hesitation, and Rosine worked in various companies. According to her, it was easy to find a job as a truck driver, as there were not many women who were willing to work in the mining sector. Although some mining companies look to hire women, men generally label them as loose women (*femmes légères*). Thus, women feel uncomfortable working in such an environment and prefer staying at home and not being criticised. For her current job, the company's HR manager invited her to apply to show local women in the surrounding rural area the importance of female work and thereby promote gender equality. After some months of hesitation, she decided to move to the town and accept the job, even if that meant living alone and far from her family. On her first day of work, everybody was curious to see a female truck driver. Her supervisor was quite suspicious about her skills, but after seeing her driving, he realised that there were no problems because, as he said: "*She works like a man*". Today, there are few female employees in the company, and she is the only one with family responsibilities. She works in shifts, including at night, but she thinks that women are too 'capricious' to work at night, and many men do not allow their spouses to take on such work. With her colleagues, she initially experienced harassment and she was accused of having a relationship with her boss. However, she showed her co-workers her strength and professional ethic, and her male colleagues realised that she was "*une femme impossible à séduire*" (a woman impossible to seduce). In the town, many women envy her, as she is independent and she is the one who economically takes care of her family. According to her, an ideal woman is modest, educated, and has children; being married and not '*orgueilleuse*' especially makes women respectable. Likewise, a man has to be responsible for his spouse and his family and be able to provide for them.

Rosine's story shows that transnational mining companies' gender equality programs were certainly favourable in her case, as she comes from a middle-class family, she finished her studies and has a strong passion for working. Most importantly, new labour market conditions meant that her husband was no longer able to afford to provide for the family by himself with an irregular salary. Those conditions were profitable for Rosine's determination to work. Similar conditions could be seen in Pauline's story (described in Section 2) who, by experiencing and suffering from Gécamines' crisis, had to reinvent her role in the couple and ended up enjoying her new position as her family's financial provider. Indeed, a woman's determination to work in Haut Katanga's mining sector is usually related to her husband's financial instability or reluctance to provide for the family. Very few of the married women employed by mining companies were - and are - fully supported by a successful spouse with a stable salary. Exceptions are found among upper-class families and the younger generation, where marital harmony and women working can coexist. Still, during my interviews, many female employees would rather have a husband taking care of them than working in a LSM company, especially in low-paid positions.

What is remarkable in Rosine's story is the contrast between her passion for a job naturalised as a man's domain and the belief that the woman's role is primarily linked to the marital sphere. It is a condition also present in the two other stories described in this article. Pauline (Section 2) and especially Sylvie (Section 3) are both middle-class women who provide for their families to a greater extent, while always respecting their husbands' final authority. Having a significant financial role in the couple made these women challenge some of the aspects associated to the idea of "respectability" (Hodgson and McCurdy, 2001, p.6), while still conforming to the ideal of a submissive wife (Rubbers, 2015). These situations bring the gender equality culture promoted by some large transnational mining companies into question. Many people claim that policies that are implemented to improve women's work situations are responsible for causing marital problems. In

most cases, particularly among middle-aged or older people, the word 'parité' (equality) is perceived to be something that comes from radical feminism and the West with the aim to reverse and confuse gender roles not just at work but also in the family.

Therefore, corporate policies that intend to increase the number of female workers are not very popular among Congolese workers and are seen, especially among those who come from lower and middle-class families, as a way to impose Western values on the Congolese way of living. Sentences like the following were common in my interviews: "*La femme soumise à l'homme est dans notre culture: la culture Africaine*" (women who are submissive to men are part of our culture: the African culture). The fear is that this first change will trigger more adjustments and make the Congolese workforce weaker and easier to control. Mining companies' policies have to take these feelings into account and adjust their standards accordingly. In short, gender equality policies and practices are crucial areas to observe the dovetailing of corporate priorities and "local" perceptions, and how these mesh with and/or contradict each other.

6. Conclusion

In this article, I analysed the effect of mining companies' policies and practices on the life of Congolese women involved to different extents in the industrial mining sector, past and present. In light of the literature on women in mining worldwide, it is interesting to place these stories in a broader, international context. More specifically, Lahiri-Dutt's (2012) analysis of gendered spaces in the mining context can further advance the study. The three interconnected spaces she identified indeed resonate with the features of the past and the present Congolese mining sector. As for the first space, the structure and the practices of the mining project itself, I have shown how mining companies positioned mining sites as primarily masculine spaces, which devalues women's labour. Starting in the colonial period and continuing under Gécamines, female workers were excluded from departments related to production and extraction and women were assigned roles linked to the domestic and reproductive tasks to improve male workers' productivity. Today, even if it is often unintentional, mining companies continue to hinder female work in the mining sector through recruitment processes, subcontracted work, and masculine workplace policies that discourage women's career and favour men in the role of the family's main provider. In other cases, larger companies support women's work but only for specific 'feminine' tasks suitable for the business. Gender inequalities also manifest in the second space, in the representation of the mining context as a dangerous working environment where women must be protected and cannot perform even safe mechanised tasks. The rationale behind this views women as weak and fragile and naturally lacking technical skills. Mining realities in DR Congo are considered masculine, where men are encouraged to work in the companies from childhood on, and female workers are labelled as prostitutes or blamed for not respecting a man's authority when aspiring for economic independence. The third level in Lahiri Dutt's framework, linked to international guidelines and global capitalism, affects the gendered nature of the mining sector in different ways. If in the past, the separation of masculine and feminine working activities was beneficial to mining businesses and their productivity, today women's work compensates for a lack in stable employment for men and is becoming crucial in the new global and neoliberal situations that make a single household wage insufficient. Although it seldom happens, when applying for job positions in some transnational mining companies, women might be hired because of perceived specific feminine working characteristics, such as docility, accuracy or a stronger commitment to work.

Moreover, gender equality is increasingly becoming a buzzword for businesses to show their philanthropic side, regardless of whether the value is actually shared by the employees or the community around the mining project. Pictures of women at work wearing the full PPE

(Personal Protective Equipment) are omnipresent in companies' reports, on websites and billboards. Reaching gender equality is therefore seen as a potential means to improve corporate reputation, even if that does not imply a real improvement in the working situation of women, who are mostly employed in "less-skilled and lower paid jobs" (Perks and Schulz, 2020, p.4). Among the expat community of the companies analysed during my fieldwork, some told me that to be in DR Congo also means participating in some sort of 'mission' intended to germinate Western values and ideals, relating to gender equality as well. However, despite the (few cases of) companies' engagements, in daily work and during recruitment, expat employees did not consider gender equality as a priority. Interestingly, many among them were the sole providers for their families in Australia and South Africa and would not like their spouses to work in the mining sector. The majority of Congolese men and women in Haut Katanga do not support these campaigns, as they believe that they go against the long-established gender norms the previous mining companies had upheld. There are, however, exceptions. In DR Congo, the approval or opposition to gender equality values depends on social class and education, gender, marital status and the support from the family and in the couple - issues I could only briefly address here.

Past and present mining companies have both contributed to promoting a certain idea of gender roles and masculine and feminine features. Compared to the past, large transnational mining companies are more inclined to promote women's work but structural and legal aspects, as well as gender stereotypes, continue to foster gender inequalities. Overall, women who decide and manage to work in the Congolese mining sector were and are still exceptional and usually motivated by reasons such as their family's financial problems, the need for economic independence or a strong passion for the job .

References

- Acker, Joan, 1990. Hierarchies, jobs, bodies: a theory of gendered organizations. *Gender Soc.* 4 (2), 139–158.
- Acker, Joan, 2004. Gender, capitalism and globalization. *Critical Soc.* 30 (1), 17–41.
- Acker, Joan, 2006. Inequality regimes: gender, class, and race in organizations. *Gender Soc.* 20 (4), 441–464.
- Bashwira, Marie-Rose, Cuvelier, Jeroen, Hilhorst, Dorothea, van derHaar, Gemma, 2014. Not only a man's world: women's involvement in artisanal mining in eastern DR Congo. *Resource. Policy* 40, 109–116.
- Benya, Asanda, 2016. Women in Mining: Occupational Culture and Gendered Identities in the Making. PhD thesis. University of the Witwatersrand.
- Byemba, Gabriel Kamundala, 2020. Formalization of artisanal and small-scale mining in eastern democratic republic of the Congo: an opportunity for women in the new tin, tantalum, tungsten and gold (3TG) supply chain? *The Extract. Indus. Soc.* 7 (2), 420–427.
- Chauncey Jr., George, 1981. The locus of reproduction: women's labour in the Zambian Copperbelt, 1927–1953. *J. Southern African Stud.* 7 (2), 135–164.
- Cornwall, Andrea, 2003. To be a man is more than a day's work: shifting ideals of masculinity in Ado-Odo, Southwestern Nigeria. In: Lindsay, L.A., Miescher, S.F. (Eds.), *Men and Masculinities in Modern Africa*. Heinemann, Portsmouth, N.H.
- Cornwall, Andrea, Gideon, J., Wilson, K., 2008. Introduction: reclaiming feminism: gender and neoliberalism. *IDS bulletin* 39 (6), 1–9.
- Cuvelier, Jeroen, 2011. Men, Mines and Masculinities: The Lives and Practices of Artisanal Miners in Lwambo (Katanga Province, DR Congo). PhD thesis. Katholieke Universiteit Leuven.
- Cuvelier, Jeroen, 2014. Work and masculinity in Katanga's Artisanal mines. *Africa Spectrum* 49 (2), 3–26.
- Dibwe Dia Mwembu, Donatien, 2001. Bana Shaba abandonnés par leur père: Structures de l'autorité et histoire sociale de la famille ouvrière au Katanga 1910-1997. L'Harmattan, Paris.
- Dibwe Dia Mwembu, Donatien, 2019. Unpublished Extract Text from the Course 'Histoire Du Travail'. Université de Lubumbashi, DR Congo.
- Eftimie, Adriana, Heller, Katherine, Strongman, John, 2009. Gender Dimensions of the Extractive Industries: Mining for Equity. The World Bank, Washington, DC Extractive Industries and Development Series 8.
- Fabian, Johannes, 1971. *Jamaa: A Charismatic Movement in Katanga*. Northwestern University Press, Evanston.
- Geenen, Sara, 2019. Gold and godfathers: local content, politics, and capitalism in extractive industries. *World Develop.* 123, 104605.
- Gier, Jaclyn G., Mercier, Laurie (Eds.), 2006. *Mining Women: Gender in the Development of a Global Industry, 1670 to 2005*. Palgrave Macmillan, New York.
- Global Education Monitoring Team, 2018. 'Meeting Our Commitments to Gender Equality in Education', Gender Review of the Global Education Monitoring Report Series.

- Unesco, Paris.
- Hayes, Karen, Perks, Rachel, 2012. Women in the artisanal and small-scale mining sector of the democratic republic of the Congo. In: Lujala, P., Rustad, S.A. (Eds.), *High-Value Natural Resources and Post-Conflict Peace Building*. Earthscan, London, pp. 529–544.
- Higginson, John, 1989. *A Working Class in the Making: Belgian Colonial Labor Policy, Private Enterprise, and the African Mineworker, 1907-1951*. The University of Wisconsin Press, Madison.
- Hilson, Gavin, Hilson, Abigail, Siwale, Agatha, Maconachie, Roy, 2018. Female faces in informal 'spaces': women and artisanal and small-scale mining in Sub-Saharan Africa. *Africa Journal of Management* 4 (3), 306–346.
- Hodgson, Dorothy Louise, McCurdy, Sheryl, 2001. "Wicked" Women and the Reconfiguration of Gender in Africa. Heinemann, Portsmouth NH.
- Hönke, Jana, 2013. *Transnational Companies and Security Governance: Hybrid Practices in a Postcolonial World*. Routledge, London and New York.
- Hunt, Nancy Rose, 1990. Domesticity and colonialism in Belgian Africa: Usumbura's foyer social, 1946-1960. *Signs* 15 (3), 447–474.
- Hunt, Nancy Rose, 1991. Noise over camouflaged polygamy, colonial morality taxation, and a woman-naming crisis in Belgian Africa. *The J. African History* 32 (3), 471–494.
- Jenkins, Katy, 2014. Women, mining and development: an emerging research agenda. *The Extract. Indus. Soc.* 1 (2), 329–339.
- Jewsiewicki, Bogumil, 1986. Collective memory and its images: popular urban painting in zaire — a source of 'present past.'. *History and Anthropol.* 2 (2), 389–400.
- Kaggwa, Martin, 2020. Interventions to Promote Gender Equality in the Mining Sector of South Africa. *The Extract. Indus. Soc.* 7 (2), 398–404.
- Katz-Lavigne, Sarah, 2019. Artisanal copper mining and conflict at the intersection of property rights and corporate strategies in the democratic republic of Congo. *The Extract. Indus. Soc.* 6 (2), 399–406.
- Lahiri-Dutt, Kuntala, 2006a. Globalization and Women's Work in the Mine Pits in East Kalimantan, Indonesia. In: Lahiri-Dutt, Kuntala, Macintyre, Martha (Eds.), *Women Miners in Developing Countries: Pit Women and Others*. Ashgate Publishing, Farnham, pp. 349–369.
- Lahiri-Dutt, Kuntala, 2006b. Kamins building the empire: class, caste, and gender interface in Indian Collieries. In: Gier, Jacklyn G., Mercier, Laurie (Eds.), *Mining Women: Gender in the Development of a Global Industry, 1670 to 2005*. Palgrave Macmillan, New York, pp. 71–87.
- Lahiri-Dutt, Kuntala, 2012. Digging women: towards a new agenda for feminist critiques of mining. *Gender, Place & Culture* 19 (2), 193–212.
- Lahiri-Dutt, Kuntala, 2019. The act that shaped the gender of industrial mining: unintended impacts of the British Mines Act of 1842 on women's status in the industry. *The Extract. Indus. Soc.* <https://doi.org/10.1016/j.exis.2019.02.011>.
- Lando, Lurhakumbira, 1978. Les Cadres Sociaux De La Motivation Féminine Au Travail. *Maadini, Bulletin d'Information de la Gécamines* 16–31 2e, 3e et 4e trimestres (N. spécial 18-19-20).
- Lauro, Amandine, 2020. *Women in the Democratic Republic of Congo*. Oxford Res. *Encyclopedia African History*. <https://oxfordre.com/africanhistory/view/10.1093/acrefore/9780190277734.001.0001/acrefore-9780190277734-e-544> (June 3, 2020).
- Lee, Ching Kwan, 2010. Raw Encounters: Chinese managers, African Workers, and the politics of casualization in Africa's Chinese enclaves. In: Fraser, Alastair, Larmer, Miles (Eds.), *Zambia, Mining, and Neoliberalism: Boom and Bust on the Globalized Copperbelt*. Palgrave Macmillan US, New York, pp. 127–153.
- MacGaffey, Janet, 1991. *The Real Economy of Zaire: The Contribution of Smuggling and Other Unofficial Activities to National Wealth*. University of Pennsylvania Press, Philadelphia.
- Makori, Timothy, 2013. Abject pensioners and entrapped youth: narratives of decline and multiple temporality among generations in the Congo Copperbelt. *Politique Africaine* 131 (3), 51–73.
- Masandi, Pierre Kita, 2004. L'éducation féminine au congo belge. *Paedagogica Historica* 40 (4), 479–508.
- Parpart, Jane L., 1986. The household and the mine shaft: gender and class struggles on the Zambian Copperbelt, 1926–64. *J. Southern African Stud.* 13 (1), 36–56.
- Perks, Rachel, Schulz, Katrin, 2020. Gender in oil, gas and mining: an overview of the global state-of-play. *The Extract. Indus. Soc.* 7 (2), 380–388.
- Reichel, Victoria, 2020. Financial inclusion for women and men in artisanal gold mining communities: a case study from the democratic republic of the Congo. *The Extract. Indus. Soc.* 7 (2), 412–419.
- Rolston, Jessica Smith, 2014. *Mining Coal and Undermining Gender: Rhythms of Work and Family in the American West*. Rutgers University Press, New Brunswick, NJ.
- Rubbers, Benjamin, 2013. Le paternalisme en question. Les anciens ouvriers de la Gécamines face à la libéralisation du secteur minier katangais (RD Congo). *Musée royal de l'Afrique centrale / Paris: L'Harmattan, Tervuren*.
- Rubbers, Benjamin, 2015. When women support the patriarchal family: the dynamics of marriage in a gécamines mining camp (Katanga Province, DR Congo). *J. Historical Soc.* 28 (2), 213–234.
- Rubbers, Benjamin, 2019. Mining boom, labour market segmentation and social inequality in the Congolese Copperbelt. *Develop. Change* 1–24 0(0).
- World Bank. 2017. "Advocacy for women's rights in DRC's mines gains momentum." <https://www.worldbank.org/en/news/feature/2017/12/13/advocacy-for-womens-rights-in-drcs-mines-gains-momentum>(February 19, 2020).