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## Undermining gender: women mineworkers at the rock face in a Zambian underground mine

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This article examines how women's increased employment in the stereotypically masculine domain of large-scale underground mining affect gender stereotypes and cultural expectations in the Zambian Copperbelt. Based on three years of ethnographic research under and above the ground, it responds to three key questions: How are women working in mining coping with their male colleagues and the underground environment? How do women miners interact with their male partners at home? What does it tell us about broader gender dynamics in the Zambian mining sector? It also shows that women's increased access to resources and valorised positions in mining has contributed to changing gender inequalities not only in mining but also in miners' families. Men are no longer ashamed of having working wives as they were in the period from the 1950s to the 1970s. For these families, economic security is a more important determinant of a man's or a woman's position than gender difference.

Este artigo examina como o aumento do emprego de mulheres no domínio estereotipicamente masculino da mineração subterrânea em larga escala afeta os estereótipos de gênero e as expectativas culturais no cinturão do cobre zambiano. Com base em três anos de pesquisa etnográfica abaixo e acima do solo, o artigo responde a três perguntas principais: Como as mulheres que trabalham na mineração estão lidando com seus colegas homens e o ambiente subterrâneo? Como as mulheres mineiras interagem com seus parceiros homens em casa? O que isso nos diz sobre a dinâmica de gênero mais ampla no setor de mineração da Zâmbia? Também mostra que o aumento do acesso das mulheres a recursos e posições valorizadas na mineração tem contribuído para alterar desigualdades de gênero, não apenas na mineração, mas também nas famílias dos mineiros. Os homens não sentem mais vergonha de ter esposas que trabalham fora como se sentiam entre as décadas de 1950 e 1970. Para essas famílias, a segurança econômica é um determinante da posição de homens/mulheres mais importante do que a diferença de gênero.

Keywords: difference; gender; underground; women; Zambia

#### Introduction

On August 18, 2010, barely two months after her graduation from university as rock mechanics engineer, Beatrice Musonda received an offer of employment as an underground mineworker at Kopala Mines (KM) in the Zambian Copperbelt.<sup>1</sup> Two weeks earlier she had attended employment interviews that had left her devastated. Given the many men who attended the same interviews, she rated her chance of getting the job as very low. Yet, to her surprise, she was offered a job. By the time I met her in 2017, she had become supervisor of about 20 male underground mine workers. Given the country's persistent legal bans against employment of women in underground mines, Beatrice's presence underground was unprecedented, hence her scepticism regarding her job prospects and her subsequent surprise. This article examines how women's encroachment on the stereotypically masculine domain of underground mining affect gender stereotypes and cultural expectations on the Zambian Copperbelt. How are women working in mining coping with their male colleagues and the underground environment? How do women miners interact with their partners at home? What does it tell us about broader gender dynamics in the Zambian mining sector?

Most studies on gender and mining claim that it is the primary cultural frame of gender that excludes women from employment underground (Absi 2006; Keck and Powell 2000; Lahiri-Dutt 2013; Lahiri-Dutt and Robinson 2008; Mercier and Gier-Viskovatoff 2006). Despite evidence of women working underground in nineteenth century Europe, the myth of women's unsuitability for mine work is well-established: in most countries with a mining tradition, it is enshrined in labour laws and deeply entrenched in miners' work culture. There are thus few women working underground, with those that do facing various forms of gender discrimination, their presence often understood as a challenge to the masculine mining culture (Kanter 1977; Tallichet 1995, 2000, 2006; Yount 1986, 1991, 2005). Whilst these studies rightly highlight the significance of gender in the mining industry, some scholars (see, for example, Rolston 2010, 2014) have recently called for more detailed investigation of how, in certain circumstances, gender differences can be challenged and sometimes even made irrelevant.

According to Judith Butler (1988, 519–520), "gender is in no way a stable identity or locus of agency from which various acts proceed; rather, it is an identity tenuously constituted in time — an identity instituted through a stylised repetition of acts." As a result, the reified and naturalised conceptions of gender could, potentially, be constituted differently. Francine Deutsch's (2007) notion of "undoing gender" not only emphasises that there are situations that can become less gendered but also reminds us that not all gender interactions lead to or reinforce inequality. As Jessica Rolston's (2014) ethnography of female mineworkers in the United States shows, such a situational approach can shed new light on the gender dynamics in the mining industry.

Building on this approach, this article focuses on the gender dynamics in the Zambian mining sector. It first offers a historical location of women in the sector since the 1920s. It then examines the exceptional case of three female underground miners at KM. Finally, it anlayses how changed gender dynamics at work have affected spousal relationships at home. The paper aims to understand how men and women interact on a day-to-day basis in different situations and how this has contributed to a change in the gender inequalities that have characterised the Zambian mining sector since colonialism.

The following analysis draws on ethnographic research carried out from 2016 to 2019. During this research, I had the exceptional opportunity to work for nine months as a helper in two KM underground mines. During this work experience I met three female underground miners, the first and only women to work underground in Zambia. Outside of working hours I spent time with both male and female miners (the latter working above ground), at home, in bars and at church. As I had grown up in Kitwe and had previously been employed at KM, this was an environment with which I was familiar. Besides countless informal conversations, in total I conducted 170 interviews with mineworkers, of which 70 were with women. I also conducted a small survey with 100 workers on how they managed their household budgets.

#### A history of women in mining

From the inception of mining on the Copperbelt in the 1920s, colonial mining companies — the Anglo-American Corporation and the Roan Selection Trust — favoured the employment of male migrant workers. Faced with competition from the Union Minière du Haut-Katanga in Congo, which had implemented a worker stabilisation policy, they had no choice but to offer the most experienced workers the opportunity to settle in the mining camps with their wives. Due to the employment laws of the time, the wives were denied employment in the mines and on all other jobs, including domestic work. As such they lived largely at the expense of their husbands, though some managed to develop income-generating activities in agriculture or trade, or by brewing of alcohol at home. Single women were strictly prohibited from coming into town, though a few were successful in defying colonial restrictions. Nevertheless, since only few women lived in the mine camps in the early years, they enjoyed significant independence from men and could easily change partners.

Things began to change after the 1929 Wall Street stock market crash and the ensuing Great Depression, which had a substantial impact on the Zambian economy, and even more significantly after World War II. Mining companies began to exercise tighter control over life in the mine townships, and the colonial administration further restricted women's economic activities in urban areas. Various measures were taken to promote the model of the modern family amongst workers, in which women were to take care of the husband and family and thus contribute towards the reproduction of future labour for the industry (Chauncey 1981; Mies 1986). In this context, very few women worked in the mines. In the 1950s and 1960s, there were only 560 women, of whom 100 were African, in an industry of approximately 40 000 workers (Daniel 1979; Munene 2018). Most of these women held subordinate positions as secretaries, cooks or cleaners. By law, no woman was allowed to work underground (Longwe 1985, 7). After World War II, and especially after the nationalisation of mines in the 1960s, mining companies expanded workers' benefits and social infrastructure in mine townships, which gave male mineworkers the opportunity of providing for their families single-handedly. This expansion of "social" provisions certainly contributed to consolidate male domination. But it was also accompanied by a slight increase in the number of women employed in the industry, mainly as secretaries, nurses or teachers. As noted by Gisela Geisler (1997), in that period a woman's accepted role was that of serving her husband and the nation.

Since the early 1980s, the decline of the public enterprise Zambia Consolidated Copper Mines (ZCCM) specifically, and of the Zambian economy in general, pushed more and more women to undertake income-generating activities to compensate for their husbands' declining real wages. This trend continued after the liberalisation of the mining sector and the wide-scale retrenchment of ZCCM workers during the 1990s and 2000s further undermined men's economic role. Although foreign investors have developed mining projects and, in some cases, new towns in North Western province (Kesselring 2018, 238–239), they employ fewer direct workers than the ZCCM did and are more willing to use mass lay-offs to cope with market pressures (Fraser and Larmer 2010).

These developments have had a paradoxical effect on the situation of women. With the decline in formal employment and the development of the informal economy in the Copperbelt, their contribution to household budgets has increased significantly. Insofar as this is the result of the growing precariousness in living conditions, women's increased economic participation hardly represents an improvement of their general situation. And yet it can be argued that it has led to a shift in the balance of gender power and a relative revaluation of the role of women in society. In the mining sector, the decline in the workforce has conversely resulted in the relative increase in the employment of women. At KM, for example, women's participation increased from 5% of the workforce (573 of 13 905) in 1976 to 9% (555 of 6 231) in 2018. Women also made inroads in technical and administrative positions (increasing from none in the 1990s to around 100 today). In 2018, at Konkola Copper mines, both the chief executive officer and the vice president for human resources were women. At KM, women occupied the positions of corporate affairs officer and chief services officer. As company lawyer and in charge of human resources, the chief services officer was also the chair of the collective bargaining team that determined wages for KM's 6 000 employees. Crucially, for the first time in the history of mining in Zambia, three women (two rock mechanics and a geologist) worked full time underground. Women's growing participation in mining should be understood in light of the importance of the mining sector for the Zambian economy. In 2015, this sector accounted directly for 10% of the country's gross domestic product, 80% of exports and 18% of government revenue (Zambia EITI 2016).

According to recent census data, the local gender dynamics mentioned above are much broader. Although women remain a minority in the workforce, their participation in the labour market, in particular as managers, senior civil servants and technicians, has increased considerably in various economic sectors since the 1980s (CSO 1994, 2003, 2011, 2018). In politics, women have held key positions of power over the past 20 years. In 2016, Zambian voters elected a woman as the

country's first female vice president. Besides, many senior government positions, including the head of the judiciary, the deputy speaker of parliament and the head of police, are filled by women. According to Alice Evans (2014), these changes in the labour market have contributed to catalyse gender flexibility and to lower gender inequalities in Zambia. The next section investigates this from the experiences of the first three women to work underground in Zambia.

#### Women going underground

Kopala underground mines are dark, noisy, dangerous and unpredictable. Working in such an environment is physically draining. When I worked there, it took more than an hour every morning to walk from the 800-meter level, where the cage dropped us, to the 1 400-meter level, where we mined the copper ore. Going back to the surface was even more difficult when we were exhausted and hungry at the end of our shift. The rocky, uneven and sometimes muddy terrains added to the complexity of navigating the underground. Scorching heat combined with smells from the diesel engines, dust and blasting fumes caused breathing difficulties. Often we had to take cover in refuge bays to give way to dump trucks carrying the ore. Safety messages, signs and symbols served as constant reminder of the dangers we faced. During my fieldwork, three miners in my section died instantly when a dump truck caught fire. On average, 21 miners die annually in Zambian mines<sup>2</sup> and many are infected with silicosis, tuberculosis and silicotuberculosis (Mulenga et al. 2005). Such working conditions allow us to understand better why the underground has been one of the last Zambian workplaces reserved for men. In 1991, the ban on women working underground was lifted,<sup>3</sup> yet with several constraining conditions: the state has to issue a special authorisation; the female miners must always be accompanied by at least one man; female facilities, such as change rooms, toilets and showers, have to be built. In short, though they are now authorised to work underground, they remain intruders.

In response to growing pressure from local non-governmental organisations calling for gender equality on the labour market (see Evans 2015a), KM started in 2010 to take the necessary steps to recruit more women in mining, which included the three female underground mineworkers at the centre of this study. In 2019, all three were young and single senior technicians. When I met them, Beatrice Musonda, aged 27 and trained as rock mechanics engineer, was a section boss and supervised drilling, development and production. Maria Banda, 28 years old and also trained as rock mechanics engineer, was responsible for underground safety in terms of ground control, support structures and monitoring ground movement to detect hazards such as ground collapse, seismic movements, rockfalls and flooding. Finally, Rose Mwale, aged 35 and trained as geologist, was in charge of finding mineral-bearing rock, assessing its mineral content, analysing its profitability and making recommendations to the development and production team. For this, she supervised drill operators, mechanics, sample collectors, helpers and a few other staff in the geology department.

The difficulties these women faced in integrating into the workplace shows how well the underground mine, as a place designed and controlled by men, can resist measures in favour of gender diversity. First, to qualify to work underground, the women had to achieve a higher degree. KM's minimum academic requirement for women in mining, engineering or maintenance is a three-year college diploma, a qualification not required from men. Also, the three women had to undergo lengthy administrative procedures to obtain the necessary state authorisation, a process that was marked by repeated refusals and delays. Finally, they had to undergo a pre-employment medical examination to ensure they were not pregnant.

Once on the job, the women faced a series of practical problems, which made it difficult for them to carry out their daily work. All protective equipment was designed for men's bodies, making them inappropriate for the women.<sup>4</sup> Maria, for example, was forced to walk for several hours every day with oversize boots because no supplier had boots of her size. As the overalls were full body suits, the women had to take them off when using the toilet. The closest toilet that was provided for them required a walk of more than an hour.

Other than these practical difficulties, the three women had no problems integrating socially (more on this below). The women working above ground, however, faced different challenges. In 2010, for example, KM assigned a part of its open-pit mine specifically to about ten women loader and dump-truck operators to move the ore. In justifying this social or spatial distance between men and women, one manager explained that the company "did not want them [women] to feel uncomfortable working with men. We wanted a better place for them." Yet, in the event of labour restructuring, it was exactly the women's jobs that were the primary target. When copper prices bottomed out in 2015, the women's plant was the first to be closed down when the company sought to cut production costs: four were reallocated to the information centre to monitor underground production via cameras but six women were retrenched. An HR manager explained that they could not reassign these women to work underground because "underground is not good for women." In his view, the three senior female underground miners were an exception to the rule.

The HR manager's answer illustrates how the majority of miners perceive underground work in a gendered way. When the three women began working underground, most male miners were very surprised. "When I saw the three girls underground, I said, 'Oh, my God, what are they doing?' I thought it was a joke," Harry Milanzi, a driller with a decade of mining experience, described his reaction. And Jackson Phiri, a loader operator, added that "I could not imagine how these girls would manage to stay alive underground." The women, in turn, responded to such gender stereotypes by short answers aimed at neutralising gender difference. This conversation between Musonda and a male colleague concerned about her well-being is a case in point:

He said: "Will you manage? Do you want to commit suicide? Ask the manager for office work." "How long have you worked underground?" I asked. He said: "15 years." I said: "If you have not died, I will also not die." Then he said: "But I am a man." And I said: "But I am also a woman." That was the end of the conversation.

This response conceals all the work that was necessary for Musonda to hide her fear and make a good impression on her male colleagues, as she explained later during an informal conversation:

Initially, I was scared of the noise. I said to myself: "If I show it, what will these guys think of me? They will say, women are weak and mining is not for women! Teya bana! [it is not for children]." So I just took a concentrated sugar solution to push my energy levels and I was up again.

However, the fear to go underground and the desire to show courage in the face of colleagues is not unique to women. Several male miners shared similar experiences. During an interview at his home, mine captain Steven Mwansa recounted:

When I started mining, I was scared of dying. I always imagined the ground falling and killing us, or the floods, like our colleagues in the 1970s. The underground is very unpredictable despite safety measures. However, as a leader, you do not have to show subordinates that you are scared. They would say he is not a man.

Obviously, the underground is not inherently gendered. Men and women have to adapt to this challenging work environment, and they do so in different ways and with varying degrees of success. Mwale was a long-distance runner at school and felt that this had prepared her for the underground. Musonda spent two weeks in the gym, doing exercises and lifting weights, to prepare herself for the underground, though she did not return to the gym once she had started working. On several occasions, as I came home exhausted after my shift, I felt that these women proved better prepared for underground work than I was. As male miners became exposed to women performing the masculine jobs, their perceptions began to change. As Tom Mulela, a heavy-duty mechanic, put it: "These women are strong and they know their job. If we had even ten of such women, the world would stop underrating women." Thus, miners who worked with the three women on a day-to-day basis came to question the dominant view that women lacked the physical strength to succeed in mining.

#### Gender underground

In many ways, the fact that the three women in question are technicians with specialised qualifications and that they occupy supervisory positions facilitated their integration underground. They had the cultural and symbolic resources necessary to impose their authority and, if necessary, could draw on and benefit from the company's disciplinary regime. When miners refused to obey her orders, Banda disciplined them. This decision alone helped her earn respect from her male subordinates: "They realised that I was not joking. I told them in plain language that I came here to work and not play. Now we understand each other better." She, just as Mwale and Musonda, explained that they never experienced sexual harassment. "Every man knows that sexual harassment is a dismissible offence at KM," Mwale stated, "so they do not even try." Most importantly, when mass lay-offs occur, the three women as team supervisors have the power to recommend who amongst their subordinates should keep his job and who should be retrenched.

But that is not the important point. My observation of the interactions between the three women and the male miners underground suggest that gender rarely intervenes in the definition of the situation and therefore appears as secondary issue in the workplace. These interactions must be understood in light of the underlying reciprocal dependency that defined them: while the women relied on their crews to get the work done, achieve targets and hence get favourable performance assessments, the male miners depended on their female bosses for their work assignments, rewards, breaks, recommendations for promotions and wage increases, technical knowledge and skills, and for possible protection during retrenchment.

Interactions at work revolved mainly around production, safety and job security, and the importance of these concerns tended to obscure gender difference in significant ways. Since the start of its operations, KM consistently reported below-target performance, a claim — the workers argued — it used to put them under pressure, limit wage and bonus increases and legitimise mass lay-offs when copper prices dropped (see Lee 2018). In this context of insecurity, workers' conversations were always about production, whether at the workplace, in meetings, on the bus or in the bars at night. When we reported for work, we talked about the previous shifts' production, the day's target and how to eliminate production bottlenecks. Often the miners, and especially the contract workers, expressed their frustrations about the unachievable targets and the difficulty of earning the production bonus that helped to cushion miners' low wages. In 2018, 60% of KM's direct employees received wages below the average basic food basket (Musonda 2020). The cost of housing alone accounted for more than 40% of the highest payroll category and about 60% of the lowest one.

Shared interests and concerns thus catalysed cooperative relations within and across teams regardless of the difference between men and women. This solidarity amongst workers is evident in how Mwale, for example, set up her production strategies. When I worked with her team, it became clear to me that one of her priorities was to keep workers employed:

When the global copper prices rise, we shift to "hard-to-mine" areas so that the high profits can be used in exploration and to develop new areas. We reserve the already developed areas for times when the copper price falls and that way we keep the mine going, and our jobs.

Similarly, when Banda made decisions on rock supports, she continually weighed up the consequences this would have on the safety of workers, on the one hand, and their wages, on the other. Although she was part of the managerial staff, her priority was to protect the workers. This is evident in her efforts to create a solidarity fund for the team to meet medical and funeral expenses:

When one of us has a problem, for example sickness or funeral, we are all affected. We contribute whatever little we have to assist. We also visit the funeral and even attend the burial. Last year Maria brought the idea that we start contributing money for events such as sickness or death. Everyone welcomed the idea and every month we contribute. (Male mineworker 2018)

These decisions gradually made the female miners be seen as competent and respected supervisors,

who cared for their subordinates and should be integrated into the "family" of underground workers. Spending most of their working lives in a space distinct from their families reinforced a form of relatedness amongst underground workers imagined as "family" (for a similar observation, see Rolston 2014). Women participated in the rituals, exchanges and informal practices that reproduced this "imagined community" on a day-to-day basis. As Mwale explains: "We are a family here. We share food. We also celebrate birthdays underground. We just bring the cake and drinks here and celebrate. That is the only time we come with our cameras." In this family, women came to occupy (in various respects) the role of "mother" or "sister" to whom workers turned when they had problems at work or at home. "Many people come to me," said Musonda, "to talk about their marital or debt problems and ask for advice."

The use of such metaphors certainly does not abolish gender difference. However, it can contribute to reduce its relevance in work interactions and hence the marginalisation that women can experience in the workplace. Thus, masculinisation of behaviour is not the only option that women have to gain respect from underground colleagues. Gender does not have the same significance and can be constituted differently depending on the situation. Women can take advantage of situational flexibility to reduce their femininity or to reframe it into a discourse of relatedness, that of the family. As we have seen, this discourse allows them to find a respected and valued place amongst the miners, whilst introducing values traditionally considered as feminine — those of care, protection and solidarity — into the masculine space of the mine.

#### Gender at home

Since the 1980s, more and more women have entered the labour market and developed incomegenerating activities to contribute to household budgets. This growing economic participation of women has led to the gradual questioning of the male breadwinner model promoted by colonial mining companies (Evans 2014, 2015b, 2016; Mususa 2010). Today, given the rising cost of living, it has become difficult to live on a single salary in the cities of the Copperbelt. Few households exclusively depend on the man's salary, even if he continues to earn more than his wife. In a random survey I conducted amongst 100 mine workers in 2018, 35 reported that they earned more than their wives, 45 that they earned more or less the same, and 20 that the wife earned more.

In the 1980s, ZCCM miners spoke of their wives as "grasping, greedy, selfish creatures interested only in using and deceiving men in order to get at their money" (Ferguson 1999, 188-189). It is still possible to hear this kind of speech in conversations between miners in Kitwe bars today. Nevertheless, it is far from corresponding with the relationships they have in practice with their wives, which are based much more on cooperation than on suspicion, concealment and conflict. In my survey, all participants claimed to manage their income together with their wives. These forms of economic cooperation between husband and wife took various forms. Stephen Kapembwa and his wife Jane, both machine operators, put their respective revenues into a joint account, which they used in a concerted manner. Francis Mulenga and his wife Nancy used their respective salaries for specific expenses: Francis paid the house rental, utility bills, school fees and transport, and Nancy paid the food, children's clothes and maid's salary. Emmanuel Mwamba, an engine winding driver, gave his complete salary to his wife, who had no formal job. "My salary is minimal," Mwamba told me, "so I give it to her to budget so we can survive up to month end." In such a case it is women's general ability to stretch low wages that justifies access to husbands' salaries. This role of women was considered all the more critical in a context of growing job insecurity. In turn, if wives cannot access their husbands' salaries for the household, they are likely to leave their men when the latter lose their jobs.

This growing economic role of women has had consequences in the distribution of domestic tasks between men and women. In the Copperbelt, domestic work was historically defined as the responsibility of women. Most authors who have addressed this question suggest that this gendered

division of labour persisted even when women started to develop income-generating activities and contributed significantly to household budgets from the 1980s onwards (Evans 2014; Rubbers 2015). Only Alice Evans (2016, 11) suggests that men were contributing more to domestic chores than was usually acknowledged, but that this work happened outside of public view.

Following Evans, I think it is likely that a focus on gender inequality could miss subtle shifts in the distribution of domestic work. My research suggests that, although housework remains, to a large extent, the woman's job, its distribution in mineworkers' households has changed when compared to earlier accounts. In a context where both spouses have to work, the main change I observed is the growing contribution of children, including boys. Take the case of Brian Mulenga, an electrician, whose wife worked as boilermaker and daughter as a nurse. Every morning, the two women and Brian left home early to go to work and only came back in the evening. So it was their son who walked his younger brother to school and picked him up later in the afternoon and who prepared the evening meals before his parents and sister returned.

I also observed stronger cooperation between husbands and wives. They helped each other in the preparation of meals and clothes according to their working hours. If they both worked during the day, it was usually the woman who got up early to prepare the clothes and food. However, if the husband worked the afternoon or night shift, he prepared his own food and clothes. And where the wife was doing night duty (e.g. nurses), I observed on several occasions husbands who prepared the meals and ironed the uniforms for their wives.

Generally speaking, women employed in the mining sector did not cook, wash clothes or clean the house on a daily basis. They were relieved of these household chores by their children, extended family members or domestic workers. Obviously, domestic work is still gendered, the children, parents or domestic workers generally being female. But men and boys were increasingly helping out with various tasks, especially if they found themselves out of work at home. Given the increasing job insecurity, the probability of men finding themselves in this situation was more common. In this case, many men willy-nilly took on household chores. This is what happened to Justin Phiri. When he was still employed at the mine, his wife and children carried out most of the household chores and he only took care of drawing water for the house and maintaining the outside yard. When he lost his job, however, he started cleaning the house and preparing the meals. Such practices suggest that, even though the traditional division of labour between men and women remains dominant in mineworkers' households, things are changing.

#### Conclusion

Over the past 50 years, women's participation in mining and, more broadly, in Zambia's labour market has seen an increase. Given the growing precariousness of employment, alongside the rise in the cost of living, this has not necessarily improved living conditions. Yet it may have led to shifts in gender relations and to a revaluation of women's work. This article has tried to investigate this further by drawing on ethnographic research conducted with KM mineworkers between 2016 and 2019.

Although the relative proportion of women employed in the mining sector has increased since the time of the ZCCM, they are still few and mainly hold subaltern jobs. The arrival of women in managerial and supervisory positions has not gone unnoticed, however, particularly in the masculine strongholds of the mine and the plant. The case of the first three female underground miners shows that they had to overcome multifaceted obstacles to access these jobs, but that they managed to adapt to this challenging environment as well as their male colleagues and have earned respect from them.

Interestingly, this successful integration was based neither on the adoption of male behaviour or masculinisation of their practices nor on open resistance to male domination. Rather, these women attempted to neutralise gender differences by emphasising the demands of work or to reconfigure them differently by redefining work interactions in the language of the family. In the

latter case they came to assume a feminine role, that of a "mother" or "sister," but one that gives them authority over their co-workers. My own experience with male mineworkers shows that they showed their female colleagues respect and loyalty, not contempt or distrust.

On the surface, the traditional workers' family model — with the man as "breadwinner" and woman as "housewife" — imposed by colonial mining companies, and then reproduced under the ZCCM, remains prevalent. The media, religious teachings and public discourse generally reproduce this model as moral standard for men and women (Rubbers 2015). However, men's dominance as providers is long gone. Today, the majority of women hold a job or pursue an economic activity and contribute significantly to household budgets. The survey I conducted with mineworkers and my interview and observational data on family life on the Copperbelt suggest that the growing economic role of women, in a context marked by precarious employment and rising cost of living, has had consequences on the distribution of domestic tasks. Whilst this varies with the employment status of both spouses, men generally contribute more to domestic work today than they did in the past.

In her recent study of gender relations in the same region, Evans (2016, 11) nuances these shifts in the distribution of domestic work by arguing that, "even if care work is redistributed, it is often unseen, so it does not undermine other people's norm perceptions or enable a positive feedback loop." This observation should not, however, lead us to ignore the hidden work of social reproduction that men increasingly perform and women's struggle in the work place to undo gender or at least reconfigure it without passing for feminists. As James Scott (1990) notes, even if such daily infra-political practices remain silent, they are not trivial but are likely to produce significant changes in the long term.

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#### **Notes**

- 1. The company and the research participants have been anonymised.
- 2. I base my calculations on the 2006–2010 reports by the Mineworkers Union of Zambia, Simutanyi (2008) and the 2016 ministerial statement on accidents in Zambian mines.
- 3. The Employment of Women, Young Persons and Children Act, No. 14 of 1989, Cap. 505 of the Laws of Zambia was amended by Act No. 4 of 1991 to allow women to freely choose a profession and employment in the mines without any hindrance whatsoever.
- 4. The protective equipment includes overalls, hard hat, safety boots, goggles, face mask, oxygen box, headlight and belts.
- 5. KM strictly forbids cameras underground.

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