Extractive Industries as Sites of Supernormal Profits and Supernormal Patriarchy?

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This article considers how patriarchal power relations between men and women are produced and reproduced within extractive industries, and examines the idea that the 'supernormal profits' to be made there encourage the development of 'supernormal patriarchy'. By looking at the sites where extraction takes place and relationships between men and women within these sites, we show the extreme and exaggerated gender roles and relations that are found here. We nuance this account by highlighting the need to recognise that patriarchal power is not felt equally by all women and men. Exploring the different roles women adopt in the extractives context we demonstrate the fluidity of women's identities as workers, 'whores' and wives with a focus on transactional sex. The article demonstrates the importance of not seeing women merely as victims of patriarchal relations, or making assumptions about how these relations operate, or the form they take. Better understanding of the range of gender roles adopted in the extractives and the supernormal patriarchal relations that produce and reproduce these is needed by policy makers. This will enable them to promote gender equality and natural resource justice, as part of an agenda to redistribute wealth gains from natural resource extraction.

Introduction

The commodification of the earth's natural resources sees a high price placed on scarce minerals such as copper, lead, zinc, on gold and diamonds, and on coal, oil and natural gas. The extraction of natural resources is costly and dangerous, but it is capable of generating great wealth or 'supernormal' profits [1]. Often, an exaggerated masculinity serves as a coping mechanism for the risks and dangers faced by those men working in extractive industries, and this 'macho masculinity' constructs men as both brave and fearless providers for their families, and as having insatiable sexual urges for an unlimited number of women (Campbell 2000). It seems that 'supernormal profits' may produce 'supernormal' gender identities and associated inequalities, or what we refer to as 'supernormal patriarchy' (Bradshaw et al 2017). This tends to reinforce stereotypical ideas of what it means to be a man or a woman, and stereotypical ideas of women – in this case constructing women as either 'wives' or 'whores' (Lahiri-Dutt 2012).

One of the critiques of the concept of patriarchy has been that it suggests all women are oppressed in the same way, by a single set of male to female power relations. In this article, we consider a range of different ways in which women experience patriarchal relations in their attempts to ensure economic survival within extractive industries. In particular, it explores the range of transactional (sexual) activities of women, in various different forms and social contexts, including marriage and intimate partnerships. Historical review confirms that over time, and across the globe, there has been a close connection between 'prostitution'/sex work and mining. While this demonstrates that transactional sex is concerned with power and dominance, it also shows how complicated power relationships can be (Laite 2009).

This article builds on a systematic review we undertook in 2015 for Oxfam America on gender and social accountability within the extractive industries (see Bradshaw et al 2016). This review drew on published research, reports from NGOs and development agencies such as the World Bank and work undertaken by Oxfam. Through further examination of existing research on the lives of women and men in mining communities in Tanzania and South Africa, it suggests that in areas

where supernormal profits are produced, patriarchal relations may be exaggerated and intensified or 'supernormal'. We pay particular attention to unpacking and exploring differences between women's experiences in the sites where extractive industries operate, to show that patriarchal power is not felt equally by all. This suggests that policymakers and practitioners who want to support gender equality in the extractive industries cannot assume to know how patriarchal relations operate and the form they take, nor assume women to be merely victims of these relations.

The main focus of development organisations promoting social justice for people living in extractives contexts has been to promote greater accountability of governments and corporations to the communities whose lives their activities affect. Initiatives seek to hold those making supernormal profits to account in redistributing the economic gains of the sector through promoting 'active citizenship' (Green 2015). To ensure gender equality within such initiatives demands a better understanding of the economic and social relations of men and women living in the extractives contexts. In the next sections, we briefly review the concepts used in our analysis, focusing on extractive industries and the 'supernormal', and reviewing the concept of patriarchy.

Extractive industries and the concept of supernormal profit

Extractive industries offer the chance to generate great wealth or what economists term 'supernormal profits' and this is related to the fact the earth's fossil fuels and mineral supplies are limited. Much of these unusually high earnings from non-renewable resources come in the form of economic rents, that is revenues above the cost of extracting the resources. Natural resources give rise to economic rents because unlike produced goods and services where competitive forces expand supply until economic profits are driven to zero, non-renewable resources are in fixed supply so can command returns well in excess of their costs of production). Despite falls in resource prices in recent years, our calculations from World Bank data suggests in 2015 resource rents amounted to some US$ 1,266.7 billion globally. In Tanzania and South Africa – the two countries we consider later – we estimate total natural resource rents in 2015 were US$ 4.1 billion and US$ 13.3 billion respectively equivalent of 6.9 per cent of Tanzania's GDP, and 4.2 per cent of GDP in South Africa (World Bank 2017).

When resource rents are used to support current consumption, rather than to invest in new capital to replace what is being used up, they are, in effect, borrowing against their future, which has important consequences for sustainable development. While scarcity and current and future needs are factors in explaining high prices and profits, these are also influenced by factors such as political instability, new discoveries, technological knowledge and developments, the costs of extraction and transportation, and the extent of competition, for example through the presence of monopoly market structures, including cartels (Gaudet 2007).

Starting up mineral extraction in a new location is often very expensive. Where oil is concerned, for example, the technical knowledge needed, and the high financial set-up costs involved, means it is large corporations that can most readily afford to seek out and exploit new finds of natural resources. The system of property rights used to govern access to and management of resources in part determines their ability to make large profits. Governments who 'own' the land and resources, but lack the finance and technology to exploit them themselves, often welcome large corporations in return for only relatively small financial returns, usually collected via resource rent taxation (Garnaut 2010). People who previously lived on the land where natural resources are located are often forced to leave or their land becomes polluted, and compensation, if paid at all, is not in line with the supernormal profits to be made (Doyle 2014).

Extractives can generate great wealth, yet studies suggest the profits to be gained disproportionately benefit international companies and national elites. In one research study, Jen Scott et al (2013) found oil revenue was perceived to have deepened existing inequalities. Other research has suggested that with the arrival of extractive industries, economic changes and associated challenges to cultural and social norms surrounding gender result in women's autonomy being restricted (Lahiri-Dutt and Mahy 2007).

For example, if men are more likely than women to be able to take up jobs offered in the extractive sector, while the wages paid to them are much less than the profits earned by the men who manage and own the mines, they may be much higher than in other local industries or farming. These higher wages may be accompanied by a change in how different activities are valued, with work for wages being valued more highly than income earned through agricultural work, for example. If women's traditional income-earning activities are lost with the coming of the extractives, through loss of land or markets, women can be consigned to the household, and experience a loss of status as not only do they become dependent on men economically but their unpaid domestic work and other contributions are devalued (Scott et al 2013), shifting power relations within communities and families (Lahiri-Dutt 2012). Supernormal profits then may be associated with producing and reproducing 'supernormal' inequalities, including gender inequalities.

The concept of patriarchy

We define patriarchy as the 'set of social relations between men which, although hierarchical, establishes an interdependence and solidarity between them which allows them to dominate women' (Hartmann 1981: 14). The word patriarchy originates in ancient Greece, where it meant 'rule of fathers', but twentieth-century feminist thought popularised the term, using it to refer to the systematic oppression and subordination of women by men (Pateman 1988). In the 1990s, an era when support declined for overarching theories or 'meta-narratives', patriarchy as a conceptual tool somewhat receded from view (Edström, with Das and Dolan 2014). It was seen by some as problematic, in that it distracts attention from the oppression of women by women and the oppression of men by men, both of which are central to maintaining patriarchal systems.

The concept of patriarchy was also charged with failing to understand the historical context of particular systems of gender relations, and thus with making different systems of gender oppression seem the same (see Patil 2013). Not all women are dominated by all men all of the time, and experiences of patriarchal relations differ between women, and over time and space. Deniz Kandiyoti (1988) noted how female-female hierarchal relations actually maintain the patriarchal system, which rewards women for policing and enforcing patriarchal power. Male-male relations of inequality are also found in all societies, and patriarchal systems involve the privileging of some men, and the subordination of others (Edström, with Das and Dolan 2014).

Despite the critiques, we find the concept of patriarchy valuable, but think it needs be nuanced to take into account differences between women that are created by patriarchal relations intersecting with other power relations, based on age, race, class, and other dimensions of difference. In addition, it also needs to take into account that masculinity is a social construct that can change and be changed, and that differences exist between men. There exists what has been termed a hegemonic masculinity an idealised form, which is actually only lived out by a minority of men. While the traits associated with hegemonic masculinity are only displayed by a small number of men in any society, it is normative, in that it is suggested this is how men should be (Connell and Messerschmidt 2005). This means men have to constantly prove their manhood and creates a 'man-on-man hierarchy' (Dowd 2010**:** 421), which is key to maintaining what has been termed 'heteropatriarchy' (Harris 2011:17) to capture the fact that a critical element of patriarchy is the reduction of human sexuality to a narrow vision of heterosexuality as the only right and normal mode of sexual relations.

Patriarchal structures of power exist at every level of society from the household to public life. While oppression is institutionalised - via governments, markets and legal systems, schools and churches - each individual's intimate relationship is also a power relationship, and in heterosexual relationships, gender norms of male domination are an important factor. As patriarchal power operates at a hidden, subconscious level, as well as overtly, it leads women to internalise and accept their subordinate status to men as the natural order of things. Meanwhile, male violence

against women (and the threat of it) limits women's roles and ways of behaving, including their sexual behaviour and sexuality.

Angela Harris (2000: 785) describes a hypermasculinity which is an 'exaggerated exhibition of physical strength and personal aggression' by men, made in an attempt to gain social status. This 'toxic' or 'destructive' masculinity, relies on two negative identities – not being a woman, and not being gay – with violence being the way of demonstrating they are neither of these (Harris 2011: 16). While these ideas about masculinity concern what it means to be a man, they also define what it means to be a woman. The opposite to hyper-masculinity is 'hyper-femininity', an 'emphasized femininity' focused on women's 'compliance to patriarchy' (Connell and Messerschmidt 2005, 848).

Deniz Kandioyti's (1988) work on 'patriarchal bargains', highlights the potential for and specific forms of women's active or passive resistance to patriarchy. In the classic patriarchal bargain, women gain male economic and social 'protection' in exchange for submissiveness and propriety. Yet such bargains vary according to what is needed in a particular place or time. If a man has no ability to economically support his wife, the ideal that he should is undermined by reality, and both the myth and the reality of patriarchal relations can change over time.

In the next section, we explore some of these ideas in more detail, focusing on the extractive industries as sites where the economic activities involved offer particular – and highly gendered – opportunities to women and men to make a living. Within them, we see patriarchal relations shifting, surviving, and magnifying 'normal' patriarchal relations to produce an extreme or 'supernormal patriarchy'.

Extractive industries as sites of supernormal patriarchy

Oil-rich nations tend to generate fewer resources and opportunities for women to influence the political process, producing states with atypically strong patriarchal cultures and political institutions or a 'petroleum patriarchy' (Ross 2008: 120). While this should be seen to be a tendency that can be changed, not a destiny (Kang 2009), nonetheless a country whose wealth is linked to extractive industries may display supernormal patriarchy at all levels of society.

Predicting the strength of patriarchy in any given context is not easy. For example, it may be exacerbated in some male-dominated occupations such as on construction sites, where strength is required, but also among lawyers, and occupations that necessitate high levels of education may expose men (and women) to very patriarchal work subcultures. This may result in a hyper-masculine behaviour that may become so embedded that it seems a 'natural' characteristic of the prototypical construction worker.

Leticia Saucedoa and Maria Cristina Morales' (2010) study of construction sites in Las Vegas, USA, highlights how a difficult work environment can be transformed into a bearable one by giving it significance beyond the work itself, relating specific masculine qualities, such as bravery and entrepreneurship, to those who work there, making them different from other men, and their 'bad' behaviour 'acceptable' within that particular patriarchal site. The study also suggests that if this hypermasculinity is a response to working conditions, then if employers were to change work practices this could change also. Similarly, while extreme events such as armed conflict can produce an exaggerated masculinity, the post-conflict context can also provide the opportunity to transform society so that it is more gender-equal (Flisi 2016).

The extractive industries tend to produce and reproduce highly patriarchal contexts. Mining and miners are associated with strongly male traits and identities (Lahiri-Dutt and Macintyre 2006), and this masculinity is ingrained in the 'corporate machismo' of the globalised industry (Lahiri-Dutt 2012). This corporate machismo produces male-male hierarchal relations based on race, ethnicity, income, and occupation, and race and class intersect with gender to determine both women's and men's positions within mines and the surrounding areas, including residential spaces (Lahiri-Dutt 2013).

For those working at the 'coal face', the dangerous nature of the work may help to explain the exaggerated masculinities adopted. It has been suggested that in the South Africa mining sector a mineworker has a one in 40 chance of being killed in a work related accident in a 20 years working career (Campbell 2000, 3). In the mines in South Africa, men are constructed as brave and fearless, risking their lives to provide for 'their' women and families, but also as pleasure-seeking, with conspicuous consumption of alcohol and sexual liaisons being part of life in some mining settlements (Mwaipopo et al. 2004).

Mineworkers have a dangerous and delicate relationship with the mountains they work; this is seen in the worship in Bolivia of El Tio, the god of miners, who is capable of delivering both death and fabulous wealth (Shahriari 2014). Statues of El Tio in mines depict a highly masculinised and promiscuous male – a horned man with a pointed beard and exaggerated erect phallus – and miners leave offerings to him which also speak of masculinity – placing lit cigarettes in his mouth, and adorning the statues with coca leaves and alcohol (ibid).

In extractive industries, including small-scale informal artisanal mining, the dangerous contexts in which miners operate promotes a particular set of male-male relations among those working the mines. These are based on both co-operation and conflict. Emphasising the (hyper)masculine characteristics of work undertaken in dangerous contexts such as construction or mining may be a way for men to build collective self-esteem about their work (Saucedoa and Morales 2010). The solidarity that this creates protects men in dangerous work conditions. It also gives men power over women because it is built on devaluing the contributions of others, in contexts where men themselves may have little other power.

In this section, we saw that the characteristics of extractive industries make them not only sites of hyper-masculinity, but also sites of supernormal patriarchy. In those that follow, we explore various important gender issues that arise in the context of extractives and their operations.

Women in the extractive industries

When an extractive industry develops and mines are opened, patriarchal relations shift in response to changing economic opportunities for men and women. It has been argued that patriarchal structures, order, customs, and power are fluid and mobile, continually taking new shapes (Hunnicutt 2009). Patriarchy can change depending on the economic opportunities open to particular women and men. For example, if employment opportunities open up for women, this can challenge existing patriarchal structures in marriage and the family, since earning income potentially gives women more power. However, Sylvia Walby (1990) has argued that employment can shift and alter patriarchal control rather than lessening it: when women join the workplace, this results in a shift in the control of women by fathers and husbands in the home, to their male bosses in the workplace.

Globally, between one-third and three-quarters of mine workers are women (Jenkins 2014, 331), and there is evidence that the sector is feminising (Lahiri-Dutt 2015). However, women are not employed on equal terms with men. In the mining industry, laws and policies relating to women's employment have not tended to focus on equal pay and equal access to employment. Rather, they have been enacted to 'protect' women through health and safety laws. These have led to their exclusion from the (better paid) jobs down the mines (Bashwira et al 2014).

While the jobs women occupy above ground may be as heavy as those below, in the artisanal and small-scale mining sector in Ghana women's wages were 60 per cent lower than those paid to men (Andrews 2015, 14). In artisanal mining in South Asia, women tended to be the ones involved in digging lower-value industrial minerals (Lahiri-Dutt 2008). Women's roles as mineworkers have been rendered invisible (Lahiri-Dutt and Macintyre 2006) not least since women's status may be informal. When a woman is working with a male partner, she may merely be seen as helping the man, with wages paid directly to him (Jenkins 2014).

In addition to employment in mining, women are occupied in a wide variety of related activities many of which are concerned with various aspects of care for the mineworkers. Deborah Bryceson et al (2014) suggest that, in artisanal mining at least, women are quick to follow the men - or perhaps, to follow the money - into an area with a new mineral strike, in the hope of benefiting from (male) miners' increased purchasing power.

Some companies also bring in women to mining areas to provide the services of 'wives' to their workforce. Isabel Cane et al's (2014) study focusing on Mongolian Mining Communities noted how women were brought in by some companies under the pretence of becoming cooks and cleaners for the men housed in dormitory style accommodation, when really the expectation is they will provide sex. Thus (male) mine owners control male workers, up to and including their sexual relations. The study highlights how male mine workers spent most of their time when not working 'drinking, fighting, and engaging with female sex-workers' (ibid: 14). High levels of violence were not found to be related to a specific company, but rather the social and structural changes that accompany the arrival of extractives into an area.

Violence is something many women face on a daily basis globally and is a means of asserting and retaining patriarchal power. The male elites who control extractives benefit from their workers being able to command and control women. While it has been suggested that violence against women may increase with the arrival of extractive industries, the scale and type of violence differs with the scale and type of activity, and also according to the different types of infrastructure developments - such as the development of transport corridors, and proximity of mines to townships (Cane et al 2014). Lack of reliable research means any policy prescription to counter violence against women in the context of extractive industries cannot currently be based on evidence, but on assumptions.

As the above discussion highlights, extractive industries are strongly patriarchal sites, but the women affected by the extractives sector and associated patriarchal structures are not a homogenous group. They include women that are forcibly removed from natural resource-rich sites, with all this entails socially and culturally, and women that continue to live in or nearby extraction sites but gain little economically from these while suffering the environmental costs. Some women are employed on and around the mines, by mining companies or artisanal employers but their work is not recognised and they are often constructed only as 'wives'. Others arrive following a new mineral strike and engage in informal occupations and transactional sex. Within each group, there are also differences between women. In the next section, we explore these differences between women further, with a particular focus on variations in experiences of transactional sex or sex work.

Double degradation? The degradation of Mother Earth and the degradation of women

In the academic literature on sex work, there is much debate about the extent to which sex workers should be seen as the victims of poverty and male dominance (in other words, as victims of patriarchy), or as active and powerful agents who challenge the patriarchal restrictions of more conventional lifestyles. Not all women are forced into prostitution and the evidence to claim that the commodification and degradation of women's bodies is an outcome of the commodification and degradation of the earth's natural resources that mining brings is largely lacking. Transactional sex can take many forms, but, as Julia Ann Laite (2009) notes, in world mining literature there has been a tendency to over-generalize about male and female sexual relations.

It is to be expected that sex work might proliferate around mines. Men are often far from their families and communities, so inhibitions and social norms of control may be lower. In addition, men in mining areas gain the cash and the authority to control the cash to pay for services they probably could not access before (Lahiri-Dutt 2012). The demand for sexual services should be seen then not as 'abnormal', but 'supernormal', male behaviour, while the supply of sexual services to male mine workers for money represents a rational response to the limited choices open to women.

Accounts of women who move to mining locations to work as sex workers are often nuanced in their understanding of women's lives, and the operation of transactional sexual relations. Many studies of women sex workers in mining communities question the general assumption that sex work is 'bad' for women, with research by Petra Mahy (2011a) and by Katja Werthmann (2009) suggesting the economic opportunities opened up might benefit women more than the related social stigma harms them. They also question what 'sex work' is, and what it means to the women involved in transactional sexual activities, with studies suggesting that the status of 'sex worker' in the extractives sector is often conferred on women, rather than assumed by them. This is explored further below.

Women who engage in transactional sex are often seen to be victims by organisations promoting gender equality or social accountability (Mahy 2011b) and their 'non-virtuous' status means they are often left outside equality and accountability programmes, constructed almost as 'not-women' due to this non-virtuous but victim status. Identities that exist in 'illegal' space or are seen as deviant, such as sex work/ers, may be relegated to outside 'citizenship' (Khanna 2013) rendering them invisible. For this reason it is important to understand more about women engaged in transactional sex and how they understand their actions.

To get a clearer picture of women's lives in the extractive industries, we will use a study by Deborah Bryceson and colleagues (discussing three articles: Bryceson et al 2014; Bryceson and Jønsson 2010; and Bryceson et al 2010), which offers accounts of sex work in the mines of Tanzania. We also draw on a study by Cathy Campbell (2000), on South Africa. Taken together, these studies highlight the dangers of generalising experiences of women in the sector. They highlight that over a lifetime, women's identities change, and one woman may adopt the roles of sex worker, worker, wife, and back again. This analysis questions the whore/wife dichotomy.

As stated earlier in this article, Deborah Bryceson and Jesper Jønsson (2010) note that in the mines they studied in Tanzania, waves of non-mining migrants, including young women who travel to the location of new mining activity believe the gains to be made there to be above 'normal' if not 'supernormal'. Women who migrate to mining communities have a number of possibilities for earning a living (Bryceson et al 2014). These include becoming a barmaid, dependent on men for food and gifts; finding a boyfriend to maintain them through regular inputs of cash; or setting up their own economic projects. In Deborah Bryceson et al's studies, these projects sometimes included mining, but also often involved running hotels and bars. The hotel and bar sector was dominated by older women well-established in the community.

Cathy Campbell's (2000) study of a squatter camp in a South African gold mining community similarly found while there was a high turnover of women coming to and going from the community, there was also a solid permanent core of women in their forties, seen as 'old' women. While these women may have once worked selling sex, they now owned shacks in the informal settlements around the mines, out of which they sold liquor. Owning a shack was associated with respectability, independence and control over their lives. As one sex worker put it: "*it is the old ladies that own our shacks make the rules, we have no control over how we live*" (16).

These women levied some control over the younger women's lives, providing places for them to work, and also counselling them, especially in the absence of family networks. This account constructs these female-female relations as hierarchical but supportive, which stands in contrast to hierarchical female-female relations in situations of 'classic patriarchy' within families, such as between mothers- and daughters-in-law. This patronage relationship is made possible by the older women's different stage in the life-course, offering younger women a measure of support, both material, and less tangible, in advice drawing on life experience.

Deborah Bryceson et al (2014) also note specific age-based female-female relations in the Tanzanian mining context they studied, where older women relied on young female newcomers to attract clientele to their restaurant-bar establishments. In a context where hyper-masculinity was the hegemonic masculinity, older women seemed able to directly benefit from younger women's newcomer status, and their ability to use their sexuality to attract men. This allowed the older

women to earn their living from an activity that enabled them to establish a more 'acceptable' female role in line with the norms of 'hegemonic femininity'.

Relations between the young women, as with the male mineworkers discussed above, may also display both co-operation and conflict. Cathy Campbell noted how women sex workers at the South African mine she studied tended to work in groups of three or four, and were dependent on one another for their physical survival especially in the dangerous conditions of outdoor soliciting. She also noted that these relationships were not without conflict around accessing clients, and fights, including physical violence, arose if one woman perceived another to be taking away her regular clients.

In Cathy Campbell's study, the women's accounts of sex suggest the act itself was clearly transactional. It is depicted as unpleasant and at times dangerous. The sex was quick and 'no-frills', often in the open countryside, money was handed over, and one woman noted she asked for more money if the client wanted her to 'move around' (27) Yet even in this clearly transactional context women did not talk of themselves as sex worker or prostitutes. In Deborah Bryceson et al's (2014) study of sex in the seemingly money-obsessed environment of Tanzanian mining settlements, it appears formally organized prostitution and market-driven pricing of sex have not become entrenched. Instead men offer small gifts of food, drink or money with the view that they are 'staking a claim' on the woman.

The difference in how the transactions are understood might reflect the different mining contexts. In the case of artisanal mining, there is an absence of patriarchal agencies, such as the state, corporate mine management, established Christian churches, and rural tribal leaders. All these commonly define and enforce 'permissible' sexual relations between men and women. Deborah Bryceson et al (2014) suggests both male and female migrants are engaged in a 'relatively unrestricted process of self-making', that embraces sexual liaisons as part of the 'ladder to success' and they conclude the exercise of this (sexual) freedom '….underpins the normalization of promiscuity, especially among young girls and miners' (97). This 'promiscuity' may be read as women challenging patriarchal norms, but may also be read as a path to conformity through reestablishing more traditional patriarchal structures such as marriage.

In both the Tanzanian and South African studies, women sought to move from highly casualised sexual relations to a more 'monogamous' relationship with a 'boyfriend'. As Cathy Campbell (2000, 484) notes every woman said she would immediately give up sex work if she could find a permanent employed partner. The word 'employed' is telling - this would be a move from having many male partners providing economic protection and patronage, to having just one, or from being involved in selling sex in many financial transactions, to selling sex in just one.

While the benefits of finding a permanent patron – or husband - for the women are clear, they may be only short-lived; Deborah Bryceson et al (2014) also note 'the casual nature' of what is considered marital status in the settlement. Men may refer to the women they live within the settlement as 'wives', yet this informally-conferred status could rapidly alter with men moving on to new mineral sites and establishing new 'marriages' there. Not only would the financial gains from 'girlfriend' or 'wife' status disappear as men move on, so too would the cloak of respectability this confers. Respectability comes through male protection or having a man, and can disappear when he does. A woman will then move back into transactional sex with many rather than only one male, demonstrating that 'sex worker' may be a fluid identity, and what it constitutes in the 'gift' versus 'market' context difficult to know.

This being said, Deborah Bryceson et al (2014, 91) suggest that their data gives hope for young women seeking to find a man to marry for financial security in that 'it happens in enough cases to continue to fuel such expectations'. While in 'normal' contexts women may seek to withhold sex until married, in this context, transactional sex may be the route to establishing such a relationship. Far from being 'abnormal' this 'promiscuous' path to achieving 'normality' and respectability through obtaining economic 'protection' from just one man, seems to be the norm.

While the gender norms in extractive industries at first sight appear different from wider societal norms, they might be better seen as reflecting an ideal or hegemonic masculinity and associated femininities. Rather than abnormal, they represent patriarchal relations which are 'super' normal.

Conclusions: implications for gender justice in extractive industries

Extractive industries act as a lens on wider society, allowing us to learn about how people perform their gender identities, and how this intersects with other characteristics such as age, race and migrant status. Through this, we can see how patriarchal relations are produced and reproduced as 'normal', whatever the perceived abnormality of the context in which they play out. Challenging the hyper-masculinised identities men adopt in the extractives sector is important, but doing this focusses on outcomes not causes as these identities are the outcomes of (super)normal patriarchal relations, that play out in the lives of women, and on women's bodies.

The main focus of development organisations working to promote social justice for people living in contexts affected by extractive industries has been to promote greater accountability of governments and corporations to the communities whose lives their activities affect. Yet as we have shown in this article, a gender analysis of the extractive industries suggests that there are other strategies that are needed to ensure gender equality within these programmes and their outcomes. Identities seen as deviant, such as sex workers, may be relegated to the margins, absent from reports and research that underpin development programmes and the programmes themselves. Presented as both the epitome of patriarchal control but also as an aberration, sex workers are often excluded as potential project beneficiaries of programmes with gender equality aims, including programmes focusing on improving the accountability of extractive industries to citizens.

Development policymakers and practitioners need to understand the differences between women, and the supernormal patriarchal relations that produce these differences to support women – and men - in challenging them. As we discussed, there is a need to understand gendered relations as multi-layered, as fluid and changing over time and space, and understand gendered identities to be fluid also, with women slipping between the categories of workers, whores and wives over time or being all these things all at the same time. It should not be assumed that 'who' a woman is now describes all she is.

Women in the extractive sector may be transitory, in both location and identity – with many moving in and out of extractive sites, and adopting a range of occupations both within and outside the sector over a lifetime. This makes them semi-visible at best in many accounts of the sector. In addition, ideological issues and moral judgements in the development sector need to be addressed and challenged if gender justice is to be achieved in the extractives sector and beyond. What sex workers in particular do is something that is still stigmatised, and seen as unrelated to formal sector employment and industrial strategies. These women, who are located on the margins of the margins, may be effectively made invisible by projects that aim to support gender justice, gender equality and/or women's rights in extractives. A related issue is the tendency to assume sex workers are not local women, or that they are recent or transitory residents – which means that they are unlikely to figure in programming that aims to support communities to survive and thrive in the face of extractive industries.

Women who sell sex will therefore not be conceptualised as local, or indigenous, 'women' (because they sell sex), nor will they appear as 'workers' – because sex workers are not visible in contrast to other (bar, hotel, shop, mine) workers. They are left out of both fields of analysis, and hence likely to be left out of any development programming that might have supported them. We see these sex workers as located in a space that is shaped by shifting notions of masculinity and femininity, made increasingly extreme in the contexts of extractive industries. These women pose a difficult challenge to those seeking to promote 'gender equality' in such contexts, as it provokes the fundamental policy question of – equality with who, for who?

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Endnotes
[1] Economists use the concept of 'supernormal profits' to refer to the profits that arise within extractive industries as a result of the opportunity cost of extraction. If more of the non-renewable resource is extracted today, it becomes depleted and less is available for extraction in the future. Current extraction has to take account of this future opportunity cost and supernormal profits represent a capitalisation of this cost. The optimal depletion path of a non-renewable resource was first considered by Harold Hotelling in 1931.

References

Andrews, Nathan (2015) 'Digging for Survival and/or Justice? The Drivers of Illegal Mining Activities in Western Ghana' *Africa Today*, 62 (2) 4 – 24.

Bashwira, Marie-Rose, Jeroen Cuvelier, Dorothea Hillhorst, and Gemma van der Haar (2014) 'Not Only a Man's World: Women's Involvement in Artisanal Mining in Eastern DRC' *Resources Policy* 40 (June): 109–16.

Sarah Bradshaw, Brian Linneker and Lisa Overton (2017) 'Supernormal' Profits and 'Supernormal' Patriarchy: Gender inequalities in the extractive industries, School of Law Working Paper, Middlesex University, London, 19 April 2017. https://drive.google.com/file/d/0BzsYq-aDZJuZQTNfQ3A0eXJYT2M/view

Bradshaw, Sarah; Linneker, Brian and Overton, Lisa (2016) Gender and Social Accountability: Ensuring Women's Inclusion in Citizen-led Accountability Programming Relating to Extractive Industries, Oxfam America Research Backgrounder Series, Oxfam America, August 2016. Last accessed 09/09/17
https://www.oxfamamerica.org/static/media/files/Research_Backgrounder_Gender_and_Social_Accountability_Final.pdf

Bryceson, Deborah Fahy; Jønsson, JesperBosse; Sherrington, Richard (2010) 'Miners' magic: artisanal mining, the albino fetish and murder in Tanzania' *The Journal of Modern African Studies*, Vol.48(3), pp. 353-382.

Bryceson, Deborah Fahy; Jønsson, JesperBosse (2010) 'Gold Digging Careers in Rural East Africa: Small-scale Miners' Livelihood Choices' *World Development* 38(3): 379–82.

Bryceson, Deborah Fahy; Jønsson, JesperBosse; Verbrugge, Hannelore (2014) 'For Richer, for Poorer: Marriage and Casualized Sex in East African Artisanal Mining Settlements' *Development and Change* 45 (1): 79–104.

Campbell, Cathy (2000) 'Selling sex in the time of AIDS: the psycho-social context of condom use by sex workers on a Southern African mine' *Social Science and Medicine* 50 (4) 479-494.

Cane, Isabel, AmgalanTerbish, and Onon Bymbasuren (2014) Mapping Gender Based Violence and Mining Infrastructure in Mongolian Mining Communities: A Comparative Analysis. IM4DC

Action Research Final Report. CRSM, Gender Centre for Sustainable Development Mongolia, National Committee on Gender Equality Mongolia, and University of Queensland.

Connell,RW and Messerschmidt, JW (2005) 'Hegemonic Masculinity: Rethinking the Concept' *Gender and Society*, 19:6, 829-859.

Dowd, Nancy E. (2010) 'Asking the Man Question: Masculinities Analysis and Feminist Theory *Harvard Journal of Law and Gender*, 33, 415-428.

Doyle Cathal M (2014) *Indigenous Peoples, Title to Territory, Rights and Resources: The Transformative Role of Free Prior and Informed Consent*, (Routledge Research in Human Rights Law), Routledge, London.

Eftimie, Adriana, Heller Katherine, and John Strongman (2009) Mainstreaming Gender into Extractive Industries Projects, Extractive Industries and Development Series 9, World Bank.

Edström, Jerker with Das, Abhijit and Dolan, Chris (2014) 'Introduction: Undressing Patriarchy and Masculinities to Re-politicise Gender' *IDS Bulletin* 45 (1) January 2014, 1–10.

Flisi, Isabella (2016) 'The reintegration of former combatants in Colombia: addressing violent masculinities in a fragile context' *Gender and Development*, 24(3): 391–407.

Garnaut, Ross (2010) 'Principles and Practice of Resource Rent Taxation' *The Australian Economic Review*, 43, 3, 347-356.

Green Duncan (2015) Promoting Active Citizenship: What have we learned from 10 case studies of Oxfam's work? Oxfam active citizenship case study. http://policy-practice.oxfam.org.uk/publications/promoting-active-citizenship-what-have-we-learned-from-10-case-studies-of-oxfam-338431

Harris, Angela (2000) 'Gender, Violence, Race and Criminal Justice', 52 STAN. L. REV. 777.

Harris Angela (2011) 'Heteropatriarchy kills: Challenging gender violence in a prison nation' *Washington University Journal of Law & Policy*, 37, 13-65.

Hartmann, Heidi (1981) 'The Unhappy Marriage of Marxism and Feminism: Towards a More Progressive Union' In *Women and Revolution: A Discussion of the Unhappy Marriage of Marxism and Feminism,* edited by Lydia Sargent, 1–41. Boston: South End Press.

Hotelling, Harold (1931). 'The Economics of Exhaustible Resources' *Journal of Political Economy* 39 (2): 137–175.

Hunnicutt, G (2009) 'Varieties of Patriarchy and Violence Against Women Resurrecting "Patriarchy" as a Theoretical Tool' *Violence Against Women Volume* 15:5, 553-573.

Jenkins, Katy (2014) 'Women, Mining and Development: An Emerging Research Agenda' *The Extractive Industries and Society* 1 (2): 329–39.

Kandiyoti, Deniz (1988) 'Bargaining with Patriarchy; *Gender and Society* 23, 274–90.

Kang, Alice (2009) 'Studying Oil, Islam, and Women as if Political Institutions Mattered' *Politics and Gender* 5 (4): 560–68.

Khanna, Akshay (2013) 'The Changing Faces of Citizen Action: A Mapping Study Through an 'Unruly' Lens' *IDS Working Paper* 423, Brighton: Hivos and IDS.

Laite, J.A. (2009) 'Historical Perspectives on Industrial Development, Mining, and Prostitution', *The Historical Journal* 52(3): 739–61.

Lahiri-Dutt, Kuntala and Martha Macintyre . (ed.) (2006) *Women Miners in Developing Countries: Pit Women and Others*, Ashgate, Aldershot .

Lahiri-Dutt, Kuntala, and Petra Mahy (2007) Impacts of mining on women and youth in two locations in East Kalimantan, Indonesia. ANU Enterprise (last accessed 08/09/17) https://www.banktrack.org/download/cr3_kld_mahy_impacts_mining_indonesia_pdf/cr3_kld_mahy_impacts_mining_indonesia.pdf

Lahiri-Dutt, Kuntala (2015) 'The Feminisation of Mining' *Geography Compass*, September 2015, Vol.9 (9), 523-541.

Lahiri-Dutt, Kuntala (2013) 'Gender (plays) in Tanjung Bara mining camp in Eastern Kalimantan, Indonesia' *Gender, Place and Culture*, Vol.20 (8), 979-998.

Lahiri-DuttKuntala (2012) 'Digging women: towards a new agenda for feminist critiques of mining' *Gender, Place and Culture*, 19, 2, 193-212.

Lahiri-Dutt, Kuntala (2008) 'Digging to survive: Women's livelihoods in South Asia's small mines and quarries' *South Asian Survey* 15, no. 2: 217–44.

Mahy, Petra (2011a) 'Beyond victims: Mining and sex-work in Kalimantan, Indonesia'. In *Gendering the field: Mining, gender and sustainable livelihoods*, ed. KuntalaLahiri-Dutt, 49–65. Canberra: ANU E Press.

Mahy, Petra (2011b) Gender Equality and Corporate Social Responsibility (CSR) in Mining: An investigation of the potential for change at Kaltim Prima Coal, Indonesia. A thesis submitted for the degree of Doctor of Philosophy of The Australian National University. Last accessed 08/09/17 https://openresearch-repository.anu.edu.au/bitstream/1885/9234/2/01Front_Mahy.pdfMwaipopo,

R.,W. Mutagwaba, D. Nyanga and E. Fisher (2004) 'Increasing the Contribution of Artisanal and Small-scale Mining to Poverty Reduction in Tanzania'. London: Department for International Development.

Pateman, Carole (1988) *The Sexual Contract*, Stanford: Stanford University Press.

Patil, Vrushali (2013) 'From Patriarchy to Intersectionality: A Transnational Feminist Assessment of How Far We've Really Come'. *Signs: Journal of Women in Culture and Society* 38 (4).

Ross, Michael (2008) 'Oil, Islam, and Women' *American Political Science Review* 102 (1): 107–23.

Saucedoa, Leticia M. and Morales, Maria Cristina (2010) 'Masculinities Narratives and Latino Immigrant Workers: A Case Study of the Las Vegas Residential Construction Trades *Harvard Journal of Law and Gender*, 33, 625.

Scott, Jen, Rose Dakin, Katherine Heller, and Adriana Eftimie (2013) A Survey and Analysis of the Gendered Impacts of Onshore Oil and Gas Production in Three Developing Countries, Extracting Lessons on Gender in the Oil and Gas Sector. Extractive Industries for Development Series 2: Oil, Gas and Mining Unit Working Paper, World Bank.

Shahriari, Sara (2014) Bolivia: Struggling to save the mountain that eats men, http://america.aljazeera.com/articles/2014/5/8/struggling-to-savethemountainthateatsmen.html (last accessed 18 Apr 2017).

Walby, Sylvia (1990) *Theorizing patriarchy*, Cambridge, MA, Basil Blackwell.

Werthman, Katja (2009) 'Working in a boom-town: Female perspectives on gold mining in in Burkina Faso' *Resources Policy* 34, 18–23.

World Bank (2017) Total natural resources rents (% of GDP), http://data.worldbank.org/indicator/NY.GDP.TOTL.RT.ZS, last accessed 14/08/2017.