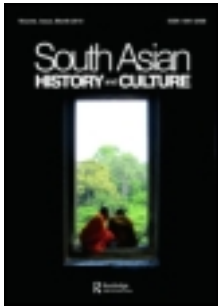


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Kuntala Lahiri-Dutt ^a

^a Crawford School of Public Policy, Australian National University, Canberra, ACT, Australia

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Bodies in/out of place: hegemonic masculinity and kamins' motherhood in Indian coal mines

Kuntala Lahiri-Dutt*

Crawford School of Public Policy, Australian National University, Canberra, ACT, Australia

In public discourse and representation, mine pits are naturalized as masculine domains – as the most obvious place of work for men by virtue of their physiological or biological traits. In this article I explore how such hegemonic masculinity is constructed, propagated and accepted as natural. Towards this aim, I bring together within a large frame the debates around the past and present conditions of women in the coal mines in eastern India, debates that allow us to further excavate the sources and spaces of masculinist discourses in the mining industry as a whole. More specifically, I analyse the debate that took place in the 1920s centring on women's reproductive functions in the collieries. Within this context, women's bodies are the source of biological essentialism, which justifies their exclusion and promulgates mining masculinity.

Keywords: coal mines; *kamins*; masculinity; women miners; colonial mines; women workers

Feminine bodies in masculine places

Underground spaces are hidden below the surface, away from the public gaze, and mining shafts are among the few available ways in which to explore them. The warm and humid pitch-dark interiors of the coal pits are mysterious and arouse a sense of danger and risk. As a consequence of these and related determinants, societies and the mining industry perceive and portray these underground spaces in ways that are heavily gendered. The ecofeminist and philosopher Carolyn Merchant¹ considers mining as a masculine space because of its close association with the tools and machines employed to extract the buried resources, and the opposition to maternal-animistic connotations of the earth as a womb. Popular discourses have reinforced the perceived masculinity of industrial mining; as Victor L. Allen writes,

Mining evokes popular images of hard unrefined men, distinct and separate from other workers, hewing in mysterious dungeons of coal: dirty, strange men, in some ways frightening and for this reason repellent, yet attractive because they are masculine and sensuous . . .²

Masculine traits were invested with a certain romanticism, typified by 'images of men down in the abdomen of earth, raiding its womb for the fuel that makes the world go round'³ The corporeal effects of such masculinity, the physical strength, endurance and filth characterising these representations all contribute to a process of 'naturalising'⁴ the association

*Email: kuntala.lahiri-dutt@anu.edu.au

between the masculine body and these exotic and dangerous places. Such perceptions of mining have been examined by Marxist feminist geographers McDowell and Massey,⁵ who observed that the gender division of labour in industrial mining has also informed the spatial division between ‘home’ and ‘workplace’ (the mine pit). In one such representation Gibson famously described miners’ wives as ‘the hewers of cakes and drawers of tea’,⁶ relegated to their place at home while men gathered in union halls or local pubs to debate the interests of the working class.

Historically, mechanized mining fuelled and sustained the industrial revolution in the United Kingdom and expanded further through colonial imperialism in the settlements and colonies.⁷ In colonial India, collieries were introduced as integral components of the new and modern industries alongside the jute mills and tea estates. Such modern extractive industries also physically expressed imperial exploitation and domination of colonies, their subjects and resources. Of these large extractive industries, mining was one of the most debated and most lucrative. The new industrial mines were much larger than India’s traditional artisanal mining operations because they closely enmeshed those elements of mining production hitherto conducted independently.⁸ Eventually, such large industrial enterprises gave rise to the early working classes and in turn extended imperial interest to incorporate working subjects, including women and children. In the collieries, women as well as young children worked as an integral part of the family-based workforce. Expressed in reports of the time, concerns over working conditions were frequently coloured by scientific analysis of the biological attributes of women, such as birthing. By analysing such discourses in this article I aim to contribute to the literature examining the colonial encounter and its influence on the shaping of gender relations and practices in India.

Contemporary work on mining reveals that gender relations in the mining industry remain focused on work and technical expertise. The mine worker is imagined and viewed as a man embodying distinctive technical skills that define the ‘He-Man Land’⁹ of the mine pits. This hegemonic masculinity not only constitutes an overt visibility of men, but it also contributes to a larger conflation of hegemony with necessity, conceding to men expertise and prestige, the arbitration of institutionalized authority, laws and structures of governance, all of which inform entrenched hierarchies and technologies which are often presented as gender-neutral.¹⁰ Likewise, the masculinity of extractive industries is interpreted by those involved in them – the engineers and managers – as natural. Normalization legitimises the mechanism of masculine power and gender hierarchy, and builds a discursive invisibility of men and masculinity.¹¹ As a consequence, women are presented as the other to this world.¹² Mines morph into gendered places, not just by association with what is perceived as masculine work, but also by intent, as certain bodies are deemed to be appropriate to such spaces while others are excluded. It therefore becomes an interesting project to explore how such notions of masculinity/femininity were historically imposed on the labouring bodies that were attached to local categories of belonging and to pre-industrial social structures in colonial India, especially by reference to caste, community and gender.

To explore the place-specific constructions of gender in India I must travel through time and enter the colonial coal pits. The labouring bodies here were subject to discourses of hegemonic masculinity within the emerging modern industrial economy, encountering indigenous, largely caste-based patriarchal structures. Rather than focus on men exclusively, I draw on the ways in which the reproductive capacity of women’s bodies has been used to argue unnecessary physical endangerment, thereby reinforcing the masculinity of such spaces. By their very presence in the colonial mines, women, popularly known as *kamins* or ‘pit women’, became problematic. The colonial concern over these bodies can

reveal by implication the ideas and practices regarding the ideal productive body as one bound by legislation, and, furthermore, it reveals gender ideologies that ultimately reshaped previous labour practices associated with family units.

As the modern industrial coal mines expanded in the late 1800s, lower-caste and indigenous women entered the mineshafts along with men. Work and family lives were understandably intricately mixed in the mine pits. To think of work and personal lives as interlinked and inseparable and not occupying separate spaces helps in understanding why kamins who worked also might have birthed there. Yet, viewed from a modern and scientific perspective, their bodies were constructed as extraneous or alien. Colonial administrators in charge of the underground coal mines began to introduce workplace codes of 'doing' masculinity and femininity from the early 1920s. These codes were expressed in the representations not only of labouring, but also of mothering bodies of lower-caste women. To analyse these representations I focus on a particular report on childbirth practices of the kamins which fully illustrates the gaps in understanding of the modern scientific worldview of labour and the industrial practices of lower-caste kamins. The report was written in 1920 by Dagmar Curjel, a woman and a practicing physician from Scotland who was hired by the Inspector of Mines in Dhanbad (in modern Jharkhand) to present an accurate description of what kamins actually did. At the time she was serving in the Women's Medical Services in India. In Curjel's words, the study was meant to 'determine the influence which underground work might exert on the health of Indian women workers especially during the child bearing ages and on the well-being of her child'.¹³ As I argue later in this article, when I analyse Curjel's findings more closely, the report benefits from gender analysis: the temporal vantage allowing for excavation of the sources of hegemonic masculinity.

Because Curjel was a medical doctor, her report was expected to accord with accepted notions and practices promulgated by the scientific establishment. Indeed, this may in large part have contributed to the reason for inviting her to write the report: to the extent of satisfying these expectations, she applies a post-enlightenment epistemological approach in studying her subjects. In this approach, work and home must be separate, and places of work such as the mines must be occupied solely by men. It is no wonder that Curjel's report begins with the implied assumption that the mothering bodies of kamins were antipodal to the mining environment. In order to bolster public acceptance, scientific methodology is relied on by colonial authorities to provide unassailable *reasons*, the basis of scientific method, to justify the assumption. Masculinity does not necessarily refer to the behavioural characteristics of men: scientific knowledge can attribute actions and thoughts imbued with the characteristics of masculinity. The notion that work which involves the use of technology and tools is masculine is in part determined – in circular fashion – by the acceptance of associated context as itself causative of existing sex disparities in work. Hopkins and Noble describe this as 'relational'¹⁴ masculinity: modes of practice emerging out a system of gender relations. This also informs Connell's 1995 underlying framework of hegemonic masculinity, which she argues needs to be counteracted by deliberations on masculinity that extend beyond the preoccupation with the dyad of male/female and consider competing masculinities.¹⁵ By attending to the questions of gendered power and resistance – questions that are historically and spatially contingent – it is possible to tease out a richer understanding of masculinity. Indeed, recent scholarship has elaborated upon the construction of gender relations as a product of the colonial encounter, articulated in research discourse, political ideologies and institutional governance.¹⁶ While experts have studied and reported on the work of kamins in the mine pits of late colonial India, the assumptions inherent in their accounts provide in turn a means of interrogating the construction of gender and its

relation to that work: my exploration of a brief moment in the history of Indian collieries analyses these gendered relations.

Colonialism and collieries

Coal mining was one of the first of the great colonial enterprises. The first pound of Indian tea was brought to Calcutta in 1838; the first jute mill (Clive Jute Mill, near Calcutta) was established in 1873; and the first iron foundry (Bengal Iron Company) began its production in 1874. However, the interest in coalmining predated these industries. The coalfields of the Jharia–Raniganj in eastern India were already under the British gaze in the late eighteenth century. Two British administrators, S. G. Heatly and J. Sumner, submitted to the Bengal Coal Company a profitable turnover of Raniganj coal as early as 1774.¹⁷ The ‘startling success’ in digging coal by Alexander and Co. in 1824 marked a rapid expansion of coal mining. Indian entrepreneurs led investments in coal mining once the railways were built in the eastern part of India in 1857. Unlike the plantations, in the late 1800s the Jharia–Raniganj collieries in eastern India became a playground for local zamindars speculating on land-based investments.¹⁸ As local zamindars invested heavily in mining, they employed cheap colliery labour, mostly men from local indigenous communities.

However, as with other colonial industries, mining work soon became a family-based activity for certain communities, particularly the Santhal and Kol tribes, and also the lower castes, who were seen as semi-Hinduised castes by colonial administrators and which included Bauris, Bagdis, Chamars, Telis, Turis, Musahars and some Jolhas (weavers). As the Marxist labour leader Deshpande observed in 1946:

The Bauris, a semi-aboriginal tribe, were the earliest miners . . . and are still noted for their skill and hard work. Since the opening of the East Indian Railway in 1890, the aboriginals from Chhota Nagpur such as Santhals and Koras started coming into the field. In the course of time, other aboriginals such as Bhuiyas, Mundas, and semi-aboriginals such as Nunias, Beldars, Meahs, Dosadih, Chamars, Goala, Ghatwals, etc. entered the coalfields in increasing numbers.¹⁹

Ethnicity and caste were, from the very outset, an integral part of labour identity in the eastern Indian collieries. According to Ghosh,²⁰ who wrote the authoritative history of Indian collieries in two volumes, 90% of the coal-cutters in Raniganj collieries were Santhals and Bauris. This tribal workforce has a preponderance of women; Seth has shown that in 1920 there were 88 Santhali women workers per 100 men, and 56 bauri women for 100 men of the same caste. Amongst the Bhuinya the proportion was also high (80), but highest amongst the Doms (111 women per 100 men) and Beldars (102). A particular feature of the colliery labour force was that specific mining occupations became distinguished according to caste; a characteristic also noted by Deshpande, who observed that ‘Since the early years of the development of the industry, certain castes and tribes have shown special aptitude for particular types of operations in the mines.’²¹ It was probably more due to inter-caste boundary maintenance than a matter of ‘aptitude’, but the fact is that Bhuinyas and Rajwars generally became loading coolies and trammers; Beldars and Nunias were mainly earth cutters and surface workers; whereas migrant Bilaspuris occupied up the more skilled positions. Nonetheless, coal miners were registered as caste-based communities, and women’s labour was central to their workforce.

Women initially worked as part of family labour units, as loaders who transported the coal cut by male partners from shallow and open-cut mines or *pukuriya khads* to the

containers or the tubs. Women were also sometimes hired as ‘gin girls’, who were required to carry the coal baskets from the pits to the surface. A Chief Inspector of Mines reported in 1925 that 52% of women workers in Raniganj’s Equitable Coal Company worked with their husbands or near relations, whereas the other 48% were ‘unattached’.²² At an earlier date, Grundy observes:

As a rule, men who come from a distance to work in the mines do not bring their wives with them, so that this greatly affects the question of female labour in these mines, because females will not work in the mines where there is a great disproportion between the numbers of males and females.²³

Women’s work as part of the family labour unit was specific to eastern India and a result of British efforts to create a captive labour force that did not return to the village fields during the cropping season. Not all British colonies developed the same labour process.²⁴

Family-based employment in the collieries meant that certain communities providing labour came to be seen by the colonial administrators as linked to the mines not only materially and pragmatically, but also culturally. Stonier, who was a Chief Inspector of Mines responsible for producing the annual reports, observed that ‘the bauris have cut coal for so long a time – probably for several generations – that they now consider coal cutting to be a caste-occupation’.²⁵ Consequently, by 1910 the District Collector of Burdwan, Paterson, could assert that some indigenous communities of eastern India had become ‘hereditary miners’ or ‘traditional coal-cutters’.²⁶ These coal-cutters were also from lower-caste communities (see Table 1). The social mosaic of coal communities was in motion throughout the twentieth century; a generation of specialist miners were being bred from local low-caste and indigenous communities, which were changing fundamentally. Women in these communities had always worked in roles that articulated with men; as a consequence they regarded mining work as part of life and the work was acknowledged within the communities. Pramanik, a labour historian of Indian coal mines, described how miners continued to work in family units during the early years of the twentieth century. A typical example is of a family in Chandmari mine in Raniganj: Nuna Majhi and Bhaban Bhar who worked in the colliery with their mother, who worked in the mine with her husband. Similarly, in Chinakuri mine, Ashu Singh accompanied his mother-in-law, a ‘quarryminer’. Just as Samar Etwar, a miner, worked with his wife, his son – a shotfirer – and daughter-in-law – a stonecutter; and Tejwa Nonia, a mine worker, worked with her husband, a cutter.²⁷

The report of the Chief Inspector of Mines in India at the turn of the century noted that in 1900 India led the ‘British colonies, dependencies and possessions’²⁸ in coal production. This leadership followed the surge in the investment in mines, in the number of collieries and workers between 1880 and 1900.²⁹ The coal mining industry was the largest employer

Table 1. Women as workers in eastern Indian collieries 1901–2006.

Year	Female	Male	% of female to total
1901	26,520	55,682	47.6
1921	70,831	115,982	61.1
1973	15,181	60,620	20.0
1980	16,094	169,136	9.7
1990	12,875	165,829	7.2
2006	9,879	151,855	6.1

Source: Compiled from Seth (1940), Census, CIL and Eastern Coalfields Limited Reports.

of labour until the turn of the century. It dominated all other types of mining and hired over 67% of people employed in all the mines.³⁰ Of the total number of women employed in the mining industry, almost the entire workforce (87%) worked in coal mines.

Kamins, as noted earlier, derived from lower castes or tribal communities living around the Raniganj–Jharia fields where the first collieries were established as early as 1774. While it is sometimes the case, the term ‘kamin’ is not always derogatory: Seth observes that it has been in wide use as reference to ‘female worker(s) employed on the surface of mines and underground in the actual mine shafts [as the feminine equivalent of the term coolie] whereas “khalasi” is one who cleans and handles the pump, haulage and winding engines during their operations’.³¹ The term is socially accepted as denoting women who undertake physical labour, usually in the urban-industrial sectors. Ray Chaudhury’s analysis of labour and gender in the coal mines provides a close view of the kamins within caste-marked colliery labour.³² She suggests that in 1901 women formed about 48% of total mine workers in Raniganj. Of these, 65% worked in underground collieries.³³ The proportion remained more or less the same until 1921 (61% and 60%, respectively).³⁴ Ray Chaudhury also notes that in 1921 women comprised around 38% of all the coal mine workers, and of the total of women mine workers, 60% worked underground.³⁵ Clearly, it would have been difficult for women to work in such large numbers in the mines without wide social approval, some tradition of manual work and even obligation to assist the family in securing a livelihood. When debates about the propriety of kamins working in the mine pits began around the late 1920s, they pertained particularly to the working condition of the labour force, with particular attention on kamins’ maternity practices. At the time, women comprised about ‘two-fifths of the daily total of underground labour employed on the Jharia field’,³⁶ and the net effect of the debates was a drastic reduction in this proportion as seen from the temporal view of women’s employment in the collieries in Table 1.

Concern over human safety in the labour-intensive production processes of the coal mines marked a new development in the 1920s.³⁷ This was a direct import from Europe, where the International Labour Organization (ILO) was created in 1919 to restrict the ruthless exploitation of industrial workers. The Chief Inspector of Mines’ annual reports produced in these years began to identify safety and labour conditions as the cause of growing alarm for the colliery administrators. But, during the same period, a global standard of labour efficiency was also being formulated, designed to promote a healthy, energetic and contented workforce that was consequently more productive.

The 1920s, therefore, witnessed a shift in the ways that the colonial state viewed industrial labour in general, and women’s well-being began to feature as an emergent anxiety within this overall concern to improve poor working conditions and safety. In response to the ILO’s attempts to monitor working conditions across the globe, women workers’ lives began to come under greater scrutiny in Indian coal mines. It is against this background that the colonial state began its probing into the working conditions of its subjects.

Inspecting mines, protecting bodies

During the early years of industrial expansion women were seen as a form of cheap labour. However, after the First World War they began to be viewed as ‘special workers’ or workers with particular problems because of their reproductive function, which more easily enabled Indian society and industry to attribute to them roles as mothers and wives. Close attention to the maternal roles of the kamins therefore came in the wake of the growing concern over the issue of maternity benefits for working-class women in Europe and other industrialized nations. High infant and maternal mortality rates not only concerned colonial

administrators, but also pervaded nationalist discourse³⁸ that idealized women and viewed womanhood as the repository of tradition.³⁹ Work outside the home, in particular strenuous work in factories and mines, was regarded as an impairment of women's childbearing capacity, thus 'stunting the growth of future labourers'⁴⁰ of the country. It is in this context – when motherhood was being socially constructed as the primary and ideal role of women – that the very idea of women giving birth in underground collieries triggered the colonial government's interest in mothering practices of the kamins.

It was not just the colonial administrators who took an interest: the educated, urban-based middle-class Bengalis also became interested in learning about the mine pits. This middle class was heavily imbued with English enlightenment perspectives, being largely a product of British-inspired religious and social reforms that led to the so-called renaissance in Bengal. The social-religious reforms also created a class of refined and English-educated *bhadramahila* (gentlewoman) and *bhadralok* (gentlemen) residing primarily in Calcutta.⁴¹

In response to this growing interest, Kamini Ray, a university-educated and high status Bengali woman, undertook a reconnaissance survey in 1923 of the Pure Jharia and Khattrasgarh collieries in eastern India, around 400 kilometres from Calcutta. Although the social-cultural distance between Calcutta and the collieries was possibly greater than that between India and the United Kingdom, Ray's responses are nonetheless noticeably different from those of the British. Although the working conditions in the pits seemed very strange to Ray,⁴² she observed that 'when a woman is forced by poverty to leave home, the best thing for her would be to work by the side of her husband or some near relation',⁴³ and concluded that 'we do not think woman labour [sic] in mines is at present much worse than in other industrial spheres'.⁴⁴ Ray's report also highlighted the voices of women with regard to their work. For example, in her survey she quoted the response of the kamins to her query of whether they preferred to work above ground while men went underground: 'No no; we should like to be together, otherwise we shall always be in fear and anxiety thinking what might happen to them. When we work together we have no anxiety, for if we die, we die together'.⁴⁵ The statement reflects not just the significant role of family ties, both at home and at work, but also the notion of mutuality, of working jointly and facing risks collectively as a family unit: ideals that coolies and kamins valued. When kamins say that dying together within the mine is better than worrying about men, they are claiming space and exhibiting agency. Above all, their accounts suggest that the productive and reproductive functions of mine workers shared the same space: that the workplace was not exclusively reserved for masculine, non-reproductive activities.

As argued earlier, the concern for safety was related to the discomfort of Victorian England with the place of work for women in the coal mines. For Indian kamins, working underground was not new; women arrived in the mines as part of family labour units and were paid together with their partners according to the amount of coal loaded, that is, on a piece-work basis. There was no specific age for children to enter the mines: they generally helped their parents and were not paid separately. A team of a man and a woman working together earned between Rs 1 to Rs 1.8, while a few could make up to Rs 2 per day, an amount that would be better than the earnings of a daily wage labourer today. Although they did not save money, families generally earned enough to eat; it is well-known that some men gambled and drank away part of their incomes.⁴⁶ A few workers from other provinces sent money to their families. There was, however, gender differentiation of tasks: '[M]en only work as coal-cutters and women are required for carrying the coal'⁴⁷; or 'The Santali men worked together with women who were either their wives, near relatives, or members of the same village'.⁴⁸ Until the late 1920s, to keep the family-oriented 'traditional coal cutters' at work, women and children were encouraged to labour in the mines.⁴⁹ A smaller

number of women were employed in other tasks underground, such as packing the trolley lines. These women generally worked under a supervisor or *sardar*,⁵⁰ who at times also acted as a *lathial* (muscleman) when need arose.⁵¹ Compared to their male counterparts, *sardarins* were rare.

British concerns both at home and in the colony underpinned the need to understand the working conditions in these mines. To do so, administrators engaged the Curjel's services. Her report suggests that she was requested to report on the general state of health of women and maternal practices. The special inspection was deemed necessary to probe into rumours that some kamins were giving birth in underground mine pits. The question of birthing was of particular concern to colonial administrators who might have been used to the idea of maternity's association with ritual pollution, which was common amongst caste Hindu families but not necessarily so in indigenous and lower-caste groups. The general expectation was that in post-birth stage women should be confined and segregated from the family and the community. This cultural understanding most likely informed the perception that it was culturally unacceptable for women to remain in the collieries following birth.

Curjel's report is one of the most well-known among the series of investigations that were carried out by colonial administrators in eastern Indian coalfields from 1923 onwards, and was used to rationalize ensuing policy measures that sought to remove women from the mines. Like other colonial documents, this report was a product of its time. However, it remains relevant because the masculine ideology on which it is based continues to inform contemporary policies that prevent women from working in underground mines, even today. It reflects the moralities of the time: although many women worked in early industrial coal mines in England as 'pit-brow lasses', the 1842 Mines Act had prevented women from working in underground mines in the United Kingdom.

The document could be read as a cultural text which enables a broader appreciation of the values and attitudes of the period concerning gender relations and, more specifically, concerning the kamins and their presence in the mines. The report is a key focus through which to examine the ways both colonial men and women were actively complicit in normalising the link between mining and masculinity, constituting what may broadly be labelled 'hegemonic (mining) masculinities'.

In her report Curjel describes the working conditions disapprovingly:

[W]omen who are carrying coal for men employed in opening up new galleries may have to work in parts where there is little air movement, in an atmosphere vitiated by smoke from naked oil lamps. Young children are found under the same conditions, often a small charpoy is brought down as a bed for a young baby.⁵²

It appears as though the discovery of unhealthy and unsafe working conditions was altogether unexpected and shocking. In view of the widespread acceptance and long history of family labour in the collieries, the judgmental tone of the report makes what appears to be an astonishing discovery of women and children in these dungeons hypocritical in the extreme. It is this perception, however, which enabled social and industrial authorities to require that women be denied access to the mines, not just for the own safety, but also for the safety of their children. The fact that living conditions in crowded temporary settlements or *dhaowras* were not much better than those of the collieries did not receive much attention. Not unlike the jute industry, a spatial gender division of labour within the mines was established, creating a situation in which 'men and women tend to participate in different spaces, shops or sections of the factory, and they usually operate or set up different

“physical technologies” that require skills or knowledge defined as male or female’.⁵³ In the mines, women generally performed repetitive chores such as carrying and processing: chores that required little or no handling of tools. The gendered task allotment reveals a vertical sexual division of labour that relegated women to the bottom strata of discriminatory wages and poor working conditions:

Men blast and cut the coal, women carry it in baskets to the nearest trolley line where the tub to be filled in is situated. A load of 60 to 80 lbs is carried at one time.⁵⁴

Curjel also observed that in smaller and less-equipped mines, women had to carry the load over considerable distances, and worked for 5 days per week, undertaking the night shift on alternate weeks.⁵⁵ She noted that the actual time spent underground varied from 6 to 12 hours, depending on the amount of coal ready to be loaded or the number of tubs available for filling.⁵⁶ On winter mornings men sometimes descended first, with women following after finishing household chores. By then, the male workers had cut enough coal to be carried out of the pits. Usually women worked until all the cut coal had been loaded in trolleys. Women would return to the surface from time to time to feed the children, who were usually left in the shade of a tree under the care of an older relative.

It is worth noting here that Curjel’s investigation was requisitioned by the Inspector of Mines to deal particularly with motherhood and the maternal practices of colliery women. It is not difficult to anticipate that Curjel might approach the study with a subjective bias based on her training in the paternalistic institutions of medicine in the United Kingdom at that time, and to be amazed by the conditions for women in the Indian collieries. To be fair, Curjel attempted to remain as objective as possible, following what she considered to be a scientific sampling method, selecting a handful of women as representatives of the different classes of labour employed, and consulting their records.⁵⁷ Nonetheless, her scientific objectivity was positivist in philosophy and steeped in the colonial aspirations of the hierarchically masculine quest to civilize. Curjel appears to have intended to locate evidence that would support her views regarding the harmful effects on women who worked underground. Consider this statement:

In all civilised countries except India the employment of women and child labour underground has been prohibited, as detrimental to the welfare of the community, and such legislation has been endorsed by the recommendations of the International Labour Organisation.⁵⁸

This quotation typifies the rhetoric of celebrating colonialism as a liberating force: bringing the native into the fold of the civilized, emancipating the locals from the shackles of tradition and the tyranny of caste. More specifically, it assigns to the colonized woman a specific place within society that prioritizes not women’s safety, but the ‘welfare of the community’. The focus is proprietary: it is clearly not on what work should be like, but on who should undertake that work. The female body somehow did not seem to fit within the British colonial structure of production and discipline in the mines. In the process, Curjel was defining the female body as out of place and assigning it properties that reflected British understandings of the colonial female body primarily as reproductive and disciplined.⁵⁹

As with the conflation of women’s safety with that of community interests, noted earlier, the interests of women and children were conflated in the reports. For example, another contemporary report on the physical welfare of children in factories, by M. V. Mehta and published in 1920, presented women’s industrial work as a source of illness and potential

danger not only for children, but for fellow workers.⁶⁰ Along with concerns over defining acceptable work for women, there was an increasing desire during this time to prevent children from engaging in – or being exposed to – industrial work. Thus, children and childhood became idealized as in need of protection by men as much as by women and femininity. Since kamins could not easily be infantilized, their reproductive bodies became the subject of control. With regards to concerns over maternity, it was suggested that kamins were unable to maintain personal cleanliness during maternity.⁶¹ Colonial administrators were apparently shocked at the sight of women operating machines whilst holding their children close to their bodies. At that time, and even now, in India, it is not unusual for women working in traditional sectors to carry young children to work. But this fact was regarded by Curjel as entirely avoidable, as evidenced by the following description:

Personal observation during this inquiry showed that the strain of industrial life is chiefly felt by women workers during the child bearing ages. Early in the inquiry it became evident that child birth being a physiological process could not be isolated from the other facts which influence the normal development of a women's [*sic*] life, and that of observations of any value were to be made, environment and economic factors should also be considered. For instance before giving an opinion as to the stage of pregnancy up to which a women should continue to work underground, it is necessary to know the nature of her work and her environment in the mine and to appreciate what would be the conditions of her home life should she cease to work.⁶²

While reading the report the question arises, what did the kamins think about their work and how did they respond to this inquiry? It is not clear if the voices of any of the women Curjel met are articulated in the report. Although there are passing references to terms such as 'women said . . .',⁶³ it does not appear that Curjel paid much attention to their views. As a result, we do not gain a clear picture of what these women might have experienced. It is likely that Curjel had difficulties communicating with these women because of language barriers and asymmetrical power relations. Curjel did note that 'the average woman worker was well-nourished and healthy',⁶⁴ indicating that the health of the colliery women could not be the reason for the death rates of children born in collieries being higher than those born in village homes. The basis of this conclusion by the inquiry committee was unclear. Infant death rates are a good quantitative marker to be used to imply that the mine environment could have been responsible, yet child mortality rates could reflect an entire gamut of factors which were not dealt with in great detail. Overall, the report presented an outsider's perspective prompted toward pre-defined conclusions by colonial concerns over control of labour in the growing industrial communities of the collieries.

Curjel did note that women generally went home for their confinement, that is, the period during which the baby was delivered, the length of absence varying according to custom and the economic status of the family. The poorest took leave as short as only 15 days, whereas some could afford to stay away from work for a year.⁶⁵ Generally, a woman rested for 2 months or longer, during which time she was supported by her husband or relatives. Most collieries gave an incentive or a small reward (of Re 1 to Rs 5) on the birth of a child. The incentive was most likely intended to retain the woman as part of the family unit of labour in which women were not paid separately for their efforts, but rather on a piece rate, that is, on the amount of coal cut or moved. Some collieries initiated rudimentary maternity benefits, which included 2 month's maternity leave with pay to cover the months before and after the birth of the child, but these were rarely implemented and women workers with young babies whom Curjel met in the dhowras knew 'nothing about the benefit'.⁶⁶

Regarding the actual process of medical attention at the time of childbirth, Curjel observed:

Women workers at the time of child birth are accustomed to employ local *dais* [midwives] and pay fees ranging from Re 1 to Rs 5/- for their confinement. Usually part of the fee was given in money and the remainder in food and clothing, occasionally in villages the whole fee was given in food stuff. Women mine workers . . . often employed dais who were of their own (low) caste. Aborigines employ women from their own village. The economic value of women was shown by the fact that, among mine workers, the dai usually receives the same fee for the birth of a boy or a girl. Some complained that formerly in their own villages they had only paid their dais 2 or 4 annas, but since workers had come to the mines and got more money, the dais had greatly increased their fees. The indigenous dais [who] met with [Curjel] during the course of this inquiry appeared to follow the objectionable and dangerous methods common to untrained women.⁶⁷

One central aspect of the concept of ‘hegemonic masculinity’ as conceived by Connell and its role in constructing identities, is that it is not restricted to men.⁶⁸ In describing childbirth practices, Curjel seems to have followed a monetary valuation of boys and girls, relegating the fact that in most indigenous communities in India girls were valued because of the very reason that they play equally important roles in providing family subsistence. This modern view permeates her interpretation of the roles of traditional midwives and their practices. Their years of experience and traditional knowledge were deemed objectionable and dangerous on the basis of her brief field visit. This links to the wider attempts from the colonial regime to civilize the workers and to create a productive society. Curjel’s report fed directly into the civilising project, whereby liberal gendered ideologies emerging in the metropolis shape colonial society. Within this context, kamins were in turn compelled to accept the idea that their place was not in the mines. This indirect and pervasive exertion of power illustrates the gendered objectives of Curjel’s investigation.

It may be suggested that one of the results of Curjel’s report was the introduction in 1937 of the Maternity Benefit Bill in the Provincial Assembly of Bengal, which stated in its introduction that ‘it is expedient to regulate the employment of women in factories and mines’.⁶⁹ Although a Maternity Benefit Fund was to be established to pay for ‘six weeks following [the woman’s] confinement’,⁷⁰ the indirect effect of the report was a decline in the numbers of women workers in collieries and factories. While Curjel had argued that any cash awarded to benefit the working mother usually would benefit either the expectant mother or the newborn child, her report was used to justify ‘benefit in kind’ measures, ultimately promoting the exodus of lower-caste and working-class women from the workplace, including the mines. By the time this Act was finally passed by the postcolonial Indian state in 1961, the proportion of kamins in the Indian colliery workforce had fallen drastically.

Conclusion

From the study presented here we see that lower-caste, poor and working women’s bodies became sites of governance – simultaneously incorporated into and ostracized from the industrial workforce – through the representation of their mothering practices and ideologies in what was increasingly a male-dominated domain. The biological essentialism apparent in construction of the bodies of kamins exposes the implicit masculine bias of Indian men; when women are represented as unfit for certain spaces of work because of their reproductive responsibilities, this perpetuates the idea that men are naturally unable to work with women without violating the norms of appropriate behaviour. Popularist and

universalist conceptions of femininity and womanhood tend to normalize contested gender roles through protective legislation that operates against women's interests. It is in the mines that the long-term policing effects of these pieces of legislation are particularly evident. This is because of the nature of labour in mining – widely accepted as masculine work – which inscribes masculinities onto the bodies involved and the places in which the work is performed. There is an inherent contradiction in this belief because the use of machines makes mining physically less arduous. However, although this belief leads to the question of whether women can physically carry out the tasks, the masculinist response retreats into the earlier reliance on women's biological attributes, ignoring the question of physical capacity. This is physiological evidence-construction that confirms the masculinist images of mining and reaffirms women's gendered roles. The construction of mine pits as unhygienic conceals various normative discourses of masculinity and femininity. By such discourse sanitized places are envisaged as appropriate for women to give birth in, and by virtue of the reproductive labour of birthing are associated with women's spaces, whereas mine pits remain associated exclusively with the productive labour of men.

Clearly, the normative discourses of propriety hide a form of hegemonic masculine anxiety around women intruding upon masculine public spaces and production technologies. They also reveal how gender and the meanings of masculinity were and are historically constructed. In the process of creation and re-creation of the hegemonic ideal of masculinity, a host of other forms of masculinity are subsumed, and as a consequence are devalued. In the colonial context, both hegemonic and subaltern masculinities emerged in mutual but unequal interaction within a gendered social and economic order. This order was subject to the colonial introduction of a 'public patriarchy'⁷¹ which assumed normativity, thereby enabling the reconception of maternal productivity – and thence women and children – as extraneous to the colonial industrial enterprise, and heralding the breakdown of family and female industrial labour. In other words, the colonial administrations of eastern India constructed masculinities of the colonized subject which radically altered the role of women in public and industrial spaces.

Their work and maternal birthing in the mines construed kamins as less feminine, a not-worker who is defined by the absence of standard characteristics that workers are endowed with. The idea of working and birthing in the same place seemed to be a gross deviation from both the femininity expected of Indian women, and the idea of the ideal industrial worker. At the time when kamins were working and birthing in the collieries, women from middle-class and urban families were being educated and trained to adopt a domestic life that followed the Victorian model of private family life.⁷² To colonial administrators, kamins working and birthing in the coal mines posed a problem: were they the same as urban, educated, middle-class women? If so, how could they be allowed to continue in an industry that apparently was not a fit place for them? If they were different – in that they were able to work in a masculine industry without physiological harm – were they naturally different or had they been malformed by industrial work? If one accepted the latter view, that kamins were physically modified by their work, then it naturally followed that all working women were at risk. From decent to indecent women, the study presented here examines the means by which colonial society has determined who is – and who should be – the industrial worker. The masculinity associated with mining not only excludes the kamins, but also draws attention to the complexities surrounding the questions of womanhood in labour processes in India. Colonial gender discourse created an imagined worker whose motherhood and femininity was in need of protection from the rigours of mining work. Removed from unhygienic mines and masculine machinery, the body of the kamin

thus became a site of reform and policing in order to create an ideal private citizen redolent with the values of decency and femininity, inhabiting only virtuous spaces.

Notes

1. Merchant, *Death of Nature*.
2. Allen, *Militancy of British Miners*, 4.
3. Campbell, *Wigan Pier Revisited*, 21.
4. Robinson, "Women, Mining and Development," 137.
5. McDowell and Massey, "A Woman's Place?"
6. Gibson, "Hewers of Cake and Drawers of Tea," 29–30.
7. Alexander et al., "Labour Crossings in Eastern and Southern Africa."
8. Deb et al., "Artisanal and Small-Scale Mining in India."
9. Quam-Wickham, "Rereading Man's Conquest of Nature."
10. Lahiri-Dutt, "Digging Women."
11. A "discursive invisibility" of masculinity occurs when it is taken as the norm, or natural order of things.
12. Lahiri-Dutt and Macintyre, "Introduction."
13. Curjel, *Conditions of Childbirth in Jharia Collieries*, 1–2.
14. Hopkins and Noble, "Masculinities in Place," 815.
15. Connell, *Masculinities*.
16. See, for example: Chatterjee, *Nation and Its Fragments*; Sarkar, "The Hindu Wife and the Hindu Nation"; and Walsh, *Domesticity in Colonial India*.
17. Humphreys, *History of the Bengal Coal Company*.
18. See Rothermund and Wadhwa, *Zamindars, Mines and Peasants*.
19. Deshpande, *Enquiry into the Conditions of Labour*, 21.
20. Ghosh, *Coal Industry in India*, 130.
21. Deshpande, *Enquiry into the Conditions of Labour*, 21.
22. Government of India, *Chief Inspector of Mines Report*.
23. Grundy, *Chief Inspector of Mines Report*, 7. It would be incorrect to think that life was easy for either men or women in these early collieries, and I am not implying that kamins lived a comfortable life. Grundy describes the working day of a woman miner (at 3):
As a rule, the women and girls go into the mine with their male relations at about 6 a.m. in the hot weather, and at about 4 a.m. during the cold weather The married females return home at about 7 a.m. to cook the food for their relations and themselves; and they take the food into the mine at about 9 a.m., and resume work again at about 10 a.m., after the meal is over, and work on until the male leaves the mine when the shift of work is supposed to be finished for most workers, except the trammers.
24. Alexander et al., "Women and Coal Mining."
25. Stonier, *Chief Inspector of Mines Report*, 2.
26. *Ibid.*, 159.
27. Pramanik, *Coal Miners in Private and Public Sector Collieries*, 79.
28. Stonier, *Chief Inspector of Mines Report*, B2.
29. Kling, *Partner in Empire*.
30. Grundy, *Chief Inspector of Mines Report*, 77.
31. Seth, *Labour in the Indian Coal Industry*, 63.
32. Chaudhury, *Gender and Labour in India*.
33. *Ibid.*, 51.
34. *Ibid.*, 52.
35. *Ibid.*, 53.
36. The average daily number of women workers varied from 20 to 30,000 depending on the season.
37. Nite, "Safety in the Jharia Coalfields," (forthcoming).
38. Samita Sen, *Women and Labour in Late Colonial India*, 140–1.
39. Chatterjee, *Nation and Its Fragments*.
40. *Ibid.*, 148. Sen quotes Jamnadas Dwarkadas.

41. Indrani Sen, *Woman and Empire*.
42. In her first impression from the mines, Cujrel observed: "The pit seemed very dark when we first entered it. After a minute or two the long passages and the walls and floors of coal became visible. The place was full of smoke and bad smell issuing from the small tin kerosene lamps" (quoted in Kamini Ray, "Woman Labour in Mines," 73).
43. Kamini Ray, "Woman Labour in Mines," 74.
44. *Ibid.*, 77.
45. *Ibid.*, 75.
46. Cujrel, *Conditions of Childbirth in Jharia Collieries*, 9.
47. *Ibid.*, 10.
48. *Ibid.*, 11.
49. A steady supply of labourers to the early coal mines was always a problem, poor working and living conditions being primary reasons, and also the indigenous workers' attachment to land. Many old reports discuss this: "To get a sufficient number of employees for the coal mines costs the contractors a considerable amount of trouble and expense" (Grundy, *Chief Inspector of Mines Report*, 7). Consequently, the system later changed and the Coalfield Recruiting Organisation (CRO) was set up to maintain a steady supply of labour to the mines by recruiting "up-country" male labourers through their Gorakhpur Labour Depot on a 12-month contract basis.
50. Arup Kumar Sen, "Labour Control in Colonial India," 3959.
51. Kumaramangalam, *Coal Industry in India*, 52.
52. Cujrel, *Conditions of Childbirth in Jharia Collieries*, 8.
53. Samita Sen, "Gender and Class," 107.
54. Grundy, *Chief Inspector of Mines Report*, 9.
55. Cujrel, *Conditions of Childbirth in Jharia Collieries*.
56. *Ibid.*, 4.
57. *Ibid.* At the end of her report, Cujrel expressed regret that she was unable to interview the very large number of women on the surface loading coal and working at other tasks, women who were paid less than underground workers, were not interviewed, but noted that many of her observations applied to them as well.
58. *Ibid.*, 6.
59. Arnold, *Colonizing the Body*.
60. Mehta, *Physical Welfare of Children in a Factory*.
61. *Ibid.*, Mehta wrote (at 16–17):
 During that period (of pregnancy) there is hardly time for her to look to her personal cleanliness and even if she finds time, the supply of water is not sufficient. This sort of life ultimately becomes second nature to her and the unclean body, dirty clothes giving out bad smell and full of pediculli [*sic*], matter to her very little. Consequently she will be affected with scabbies [*sic*] and ringworm with which she infect her children and these victims in turn infect their whole body as well as other fellow companions.
62. Cujrel, *Conditions of Childbirth in Jharia Collieries*, 2.
63. *Ibid.*, 6.
64. *Ibid.*, 5.
65. *Ibid.*
66. *Ibid.*, 7.
67. *Ibid.*, 14–15.
68. Connell, *Masculinities*.
69. Government of India, *Bill to Regulate the Employment of Women*, 2.
70. *Ibid.*
71. Kimmel, *Manhood*.
72. Donner, *Domestic Goddesses*.

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