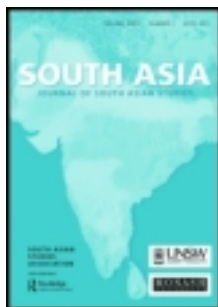


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The Shifting Gender of Coal: Feminist Musings on Women's Work in Indian Collieries

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Abstract

This paper investigates the sharp fall in the number of women workers in Indian coal mines, and explores the specificity of women workers in their demands for gender equity. It examines *four* main factors responsible for the gradual decline in women's participation in Indian collieries: the laws surrounding women's rights to work; the gendered impacts of technology use; the neglect of women workers' needs and interests by the relevant trade unions; and the gender discriminatory attitudes and instruments of the mining companies which have produced a certain kind of ideal worker who is also a gendered being. The paper asserts women's right to mine in order to earn a living, and to demand an equal share in the benefits that mining can offer.

Keywords: coal mining in India, gendered labour, employment in Indian coal mines, gender equality and gender difference, protective legislation

Women in Mines: Special Workers Performing Special Work?

A Drastic Fall in Numbers in Only 100 Years

Between 1900 and 2000, a century significant for its feminist achievements, the percentage of women employed in Indian collieries fell from around 44 percent to less than 6 percent of the mining workforce. In contrast with this decline, the Indian coal-mining industry continued to expand. By the end of the twentieth century, the mining industry had acquired the status of a national icon. Given

This paper has benefited from comments from a number of sources: the audiences at the seminar series in the Gender Relations Centre at ANU; CAPSTRANS at the University of Wollongong; the Gender Commission meeting of the International Geographic Union at Zurich University; and above all from the constructive suggestions of two insightful referees.

this background, the steep drop in the proportion of women in the coal-mining labour force poses a problem: has the social construction of masculinities around mining as an area of work rendered it a hostile space for women? Do women have a right to mine? This question is the ultimate litmus test for the robustness of human rights' claims for women in masculine vocations, and gives us a sense of the multi-faceted discrimination against women in such work. A brief overview of women's industrial work in India in general will provide a better context for understanding women's mining work in particular.

Women's labour in mines needs to be placed in the context of their right to work in other heavy industries, in which their physiological attributes are upheld as a way of justifying female exclusion. Literature on women's labour in India by feminist labour historians has demonstrated how biological arguments have been a consistent feature in discussions around women workers. For example, as early as 1923 Janet Kelman's book raised the importance of legislation in regulating the working conditions of women factory workers.¹ By 1960, confronted with data indicating the steady decline of women workers in some of the older and larger factories, Padmini Sengupta noted that these laws and legislation had in fact produced negative effects on women workers, commenting that the 'very laws which have been passed to protect women are the main causes of their removal'.² More recently, Janaki Nair has confirmed this observation, noting that legal discrimination against women is actually supported by the ambiguities of the legal-judicial framework: what the Constitution of India has given 'with one hand has been taken away with the other'.³ In exploring the causes of declining numbers of women in formal industrial work, Samita Sen also held the protective laws responsible, as they reveal the concern of the Indian state to define women as 'special workers'.⁴ This 'special' nature of women workers is conceived by labour experts in three ways: women's 'natural' task is reproductive labour; their physical frailty circumscribes the kinds of work they can do; and as dependants unable to uphold their own interests, they require the protection of the state. This threefold definition of the female labourer raises a number of questions for women's right to work in mines. How is the work of women in mines understood and governed by the state? How are women situated, relative to men, in coal mining? What does women's current position in mining tell us about the industry? And since the women who worked in the early collieries in India belonged to lower-caste,

¹ Janet Harvey Kelman, *Labour in India: A Study of the Conditions of Indian Women in Modern Industry* (London: George Allen and Unwin Ltd., 1923).

² Padmini Sengupta, *Women Workers of India* (London: Asia Publishing House, 1960), p.7.

³ Janaki Nair, *Women and Law in Colonial India: A Social History* (New Delhi: Kali for Women, 1996), p.4.

⁴ Samita Sen, 'Gender and Class: Women in Indian Industry, 1890-1990', in *Modern Asian Studies*, Vol.42, no.1 (2008), p.78.

Adivasi and other poorer communities, how does the decline in their participation reflect India's conceptualisation of women as economic citizens?

Discourses on the nature of women workers as 'special' build, reinforce, and perpetuate a 'maternal wall',⁵ bringing women's domestic and reproductive roles to the fore. Populist and universalist conceptions of femininity and womanhood tend to naturalise contested gender norms through problematic protective legislation that operates against women's interests. Nowhere are the long-term policing effects of this legislation so evident as in the mines, where masculinities are inscribed onto the bodies of miners and into the mines themselves.⁶ One reason why mining has been characterised by hypermasculinity is that a particular construction of mining has carried over from early industrial mines, where labourers performed physically-arduous work that was considered suitable for men only. This view questions women's ability to perform physically-demanding jobs, usually delivering a negative answer based on biological reasoning, in spite of ample social and historical evidence to the contrary. The resulting masculinist images of mining have been instrumental in establishing ideas of womanhood, giving rise to protective laws which justify the exclusion of women from the rigours of mining work as something that will benefit them.

Work bears an intimate relationship to the autonomy of an individual. Early commentators on Indian industries such as Radhakamal Mukerjee linked the decline of women workers in mines, described overwhelmingly as '*kamins*' (a feminised version of 'coolie'),⁷ with a fall in family earnings, leading to a deterioration in living standards of entire families.⁸ Mukerjee argued that on leaving the mines, it became difficult for women to obtain well-paid continuing employment and that, as a result, the condition of 'unattached women and widows' worsened. Such arguments resonate even now, as civil society organisations that resist environmental degradation in mining areas express concern about the risks faced by labouring women. However, the invisibility of women located *within* the coal industry has become so firmly entrenched⁹ that

⁵ The term implies a binary between working and stay-at-home mothers, and has been used widely in the US to query the notions of women 'opting out' or being 'pushed out' of the job market. For a discussion of these issues, see Joan K. Peters, 'Women's Work: Dismantling the Maternal Wall', in *Women's Studies: An Interdisciplinary Journal*, Vol.31, no.1 (2007), pp.17–33.

⁶ See its elaboration in the introductory section of Kuntala Lahiri-Dutt and Martha Macintyre, *Women Miners in Developing Countries: Pit Women and Others* (Aldershot: Ashgate, 2006).

⁷ Radhakamal Mukerjee, *The Indian Working Class* (Bombay: Hind Kitab, 1947), pp.94–7.

⁸ Mukerjee noted that after women were banned from working underground, only a very small proportion of them were absorbed in surface jobs, and that only in larger collieries. He observed: 'The deterioration of the miner's economic position has been rather unfortunate since this has largely frustrated the effects of the new legislation intended for his good. . . .' *Ibid.*, p.98.

in 2002 the National Commission on Labour observed that '[t]here should be...prohibition of underground work in mines for women workers, [and] prohibition of work by women workers between certain hours'.¹⁰

This paper argues that if all work was open to every adult individual who is willing to do it, then we need to question the simplistic and sweeping judgment of the National Commission. Below, I will make a rights-based case for women working in the coal-mining industry through a situated analysis. Grounded in the notion that feminist theory and scholarship are closely interlinked with transformative practices, this approach highlights the continuing need to explore the emancipatory potential of feminist intellectual endeavour.

Elsewhere, I have shown that an unintended consequence of closing the doors of formal sector mining jobs to women has forced some of them into even more arduous and insecure mining work in the informal sector.¹¹ For example, using the 2001 Indian Census data on so-called 'main workers' and 'marginal workers' as proxy indicators of formal and informal employment in mining and quarrying, I have demonstrated that the proportion of women to the total number of workers in 'informal mining and quarrying' (which can include anything from stone-breaking to carrying and processing) is as high as 33 percent, compared to only 6 percent in coal.¹² Most informal employment is unrecorded and seasonal, so the actual employment figure could be much higher. Certainly in coal, as I have noted elsewhere, the daily wage 'loaders' hired by 'contractors' are mostly women.¹³

⁹ This invisibility is affirmed not only in labour studies such as P. Pramanik, *Coal Miners in Private and Public Sector Collieries* (New Delhi: Reliance Publishing House, 1993), but also by poorly informed and ahistorical statements made by responsible agencies working for the Indian government such as the National Commission on Labour. See National Commission on Labour, *Reports of the National Commission on Labour, 2002–1991–1967* (New Delhi: EconomicaIndia, Academic Foundation, 2003).

¹⁰ *Ibid.*, p.96, point 6.121c.

¹¹ See Kuntala Lahiri-Dutt, 'Digging to Survive: Women's Livelihoods in South Asia's Small Mines and Quarries', in *South Asian Survey*, Vol.15, no.2 (2008), pp.217–44.

¹² 'Main workers' are highest in dolomite mining (33 percent), stone quarrying (23 percent), slate (22 percent), peat extraction (26 percent), clay mining (23 percent), mica (24 percent), and salt (23 percent). 'Marginal workers' are highest in gold ore mining (57 percent), dolomite (40 percent), manganese ore mining (40 percent), aluminium ore mining (70 percent), salt extraction (59 percent), limestone (37 percent), and stone quarrying (38 percent). In general, more women work as 'marginal workers' in a wider range of minerals. See Kuntala Lahiri-Dutt, 'Roles and Status of Women in Extractive Industries in India: Making a Place for a Gender Sensitive Mining Development', in *Social Change*, Vol.37, no.4 (Dec. 2007), pp.37–64.

¹³ *Ibid.*

Factors Responsible for the Decline in the Numbers of Women in Mines

Four interrelated factors are largely responsible for the fall in the number of women as compared to men in Indian coal mines: the laws surrounding women's rights to work; the gendered impacts of technology use; the neglect of women workers' needs and interests by the trade unions operating in the collieries; and the gender discriminatory attitudes and instruments of the mining company, Coal India Limited (CIL), one of the largest public-sector employers.

These factors may have operated in other areas of women's labour as well, but the pervasive view of mining as masculine work entrenched women's functions as purely reproductive agents, and legitimised the alienation of women's rights as miners. Biology is sanctified by cultural values, but these values also lead to legal protectionism to prevent women from doing certain things or exerting their rights to certain kinds of work, not on grounds of proven ability or inability, but on the basis of their gender as defined biologically. Some protective laws around women's work have come to India from the International Labour Organization (ILO), and although India has altered some of them recently,¹⁴ their selective continuation in mining reflects the gendered bureaucratic and technocentric worldview of the coal-mining industry. In the mines, every technological improvement that has made the labour process safer and less arduous, and which has increased productivity, has paradoxically pushed more women out of jobs. The dirty, risky, manual work performed in the early coal mines has been replaced by machines, leading to better pay compared to other industrial sectors. The impetus to improve working conditions was advocated by male-dominated trade unions, which could only bargain for higher wages on the grounds of a shortage of sufficiently-skilled labourers to operate the machines. Further, while the male camaraderie of trade unions has been a vital asset in the struggle against labour exploitation, it has compounded the marginalisation of women workers in coal mines. Since most women mineworkers are illiterate and from lower castes or indigenous groups, they are seen as unable to handle these machines. The male miner thereby appears as *the* archetypal labourer; gradually men's interests have superseded those of the women workers in the coal industry.

¹⁴ India ratified the International Labour Organization's 1998 'ILO Declaration of Fundamental Principles and Rights at Work' (Geneva: ILO, June 1998) [<http://www.ilo.org/public/english/standards/relm/ilc/ilc86/com-dtxt.htm>, accessed 11 Oct. 2011] which is aimed, amongst other things, at eliminating 'discrimination in respect of employment and occupation', recognising the right to the work of one's choice and rights against discrimination as inalienable rights of workers as operating under any system of labour laws and labour policy.

Mining as Work for Women

One argument to support women's right to mine can be made by drawing on a vast range of historical and contemporary evidence of women's active involvement in the industry, and not only in South Asia. Agricola's 1556 book on mining in Europe is perhaps the best example of an early historical document that shows women engaged in mining tasks such as breaking and sorting ores, hauling and transporting them, smelting and processing, and sometimes undertaking the physically-demanding job of working the windlass.¹⁵ Since India has a very long history of metal use, one can speculate that as in Europe,¹⁶ women worked in artisanal mine pits and processed ores in ancient mines. The written record of women's involvement in mining in India exists only from British colonial period with the introduction of a European model of capital-intensive industrial mining. It is likely, however, that records of modern industrial mining do not reveal the full extent of women's participation. The difficulty of enumeration arises because many mines hired women as part of family labour units. As Angela Johns has demonstrated in the case of Victorian coal mines in England, women's labour was fully utilised, but male relatives tended to not acknowledge their contribution.¹⁷ Comparable sources for India are limited, but as I will show in the next section, they seem to indicate the heavy involvement of women in family labour units which were characterised by a sexual 'marking' of specific jobs as feminine or masculine. Not only are women and their work obscured, but cultural understandings loaded onto labour serve to legitimise men and obscure the linkages between power and masculinity.

Women as an Integral Part of Indian Collieries: A Brief History

'Modern' coal mining began with the 'discovery' of coal near the Damodar River in the Raniganj fields in Bengal by two employees of the East India Company in 1774, which pre-dated the other major enterprises of the Company, including tea and jute cultivation.¹⁸ However it was Indian

¹⁵ A windlass is horizontal drum or barrel rotated by a crank used to pull up a cable or rope. It is still used on boats to raise the anchor. Women operated windlasses in early industrial coal mines in Britain as well. For more on women's involvement in early mining practices, see Georgius Agricola, *De Re Metallica* (New York: H. and L. Hoover, Dover Publications Inc., 1556).

¹⁶ Christina Vanja, 'Mining Women in Early Modern European Society', in Thomas Max Safley and Leonard N. Rosenband (eds), *The Workplace before the Factory: Artisans and Proletarians, 1500–1800* (Ithaca and London: Cornell University Press, 1993), pp.100–17.

¹⁷ Angela John, *By the Sweat of Their Brow: Women Workers at Victorian Coal Mines* (London: Croom Helm, 1980), p.20.

¹⁸ 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, the first iron foundry (Bengal Iron Company) began production in 1874. Two British administrators, S.G. Heatly and J. Sumner, on behalf of the Bengal Coal Company, were able to show the profitability of Raniganj coal to the EIC government as early as 1774. See H.D.G. Humphreys,

entrepreneurs who led investment in coal mining once mining took off, following the 1857 expansion of the railways which made the transportation of coal to the industrial-urban areas of Calcutta-Howrah easier.¹⁹ Colonial reports show that mineworkers were both women and men, predominantly from lower castes and indigenous communities. The 1901 *Chief Inspector of Mines Report* states that in the Giridih, Jharia, and Raniganj collieries, about 10 percent of the labourers were Santhals and Kols, while around 60 percent were from 'semi-Hinduised' castes such as Bauris, Bagdis, Chamars, Telis, Turis, Musahars and some Jolhas (weavers), with the rest being 'Mohammedans'.²⁰ Women were part of family labour units, working as loaders who transported the coal cut by male partners from shallow open-cut mines, or *pukuriya khads*, to the containers or tubs.²¹ Such mining processes were not much different from those in early British or Belgian mines. Women in India were sometimes hired as 'gin girls' who had the responsibility for winding the engines to bring the coal baskets up from the pits to the surface, although the evidence suggests that they preferred to work with other women.²²

The 1901 *Chief Inspector of Mines Report* noted that at the turn of the century, India headed the 'British colonies, dependencies and possessions' in coal production. It also noted a surge in the number of workers between 1880 and 1900.²³ The coal-mining industry was the largest employer of miners until the turn of the century, hiring over 67 percent of all mineworkers, and coal mines were always the most important employer of women.²⁴

Women's work as part of the family labour unit was specific to eastern India, to the Raniganj and Jharia fields in particular, and was a result of British efforts to create a 'captive' labour force that would not return to the fields during the cropping season.²⁵ Family-based labour in the collieries meant that certain

'History of the Bengal Coal Company: 1843-1861', Andrew Yule and Company Archives, Calcutta. However, the 'startling success' in digging coal by Alexander and Co. in 1824 marked the beginning of a rapid expansion of coal mining.

¹⁹ Dietmar Rothermund and D.C. Wadhwa (eds), *Zamindars, Mines and Peasants: Studies in the History of an Indian Coalfield and Its Rural Hinterland* (New Delhi: Manohar Publications, 1978).

²⁰ Geo A. Stonier, *Chief Inspector of Mines Report* (Calcutta: Government of India Press, 1901), p.2.

²¹ Kuntala Lahiri-Dutt, 'Kamins Building the Empire: Class, Caste and Gender Interface in Indian Collieries', in Jaelyn Gier and Laurie Mercier (eds), *Mining Women: Gender in the Development of a Global Industry, 1670-2005* (New York: Palgrave Macmillan, 2006), pp.71-87.

²² See Kuntala Lahiri-Dutt, 'From Gin Girls to Scavengers: Women in Raniganj Collieries', in *Economic and Political Weekly*, Vol.XXXVI, no.44 (2001), pp.4213-21.

²³ See Stonier, *Chief Inspector of Mines Report*, p.B2.

²⁴ J. Grundy, *Chief Inspector of Mines Report* (Calcutta: Government of India Press, 1896), p.77.

²⁵ Not all colonies developed the same labour practices. See Peter Alexander, 'Women and Coal Mining in India and South Africa', in *African Studies*, Vol.66, no.2 (2007), pp.201-22.

communities came to be seen by the colonial administrators as culturally attached to mining. In 1901 George Stonier observed: '[T]he bauris have cut coal for so long a time—probably for several generations—that they now consider coal cutting to be a caste-occupation'.²⁶ In 1910 the Burdwan district administrator, J.C.K. Paterson, described some indigenous communities of eastern India as 'hereditary miners' or 'traditional coal cutters'.²⁷

Of the total number of women employed in mines, almost the entire workforce was in the coal mines (except for a small proportion of 13 percent who worked in other mines, such as mica, salt, stones and other such mineral works.). The first *Chief Inspector of Mines Report* of 1896 showed that women employed underground in coal mines in Bengal comprised nearly 44 percent of the mining workforce. The *Report* noted:

As a rule, the 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.²⁸

In 1925 the Chief Inspector of Mines reported that 52 percent of women workers in Raniganj's Equitable Coal Company worked with their husbands or close relatives, while the other 48 percent were 'unattached' (see Table 1).²⁹

Table 1
Ethnicity and Caste: Ratio of Women Coal Mineworkers to Men in Eastern India, 1920–1940

Caste	Women/100 Men of the Same Caste	Caste	Women/100 Men of the Same Caste
Doms	111.0	Kurmis	67.5
Jolhas	59.4	Bauris	55.8
Telis	45.5	Rajputs	27.2
Goalas	24.5	Beldars	102.0
Santhals	87.9	Mallahs	79.5
Bhuinyas	80.1		

Source: B.R. Seth, *Labour in the Indian Coal Industry* (Bombay: Asia Publishing House, 1940), p.129.

²⁶ See Stonier, *Chief Inspector of Mines Report*, p.2.

²⁷ J.C.K. Paterson, *Bengal District Gazetteers: Burdwan* (Calcutta: Bengal Secretariat Book Depot, 1910).

²⁸ Grundy, *Chief Inspector of Mines Report*, pp.3, 7.

²⁹ Government of India, *Chief Inspector of Mines Report* (Calcutta: Government of India Press, 1925), p.9.

Nevertheless generational change was taking place in mining labour. Statistical data reveals a picture of the social mosaic of coal communities as dynamic, in flux, changing; a generation of specialist miners were being bred and the changing nature of the communities was being led mainly by mining women. Table 2 shows the growth of women workers in collieries in the early part of the twentieth century, followed by a sharp drop in the post-colonial period.

Table 2
Women Workers in Eastern Indian Collieries, 1901–2006

Year	Female	Male	% Female : Male
1901	26,520	55,682	47.6%
1921	70,831	115,982	61.1%
1973	15,181	60,620	25.0%
1980	16,094	169,136	9.5%
1990	12,875	165,829	7.8%
2006	9,879	151,855	6.5%

Source: Compiled from B.R. Seth, *Labour in the Indian Coal Industry* (Bombay: Asia Publishing House, 1940); Government of India, Ministry of Home Affairs, *Census of India* (various) [<http://www.censusindia.net/>, accessed 10 Oct. 2011]; Coal India Limited (data collected from the headquarters by author); and Government of India, 'Eastern Coalfields Limited Annual Reports' (various) [<http://www.easterncoal.gov.in/>, accessed 11 Oct. 2011].

Until the late 1920s, the industry generally recognised that it was important to keep women (and children) in the mines in order to keep the family-oriented 'traditional coal cutters' at work. Rakhi Ray Chaudhury has shown that in 1921, women comprised around 38 percent of the total coal-mining workforce and of these, 60 percent worked underground.³⁰

As early as 1896 getting a steady supply of labourers for the coal mines had been a problem. Eventually the Coalfields Recruiting Organisation (CRO), an independent body, was established after the 1929 Royal Commission of Labour in India criticised the industry's dependence on contractors to ensure a steady supply of labour by recruiting 'up-country' male labourers on a 12-month contract basis through their Gorakhpur Labour Depot.³¹ This influx of single male workers had a major impact on the gender composition in the mines.

³⁰ See Rakhi Ray Chaudhury, *Gender and Labour in India: The Kamins of Eastern Coal Mines 1900–1946* (Calcutta: Minerva Associated (Publications) Pvt. Ltd, 1996).

³¹ Poor working and living conditions were the primary reasons for problems in recruiting labour, but the indigenous workers' attachment to the land was also a prime factor. See Grundy, *Chief Inspector of Mines Report*, p.7.

Many indigenous families left the coal mines due to their unwillingness to work with ‘outsiders’, that is, Hindi-speaking single male workers from other parts of India and went instead to work in the tea plantations where they could continue to work as family units. This poignant and gendered moment in the history of modern industrial mining in India was marked by a growing separation of work from the home, which broke the longstanding convention of the ‘protection’ of women in the workplace by their male kin.

In their respective reports in the mid 1940s, both S.R. Deshpande and S.A. Dange—two key Leftist intellectual/activists—deduced that the main reasons for fewer women in mining work were the appalling working conditions and related concerns about safety in the labour-intensive early production processes of Indian collieries.³² Their reports are reflective of concerns over working conditions raised in the final years of colonial rule. These concerns, as well as those around the squalid living conditions in crowded *coolie-bastees* (temporary settlements) and *dhaowras* (shanties around mines that housed workers), influenced trade unionists’ agendas for several decades to come, and also contributed to the elimination of women.

Eliminated in the Name of Protection

Protective Legislation

While women’s reluctance to work with men to whom they were not related led to an exodus of women from the collieries, an even bigger blow to women’s employment in coal mines was dealt by legislation introduced by the ILO in response to rising social concerns in Europe in 1919. Amongst other things, these laws were constructed as protectionist laws which aimed to prohibit women from working in underground mines and during night shifts. The laws were justified by medical evidence of women’s inability to perform hard manual work, but in the context of the debate about women’s role in society following their contribution to labour needs during the Great War, they were also intended to underpin the model of a ‘decent’ woman whose primary responsibilities were reproduction and the home. Women who functioned outside this norm were projected as deviating from the norms of ‘civilised’ feminine behaviour.

³² S.R. Deshpande, *Report of an Enquiry into the Conditions of Labour in the Coal Mining Industry in India* (New Delhi: Government of India, 1946); and S.A. Dange, *Death Pits in Our Land: How 200,000 Indian Miners Live and Work* (Bombay: Asia Publishing House, 1945).

The 1842 British Mines Act, which prohibited women from working underground on the grounds of moral degradation and unhealthy conditions, was the forerunner of the ILO conventions.³³ The ILO's Night Work (Women) Convention of 1919 (C89) was the first global restriction on night work, and it was followed by the first convention specifically framed for mining, the C45 Underground Work (Women) Convention of 1935.³⁴ This prohibited women from being employed 'for the extraction of any substance from under the surface of the earth', and applied to both public and private undertakings.³⁵ The C45 Convention led to the Indian Mines Act of 1952 (Act No. 35) which declared that 'no woman shall, notwithstanding anything contained in any other law, (a) be employed in any part of a mine which is below-ground, and (b) in any mine above ground except between the hours 6am and 7am'. The idea behind preventing women from working in underground mines and at night is not difficult to discern; it was clearly the outcome of the prevailing view that women should be prevented from working at certain times and in certain places in order to maintain their physical safety and societal position.

Most ILO conventions have been revised several times since their original framing; the one on night work was revised in 1934, 1948, and most recently in 1990, introducing a clause permitting women to work at night 'in specific activities or occupations'. In 1975, the International Labour Conference passed a motion that 'women should be protected "on the same basis and with the same standards of protection as men"'.³⁶ In 1985, the Conference passed a resolution calling on all member-states to 'review all protective legislation applying to women in the light of up-to-date scientific knowledge...and to revise, supplement...or repeal such legislation'.³⁷ A 2001 ILO Committee of

³³ The European countries which followed the UK included Germany and Sweden, although women continued to work in France and Belgium until well into the twentieth century, and in Russia until the revolution in 1917. See Carolyn Malone, 'Gendered Discourses and the Making of Protective Labor Legislation in England, 1830–1914', in *Journal of British Studies*, Vol.37, no.2 (April 1998), pp.166–91; and Alexander, 'Women and Coal Mining in India and South Africa', pp.201–22, esp. p.203. Throughout the industrialised North, changes in family law went together with social and economic change affecting the position of women, but Indian (labour) legislation has followed that of the ILO. See Angeles J. Almenas-Lipowsky, *The Position of Indian Women in Light of Legal Reform* (Wiesbaden: Steiner, 1975), p.3.

³⁴ See the 2001 survey by the ILO, *Night Work of Women in Industry: General Survey of the Reports Concerning the Night Work (Women) Convention 1919 (No. 4), the Night Work (Women) Convention (Revised) 1934 (No. 41), the Night Work (Women) Convention (Revised) 1948 (No. 89) and the Protocol of 1990 to the Night Work (Women) Convention (Revised) 1948*, International Labour Conference 89th Session, 2001, Geneva, Report III (Part 1B) [<http://www.ilo.org/ilolex/english/surlist.htm>, accessed 19 Mar. 2008].

³⁵ Exceptions include women in management, women in health and welfare, and women who go underground as part of their training for non-manual occupations.

³⁶ ILO, *Night Work of Women in Industry*, Report III (Part 1B), para. 60.

³⁷ See *ibid.*; and George P. Politakis, 'Night Work of Women in Industry: Standards and Sensibility', in *International Labour Review*, Vol.140, no.4 (2001), pp.403–28.

Experts on the Application of Conventions and Recommendations (CEACR) noted that these laws were incompatible with other international bills of rights for women, such as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), adopted in 1979 by the United Nations General Assembly. In 2002 in mining, a Working Party on Policy for Revision of Standards of the ILO recommended the removal of the C45 Underground Work (Women) Convention and requested countries to sign the C176 Safety and Health in Mines Convention.³⁸

In India these efforts by the ILO to remove protective conventions have largely been ignored, due to an ongoing commitment to the protection of women by the state. As mining work has now assumed a hegemonic masculinity, and the history of women's contribution to the mining industry has been largely obscured, the state's resistance to change has not been met by protests from Indian feminists. Indian feminists have focused on other areas, such as night work for metro-based middle-class call-centre employees, or the impacts of large mining projects on women and their communities. This neglect of women's right to mine could be because of the physical isolation of the mines, or because of the ethnic composition of women mineworkers—their lower caste and tribal background. The complex conflicts and the host of social and environmental problems surrounding large mining projects could also have made the issue of women in mining too hot to handle.

In my view, the ambiguity about women's right to mine partially reflects an overly Western-influenced feminist quandary between women's need for protection and their right to equality, and whether women workers should be seen primarily as 'women' or as 'workers'.³⁹ Kessler-Harris, Lewis and Wikander describe protective legislation as the 'central tension' around women's work outside the home: 'In different forms, they occupy a pivotal position in the debates of every industrial country, pitting the demand for equality in the workplace against the well-intentioned efforts of men and women to protect family life'.⁴⁰ Ultimately, the feminist debate hinges upon the

³⁸ ILO, 'Follow-up to the Recommendations of the Working Party', Governing Body Working Party on Policy Regarding the Revision of Standards, 283rd Session, Document reference GB.283/LILS/WP/PRS/1/2, March 2002, para. 13.

³⁹ This predicament is extensively discussed in Susan Lehrer, *Origins of Protective Legislation for Women 1905–1925* (New York: State University of New York Press, 1987); and Ulla Wikander, Alice Kessler-Harris and Jane Lewis (eds), *Protecting Women: Labour Legislation in Europe, the United States and Australia, 1880–1920* (Urbana: University of Illinois Press, 1995).

⁴⁰ Alice Kessler-Harris, Jane Lewis and Ella Wikander, 'Introduction', in Ulla Wikander, Alice Kessler-Harris and Jane Lewis (eds), *Protecting Women: Labour Legislation in Europe, the United States and Australia, 1880–1920* (Urbana: University of Illinois Press, 1995), p.6.

question of ‘difference/equality’ between genders: yet is protecting women not equivalent to discrimination?⁴¹ Maternity leave is perhaps the most widely-known protective legislation that women claim. Menstruation leave also exists in some Asian countries.⁴² However, protective legislation is ‘universalist’ in that it does not differentiate the category ‘women’. The Indian Mines Act of 1952 might appear ‘women-friendly’ because it has some clauses dealing solely with women workers: conditions such as the mandatory provision of crèches, 12-hour breaks and separate pit-head toilets and showers to ensure separate physical cleaning spaces for women. These provisions, written into the law, appear egalitarian. However women who work in mine offices neither need these provisions, nor are aware of them. When the totalising narratives of protective legislation assume explicitly restrictive forms, such as those limiting night work and underground work in mines, they can have far-reaching and oppressive gender-based consequences. In Indian mines, protective legislation has primarily affected the earning capacity of poor, low-caste, and tribal women workers, thus revealing a class difference between the field-level workers and the female administrative staff in mine offices.

Technology Pushes Women out of Collieries

A range of technological inputs is required in extractive industries and mining is heavily dependent on tools and machines for mineral exploration, extraction, transportation, and processing. This increases productivity and safety, and improves working conditions, but the impact of technology is not gender-neutral. During the 1970s, second-wave Western feminists demonstrated the gendered nature of technology, in terms of both its impact, and in making

⁴¹ As recently as 1991, Stanford and Vosko showed that women in Russian cities faced the dilemma of choosing between the ‘double day’ of relentless work outside and inside the home or a husband who would support the family. In the same year, the Court of Justice of the European Community decreed that national provisions forbidding night work for women contradicted the Community’s regulations mandating equal opportunities for women and men. Both France and Italy had restrictions on women’s night work, and whilst the laws were never rigidly applied, it was argued that women are more exposed to risks of violence or sexual assault at night. In India, there is now a similar wave of sentiment against the relaxation of night-work laws for female call-centre employees, citing instances of rape and sexual harassment of these young women. See Jim Stanford and Leah F. Vosko (eds), *Challenging the Market: The Struggle to Regulate Work and Income* (Montreal and Kingston: McGill-Queens University Press, 2004).

⁴² Indonesia is among the few Asian countries that offers two days paid menstruation leave each month for every working woman. In 2002, when new labour laws were implemented to pave the way for more foreign capital investment, a clause ‘subject to medical check up by a doctor’ was attached to this leave. The need for a medical check up has been controversial for women working in the urban-based factory sector. Indonesia also offers breastfeeding breaks to lactating mothers. However Indonesian feminist labour leaders argue that these laws are rarely applied or taken advantage of by women. See Kuntala Lahiri-Dutt and Kathryn Robinson, ‘Period Leave at the Coalface’, in *Feminist Review*, Vol.89, no.1 (2008), pp.102–21.

visible women's contribution to production. It is now recognised that the impacts may be mixed, and that in addition to gender, aspects such as race, ethnicity, and class also play important roles in producing different impacts for different groups of women.⁴³ Generally, in any industrial production, technology impacts differently on women's and men's labour because a gendered division of labour is embedded in the work each does. This point was emphasised in Sen's work on the jute industry in India: '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'.⁴⁴ This is also true also for mining, where women generally perform repetitive chores such as carrying and processing, revealing a vertical, sex-specific division of labour that relegates women to the bottom strata of low wages and poor working conditions.

In mining, higher technology has tended to displace women's labour. For example, evidence from the coal-mining industry in Japan shows that the introduction of new technology destabilised the *naya* (or 'stable') system of work for women in pre-capitalist coal mines.⁴⁵ The technological improvements that characterised the capitalist expansion of coal mining in Japan put most women out of work in mining, with the percentage of women workers falling from 26 percent in 1925 to 10 percent in 1935. Similarly, in Indian collieries the introduction of deep-shaft mining in the late 1920s was accompanied by most drastic falls in women's employment.⁴⁶

Many coal industry experts hold the Indian government's ratification of the ILO Convention primarily responsible for the decline in women's participation.⁴⁷ However labour experts suggest additional reasons, such as the decline in coal prices between 1923 and 1936, and the closure of many small and non-mechanised collieries which employed a considerable number of women.⁴⁸ However both Ghosh and Seth believe that the primary reason for the growing exclusion of women mineworkers was the introduction of labour-saving mechanisation processes in the larger collieries.⁴⁹ Seth notes that technological

⁴³ For an overview of this discussion, see Judy Wajcman, *Technofeminism* (London: Polity Press, 2004).

⁴⁴ Samita Sen, 'Gender and Class: Women in Indian Industry, 1890–1990', p.107.

⁴⁵ See Masanori Nakamura, *Technology Change and Female Labour: Manufacturing Industries of Japan* (Tokyo: United Nations University Press, 1994), pp.15–16.

⁴⁶ Ray Chaudhury, *Gender and Labour in India: The Kamins of Eastern Coal Mines 1900–1940*.

⁴⁷ A.B. Ghosh, *Coal Industry in India: An Historical and Analytical Account, Part 1* (New Delhi: S. Chand, 1977).

⁴⁸ B.R. Seth, *Labour in the Indian Coal Industry* (Bombay: Asia Publishing House, 1940), p.141.

⁴⁹ Seth observes: 'The loading and screening plants deprived women of much of their surface loading work for which they were chiefly employed. The introduction of haulage reduced the tramping work (the work of

changes transformed the social fabric in colliery communities because ‘the wives and daughters [of male miners] ceased to work underground’.⁵⁰ In India, the ban on women mineworkers was ‘temporarily eased’ during World War II to supply the increased demand for coal,⁵¹ but at the end of the War, the demand for coal slowed and with an excess of labour, women were the first to be retrenched. The post-colonial nationalistic fervour that accompanied heightened trade union activities in collieries during the 1950s soon forgot the women mineworkers, as Kumarmangalam shows in her 1973 book.⁵² After the passage in 1952 of the Mines Act, virtually no re-training of women mineworkers occurred, which could have placed them in cleaner and physically less-demanding jobs. As a result, those women who traditionally worked in mines lost the opportunity to get better-paid jobs. Being nearly illiterate, they instead had to find work in labour-intensive, poorly-paid, and temporary jobs near the collieries on construction sites and in stone quarries. These jobs offered harsher working conditions, and being part of the informal economy, fell outside the official gaze.

The relationship between technology-aided productivity increases and the decline in the numbers of women workers has been most notable since the nationalisation of coal mines in 1972–73. In recent decades, the industry has seen intensive technology as a panacea for poor safety and low productivity. Brand new technologies such as the longwall process for underground mining have been utilised in an effort to make older mines more profitable; mechanised open-cut mining using bulldozers, dump trucks, conveyers and other motorised equipment now accounts for over 80 percent of Indian coal production. But as work became easier and safer, women workers were not trained to operate these new machines, nor did the industry encourage the employment of women workers.

Trade Unions Neglect Women Workers’ Interests

Mining has conventionally been one of the most important areas of labour resistance throughout the world, and one would expect that the decline in

physically pushing loaded wagons). The using of pumping engines for bailing water removed another important task for women’. Previously men had refused to do many of these tasks as they were considered ‘womanish’. *Ibid.*; and Ghosh, *Coal Industry in India*, p.171

⁵⁰ Seth, *Labour in the Indian Coal Industry*, p.75.

⁵¹ See Ghosh, *Coal Industry in India: An Historical and Analytical Account*, p.140; and K.C. Mahindra, *Indian Coalfields Committee Report* (New Delhi: Manager of Publications, Government of India, 1946).

⁵² For more details, see S.M. Kumarmangalam, *Coal Industry in India—Nationalisation and Tasks Ahead* (New Delhi: Oxford and IBH Publishing Co., 1973).

women's numbers would be noted at least by the leaders of coal-mining trade unions. Although women's supportive roles in mining struggles are legendary, they have never been an integral part of mining unions anywhere in the world.⁵³ It has been suggested that the poor working conditions of women and children in colonial collieries was in fact critical to the birth of the labour movement in India.⁵⁴ However the All India Trade Union Association, founded in 1920, dealt with 'women workers' issues' by forming separate trade unions for women. The separation of women's interests as 'special' from general workers' issues meant that men in trade unions dealt with 'bigger' and more pressing agendas. This separation, though changed later, left a legacy by segregating Indian working-class interests on a gender basis, and by encouraging a view of the industrial labour force as the domain of male workers. In 1960, Sengupta observed that 'the question of women in Indian industries is still considered in many circles as a minor problem compared to other labour problems'.⁵⁵ Little had changed by 1997, when Fernandes observed that 'the question of gender has been viewed by unions as a marginal concern'.⁵⁶ This is because the conventional wisdom of trade union leaders is to deal with what they see as the most important problems such as lockouts and mass retrenchments. These bigger problems, however, subsume issues relating to the position of women workers within the industry. With a gradual decline in numbers, women's issues have become an even less significant problem for the unions.

The reasons why trade union leaders choose to exclude women's issues or relegate them to a secondary position in their list of priorities are complex. In the collieries, trade union leaders saw the presence of women in mines as undesirable and exploitative, and actually lobbied for the regulation of women's labour there. Additionally, some trade unions endorse the political ideology of a monolithic working class and are uncomfortable with the possibility of a conflict of interest between male and female workers. The size and power of nationally-federated coal-mining industry trade unions mean that their leaders' voices have assumed great authority in deciding who represents the working class in India. If the context-specific, working-class traditions that developed in the collieries—the ethnicity of women mineworkers, the nature of

⁵³ Anne Munro, *Women, Work and Trade Unions* (New Delhi: Discovery, 1999).

⁵⁴ The real 'politicisation' of the trade union movement (i.e. the split from Congress politics and 'bourgeois ideology') took place on the coalfields of Jharia on 30 November 1921. The venue was 'packed' with miners, men, women, and even children. Sen notes: 'All India Trade Union Congress was founded in Bombay session but without the Jharia session its foundation was not complete'. See Sukomal Sen, *Working Class of India: History of Emergence and Movement, 1830–1970* (Calcutta: K.P. Bagchi, 1977), p.190.

⁵⁵ Sengupta, *Women Workers of India*, p.67.

⁵⁶ Leela Fernandes, *Producing Workers: The Politics of Gender, Class, and Culture in the Calcutta Jute Mills* (Philadelphia: University of Pennsylvania Press, 1997), p.38.

worker recruitment, and the physical distance of coal mines from metropolitan centres where political power resides—are added to these voices, then one begins to understand the formidable reasons why coal-mining industry unions ignore the rights of women. The deeply-entrenched norms and rules of labour in the collieries are the product of its unique colonial history;⁵⁷ many of these norms are rooted in the older, rural, social hierarchies and only partly resemble modern wage-based relations.

The coal-mining industry has a long history of unionism; as the trade unions became more powerful in the 1950s and 1960s, a number of them grew in strength in mining areas,⁵⁸ and soon their reluctance to have women in mines became apparent. Sen argues that in Indian industry in general, ‘the unions played an active role in eliminating women and hindering women’s recruitment’.⁵⁹ This could have also been one of the repercussions of the establishment in other modern industries of the concept of a minimum wage which was predicated on the notion of the ‘male breadwinner’. As the trade unions and women began to go their separate ways, compounding their mutual distrust of each other, many women workers began to accept and even support the idea that men are primarily responsible for the maintenance of the family. Formerly, lower-caste and indigenous women had no concept of the male breadwinner—it was taken for granted that women and men would work together to support the family. Barnes’ analysis of women’s struggles in the Bhowra colliery community in the 1970s clearly shows how frustrated women workers were with the lack of support from trade unions for their struggles to earn a decent livelihood. Many trade union leaders reinforce statist views of women as primarily reproductive agents and mothers,⁶⁰ sometimes to enhance their power

⁵⁷ The informal system of *badli* (labour replacement in which a relative, co-villager or acquaintance goes to work in place of an employee based on a mutual understanding) is a well-accepted work tradition that is still practised in some collieries. Such relics of past labour organisation continue; even in management structures there are sometimes ‘agents’ whose primary tasks involve labour management.

⁵⁸ Barnes argues that 1867 marked ‘the beginning of the most militant decade of colliery workers’ struggles in the history of the coalmines in India’. She puts the responsibility on the radical Naxalbari movement in West Bengal (that threatened to spread to Bihar), the deepening economic crisis, the shortage of food grains and a famine-like situation in Dhanbad, the wage increase recommended by the Pay Commission which encouraged mine owners to retrench old workers, and above all, the rise of A.K. Roy, a militant trade union leader from Sindri. See Lindsay Barnes, ‘Roti Do Ya Goli Do: Stories of Struggle of Women Workers in Bhowra Colliery, India’, in Kuntala Lahiri-Dutt and Martha McIntyre (eds), *Women Miners in Developing Countries: Pit Women and Others* (Aldershot: Ashgate, 2006), p.326.

⁵⁹ Samita Sen, ‘Gender and Class: Women in Indian Industry, 1890–1990’, p.84.

⁶⁰ The union–party–state nexus or political incorporation of national trade unions has been a defining characteristic of the industrial system in India, encouraging commentators to place it closer to a model of societal corporatism. See Fernandes, *Producing Workers: The Politics of Gender, Class, and Culture in the Calcutta Jute Mills*, p.29.

in their own spheres of influence. In effect, male trade union leaders *choose* to look away.⁶¹

The numbers of women in colliery trade unions has thus been consistently low. In 1950–51, of over 68,000 union members in the Indian coal-mining industry, only around 9,000 were women.⁶² Yet at the same time, about 35 percent of all workers in these mines were women.⁶³ Venkata Raman and Jain blame exclusionary policies for the low representation of women in the trade unions of modern industries.⁶⁴ Mukhopadhyay, however, saw the low participation as a reflection of the concentration of women in the informal sector.⁶⁵ The middle-class leadership of unions and their class prejudices may have hindered the fuller participation of women in colliery unions. The reluctance to include women could also reflect the status aspirations of adult male workers and their desire to maintain authority within the family. The male-dominated nature of trade unions tends to preclude them from advocating for women's issues. The masculinity of the mining industry is reflected in the leadership of unions such as the Colliery Majdoor Sabha of India (CMSI). By contrast the textiles industry has produced powerful women leaders. This lack of powerful female leadership highlights the specific case of the collieries. As noted by Sarkar and Bhowmik, low participation rates or membership numbers do not necessarily reveal the extent of women's marginalisation in the trade unions.⁶⁶

One, therefore, returns to the perceived and/or constructed masculinity of mine work and the culture of mining communities as key reasons why colliery trade unions envision, represent, and reconstitute a working class that is essentially masculine. The support of trade unions could have been crucial in protecting the interests of women in the mines. For example, the unions could have rectified the declining number of women workers by mobilising them and protesting against discriminatory policies. However in recent years mining unions such as the CMSI have chosen to protest about other issues in order to mobilise public opinion, campaigning for example against environmental

⁶¹ Anna Lindberg has investigated this in more detail in her essay on cashew workers in Kerala. See Anna Lindberg, 'Class, Caste and Gender among Cashew Workers in the South Indian State of Kerala, 1930–2000', in *International Review of Social History*, Vol.46 (2001), pp.155–84.

⁶² Sengupta, *Women Workers of India*, p.70.

⁶³ See R.K. Akhauri, *Labour in Coal Industry in India* (New Delhi: Sterling Publishers Pvt. Ltd., 1969).

⁶⁴ C.S. Venkata Raman and Harish C. Jain, 'Women in Trade Unions in India', in *International Journal of Manpower*, Vol.23, no.3 (2002), pp.277–92.

⁶⁵ See S. Mukhopadhyay, 'Locating Women within Informal Sector Hierarchies', in *Indian Journal of Labour Economics*, Vol.40, no.3 (1997), pp.383–492.

⁶⁶ K. Sarkar and S.K. Bhowmik, 'Trade Unions and Women Workers in Tea Plantations', in *Economic and Political Weekly*, Vol.33, no.52 (1 May 1998), pp.L50–L52.

degradation in the Raniganj area. But women's issues have not been considered worth taking up.

Selectively Recruited and Retired

The routes of entry into mine-working are limited for women. In the years after nationalisation, jobs were handed out as compensation for the loss of land or for the death of a close relative. But women did not get the jobs given as compensation for land loss because in most cases the legal owner of the land was male, even if the women in the family worked on it. There was an unwritten preference for men workers by both the company and even by the families of the land-losers.⁶⁷ Even 'jobs on compassionate grounds'—those offered after the accidental death of a male or female household head—tended to be offered to the male heirs, as the management preferred them over widows. Direct recruitment of indigenous women became negligible and remains so. Only a handful of women are now directly hired as *kamins*, some for menial tasks such as sweeping—the lowest level of the female workforce—although some middle-class educated women are hired as typists and computer operators.

Besides the shrinkage in opportunity, the Voluntary Retirement Scheme (VRS) has also been a factor in the declining numbers of women mineworkers. VRS is an instrument used widely in CIL to reduce the number of paid workers. There is no official data to prove that women are specifically asked to leave or that VRS is used as a means to get rid of women. However during my fieldwork in the collieries run by Eastern Coalfields Limited, I met a number of women who were being encouraged to return to the home by taking VRS. Both gender-selective recruitment and retrenchment operate informally and without protest from either the trade unions or the 'retired' women.

The explanation for this silence lies in the representation of labour in the industry as problematic; all efforts to improve the productivity of mines hinge upon identifying 'unproductive' labour.⁶⁸ The low level of literacy and poor support from the trade unions, and the absence of institutionalised skill-imparting programmes, mean that women mineworkers can be more easily removed. The view of women as unsuitable for mining work is now widely accepted by higher management; women too seem to have internalised this

⁶⁷ 'Land-loser' recruitment has become far less common, largely as a result of the increase in the mechanisation of tasks that were previously carried out manually.

⁶⁸ See Kuntala Lahiri-Dutt, 'State, Market and the Crisis in Raniganj Coalbelt', *Economic and Political Weekly*, Vol.XXXIV, no.41 (1999), pp.2952–56 for a critique of the economic arguments used by CIL.

view. The processes of masculinisation operate at the highest levels, for example, in the prohibition on women students taking the mining engineering course at the Indian School of Mines University on the grounds that they are unable to work underground or on night shifts. The concomitant paucity of women engineers has resulted in a completely masculinised higher management of the industry.⁶⁹

Establishing Women's Right to Mine as a Human Right

Not all protective legislation is unnecessary; some legislation has enabled countries to adopt humane values, and many workers continue to enjoy some form of protection at work. In the context of a special workplace like mining, the laws illuminate a grey area—a woman's biological specificity as well as her demand for gender equity. Yet it is also true that such laws create and reinforce commonly-held beliefs about women's 'special' duties, and hinder changes to the roles women could play in working in new forms of production. The biologically-determinist protective legislation that regulates women's work was established in the 1920s with certain 'guiding assumptions',⁷⁰ which were based on a certain image of women. This image is neither valid nor justifiable today.

The exclusion of women workers from mines also draws attention to the complexities around the 'woman question' in labour processes in India. Sometimes, even a silence can be eloquent, and can be interpreted as saying something about the standpoint of those who remain silent. While the comments of the National Commission on Labour Report (cited earlier) were received with silence, the introduction of night-work legislation for middle-class women working in metro-based call centres was covered extensively by the media. This contrast either reflects that women's work in mines is still seen in India as some kind of a social aberration, or that there are no lobby or interest groups representing women mineworkers despite their absolute numbers

⁶⁹ I am treading on tricky ground here; women are not outside society and they imbibe the masculinist images of, and ideas about, mining as much as men do. All career choices must be made equally free to everyone, only then can we know whether, for example, women *want to* study mining engineering. From my experience in Indonesia, I can say that many middle-class women there graduate from mining engineering courses to take up well-paid jobs in mining companies. It is a different issue that, in general, women tend to remain concentrated in lower-paid and 'softer' departments such as environment or purchasing in mining companies, whether in Australia, Indonesia, or elsewhere.

⁷⁰ Fernandes observes: 'Women workers in all countries require special treatment because they need more protection than men in their working environment in view of their tenderness, sensitiveness and their influence in the home, including reproduction function and in bringing up future generations of the country'. See Fernandes, *Producing Workers: The Politics of Gender, Class, and Culture in the Calcutta Jute Mills*, p.42.

probably being greater than the number of women night-workers in call centres.

Confronted with the historical evidence of women's contribution to the mining industry, I wonder how the state, the various trade unions, and civil society would respond to this? Would they hold on to the belief that the *kamins* were less feminine than they should be, or that they were gross deviations from the model of an imagined, decent, woman? (When *kamins* were joining the collieries for work, by contrast middle-class women were being increasingly domesticated following a Victorian model of family life.) Women working in the mines pose a dilemma: were these *kamins* the same as their urban, educated, middle-class sisters? If so, how could they have been allowed to continue working in an industry that was not considered to be a fit place for women? 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 transformed somehow by industrial work? If the latter, then all women were 'at risk'. These attitudes towards women, which created the imagined female worker whose femininity and motherhood were in need of protection, continue today.

The post-colonial *kamin* remains a site of reform to create an ideal citizen, an ideal worker who is also a 'decent' woman. Because she is a mother and a decent woman, this ideal worker should only inhabit virtuous spaces with access only to suitable kinds of work, and at restricted times and places.

There is no physical or biological evidence against women's ability to work in mines; on the contrary, there is evidence that the non-availability of better-paid and mechanised mining work throws women into *more* physically-arduous informal-sector work in small mines and quarries. Biological arguments use women's bodies as sites to further political arguments, and the exclusion of women's labour from underground collieries is a manifestation of the controlling and disciplining effects of biological politics at its worst.

Ultimately, we return to the simple question: Do women have a right to mine? The answer is also straightforward: Women *have* a right to mine—and to all mining work—because it is one of their fundamental claims to earn a living as human beings, and to have an equal share in the benefits that the mining industry could theoretically offer to its employees. The heavily masculinised work of underground mining provides a context where the strength of human rights (and women's rights) can really be tested. The underground mine pits might then be turned into platforms where we can begin to overcome the many-faceted oppression of, and discrimination against, women in India.