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Laurie Mercier

Washington State University, US

Bordering on Equality: Women Miners in North America

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Presenter: Laurie Mercier, Professor of History, Washington State University, US

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I am very grateful to Kuntala Lahiri-Dutt and the RMAP Program for inviting me to participate in this workshop and for their tremendous work in examining the issues of gender equity and women's empowerment in mining communities. As we collectively explore the social, economic and political factors which affect the relationship between mining, gender and sustainable livelihoods of the Asia-Pacific region, I will share some observations based on my work concerning gender in the development of this global industry and more specifically on women miners in North America.

Mining has often been upheld as the most "masculine" of industries, its employers, male employees, unions, and communities traditionally preventing women from entering the workplace, whether in 16th century Peru or 21st century South Africa. As many scholars have demonstrated, these restrictions are historical and social in nature, constructed to limit women's employment and encourage their reproductive labor at particular points in time. Yet they have been enforced as if they were "natural."

In Canada and the United States, two decades, the 1940s and 1970s, offer exceptions in women's employment in mining and therefore some insights on how women and their advocates might dislodge gender barriers. World War II presented a labor shortage that forced governments, companies, and unions to recognize that women could (in their minds temporarily) fill critical mining positions. Later, the feminist movements of North America compelled governments to open up former male bastions such as mining through Equal Employment legislation.

This paper will explore the reactions of male employers and co-workers as women challenged barriers to mining work and how women found, kept, or were terminated from employment. Structural and cultural resistance appeared unyielding; how did women overcome obstacles to their employment? At what times and how did companies and unions attempt to break down or sustain rigid ideas of gender roles? Why did not the numbers of women miners increase more substantially over the next several decades?

My paper title, “Bordering on Equality,” signifies at least two kinds of borders. The physical border between nations, in this case the U.S. and Canada, historically has not impeded the movement of capital and ideas about gender. Women in mining have also been positioned on the borders (or barriers) of a male-dominated occupation. Despite legislative efforts such as EEO most women miners have been discouraged by entrenched cultural resistance to their employment and economic factors including mechanization, plant shutdowns, and declining jobs. These examples from Canadian and U.S. mining workplaces illuminate the difficulties in instituting gender equality, and this historical perspective may suggest some lessons or directions for how to overcome those inequalities in mining worldwide.

Masculinity and Mining: the Background

Two important recent, comparative anthologies reveal that gender constructions of work, family, and militancy have been central to this masculine world, and that women have played a more critical role in mining enterprises and communities than previously understood. In *Women Miners in Developing Countries*, Kuntala Lahiri-Dutt and Martha

Macintyre feature a number of essays that focus on artisanal and small mining that traditionally employed larger numbers of women, who combined their earnings from mining with agricultural subsistence activities. Even when women were excluded from digging underground, they played pivotal economic roles on the surface in transporting and processing the diggings.¹

With tremendous variety in the world's mining enterprises, how did the occupation become so singularly male? In the collection of essays that Jaci Gier and I co-edited, we found that gender exclusions emerged at particular historical moments and were hardly uniform across the world.² For example, women in precolonial Africa mined below and above ground, while in the precolonial Andes women were viewed as “bad luck” underground although they were central to mining work. Global historical forces of colonialism or capitalism often altered customary gender roles in mining, limiting women's traditional rights over mineral wealth.³ Attitudes toward women and mining were uneven in industrial societies as well. For example, the British parliament officially prohibited women from underground works as early as 1842, although women miners continued to work in some regional pits into the early twentieth century. Elsewhere in the British Empire, Indian women labored in British-owned mines for a fraction of the wages paid to their male counterparts in the United Kingdom. And even in societies such as Japan, where gender roles were rigidly enforced, surprisingly, women continued to mine underground until the mid-twentieth century.

Despite the variety of places in the world and mining activities represented in these two collections of essays—from gold to coal to copper and tin—a clear pattern emerges that links women's lives across time and space: as the processes of globalization

have expanded into postcolonial spaces, mining has become more masculine. These books conclude that the position of women in mining declines as the operation becomes more capitalized, centralized, and mechanized. Whether in Asia, Europe, the Americas, or Africa, societies and employers normalized women's exclusion from working underground through an elaborate set of superstitions, beliefs, traditions, sexual metaphors, and seemingly "rational" justifications, which were enforced through legislation or cultural taboos.⁴

Since we know that ideas about gender roles are historically and socially constructed, we need to know when, why and how mining became particularly resistant to women working underground. In Lahiri-Dutt and Macintyre's anthology, Linqing Yao provides a fascinating glimpse at how the numbers of Chinese women in mining rose and fell with changing political and economic tides. Communist emphasis on equal rights ended Confucian gender restrictions, but after economic reforms, women in post-1990s China have seen their share of mining employment decline. In the 1950s and 1960s women miners were glorified as "Iron Girls," but in reality they still represented a minority of workers underground. Some high profile accidents in the 1980s led to the 1992 "Provision for the Protection of Working Women," which prohibited the employment of women underground. With a new emphasis on markets, women workers were seen as more expensive with their maternity leave provisions, and less reliable than men. As a result of these restrictions, Chinese women have moved figuratively underground, working illegally in mining activities and losing prior benefits.⁵

This is but one example that clearly illustrates the vacillation of employers and the state in either embracing or rejecting women miners, almost always tied to structural

conditions. Companies or nations saw their own interests tied with patriarchal male miners, and reinforced gendered practices, although they alternately viewed women as assets or liabilities in efforts to control labor. Companies often encouraged marriage and constructed family housing in order to sustain a more docile workforce; at other times, they tried to limit the number of women in a mining camp. Although men came to dominate most mining, women's reproductive and domestic work was essential to the industry. As a U.S. Women's Bureau study concluded in the 1920s, miners' wives were of "peculiar industrial and economic importance" to keep miners in the region.⁶ Moreover, women's waged and unwaged work played a critical role in the basic economy of the industry. Women created economic niches through direct relationships to mining in surface operations that admitted them—and in the brothels, taverns and cafes, households, and other businesses that maintained male miners.

Since mining has historically excluded women from employment, much research has focused on ways that women through their reproductive labor supported the industry and in their militancy helped male miners through strikes and other labor actions. Despite company hopes that they would "settle" and make more dependent a male workforce, women often became the most militant community members in demanding better wages and living conditions. They often manipulated gender assumptions to more effectively and physically assert strike goals when men were enjoined from more public demonstrations through injunctions, or military and police violence. Labor movements preserved the ideals of female domesticity and the male worker as head of household, but women creatively exploited these assigned roles to pursue their own interests and their own forms of protests. As Thomas Klubock found in Chile's El Teniente, for example,

women used the “family wage” ideal to claim their rights to husbands’ wages and benefits as well as work with men to extract economic and social concessions from Kennecott Corporation.⁷ Abundant examples from the world’s mining communities reveal how women exaggerated gender claims in solidarity for what they viewed as family and community, not just union, efforts. As Janet Finn documents in Chuquicamata, Chile, when the company tried to crush a strike, groups of women hid lunch buckets and even seized and dressed strikebreakers in women’s clothing to ridicule their lack of manhood in failing to support the strike.⁸

In the process of supporting men’s labor rights, women often came to contest the gendered rules for protest and question their own roles in unions, families, and communities. Because these moments of protest often appeared as much about challenging patriarchy as capitalism, male miners and unions were not always supportive of women’s independent militancy as they were when women performed more traditional support roles during strikes. Despite women’s proven critical role in labor actions, male miners, as June Nash discovered in her study of Bolivian tin communities, often “ordered wives back to the kitchen.”⁹ But women and men repeatedly struggled over and renegotiated those gender roles.

Some of the greatest but less visible struggles occurred when women sought access to the mines that would allow them the opportunity to earn livelihoods equal to men. A historical approach allows us to see how gender conceptions are fluid and intersect with other identities such as class, race, culture, and nation, as we examine how a minority of women boldly asserted their economic and social rights to do “men’s” work.

Women and Mining: the North American Context

There are two types of women miners that have drawn most historical attention: the intrepid individual prospectors of different class backgrounds who prospected the Rocky Mountain Wests from New Mexico to the Yukon in the 19th and early 20th century; and the women who labored underground to help families survive, almost always in small enterprises, primarily coal rather than hardrock, and alongside husbands or fathers.¹⁰

Although these examples are noteworthy in that they challenge the assumptions about women's underground mining work, they contribute to an exceptionalism that may hinder a closer look at the gendered structural exclusions in corporate mining, which has dominated the industry in North America since the late 19th century. Since we know that women have been employed in smaller mine operations, and legislation and custom even allowed women underground particularly when working with family members, it seems to me that the chief question to pursue, then, is why women could not work in larger mining operations?

Mining has been part of a larger culture of masculinity that infused industrial work. From the late nineteenth through the late twentieth century resource-based industries—logging, mining, agriculture, fishing—distinguished the gendered and racialized character of work in the U.S. and Canada. Even though women and people of color worked in these industries or the service sectors that supported them, narratives about regional work reinforce the concept of a white, male “wageworkers’ frontier.”¹¹ These occupations elicit images of tough, masculine outdoor work and independence. They have also resisted hiring women and certain ethnic groups except when labor

demands have overwhelmed the exclusionary rigid boundaries they erected. The white male breadwinner ideal and the reputed toughness of the work that supposedly discouraged women from employment often disintegrated when labor markets expanded, when families required multiple breadwinners, or when these “rugged” jobs became seasonal and low-paid, which then made women and people of color “ideally suited” for the work.¹²

Industries, unions, and male workers perpetuated this social order that reinforced the belief that much industrial work required rugged masculinity. Unions and workers might preserve jobs for white men, but employers could resist improving conditions or providing adequate workers’ compensation by exploiting stereotypes that rendered workers “tough enough” to handle the most dangerous conditions or too rootless and family-less to warrant company-provided protections.¹³

Despite union gains in North America after the 1930s, many mining union leaders and rank-and-file workers continued to believe that the association of masculinity with militancy aided their cause. The International Union of Mine, Mill, and Smelter Workers (IUMMSW), which represented U.S. and Canadian nonferrous miners and refiners, and the United Mine Workers (UMW), representing coal miners, championed masculinity in their iconography and rhetorical traditions to assert their fierce independence. The mining industry’s contraction during the 1920s and 1930s also reinforced it as a male domain, but the sudden demand for labor beginning in 1940 upset gendered notions of work.

The North American Example: Labor Expansion 1940s

Even during World War II, when much of Canada and the United States opened industrial jobs to women, company, government, and union officials sought to preserve men's claims to traditional mining occupations. Montana's war manpower director, for example, claimed that the state needed "men for the hard, heavy and unpleasant jobs" in mines, mills, and woods "where women cannot be used." Anaconda Copper Mining Company and Mine Mill union officials agreed that mines, mills, and smelters could not employ women because the work required strength and stamina. But physical prowess evidently was not the chief requisite, because the company began recruiting retired and disabled men.¹⁴ Nancy Forestell charts how gold mines in Ontario resisted hiring women even during the war labor shortages. In other mining centers companies supported hiring women with the understanding that they could free up large numbers of men on the surface to work underground. But gold mining executives decided not to pursue female workers since the mines employed disabled male workers on the surface, maintaining the gender exclusivity of the industry.¹⁵

The war years provide ample examples to illustrate the shifting ground of gendered and racialized work categories. In Anaconda, Montana, the Anaconda Company manipulated perceptions of difference to convince union representatives to allow women into its smelter. Appealing to racial prejudices, management threatened to import African Americans and Mexicans to fill the labor void, emphasizing that they would prefer Anaconda women "rather than Mexican boys," but the federal government could send "colored men" any time. Management and labor then agreed that they would preserve community values that championed white male *AND* female breadwinners. The new employees had to be Anaconda residents, wives of former smelter workers in the service

or recently deceased or disabled, and with children or parents to support.¹⁶ The conditions seemed clear; these women understood that they had to relinquish their positions to men at war's end.

Although the company never advertised the smelter openings in late 1943, word spread quickly and many women eagerly applied. The opportunity to earn men's wages was a powerful lure. Ursula Jurcich, strapped to care for an invalid husband and young son, noted that "Everybody was talking about it, 'oh, the women are working on the [smelter] Hill.' That was a big 'baloo' around here....so I thought I might as well go and see if I can get on....The money was big, that was important."¹⁷ Nonetheless, the company's ambivalence and the firm community male breadwinner ideal led to just over a hundred women hired on the smelter (compared to almost 400 men over 60 years in age) during the war.

Wartime labor demands and subsequent relaxation of occupational barriers presented unprecedented opportunities for women of many ethnicities in various industries, especially new aircraft and shipbuilding plants. Mining remained off limits, however, except for a small percentage of women who found work in processing ore and on surface operations. Since 1890, Ontario mining legislation had prohibited the employment of women in mines. But calling on the War Measures Act, the Canadian government issued an order on August 13, 1942 that allowed women to be employed to allay a labor shortage, but only in surface operations. At International Nickel's Sudbury operations, over 1,400 women were hired for production and maintenance jobs for the duration of the war. They performed a variety of jobs such as operating ore distributors, repairing cell flotation equipment, piloting ore trains and working in the machine shop.

At the end of the war, the government rescinded the order allowing the employment of women in the company's surface operations, and INCO saved the positions for returning servicemen.¹⁸

Why did urban shipyards and aircraft plants actively recruit women, while mining communities resisted hiring them?¹⁹ Well-entrenched gender ideologies, accompanying lore about the work, and past union struggles for job security in automating industries influenced practices. The industry's needs and economic position also explain the difference; the minerals industry had been declining except during the war boom, whereas new industries like shipbuilding demanded new recruits. This helps explain why women never constituted more than 5 percent of the smelter workforce in Anaconda, while they made up 28 percent of Portland, Oregon's shipyard workers.²⁰

Even the left-leaning labor union, the IUMMSW, wavered from its expressed goals of gender equality given male rank-and-file resistance. In Anaconda, when the company tried to bypass union seniority rules to give women "soft" positions, union leaders, struggling to preserve a male breadwinner-workplace while maintaining labor principles, alternated between insisting that women be excluded as a weaker sex and that they be treated equally. By the end of the war, IUMMSW Local 117 sought to restore jobs to returning servicemen, but it also defended the women in a retroactive pay contractual issue. The union even sought to retain jobs for widows, whom it believed merited continued employment because of their economic circumstances. But the union became caught in its own web of seniority rules, and the company insisted that the last woman hired would be the first laid off when a serviceman reclaimed his job. Within a few months no women were employed in production at the smelter.²¹ Pearl Chytuk, who

moved to Sudbury, Ontario, from Regina, Saskatchewan, in 1941, was able to get a job at the Inco smelter during the war, but she was surprised that people were fearful of talking about unions. While working at the smelter, Chytuk actively organized for Mine Mill Local 598. She remembered the hesitancy of some of her male co-workers, but many of the women activists were “from the west where we always felt more free.” Despite their activism, the union could not help them retain their jobs at the war’s end.²²

The postwar period brought a rapid resumption of restrictions, and old gender barriers were re-erected as men returned home to their jobs and women were discharged, underscoring the fluidity of these ideologies and how pinned to power relations they were. Nonetheless, women in mining communities were often fundamentally changed by their wartime experiences, as represented by married women’s increasing participation in the labor force. For example, women who worked in the Anaconda smelter during the war lost their jobs, but the independence they tasted lasted in subsequent work and family roles. Erma Bennett recalled that after the war people “tried to change it back,” but it was “the beginning of the change” in women’s roles as they sought greater public and economic participation.²³ In single industry mining communities, well-paying mining and smelting jobs remained enticing (if forbidden) to women until legislation made opportunities available again.

The North American Example: Labor Contraction 1970s

If women received a frosty reception in the mining workplace during wartime labor demands, their efforts to re-enter mines and smelters several decades later following government and union mandates presented even more challenges in the light of

a declining industry. In the U.S. and Canada, women won the legal right to enter male mining workplaces just as the industry began to mechanize, move operations out of the country, and lay off workers in the 1970s. Federal affirmative action orders opened coal and hard-rock production jobs to women for the first time since the Second World War. For women in places like Arizona, Montana, Appalachia, and Ontario, despite male resistance and harassment, the good wages offered made competition stiff for the few mining jobs available.

Despite initial opposition, female miners broke barriers in the UMW and created the Coal Employment Project (CEP) to combat discrimination, work on health and safety issues, and form an international network of coalfield women. Although 1965 U.S. civil rights legislation was amended in 1967 to include gender as a basis for nondiscrimination, abolishing state prohibitions against women mining, social sanctions remained, as Carletta Savage notes, “in full force.” A class-action lawsuit settled in 1978 forced Appalachian coal companies to open their tunnels to women. In 1977 women made up just 1 percent of the mining workforce; by 1979, they had increased to over 10 percent.²⁴

In the mid-1990s Suzanne Tallichet spent several months in a West Virginia coal mining community to uncover the world of women miners. In studying Bureau of Mines data the author found that gender was a more likely determinant of a miner’s job rank than all other factors combined.²⁵ In her research and interviews she determined that once hired, the ‘daughters of the mountain’ still had to negotiate tremendous barriers, including harassment from male co-workers and bosses and resistance from the community. Male miners asserted their solidarity and dominance by exaggerating gender

differences and sexualizing relationships with female co-workers. The women interviewed claimed that at least half of their co-workers and bosses targeted them with sexual and other harassment. To survive this treatment, more feared than the mine's dangers, women acted tough and repeatedly reminded the men of their practical needs: 'I'm not here for romance but for finance.'²⁶ A woman had to prove her physical capabilities and accommodate men in various ways to win acceptance.

But a 1981 CEP survey found that bosses, rather than co-workers, exacerbated women's problems underground. Tallichet's and Savage's interviews with women miners confirmed that women were prevented from moving out of lower-paying strenuous jobs for more skilled positions. What was considered 'women's work' usually required the greatest physical endurance; supervisors rarely allowed women to learn new skills to operate machinery, or they failed to train them when they did attain those positions, which caused resentment among male co-workers who were frustrated by the women's inexperience. A decade after women entered coal mines in large numbers, they still lacked training, endured high rates of sexual harassment, and with little training and seniority were the first laid off when the industry declined in the 1980s and 1990s. Savage concludes that the very paucity of information about gender relations available to supervisors and personnel departments in the coal industry reflects how insincere they were about successfully integrating women into the work force. The small monetary awards from harassment and discrimination lawsuits, and the hard labor and physical and emotional decline convinced many women miners to leave the industry altogether.²⁷

Resistance to women's employment did not emerge solely from male miners and employers. A surprising theme emerges from all of these studies, whether hardrock or

coal or U.S. or Canadian mining communities: the resistance from miners' wives was often the most virulent, upending any notions of gender solidarity. Tallichet found in her interviews that wives viewed the women miners as sexual and economic threats. Many wives even believed that women were not physically suited to working underground, endangering their husbands' lives. That competition called into question who was entitled to a breadwinning wage. In 1974, miners' wives in Logan, West Virginia, protested a local mine's hiring of women. As Marat Moore discovered, male miners voiced greater support for affirmative action quotas than did their wives.²⁸ Women miners blamed the wives for hardening men's attitudes towards them underground. There is a striking racial difference here, however. Although black women faced even greater resistance to mining employment, they experienced support, rather than hostility, from men and women in the black community. These findings remind us that we need to question universal notions about gender.

Diminishing opportunities were even more apparent for women who had edged their way into hardrock mining.²⁹ Jennifer Keck and Mary Powell outline how a hundred pioneering women took jobs at Inco in Sudbury, Ontario, in the mid-1970s after provincial legislation removed barriers to women's employment in surface jobs (1970) and later underground (1978). Motivated primarily by higher wages, the women Inco workers found that "men's" jobs offered a great deal of satisfaction as well as greater financial independence. They endured the physically hard work, sexual harassment, and difficulties finding child care to better support themselves and families. In adapting to masculine work culture, they had to prove they could "do the work of a man" in order to be treated the "same as a man." In the process, they could achieve "manhood" regardless

of sex, breadwinner status based on family need, and respect for fighting back. During the strike of 1978-79 women workers saw themselves as workers first and declined to join wives in making sandwiches, instead joining their brothers on the picket line and in negotiating committees.³⁰ Yet these challenges to the gender division of labor became muted as the minerals industry restructured and downsized in the 1980s; women and minority workers with the least seniority were laid off first.³¹

In the tight-knit copper smelting community of Anaconda, women remembered their World War II predecessors, and with EEO openings in the 1970s seized opportunities for higher pay. But community attitudes toward the new generation of women smelterworkers were different in a climate of retrenchment. As former wartime smelter worker Katie Dewing recalled, the women who crossed gender boundaries “the second time around” in the 1970s “had hard jobs and did all the things that men do” because they “were taking men’s jobs.” Yet despite workforce reductions, the ACM made an earnest effort to implement EEO hiring. Personnel director Bob Vine insisted that the women “were readily accepted” by male workers. This may be because few women lasted. In March 1974 Carolyn Crisler left her position as a nurse’s aid to work at the smelter. Since she weighed less than the required 130 pounds, she slipped weights into her pants to get the job because “we were trying to buy a house, and we needed the money, and I knew if I got up there, I could save a lot of money.” Despite the hot, dirty, and dangerous work in the converters, she “liked the crew...and the men accepted me and I did my work.” Nevertheless, she quit after two years because the physically exhausting work interfered with raising her young children.³² In 1980, the Atlantic

Richfield Corporation, which absorbed the Montana ACM mines and smelters in 1977, shut down the state's operations.

The Arizona copper mining strike of 1983–1985, involving the large multinational Phelps Dodge and the Steelworkers Union, represented a watershed moment in North American labor and mining history. Once again, women assumed a dominant role in maintaining the strike, loyally and passionately picketing for the same reasons they had in years past—to improve their families' living conditions, and to support striking men (and some women miners) who were legally enjoined from action. The strike ultimately failed and the company successfully decertified the union with its permanent replacement workers, ushering in a new non-union era in the American mining industry.³³ Women miners and miners' wives in Arizona joined thousands of women from other declining mining communities in North America to find other wage work, often in the expanding service sector, and often became the main breadwinners in their families.

As these examples from North America and scholarship from around the world demonstrate, women have persistently sought access to mining jobs. Women miners endured discrimination, harassment, and dangerous and demanding labor in order to gain more comfortable lives for their families and in many cases the self-satisfaction that they could perform a 'man's' job. These cases remind us how masculine work culture, entrenched corporate practices, and social assumptions about gender, even in periods of labor expansion (such as World War II) or structural legislative changes (as in the EEO

push of the 1970s), can impede the entry of and survival of women in the mining workplace.

By the 1970s coal and minerals companies and the United Mine Workers and Steelworkers Union (successor to Mine Mill) officially opposed discrimination and harassment, but the oral sources often contradict official pronouncements. By the 1980s, many women had formed an uneasy alliance with their male co-workers in mines and smelters. But automation and industrial decline forced layoffs, and having the least seniority, women made up a larger proportion of those terminated. Although men and women together faced uncertain futures, women had spent a decade proving themselves, only to see men hang on to the few remaining skilled mining jobs.

In the 21st century, the mobility of capital, government policies, global structural adjustment programs, and the quality and exhaustibility of ore continue to threaten the stability of mining communities. Despite its often attractive wages, mining continues to disrupt women's and indigenous agricultural practices, cultural traditions, and extended kin and community networks; it displaces communities, introduces disease, and pollutes lands and water. Once led to extract better wages and working conditions from mining companies, recent protests often attempt to keep mining *out* of an area or challenge the ways in which multinational corporations extract resources. Tibetan protests against Chinese mining, Australian protests of uranium production, and Honduran, Sri Lanka, and Indonesian protests of U.S. corporate mining reveal the growing "cultures of solidarity" between women, environmentalists, indigenous peoples, mining communities, and international human rights organizations. Since the 1990s, several international conferences involving women in mining countries have met and an International Women

and Mining Network has formed to protest the unsustainability of mining and its harm to women and communities.³⁴

As others have noted, women have not shared the benefits and borne a disproportionate share of mining's negative effects. Excluded from mining or denied skilled training, women are denied higher wages, and in their more informal mining activities are more subject to mercury pollution and other health hazards. While we explore the ways that transnational corporations, national and local governments, and international institutions can integrate women more fully in mining jobs, we might also ask whether mining—by its very nature socially and environmentally disruptive—can ultimately sustain women and men and their communities. Even with gender equity, can there be more positive mining developments?

Although these examples from North America may not seem compatible with the experiences of women in the developing world, I think we can see how gender ideologies take root and spread across time, space and cultures. Understanding that process can perhaps lead us to find ways to help move women from the borders to the center of mining workplaces and the decision-making processes that affect their lives.

¹ Kuntala Lahiri-Dutt and Martha Macintyre, eds. *Women Miners in Developing Countries: Pit Women and Others*. (Hampshire, England, and Burlington, VT: Ashgate Publishing Co., 2006).

² Laurie Mercier and Jaclyn Gier, eds., *Mining Women: Gender in the Development of a Global Industry, 1670-2005* (Palgrave/Macmillan, 2006).

³ María Elena Díaz traces this process of how women dominated mining as long as the enterprise was marginal and an extension rather than departure from domestic responsibilities, in "Mining Women, Royal Slaves: Copper Mining in Colonial Cuba, 1670-1780," in *Mining Women*, 21-39; and, *The Virgin, the king, and the royal slaves of*

El Cobre : negotiating freedom in colonial Cuba, 1670-1780 (Stanford University Press, 2000).

⁴ For an interesting discussion of the myths, metaphors, and symbolism that for centuries made mining a gendered practice, see Richard V. Francaviglia, "In Her Image: Some Reflections on Gender and Power in the Mining Industry," *Mining History Journal* 5 (January 1998): 118-126.

⁵ Lingqing Yao, "Women in the Mining Industry of Contemporary China," in *Women Miners*, 227-254.

⁶ *Mining Women*, 6.

⁷ Thomas M. Klubock, *Contested Communities: Class, Gender, and Politics in Chile's El Teniente Copper Mine, 1904-1951* (Duke, 1998).

⁸ Janet L Finn, *Tracing the Veins: Of Copper, Culture, and Community from Butte to Chuquicamata* (California, 1998).

⁹ June Nash, *We Eat the Mines and the Mines Eat Us: Dependency and Exploitation in Bolivian Tin Mines* (Columbia 1979).

¹⁰ For example, beginning in 1872 until her death 50 years later, Irish immigrant Nellie Cashman searched the Klondike of the Canadian Yukon, and north of the Arctic Circle in Alaska for precious metals and gained fame as a philanthropist from her mining earnings. Don Chaput, "In Search of Silver and Gold," *American History* 1996 30(6): 36-40. Sally Zanjani traces the history of women mining entrepreneurs in *A mine of her own : woman prospectors in the American West, 1850-1950* (University of Nebraska Press, 1997); on women coal miners during the Great Depression and other periods, see Camille Gúerin-Gonzalez, "From Ludlow to Camp Solidarity: Women, Men, and Cultures of Solidarity in U.S. Coal Communities, 1912-1990," in *Mining Women*, 303-309; and, Marat Moore, *Women in the Mines: Stories of Life and Work* (Twayne Publishers, 1996).

¹¹ Carlos A. Schwantes has written extensively about the male worker's milieu in *Radical Heritage: Labor, Socialism, and Reform in Washington and British Columbia, 1885-1917* (University of Washington Press, 1979); "Protest in a Promised Land: Unemployment, Disinheritance, and the Origin of Labor Militancy in the Pacific Northwest, 1885-86," *Western Historical Quarterly* 13 (October 1982): 373-90; "Images of the Wagoners' Frontier," *Montana: The Magazine of Western History* 38 (Autumn 1988): 38-49.

¹² Ideas about domestic roles, region, race, gender, and class become so closely enmeshed that the segmentation of work around difference appears to be "natural." Feminist scholars have explored this process of segmentation, the promotion of inequalities in the workplace, and the male breadwinner wage ideal and accompanying female wage. See,

for example, Alice Kessler-Harris, *A Woman's Wage: Historical Meanings and Social Consequences* (University Press of Kentucky, 1990), 1–19; Maurine Weiner Greenwald, “Working-Class Feminism and the Family Wage Ideal: The Seattle Debate on Married Women’s Right to Work, 1914–1920,” *Journal of American History* 76 (June 1989): 118–49; Ruth Milkman, *Gender at Work: The Dynamics of Job Segregation by Sex During World War II* (University of Illinois Press, 1987), 6, 124. For reviews of some of the literature that links the social construction of masculinity to work, breadwinning, gender relations, and skill monopolization, see Steven Maynard, “Rough Work and Rugged Men: The Social Construction of Masculinity in Working-Class History,” *Labor/Le Travail* 23 (Spring 1989): 158–69; Karen Anderson, “Work, Gender, and Power in the American West,” *Pacific Historical Review* 61, no. 4 (1992): 481–99; Jens Christiansen, Peter Philips, and Mark Prus, “Women, Technology, and Work: The Gender Division of Labor in U.S. Manufacturing, 1850–1919,” *Research in Economic History* 16 (1996): 103–26.

¹³ William G. Robbins, “Labor in the Pacific Slope Timber Industry: A Twentieth-Century Perspective,” *Journal of the West* 25, no. 2 (1986): 10, 8; Nancy M. Forestell, “‘And I Feel Like I’m Dying from Mining for Gold’: Disability, Gender, and the Mining Community, 1920–1950,” *Labor: Studies in Working Class History of the Americas* 3 (3) 2006: 77–93.

¹⁴ Plant Manpower Analysis, 18 November 1943, ACM Collection, Box 62, Folder 3, Montana Historical Society Archives, Helena, MT (hereafter MHSA).

¹⁵ Forestell, 86–87.

¹⁶ Laurie Mercier, *Anaconda: Labor, Culture, and Community in Montana’s Smelter City* (University of Illinois Press, 2001), 67–68.

¹⁷ Ursula Jurcich, interview by author, 12 August 1986, MHSA.

¹⁸ Stan Sudol, “Inco’s Sudbury Nickel Mines were Critical During World War Two,” *Republic of Mining* <http://www.republicofmining.com/category/women-in-mining/> (accessed 4 October 2008).

¹⁹ For a description of the specific myths, traditions, movements, and legislation that forbade women from working underground, see Angela V. John, *By the Sweat of their Brow: Women Workers at Victorian Coal Mines* (London: Croom Helm, 1980); Jane Mark-Lawson and Anne Witz, “From ‘Family Labor’ to ‘Family Wage’? The Case of Women’s Labor in Nineteenth-Century Coalmining,” *Social History* 13 (1988): 151–74; Barbara Kingsolver, *Holding the Line: Women in the Great Arizona Mine Strike of 1983* (New York: ILR Press, 1989), 1–21.

²⁰ Karen Beck Skold, “The Job He Left Behind: American Women in the Shipyards during World War II,” in *Women, War, and Revolution*, ed. Carol R. Berkin and Clara M.

Lovett (New York: Holmes & Meier, 1980), 57; Amy Kessler, *Fleeting Opportunities: Women Shipyard Workers in Portland and Vancouver During World War II and Reconversion* (State University of New York Press, 1990). Karen Anderson, in her study of women war workers, concludes that labor markets, rather than community values, determined such variations. She notes, for example, that women made up just 4 percent of Baltimore shipbuilders, compared to 16 percent in Seattle, because of greater availability of black male workers in the East. Karen Anderson, *Wartime Women: Sex Roles, Family Relations, and the Status of Women during World War II* (Westport, CT.: Greenwood, 1981), 31, 46.

²¹ For an extended discussion of the women smelter workers and gendered debates about employment during and after the war, see Mercier, *Anaconda*, 64-77.

²² Mike Solski and John Smaller, *Mine Mill: The History of the IUMMSW in Canada Since 1895* (Ottawa: Steel Rail Publishing, 1985), 124; Steedman, et al., *Hard Lessons*, 162-65.

²³ Mercier, *Anaconda*, 91.

²⁴ Moore, *Women in the Mines*, xl-xlvi; Carletta Savage, "Re-gendering Coal: Female Miners and Male Supervisors," *Appalachian Journal* 27(3), 2000, 232.

²⁵ Suzanne E. Tallichet, *Daughters of the Mountain: Women Coal Miners in Central Appalachia*. University Park, Pennsylvania: The Pennsylvania State University Press, 2006. Articles about women in mining frequently emphasize how the women had to show extraordinary stamina and good humor to survive male co-workers' hazing. See, for example, Anna Sale, "Sisters in Coal: A History of Women in the West Virginia Mines," *Goldenseal* 33 (1) Spring 2007, 10-17.

²⁶ Tallichet, 54.

²⁷ Savage, 237-246.

²⁸ Moore, *Women in the Mines*, xxxvii-xxxviii.

²⁹ Although the coal industry also downsized and mechanized, reducing the numbers of workers, the oil and energy crises of the 1970s put more demand on production of domestic coal reserves, which sustained some demand for miners.

³⁰ Jennifer Keck and Mary Powell, "Women Into Mining Jobs at Inco: challenging the Gender Division of Labor," in *Mining Women*, Gier and Mercier, eds., 280-295.

³¹ Dona G. Gearhart notes that some women were displaced because of revived gender discrimination and the attraction of other work alternatives, in "Coal Mining Women in

the [American] West: The Realities of Difference in an Extreme Environment,” *Journal of the West* 1998 37(1): 60-68.

³² ACM, *Annual Report* (1975), 23; interviews by author with Kathryn Dewing (Aug 11, 1986), Bob Vine (May 27, 1986), and Carolyn Crisler (Mar 16, 1987), MHSA.

³³ Kingsolver, *Holding the Line*.

³⁴ See the International Women and Mining Network website for reports on recent activities and campaigns: <http://www.rimmrights.org/index.htm>