NOTE TO USERS

The DVD is not included in this original manuscript. It is available for consultation at the author's graduate school library.

This reproduction is the best copy available.

UMI®

Men & Women and Tools:

Reflections on Male Resistance to

Women in Trades and Technology

By

Marcia Ann Braundy

B.A., Antioch College West/Union Institute, 1972

Interprovincial Journeylevel Qualification in Carpentry, 1981

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

In

The Faculty of Graduate Studies

Curriculum and Instruction

The University of British Columbia

December 2004

Abstract

Men & Women and Tools is an exploratory study, where new knowledge is created in the interplay of voices: narratives of lived experience, a dataplay of participants' voices, research and exposition in the literature, and the space between the audience and the text. Male and female workers, equity consultants and advocates discussed male resistance to women in trades and technology. In one interview with tradesworkers an explicit clarity emerged, provoking an *emotional understanding* of the issues. That interview became a fifteen minute dataplay, creating a mirror where, in a moment of reflection, individual audience members can choose whether to continue the constructions of gender they find. Most of the words, thoughts, and sentiments found in the play are direct quotes from the interview. Reflecting on their experience integrating women on their worksites, those interviewed poignantly demonstrated the struggles facing men and women in a society that constructs and limits their vocational and emotional relationships, while embedding expectations regarding their contributions to society. They exposed their own fears, and concerns. But also interwoven was a construction of women and their place in these men's interpretation of the social order. The notions of *patriarchal masculinity* were overpoweringly present.

The interview resonated with my own experience as a tradesworker. It struck cords with equity interventions undertaken with both men and women to change the social construct of gender and work. The voices embodied and echoed hegemonic struggles in contention for the past 250 years.

Performed at the Brave New Play Rites Festival at UBC, *Men & Women and Tools* was digitally videotaped and edited. The artefact, a *performative authoethnography*, is a personification of a social reality. Interweaving scholarly voices naming the historical, sociological and cultural roots of gendered practices with the voices from the play, this dissertation illustrates the ways that social

reality is constructed and reconstituted in the cultures, practices and motivations of society, and how the resistance has emerged. The research findings are embodied: a reflection, a provocation, a pedagogical tool to be used in schools and union halls to interfere in the mechanisms of gender relations in the 21st Century.

Table of Contents

Table of Contents   v

List of Tables

Acknowledgements

There are many without whose assistance and support this dissertation would never have been written.

I would like to begin by acknowledging the sister I was given at birth, and who has become my friend, Joyce Miriam Grossbard, for her wise counsel when things got rough, for buying a large round of the research texts that began the foundations of this work, for the financial gifts that came when I most needed them, and for her ongoing encouragement to seeing this through.

Bobbie Samet, my best friend, who has grown with me since we met at Antioch College West in 1972, has been there with her humour, her insight into me and this educational process, and her eclectic repertoire of interventions which have been a touchstone along this road and in these rough seas.

Rita Moir, non-fiction writer extraordinaire, neighbour, friend, guardian of the Vallican Whole Community Centre and my home base, for not giving up on me when this didn't take just the "year or maybe two" that I gave it at the outset, to be away from my beloved Slocan Valley.

Coming to graduate school was a solution for shifting my life's work developed with Kathleen Shannon, the founding executive director of Studio D at the National Film Board. She retired to the Kootenays, and we became peer advisors. She saw me through the process of application and acceptance, then died on the operating table three days after I got to school. It was a difficult loss for many people. I dedicate the play to her enduring influence.

A most significant acknowledgement is for my dear friend Mavis Jemielita, 87 years old. Recognizing that my years of volunteer work had limited my economic viability, she shared her home with me. Listening to the trials and tribulations of several graduate students over time, she has enriched our lives and healed our wounds. For me, she will always be a role model of community contribution. Mavis also gave me my love, Dale Norman, who she bid on and won in a services auction. This extended the time it has taken to complete this degree, but living a full and fulfilling life in the process is a wondrous life lesson.

My Dad, Saul Grossbard, whose love for knowledge and breadth of interests allowed him to do the New York Times crossword puzzle in 20 minutes or a bit more, in pen. He sparked my impulse for this PhD in many different ways. I am sad he died in the middle of this work, and he is not here to feel the honour of completion.

Chapter I

Prologue

Since the first time I picked up a hammer, as the volunteer coordinator at the Vallican Whole Community Centre (personal journals, 1973-2003), I have loved construction work. Since the first time architect Al Luthmers gently and caringly taught five women on that site how to safely use a circular saw, I have collected and used a myriad of hand and power tools. Prior to that I repaired and reconstructed 12 years of Volkswagens, which I did more out of need than love. Along the way of all of these years, I have met other women who also love to use tools. As we told the stories of our lives to one another, the palpable quality of resistance, of walls and inordinate challenges emerged. When I joined the Carpenter's Union in 1980, after a year of struggling to be allowed, I was shocked to realize that I was being welcomed as the first woman in the "United Brotherhood" in British Columbia. When I got my Interprovincial Qualification and Certificate of Apprenticeship in 1981, and was hailed as the first Journeywoman in B.C.[1], I was very surprised, as many women had started training before I did. As a feminist, I was concerned for what had happened to them. It had required great tenacity to overcome the pain, resistance and harassment I had experienced to achieve completion of my apprenticeship. What had it been like for them?

The stories told at the meetings of Vancouver Women in Trades, and the first national Women in Trades Conference in Winnipeg (1980) began to answer my

---

[1] In a later study of the apprenticeship records for the province, I discovered that one woman had been qualified up North 6 years earlier, but no one had heard from her again or knew where she was. I was the first female to go through the program at PVI/BCIT.

questions. Back in 1980, these were mostly stories of 1st, 2nd and 3rd year apprentices, and they could easily make you cry. And yet, many of these women persevered, because they loved their work, because they would not allow the system to grind them down. Briefs were presented to British Columbia Institute of Technology (BCIT) and Pacific Vocational Institute (PVI) calling for non-sexist seminars for vocational and technical instructors, as well as other changes at vocational colleges.

Little was done by those with responsibility to undertake that work. In 1983, I asked the British Columbia government's Women's Program when something was going to be done? They suggested that I had the right skills to put a project together and make it happen. So, in the spirit of "performing a head taller" (Newman & Holzman, 1993), I took their advice and gathered funding from the British Columbia Provincial Council of the United Brotherhood of Carpenters and Joiners of America, the Carpentry Apprenticeship Joint Board (employers and union reps), the B.C. Human Rights Commission, Secretary of State Women's Program and Employment and Immigration Canada. I conducted a research project that would form the basis for a seminar for a primarily male audience. I interviewed 40 tradesmen, vocational instructors, employers and Joint Board coordinators from the building trade unions about what they saw as the barriers to women in their trade.

The trades instructors were by far the most vehement about women not being able to do their specific trade, "maybe they can be a carpenter, but never an electrician," " maybe a welder, but never a mason." It was a very disheartening experience, but I managed to keep my spirit up while discussing and challenging the most outrageous of their stereotypes, in what I hoped was a somewhat formative interview. If I and the other tradeswomen I knew could do it, why not anyone else?

I flew home to the Kootenays and cried for three hours on the shoulder of the woman who was my apprentice, at the resistance and impedance expressed by those men, all so sure that a woman could not possibly do their trade. Even if women had proven to be successful in some other similar trade, the men expounded upon some tiny portion of their trade they were sure was so difficult that "a woman could never handle it." The barrage of their voices almost silenced me. I almost quit the seminar development project after those interviews; the barriers were so deeply ingrained inside those men who were the gatekeepers.

But I had met a Mohawk woman ironworker from Ontario, and knew that many women were masons in Jamaica. I had met successful female electricians, and knew a woman avionics mechanic who worked on 747s. By then there were 33 women in the Carpenter's Union in British Columbia. As my apprentice, Sally Mackenzie, reminded me of these things, and offered to help to develop the seminar, the task became less daunting, and *The Workplace in Transition – Integrating Women Effectively* seminar was born (Braundy, Mackenzie, & Ward, 1983), ably assisted as well, by Valerie Ward, the regional women's employment consultant for Employment and Immigration Canada; a truly gifted trainer.

The baseline was a somewhat naïve belief that the resistance was unconscious and unintentional. The men expressed that their doors were open, that they would welcome women. But their attitudes and behaviour created a different reality. Looking at all the men's responses, and the experiences of the women, we created what we hoped would be transformative activities and exercises based on adult and cooperative learning techniques, and sensitivity training practices. We had mini-lectures on demographics and legal issues, and we asked the men to describe the barriers and their roles as instructors in overcoming them. The seminar's purpose was to assist people who did not know how to act in new and

unfamiliar situations to enact appropriate and legally required behavioural change, and support the integration of women into trades and technology training and employment. The idea was that, as the men experienced the feedback the new behaviours would invoke, their attitudes might begin to shift. In the meantime, at least the women and men in their jurisdictions would be able to experience and react to the improved behaviours. In other words, "think what you like, but behave appropriately!" It was the first of its kind in North America in 1983. Most training at the time was developed to help employers keep from contravening the Affirmative Action laws in the US, and was not particularly pro-active.[2]

After successfully piloting the seminar three times with the Provincial Council of Carpenters, the Joint Board Coordinators of most of the Building Trades Unions, and Selkirk College vocational instructors, we took it on the road. During the 1980s and early 1990s, we delivered well over 40 full day sessions: with technical instructors at most colleges in BC, the Department of National Defence trainers and unions, Ontario Hydro staff trainers, Apprenticeship and employment counsellors, various employers' groups, union steward's training, and nine sessions delivered to instructional staff at BCIT.

There is always resistance. The majority of men, no matter how they are selected or volunteer to attend, come in and sit with their arms folded across their

---

[2] During the research phase of the seminar development, I travelled across Canada and to New York to interview those who by virtue of their other activities i.e. Women in Trades and Technology (WITT) courses, Affirmative Action consultants etc, might have developed a seminar we could just use. In Ontario, WITT instructors and the Ontario Women's Directorate said how much such a training session was needed, but had not yet developed. In New York, one of the leading AA consultants showed me his company's training materials which had far more to do with how to avoid breaking the law than any kind of pro-active social change.

chests, protecting themselves and pushing our their chests as if saying "teach me something I don't already know!"

After the seminar was developed and piloted, I created a "train the trainers" session which I delivered three times across Canada, teaching 37 women about the seminar, the issues in delivering it, and some "how to" for particular components. Of those 37 women, (educators, advocates, tradeswomen and industry representatives), I would have trusted only about five to be able to deliver it.

There is an extremely fine line between educating and lecturing, between challenging rigid thought patterns and attacking an individual. The seminar dealt with some pretty difficult material and belief systems. With all that resistance, if an individual female facilitator had not worked through her[3] own issues and resolved her own anger towards men, or the male power structure, there was always the potential for sparks to fly off the flint edge of those feelings. I had done years of Gestalt and personal growth work, working through some of those difficult experiences in my own life. I was frank with the trainees about the need to be clear, and not loaded, not ready to be triggered by the first ignorant remark. Our job was to take people through the activities, help to clarify the issues, respond with information, encourage new ideas etc, not to get into fights with the participants. We learned during the first pilot the importance of having tradeswomen and female technologists present, to speak to their own real experience in training and on the

---

[3] Only once, towards the end of the series of deliveries, and at the request of BCIT, was a man involved as a co-facilitator. Bill Darnell, the Joint Board Coordinator for the Carpenters, was one of the few men at the time with the appropriate background (in the trades) trusted to share the role of facilitator and not allow the participants to get away with relating only to him. Modelling the kind of respect and communications expected from the group was of primary importance, and it would not have been useful to enact a competitive example. Bill did a great job of co-facilitating, and if he hadn't gone off to another life, we might have continued the partnership, as it was clear that having a skilled man and a skilled woman in those roles was useful.

job, so the facilitators could facilitate communication, and not have to constantly represent all women. I developed and produced my first performative intervention, the slide/tape show, What Happens to Women in Tradesland? (Braundy, 1983), so another voice, another script, and almost life size photos of women workers in many technical occupations, could present alternative ideas for reflection.

Reflections I

In this dissertation, I speak girded with the voices of all the women I have met in my career, and also create space for them to speak for themselves. Their ideas and sentiments contribute an essential emotional reality to this work. A tradeswoman who had completed her apprenticeship in a large industrial setting attended a 1983 session of the seminar as one of four women among fourteen men: union activists and training coordinators. She provided these reflections on the experience:

September 21, 1983

Dear Marcia,

...I left the seminar feeling depressed...with the attitudes of those men. They seemed very traditional, very defensive and closed to the fact that women do have extra problems in the male workplace. I don't really have any sense whether the seminar opened their minds—you certainly provided the information and role models to do so—or whether that caused them to stand their defensive ground more...I wondered whether we four tradeswomen dominated the discussion too much but on the other hand, we were constantly being provoked (by their statements) to tell our side of the story. We could never have sat back to let those things go unchallenged.

[For example:] The first day on the job: either sex is nervous, eager to do well, facing lots to learn, meeting new people, being monitored by journeymen and/or foremen. Result is lots of stress. Extra stress for women:

a) fellow workers come to look at her, her manner of working, to meet her, to give advice, to satisfy their curiosity about her motives; b) she has to learn about and adjust to a whole different society, form of communication, than exists in a women's workplace or mixed workplace; c) she must be constantly judging whether she is being treated in certain ways because she is new (apprentice) or because she is a woman (i.e. Is she not being given responsible jobs because she's inexperienced or because assumptions are being made about her capabilities?). I believe that if we attempt to prevent their defences from rising at the outset, they will be more open to hearing us.

Considering that they don't hear that sexual harassment is a problem: the seminar and personal experience give ample evidence of its existence...I think you must have instilled some doubt in their minds.

On the point that they don't hear us when we say we are treated differently because we are women even when we give them examples. [They say] the examples are exceptions and the reasons (like socialization) are an individual woman's problem. Is the answer to this going into more detail about women's socialization and men's?

Already the seminar is jam packed with too many time constraints. Even if we went off topic, I learned something from it − learned to understand their perceptions more. That's valuable in the sense of knowing thy enemy (the enemy being attitudes rather than sex). An example of one thing I learned: One man did not realize that women generally lack self-confidence.. It could be discussed, explaining that it is due to our conditioning, our history in low status work that causes many of us to doubt our own abilities deep down even as we struggle to overcome it; explaining that we have not learned to bluff (another extra skill that we must learn that most men have already mastered). [Handwritten letter, workshop binder, 15 July 2004] (Braundy et al., 1983).

What underlies such vehemence?

Her suggestions and all the other verbal and written feedback we received was incorporated in one way or another, and still, with all of our careful preparation, the very worst, most recalcitrant groups were the vocational instructors. And the most difficult of those were at BCIT. They bought nine sessions of the seminar, over a five-year period with several different administrations. The last was an "end of the fiscal year" event during the worst downsizing the Institute had experienced. No one had told the male instructors why they were assigned and required to attend, and though the importance had been made quite clear to the organizer about women attending the session as participants, none were invited. The woman organizer did not even show up. It was a small group, and to save money, I had agreed to do it by myself. Previously the session had always been delivered with two people. Perhaps I had gotten "cocky" after the years of experience in facilitating the seminar and thought I could do it on my own. It was ugly. The men were on full attack mode, and I heard all about all the "girls" who had made trouble for them in one way or another: by having a brush cut hairdo; rips in their jeans; provocative clothing; nothing about their capability on the job, always about their appearance, and the distractions they caused. These were classroom management issues that had turned into personal affronts, and I was going to pay for them! The day was finally over and I left quite shaken. The wolf pack had tried their best.[4]

---

[4] As a carpentry pre-apprenticeship student at Northern Lights College in Dawson Creek, ultimately the first woman to complete a trades training course there (I heard much about "the ones who didn't make it"), I found what I came to call "the wolf pack mentality". There were a couple of leaders, and 14 or more followers, and when one would start to run down their prey (me) others would follow seemingly blindly. Only in the interview for this research did I begin to understand the complexity of what is driving them.

Several years later, as I sat in a meeting with BCIT and Employment & Immigration Canada representatives, one of the male instructors who had been in that session and the woman who had organized it lost their cool and were screaming at the rest of us that BCIT would never have a women-only trades exploratory course. They had no reasons, but their feelings were strong. The Construction Association would have to go elsewhere to implement one of the major recommendations of their very expensive Industrial Adjustment Study. Sadly, it was never implemented, though several years later women-only trades exploratory courses became available at that institution.

What underlies such impedance and resistance?

Building the Vallican Whole Community Centre, at pre-apprenticeship training in Dawson Creek, in Carpentry apprenticeship classes at Camosun College, Pacific Vocational Institute and the British Columbia Institute of Technology, in the United Brotherhood of Carpenters and Joiners of America, on construction sites and in the seminars, I did my best to humour, cajole, beseech, challenge and encourage men to make way, to find ways, to welcome women as workers beside them. I listened and observed, and developed courses for women to help them meet the needed skill levels for effective entry into the technical world. I advocated with the men who controlled the apprenticeship programs in provinces and in Canada to open the doors a bit wider, to make welcome the women who wanted to come in, instead of standing guard against them, resisting and impeding the systems. In each of those situations, the image of the men: students, instructors, union activists and fellow workers, apprenticeship and employment counsellors, standing or sitting with their arms folded across their chests in a stance of defiance, or protection, or challenge stays with me. Body language speaks volumes.

And yet, every now and then, I would watch as they ever so slowly unwrapped their arms, sat up and even forward, in a *willingness* to engage. It gave me hope, and the stamina to continue.

Looking back at the tradeswoman's seminar follow-up letter, I can see how so many of the themes she addressed are reflected in the play which forms the centrepiece of this dissertation, themes which came from an interview with trades*men,* struggling to come to terms with male resistance.

Performing Intervention

Working with men and women who supported the integration of women in technical fields, I organized three national conferences (Braundy, 1989b) where WITT women came together on the first two days and then were joined, for another two days, by employers, unions, government and educators: those who had a role to play in making changes to our technical workforce. 250 people, 120 of them trades and technical women, came to the first in 1988, at Naramata in British Columbia. It was a watershed event, still spoken of today. With Kootenay WITT, I produced the audio-taped, transcribed and edited proceedings into a book, so that the voices of the women and the initiatives of industry would have a continuing profile (1989b).

Participating in the founding of the national organization, in Ottawa in 1992, I was the elected National Coordinator. There were 374 participants at the 1994 conference in Halifax. We worked in several areas: Front Line worker/manager education, Women In Trades & Technology (WITT) exploratory courses, integrating the apprenticeship system, political advocacy, and grass roots development.

This was a national framework for interventions, in concert with minimal local and provincial interventions and federal employment equity legislation. And though we made small inroads, the numbers of women training and working were

still miniscule, and their experiences were not always improved. Despite the growing stack of reports and recommendations for increasing the participation of girls and women in trades and technology, few actions were ever actually taken by governments, apprenticeship boards, industry and community colleges to implement them.

Since 1980, when the first Women in Trades conference took place in Winnipeg and Lloyd Axworthy gave his speech about skill shortages and the need for women to fill them, and Rosalie Silberman Abella's research formed the basis for the recommendations of the Royal Commission on Equality in Employment (1984a), and legislation (Canada, 1995 & 1985), advocates for interventions have worked to change the representation and opportunities for women in technical fields[5]. Recommendations for exploratory courses in trades and technology for women in industry[6], and in colleges abound[7]. Several course manuals were developed[8], but infrequently implemented. The same has been the case for interventions at the junior, senior secondary and post-secondary levels[9] where any programs were

---

[5] While not commonly done, given that I am among the most published observers of phenomenon in gender, trades and technology, it would be difficult to avoid referencing my own work. Reference to these materials is included, where appropriate, with my colleagues.

[6] (Bohnen, Booth, & Klie, 1991; Braundy, 1997a; Cauley, 1981b; Ross, 1989)

[7] (Booth, 1981; Braundy, 1986, 1992, 1989b; CLFDB, 1989-1994, 1991; CLFDB, 1992; CLMPC & EIC, 1990; Goldberg, 1992; HRDC, Robertson, & Gardner, 1992b; L. K. & Associates, 1992b; Lloyd, 1992b; McKnight, 1994; Ministry of Labour & Ministry of Education, 1978; Minty, 1992b; Muir, 1989; National Advisory Board on Science and Technology, 1993; National Coalition of Women and Girls, 1995; PAB, 1992-1997, 1994; Robertson, 1992a; Schom-Moffatt & Braundy, 1989; Wellmeier, 1993)

[8] (Booth & Murch, 1981; Braundy, 1997b; Brooks, 1986; Ministry of Labour & Ministry of Education, 1978; Minty, 1992b; Sanders, 1986)

[9] (Braundy, 2000; Braundy, Petrina, O'Riley, Dalley, & Paxton, 2000; Bryson & de Castell, 1999; Bryson, Petrina, Braundy, & de Castel, 2003; Castell & Bryson, 1998; Castell, Bryson, & Jenson, 2002; Hawkins, 1996; Hawkins, Mackenzie, & Shirley, 1999; Kutnick, Jules, & Layne, 1997;

implemented as 'one of a kind' for brief periods when they were championed by someone either internal or external to the school. But these programs are not integrated into regular programming. Efforts to increase equity in apprenticeship training have been consistent only enough to demonstrate their promise[10], but never to achieve their long term viability.

Perhaps the fiercest was, and is, the resistance from business, labour and governments to pro-actively move forward implementation of innovative programming to increase the participation of women in industry, or ensure the enforcement of equity legislation and guidelines related to women in technical fields[11]. The British Columbia government has even stopped making sex-disaggregated data available for technology-intensive courses in primary and secondary schools (Bryson et al., 2003), and apprenticeship training in all trades, while changing the legislation that required improvement in the participation of under-represented groups in apprenticeship.

Petrina, 1998; Petrina & Braundy, 1998-2004; Volk & Holsey, 1997; WITT National Network, 1999)

[10] (Bohnen & Klie, 1991; Braundy, 1986, 1992, 1994, 1996, 1989b; Brooks, 1986; Cauley, 1981a; CLMPC, 1993; Cohen & Braid, 2000a; Fields & Gordon, 1992; Gordon, 1989; Haw & Hoevenaars, 1989; Householder, 1998; HRDC et al., 1992b; ITAC, 1997; Kreutz, 1992; Liedtke, 1998; Lloyd, 1992a, 1992b; Madsen, 1999; McArthur-Blair, 1986, 1995; McKnight, 1994; Ministry of Labour & Ministry of Education, 1978; Minty, 1992a, 1992b; Muir, 1989; North Lake College, 1995; PAB, 1992-1997; Rexe, Braundy, Sarenac, Morrison, & Aliyargadeh, 1996; Robb, 1998; Robertson, 1992a; Scane, 1994; Schom-Moffat & Braundy, 1989; Schom-Moffatt & Braundy, 1989a; Steinhause, 1995; Technology, 1993; Thomas, 1993; WEEA, mulitple; Wellmeier, 1994; Wiltshire & McGregor, 1995)

[11] (Abella, 1984a, 1987; Allied Hydro Building Trades Council & Columbia Hydro Constructors, 1993, 1999; Apprenticeship Branch, 1997; Axworthy, 1980; Beck, 2000; Bernard, 1989; Bohnen & Klie, 1991; Braundy, 1989a, 1997a, 2000; Browning & Webb, 1989; CLFDB, 1989-1994, 1994; Cockburn, 1991; Cohen & Braid, 2000a; EIC, 1993; Freidman, 1999; Goldberg, 1992; Gordon & Fields, 1992; Grzetic, 1998; Grzetic, Shrimpton, & Skipton, 1996; Hart & Shrimpton, 2003; ITAC, 1997; L. K. & Associates, 1992a; LeBreton & Loevy, 1992; Legault, 2001b, 2003b; Minty, 1992a, 1992b; National Coalition of Women and Girls, 1995; National Women's Law Center, 2002; Riddle, 1994; Robertson, 1992a; Scane, 1994; Status of Women Canada, 1995; Stead, 1988; Technology, 1993)

I have played a role in a great many of the interventions to improve the representation of women from all the designated groups. I have witnessed the subtle and overt walls of resistance. Lip service is paid and no action taken. If even some of the ideas presented in the reports and recommendations were embraced, it is probable more significant change would have been noticed between Annual Reports to Parliament on Employment Equity in Canada (Canada Employment and Immigration Commission, 1988 - 2004).

An ethical practice of witnessing includes the obligation to bear witness—to re-testify, to somehow convey what one has heard and thinks important to remember. Communities of memory are locations in which such obligations can be worked out...they are locations in which one can: (a) work through the difficulties of responding to the symptomatic questions elicited by testimonies of historical trauma, and (b) decide which testimonies, and what aspects of them, should be retold to whom and in what ways (Simon & Eppert, 1997, p. 187).

I am not assessing or engaging the aforementioned women in trades and technology literature in any depth in this dissertation. The identification of barriers has been multiple as the previous lists of references attest. As well, while I appreciate the vast literature on recommendations for integrating women and other designated groups into apprenticeship and technical training and work, it is the resistance to these initiatives that this dissertation addresses.

Where does the resistance come from?

Early in my studies, when I mentioned that I was investigating resistance to equity initiatives that increase the successful participation of women in trades and technology, a male professor said, "Oh, you mean the resistance inside the girls!" "No," I replied, having recently volunteered in a girls exploring trades and

technology (GETT) week-long summer camp, where I watched the intention and delight on the 6th and 7th grades girls' faces as they operated the jigsaw, drill press, cutting torches and tap and dye set in constructing fancifully designed and drafted go-carts, which they raced on the last day. I had seen no resistance there; perhaps a bit of fear of the unknown on a few of the faces at the beginning. But by the end of the week, everyone had enthusiastically thrown themselves into the action, and were gleefully demonstrating their prowess[12]. The same holds true for women in trades and technology exploratory programs and in industry. I had seen their faces as they used tools to construct, repair and modify tangible objects for use in their lives, and had seen no resistance, only increased self-esteem, excitement and fascinated engagement. The resistance lies elsewhere.

I felt I needed to know more. The naiveté that formed the basis for the seminars is now more informed. *Un*conscious actions are constructed from some basis, and simply bringing the unfairness or illegality of the actions to conscious awareness will not suffice. There are underlying issues that I was not yet able to understand. What is this resistance about? Why not acknowledge, encourage and engage women's interest, learning potential and capacities in these areas? Why, I wondered, the continuing impedance to women's active participation as trainees, co-workers, and even supervisors in trades and technical work?

A long-time senior officer in the federal employment equity program who I interviewed for this research, in Ottawa in early December 2002, said that the resistance has become more subtle, but is still extensive. As someone who has worked with industry and trained equity officers in government and industry for 33

---

[12] (Hawkins et al., 1999; Jenson, Castell, & Bryson, In press; Schom-Moffatt & Braundy, 1989)

years, he felt, "The problems are at that emotional level, and we in government are not necessarily equipped to deal with it!" He was concerned that:

> *In all fairness, we have made progress. But I must admit on different occasions I have sympathy for employers, because they are dealing with issues that are bigger than the workplace, there are attitudes that people bring with them to work... People may not have received training in high school or university and just haven't got the context. So we seem to be putting a lot of onus on the employer community to be doing things while at the same time I contend that we definitely have not done a very good job of public education and we continue not to do a very good job of public education. After 33 years with government, I would be lying if I didn't say that I get cynical sometimes. We go three steps forward and two steps back. What we say and what we do is not lined up. It takes a lot of patience to deal with that (comment from male Employment Equity research participant).*

He suggested that they had tried many other avenues without great success, but thought the idea of using theatre to reach people on a more visceral level had strong possibilities.

What undergirds the fear that has lead to the practices, historical and current, experienced by women[13] seeking training and work in technical and blue-collar fields of endeavour? My doctoral journey is one step towards understanding and reflecting with others on the complexities of this resistance. Through the epistemology of theatre, I explore the performance of *patriarchal masculinity* (hooks, 2004), a form of gender performance, which was so willingly offered up to me in my very first interview for this study; an interview that became a pedagogical tool: a

---

[13] Based on my experiences and observations, three national WITT conferences in Canada, several international labour women's Summer Institute's at Simon Fraser University, and several years participation on the National Women's Reference Group on Labour Market Issues, I recognize that the resistance as experienced by women discussed here crosses lines of race and ethnicity. It is also clear to me that women of colour, aboriginal women, women from a variety of ethnic backgrounds and women with disabilities encounter additional resistance and other forms of discrimination that are beyond the scope of this dissertation.

dataplay (O'Riley, 2003) that explores the social construction of gender in trades and technology.

In exploring the insights into gender and its performance with a particular interest in construction and industrial settings, scholars in the literature [Chapters II-IV, IX-X] point to some of the origins of the words spoken by those interviewed for this study; words that became the play, *Men & Women and Tools* [Chapters VI-VIII]. The scholars words are interwoven, with voices from the play, and my own voice, creating an *interanimation* (Bakhtin & Holquist, 1981), a foundation for understanding.

Chapter II

Gender Is A Contentious Term

Gender refers to a social construction of femininity and masculinity which varies over time and place and is enacted through learned, rather than innate, behaviour (Macdonald, Dubel, & Sprenger, 1997).

Effected by the omnipresent patriarchal biases of our civilization [,] the masculine in this fashion has come to be identified as active, dominating, adventurous, rational, creative; the feminine, by systematic opposition to such traits, has come to be identified as passive, acquiescent, timid, emotional, and conventional (Felluga, 2003, G).

Gender is the structure of social relations that centres on the reproductive arena, and the set of practices (governed by this structure) that bring reproductive distinctions between bodies into social processes....We are talking about relationships, boundaries, practices, identities and images that are actively created in social processes...subject to historical struggle and change (Connell, 2002, pp. 10, 27).

Gender is...one of the foundations of every existing social order...an integral part of any social group's structure of domination and subordination and division of labour in the family and the economy... [it] shapes the individual's opportunities for education, work, family, sexuality, reproduction, authority, and the chance to make an impact on the production of culture and knowledge (Lorber, 1998, pp. 1-2).

Gender is a social, historical and cultural construct, whose meaning is currently being redefined, refined, and reinterpreted. This does not change its usefulness as a construct; it only reaffirms the complexity of what it may encompass. It is also a term that is often confused or conflated with biological sex, and some scholars use the terms interchangeably as was done in a study of occupational sex segregation (Weedon, 1998), or an examination of the interaction of physiologically based characteristics with cultural factors (Bland, 1998).

In this research, gender is a culturally constructed framework within which women and men are limited by historical and socially imposed roles and practices which define their scope, opportunities, ideas and attitudes, as well as their interactive, interdependent social relations *(C. Moser (1993), in Society for the Advancement of Community, 2004, Definition of Gender)*. Sociologist R. W. Connell suggests that such a definition, "based on a dichotomy excludes the patterns of difference among women, and among men" (2002, p. 9), and offers the term gender relations to recognize and include a wider variety of patterns in which people act. And yet,

> *there is an impressive degree of cross-cultural consistency in the content of gender stereotypes. In a study of 25 different countries with considerable geographic, economic, and cultural diversity, several consistent differences in perceptions of women and men emerged (Best and Williams 1993, cited in Glick & Friske, 1999, p. 378).*

While the quotes on the previous page lay foundation for the notion of gender used here, there are a variety of social, economic and political elements that inform this discussion, explicated in the following chapter. *The Longest War – Sex Differences in Perspective,* by psychologists (Tavris & Offir, 1977) is the book that helped me make sense of my difficult and challenging experience in pre-

apprenticeship training. It does not have "gender" in the index, though the word is mentioned a few times in the text. *The Longest War* predates the current common usage of the term gender, though it explicates and analyzes the roots of the differential treatment and constructive social relations of women and men through history to the present day. The authors chose to write, soon after the advent of Women's Studies as a fledgling discipline, a multi-disciplinary book in the social sciences looking at sex stereotypes, and sex-difference research and practice, in plain language accessible to a wide audience. They have included historical frameworks, as well as psychoanalytic, mythological and other religious references. Throughout, they have maintained a sense of humour in examining complex and contentious issues, as explored below.

Difference as Deficiency

Tarvis and Offir (1977) begin their book by demonstrating the love affair and antipathy many men have felt for women. Such antipathy is found going back to at least the 7th Century B.C.E. with the poet Semonides of Amorgos: "'For Zeus designed [woman] as the greatest of all evils—and bound us to it in unbreakable fetters'...need and desire" (p. 3). "Many cultures warned men about the horrible things that may happen to those who yield to female sexual mysteries and lures..." (p. 6). These ideas, tracked through literature, laws and religious texts, lay the groundwork for strictures and structures constraining the behaviours and opportunities of the women, and constructing the opportunities of the men, each in their own time.

> *Thus, when the infant science of psychology took up the matter of sex differences in the late nineteenth century, it sought to identify the precise deficiency in the female brain that accounted for her weak intellect and strong emotions (with Stephanie Shields, 1975, p. 13).*

Differences, in both race and sex, have come to be interpreted by the dominant culture as deficiencies, "deviance from an acceptable norm – even as pathology—and in both cases difference is used to rationalize racism and sexism" (Rothenberg, 1998, p. 11). Twenty years after her groundbreaking work on gender roles, Sandra Bem waded into the continuing debate about sex differences, and found that she had also entered the contentious arena of sex and gender diversity and race and cultural identity representation. She notes that in all of these cases, the differences are being played out against a "rich, white, heterosexual, and male centered" world disguised as gender-neutral, which "transform such differences into disadvantages" (Bem, 1998, pp. 49-50). To engage constructively in this arena, she posits that "it is much more important to shift from an analysis of difference *per se* to an analysis of the ways in which the social structure privileges some people's differences at the expense of others" (p. 50). Those differences attributed to male and female are characterized as "gender polarization," and tend to "constrain" and "script" aspects of human expression from work and personality to sexual affection and desire. Such polarization also defines those who deviate from the script "as problematic—unnatural, immoral, biologically anomalous, or psychologically pathological" (p. 51). She ends by endorsing a challenge to the belief that all men are naturally masculine, all women naturally feminine and everyone is naturally heterosexual, categorical assumptions she believes are at "the foundation of gender inequality."

Judith Halberstam (1998) reinforces this with her challenges to reified gender roles. In *Female Masculinity*, she argues against "a pathological theory of gender dysphoria" (p. 119) pointing out that "within certain brands of lesbian masculinity, the effects of gender dysphoria produce new and fully functional masculinities, masculinities moreover, that thrive on the disjuncture between

femaleness and masculinity." She quotes Gayle Rubin in noting that there are some women "who are more comfortable with masculine gender codes, styles, or identities than with feminine ones" (p. 120).

Differences and Similarities

In 1977, Tarvis and Offir examined similarities and differences between men and women in sexuality, the biological realms, psychoanalytic perspectives, socialization and learning theory, sociological perspectives on work and marriage, and anthropological descriptions of how things are done in other cultures, and their findings are still salient today. They do this in a fullness that is quite unique. Lynn Segal, Professor of Psychology and Gender Studies, has since covered similar areas (1990), and her focus on masculinities has been an invaluable contribution. R. W. (Bob) Connell (1987; 1995; 2002) has also covered similar ground, using the concept of gender, masculinities and femininities as an organizer, demonstrating throughout the social constructions of these elements, characteristics and practices that have often been considered fixed. His theoretical approach provides a useful context to highlight the dynamics of gender in this dissertation.

Biological basis

Sex refers to the biological state of being male or female in a society that accepts only two sexes. It is clear to me from the literature on those children born with both male and female physiological sex characteristics (Fausto-Sterling, 1993, 2000), and the variation in chromosomal and hormonal representations across individuals, as well as the growing activism by and for those who experience it (ISNA, 2004; Koyama & Weasel, 2001), there is a spectrum of biological potential that goes beyond merely the two sexes that are traditionally acknowledged (Lorber, 1994, 1998). Both men and women carry varying and individual levels of

testosterone and oestrogen (Rogers, 2000, in Connell, 2002, p. 33) at different times in their lives. But that is not the subject of this dissertation.

Throughout history, there have been theories and practices developed to create and respond to notions of the realms of differences characterized as inherent in the extremes of male and female physiologies. Bigger brains, smaller brains; stronger muscles, weaker muscles; skills and abilities in various occupations; emotional and nurturing differences, etc. Maccoby and Jacklin (1974) thought they put those ideas to rest when they completed their meta-analysis of the sex difference literature and found only minute differences, reaffirmed in 2003:

> *They concluded that there were only four differences between boys and girls for which there was strong evidence. This is a much smaller number of gender differences than would have been predicted by most psychologists. The four differences identified by Maccoby and Jacklin were as follows:*
>
> *• Girls have greater verbal ability than boys.*
>
> *• Boys have greater visual and spatial abilities than girls (e.g., arranging blocks in specified patterns).*
>
> *• Boys have greater arithmetical ability than girls, but this difference only appears at adolescence.*
>
> *• Girls are less aggressive than boys: this is found in nearly all cultures, and is usually present from about 2 years of age.*
>
> *Most of these differences are fairly small, and there is much overlap in behaviour between boys and girls. Sex differences in abilities (verbal, visual, spatial, and mathematical) are even smaller now than they were in the early 1970s (Hyde & Linn, 1988, in Eysenck, pp. 303-304).*

What is not presented by Eysenck are the areas of similarity Maccoby and Jacklin found:

Table 1   Gender Similarities

General intelligence	No difference on most tests Reconfirmed in 2000 by Halpern & LaMay (in Connell, 2002)
Creativity	Female excel on verbal creativity tests; otherwise no difference
Cognitive style	No general difference
Physical abilities	Males more muscular; males more vulnerable to illness, disease; females exceed on manual dexterity tests when speed important, but findings ambiguous.
Sociability and love	No overall difference; at some ages boys play in larger groups; some evidence that young men fall in love more easily, out of love with more difficulty.
Empathy	Conflicting evidence
Dependence	Conflicting findings; dependence probably not a unitary concept
Nurturance	Little evidence available on adult male reactions to infants; issue of maternal vs. paternal behaviour remains open; no overall difference in altruism

(Tavris & Offir, 1977, p. 33)

Maccoby and Jacklin's study has received wide acceptance, with some caveats regarding their equal weighting of all studies reviewed. Tarvis and Offir explore the specific realms of difference and similarity in detail in Chapter 2, bringing in other studies as well. Maccoby and Jacklin's work is quoted in "virtually every introductory psychology textbook," but "it is the relatively small number of consistent sex differences that are highlighted in these texts rather than the much larger number of inconsistent findings. Sex differences are stressed, rather than sex similarities" (Connell, 2002, p. 43; Unger, 1998, p. 96).

And there has been a recent resurgence of hairsplitting and deep research into these "fairly small" and overlapping behaviours noted in Scientific American.com (Kimura, 2002). There was also an extremely contentious debate about notions of sex difference on an international feminist listserv for Women's Studies (WMST-L)(Various, 2002). Of note in all of this is the propensity to use such data and theoretical approaches to promote views that these few conceptual differences create an essential discongruity, aligned with the idea that the male extreme is the norm and superior, and the female characteristics, at whatever level of expression, are an aberration, a practice referred to as *androcentrism*, andro meaning male (Bem, 1993).

Rhoda Unger, a founder of the field of feminist psychology in the United States (1998), teases out the understanding that "controversies about sex and gender are controversies over what is assumed to produce a particular sex- or gender-related behaviour," verily, the *nature-nurture* debate. Are these characteristics and behaviours generated by physiological requirements, or are they the result of social learnings?

Sex/Gender Role Theory

Historically, surveys of biologically-based sex differences have been used to develop and reinforce societal attitudes regarding the proper behaviours for men and women, and define what has become known as their gender roles. These sexual stereotypes are then used to create and/or justify differential social, economic and political treatment.

Typical traits associated with each sex include:

Table 2   Gender Traits

Traits associated with males	Traits associated with females
Aggressive	Gentle
Independent	Need security
Blunt	Tactful
Hide emotions	Displays emotions
Never cries	Cries easily
Ambitious	Kind
Courageous	Timid
Strong	Sweet
Dominant	Submissive
Disciplinarian	Nurturer
Rational	Emotional
Self-sufficient	Understanding
Forceful	Sympathetic
Analytical	Intuitive

(Adapted from Broverman et al, in Tarvis & Offir, pp. 21-23)

Sandra Bem, noted feminist psychologist, created the Bem Sex-Role Inventory (1974), confusing the current discussion through her use of the term sex to describe characteristics which may be either innate or socially acquired. She used these characteristics to evaluate scales of masculinity, femininity and androgyny. Individuals can score high on both masculine and feminine scales, demonstrating degrees of androgyny, the representation of both masculine and feminine characteristics within one person, able to use those traits as needed.

> *Research has supported the idea that androgyny correlates with a number of other positive attributes, such as higher levels of identity formation in college students (Bem, 1974; Heilbrun, 1976; Orlofsky, 1977). In addition, androgynous individuals have been demonstrated to have more reasons for living than gender-typed individuals (Ellis & Range, 1988). These findings suggest that androgynous individuals tend to be more psychologically healthy and function more adaptively in modern living (Holt & Ellis, 1998).*

Psychological androgyny was conceived to be a contradiction to the sex role and psychological health correlates that existed at the time, specifically the idea that healthy sex-role identity should consist of the adoption of behaviors and attitudes that were culturally consistent with one's sex (Bem, 1976, in Koesterer).

Some of the typical traits above are words used in Bem's test, which found a high degree of "high internal consistency and test-retest reliability." Since the test was over two decades old, there was some concern that it may be outdated in terms of the representations of masculine and feminine gender roles. Another study using a somewhat different scale was completed in 1995 and its results were quite surprising.

*[It] examined college students' gender role perceptions of the ideal man, ideal woman, most men, most women and themselves, by completing the Sex Role Trait Inventory (SRTI) (Street & Meek, 1980). Students completed the SRTI for each of the five objects (ideal man, ideal woman etc.). It was found that both the female and male students rated the ideal woman as androgynous, women preferred an androgynous ideal man, and men preferred a masculine ideal man. Both female and male students rated most women and men in terms of stereotypical gender roles. **It was concluded that little has changed in the gender role perceptions of college students since the 1970's** (Street, Kimmel, & Kromrey, 1995). [Emphasis added]*

The Bem Sex-Role Inventory was revalidated in 1997 (Holt & Ellis, 1998). The findings showed that the masculine and feminine word scales were still valid, i.e. "all of the masculine adjectives were rated as significantly more desirable for a man than for a woman…[and] all but two of the feminine adjectives were rated as significantly more desirable for a woman than a man." ('Loyal' and 'childlike' were words "only marginally rated as more desirable for a woman.) The finding of note, however, was the indication that

an examination of the magnitude of differences in the difference scores
("change") of the desirability of the adjectives for males and females from
Bem's 1974 sample to the present indicates that the magnitude of difference in
desirability has decreased over this period (p. 3).

In other words, there was a lesser magnitude of difference scored for social desirability of the adjectives for masculine and feminine, "suggesting that people are slowly becoming less polarized in their notions of traditional gender-based characteristics. It seems this finding is at odds with the Street, Kimmel and Kromrey study, but one must also note that the two studies differed in the questions asked. It will be useful to replicate the Bem study over time.

Sex and/or Gender Theories

Bob Connell, a scholar who has made a life study of gender, power and the construction of masculinities, describes and critiques the "frameworks" of gender (1987). He, too, confuses the situation by conflating sex-roles[14] with gender roles. One must note and encourage the evolution of these terms in hopes of eliminating some of this confusion but as I am quoting him, I will use his original terms here. He uses the term *sex-role theories*, suggesting that "it allows a shift away from biological assumptions about sex differences, emphasizing that women's and men's behaviours are different because they respond to different social expectation" (p. 48) and that these expectations are often reproduced through media images in the society at large. He feels that sex roles provide "a simple framework for describing insertion of individuals into social relations...[through] 'role learning', 'socialization' or internalization," so that "female character is produced by socialization into the female role, masculine character by socialization into the male role − *and deviants*

---

[14] An example of a sex role would be one that is biologically based, such as mother/father, wetnurse, progenitor, copulator or other term that is based solely on having a particular sexual organ.

by some kind of failure in socialization" (p. 49) (emphasis added). As these arguments direct attention towards "people and institutions responsible for the learning, the so-called 'agencies of socialization': mothers, teachers, peers and the media," Connell suggests they provide the opportunity for

> *a politics of reform. If the subordination of women is largely a result of role*
> *expectations that define them as helpmates or subordinate, their characters*
> *as passive or expressive (rather than instrumental), then the obvious path*
> *forward is to change the expectations (p. 49).*

Connell posits that if roles are reinforced through "reward of conformity to them and punishment of departures from them," adherence comes down to individual acceptance of the constraints, "personal agency" and not solely social structures, and that this is further distilled, in role theory, by an implicit assumption of *biological determinism,* reverting to a discussion of inherent sex differences. He suggests that rather than examining the economic, domestic and political power arrangements inherent in this construction of gender, what he later refers to as the *gender regime* of the *gender order* of a particular segment of society (Connell, 2002, pp. 53-54), "role analysis substitutes a theory of norms...reducing all masculinities and femininities to one dualism (with Ann Edwards)...a *normative standard case"*. But in fact, "a crucial difficulty is that what is *normative,* i.e. expected or approved, is not necessarily *standard,* i.e., actually the way things usually happen...especially not in the case of sexuality" (p. 51). This discrepancy promotes a concept of deviance, "produced by imperfect or inappropriate socialization," eliminating "the element of power" and "the fact of social struggles" from the discussion. His main point here is that sex role theory "cannot grasp

change as history, as transformation [is] generated in the interplay of social practice and social structure" (p. 53).

Categorical Theory

In the next section of his foundational work on gender and power, Connell (1987) explicates his choice of the term "Categorical Theory" in which is included a series of arguments from the literature that might be considered essentialist: based on notions that all men are this, or all women are that, "as in Susan Brownmiller's well-known argument that rape is 'a conscious process of intimidation by which *all men* keep *all women* in a state of fear'" (p. 55); or an economic division of labour based on sex, without consideration of the capabilities of the individuals. Sociologist Judy Wajcman, in her foundational analysis of the gendered interplay in science and technology (1991) describes essentialism as "the assertion of fixed, unified and opposed female and male natures" (p. 9). Ava Baron (1991a) offers that such categorical theories, "as those that posit the existence of distinct sex/gender or patriarchal systems, treat sexual politics as relations between two internally undifferentiated groups of people with contradictory interests" (p. 21), are in opposition to one another and engaged in conflict and power struggles, provide only limited illumination, and don't concern themselves with "the process by which gender categories are constructed." Wacjman notes "the values being ascribed to women originate in the historical subordination of women...the belief in the unchanging nature of women, and their association with procreation, nurturance, warmth and creativity," and reminds us that these notions are "constantly under reconstruction," and that, "there is no behaviour or meaning which is universally and cross-culturally associated with either masculinity or femininity" (p. 10).

Connell points out that

Another form of categoricalism focuses on a representative individual...the argument that explains pollution, indiscriminate exploitation of resources and the threat of nuclear war, by the personal aggressiveness and ruthlessness of the typical man (p. 57).

He counters the use of categoricalism because it ignores the potential for change through the reconstruction of social processes:

The insight underlying this argument is certainly correct. A power-hungry and emotionally blunted masculinity is part of the social machine that is wrecking the environment...but to theorize this as the direct outcome of masculinity is to miss the point of the social machinery that makes a given form of masculinity environmentally destructive...It misses the social arrangements that give a particular kind of masculinity a hegemonic position in sexual politics that marginalize others. And in many arguments it misses the social processes that construct this kind of masculinity in the first place (pp. 57-58).

Connell's descriptions and argument are cogent for the most part. He criticizes the categorical theory after providing a simplistic schematic of gender and class, based on Tolson, and complicating it with additional considerations of race.

It is a similar heuristic to the original social cartography developed by theorist Roland Paulston, formed by two crossed lines, creating four quadrants, labelled: positivist, Marxist/critical theory, interpretive and post-structuralist/postmodern. Paulston's later updated schematic (1997) added myriad components in complex juxtaposition to one another. This is to illustrate, as Connell suggests, that "categoricalism underplays the turbulence and contradictoriness within the social process of gender" which is in constant flux.

The complexities that are continuing to emerge from scholarly discussions of what needs to be taken into account in exploring the contextual roots of sex discrimination at work are well described in the introductory chapter of Ava Baron's

historical look at situations and practices of women working in technical areas, *Work Engendered – Toward a new history of American Labour* (1991c). Rather than posit the post-structuralist and postmodernist theories as a progression of feminist theorizing from *First Wave* through *Second Wave* to *Third Wave Feminism*, Baron incorporates analyses of class, race and gender while posing the question: "How can feminist thinkers incorporate differences among women and still formulate a theory about women as a social category?" (p. 33), acknowledging that some feminists "are concerned that such differences may eradicate the possibility of feminist theory and stand in the way of effective political action in mobilizing women qua women" (p. 34). It would seem that she, too, has come to the conclusion that "difference does not preclude similarity...despite differences, it is possible for women to share a feminist understanding of gender relations....Feminist politics does not need to be based on a shared identity, it can be based on alliances between women who are different, but who share the same interest in particular circumstances" (Charles, 1996, pp. 13, 32), i.e. working lives, trades or technical training and work etc.. As well, there is potential for women and men as well, "as gendered beings, [to] actively constitute and reconstitute the social relations in which they live" (p. 23).

Moving away from traditional adherence to either/or brands of feminist theory, well delineated in the introductions of *Women's Studies Essential Readings* (Jackson, 1993) and *Materialist Feminism* (Hennessy & Ingraham, 1997), Baron advocates an integration, rather than even an interrelationship, approach for analyses of gender with economic concepts, work, the family, social reproduction, race and class relations, and, with Joan Scott (1988), "the way meanings of sexual difference are constructed and used to signify power and hierarchy" (1991a, p. 19). This model is exemplified in Feldman's exploration of patriarchal theories as applied to women workers in Bangladesh (2001).

Patriarchy

Using the areas of paid employment, household production, culture, sexuality, violence and the state as organizers or structures, Sylvia Walby (1990) defines patriarchy as "a system of social structures and practices in which men dominate, oppress and exploit women" (p. 20). She demonstrates how, in each domain, representatives of differing theoretical feminist constructs engage the concepts and practices of patriarchy in their examinations of women's experience. Taking a dual-systems approach herself, the threads of capitalism and public and private patriarchy are woven in a compendium of historical and social acts of challenge and resistance.

Patriarchy is defined by Carole Pateman as "...a set of social relations which has a material base and in which there are hierarchical relations between men, and solidarity among them, which enable them to control women" (in Cockburn, 1983, p. 125). She further elaborates her use of the word and the concept in her conversation with Nirmal Puwar (2002):

> *The reason I picked the term patriarchy is that it is very difficult to find a term that captures the power of men over women, in whatever form it comes. Because that form of power has not been treated as a political issue..., we have not had analogous terms to those developed for other types of power. But you do not have to do any extensive amount of research to see how race, gender, class and ethnicities are...connected in the new global order (p. 124).*

Social psychologists Susan Fiske and Peter Glick deepen the understanding by adding the concept of *structural power*, that of "high-status positions in important social, economic, legal, and religious institutions" (Glick & Friske, 1999), positions, more frequently than not, occupied by men in the society.

While Judith Butler suggests that the term "patriarchy" is/should be in disfavour, particularly as a "universalizing concept that overrides or reduces

distinct articulations of gender asymmetry in different cultural contexts" (1990b, pp. 3-4, 35), others have continued to maintain its usefulness in providing a discursive tool. Because "hegemonic discourses are never totalizing, but always contested, reasserted, reconstituted, and reformulated" (Feldman, 2001, p. 1120), patriarchy provides a foil upon which clarity and contextual understandings can be built. "Relations in difference negotiate with dominant practices through the complexities of daily life in ways that both interpret and reconstitute emergent discourses and imaginaries of change."

Patriarchy is a verbal identifier of complex processes and relationships, but does not provide an understanding of what actually constructs them. I use this term in this dissertation in the same spirit, rather than citing the word as "the original or founding cause" (Barrett & Phillips, 1992, p. 3) of the structures of oppression. It is not the answer, but it is certainly a component of the complex context in which the words of the play emerged fully formed.

Steve, the older union organizer in the play, *Men & Women and Tools*, reflects on what some of those processes and relationships look like in technical workplaces today:

> **Steve: When I was a kid, on a construction job, non-union - may I be forgiven - a young guy was carrying two cement blocks up a board and giving it to the masons. I saw the crew go to the boss and say look, this kid is going to die! He didn't have the upper-body strength to carry blocks like that. It was the crew that intervened. But I sure as hell have never seen a crew do that for a woman.**

Gender Relations

In his work on gender, Bob Connell provides a complex review of analyses and theories from studies in diverse disciplines of the social, political and cultural relations between women and men, including feminist and lesbian perspectives and those from gay liberation, along with race and class orientations. He uses these to

demonstrate both theories and practices that contest the somewhat received notion of unmoving categorical structures. These studies imply "the possibility of different ways of structuring gender, reflecting the dominance of different social interests...[and] changing levels of contestation and resistance" (1987, p. 63). Years later, the issue of the biological factors in sex differences is still unresolved in many people's minds, and still, others are moving forward on more practical fronts in gender relations.

This is more effectively noted in Connell's later work (2002), and complicated by the notion that 'gender' is

not about simple differences or fixed categories. We are talking about relationships, boundaries, practices, identities and images that are actively created in social processes, come into existence in specific historical circumstances, shape the lives of people in profound and often contradictory ways, and are subject to historical struggle and change (p. 27).

Connell's lifelong explorations and investigations of masculinity and gender are undertakings within the frame that these notions are socially constructed, and interventions which bring such understandings to the surface have social change potential. This perspective means that what has been constructed, can be deconstructed and reconstructed, provides the ground on which to stand to bring forth efforts in this ongoing social action reflexive praxis.

Gender is a factor complicated with power dynamics and reconstituted through communication patterns and institutionalized practices. Sometimes defined as "the culturally specific set of characteristics that identifies the social behaviour of women and men and the relationship between them..., the way it is socially constructed...[as] a relational term, gender must include women and men" (Status of Women Canada, 1996) (emphasis in original). The structure, processes and

institutionalized practices that govern that relationship can be referred to as *gender relations*.

> *Gender relations are the rules, traditions, and social relationships in societies and cultures which together determine what is considered 'feminine' and what 'masculine', and how power is allocated between, and used differently by, women and men (Macdonald et al., 1997).*

Four contexts for gender relations

Connell posits that gender relations are structured through the daily practices of people and groups, "reconstituted from moment to moment in social action" (2002, p. 55) in four contexts: power relations, production relations, emotional relations, and symbolic relations.

In his explications of power relations (pp. 58-60), he does not distinguish between 'power over' and 'power to', an understanding of agency found in grass roots women's movements. Cockburn also distinguishes this when she suggests that "women and other subordinated groups are potentially able to recognize and use power not as domination but as *capacity* (1991, p. 241) [italics in original]. Still, Connell refers to patriarchal constructions of power in legal and institutional relations to women, and as applied to harassment and discrimination of gay men and lesbians, including the notion, attributed to Foucault (1977), that power is widely dispersed, diffused throughout the culture, remarking on the ways it can and has been contested and transformed.

Production relations encompass not only the "sexual division of labour" at work, but also the allocation of separate spheres of work and home, with primary constructions of masculine and feminine domains, regardless of actual practices. He notes, with a nod to Maria Mies (1986), these processes are being "pressed" onto developing economies in colonized countries, reproduced through gendered

accumulation processes, and instructed through gendered divisions in education systems. This latter postulate has been well documented in the development of technological competence in elementary and secondary schools[15].

Identifying (with Freud, 1900) that "charges of emotion – both positive and negative – were attached, in the unconscious mind, to images of other people, Connell (2002) offers several arenas in which this takes place in gender relations. Hostility and warmth towards women and/or homosexuals are "definite emotional relationships," (p. 63), as is ambivalence. Sexuality, individual affections, and romantic love find differing arrangements in a variety of cross-cultural settings and even in the workplace.

Lastly in Connell's four contexts is symbolic relations, the "world of meanings" created in the social processes in which we each live. Acknowledging French psychoanalyst Jacques Lacan who gave the world the analysis of "the phallus as master-symbol...giving rise to an interpretation of language as 'phallocentric', a system in which the place of authority, the privileged subjectivity, is always that of the masculine...culture itself embodies the 'law of the father'" (p. 65), Connell suggests it is this "dichotomous gender structuring of culture" that "gives us some inkling of why patriarchal gender arrangements are so difficult to abolish" (p. 66). This symbolic relation permeates fashion, film, advertising and architecture, is challenged and toyed with by queer activists and theorists Judith Butler (1990), Judith Halberstam (1998), and performance studies professor Peggy Phelan (1993b; 1993; 1998). Halberstam uses the action hero notion as represented by James Bond to show how intentional (or unintentional) parody can create an "exposure of the norm (p. 4), thereby un-naturalizing the performance.

---

[15] (Braundy, 2000; Braundy et al., 2000; Bryson, 1998; Bryson & de Castell, 1995a, 1996; Bryson et al., 2003; Petrina, 1998)

Connell's explication of gender relations while rich and articulate, seemed to be advocating of a "gender-free society" (Connell, 2002, p. 70). This is of concern. It is not the representation of gender, nor even all specific relations that are problematic. It is the pejorative constitution of deviance built into those relations that are unacceptable.

Instead, Mary Bryson and Suzanne de Castell (1995a; 1995b; 1996; 1999) open up the potential for playfulness in their taxonomy of gender/equity/and technology (1995b, p. 24; 1996, p. 124) by noting that

> *A pedagogy of salvage and recycling might accordingly appropriate traditional skills, simultaneously abandoning traditional (gendered) meanings, functions and uses of those skills in a species of mimicry of (thus far usually masculine) competencies which, because of its self-conscious playing with positions, thence its parodying of the fixity of position, is at last capable of truly disrupting hegemonic relations between learners and technology (1996, p. 124).*

By creating programs where young and older women actually take the tools in their hands and develop the skills to use them as in the Einstein's Sisters project (de Castel, Bryson, & Jenson, 2002, pp. 5-6) and WITT exploratory courses[16], this interference with the traditions of normalcy provides a place for "maximizing the likelihood of optimal outcomes" (Bryson & de Castell, 1996, p. 125) including the delight in the actualities of "restructuring power relations," and "transforming received knowledges...through ironic acts of mis/representation, mimicry, collage, montage, and re/degendering" (Bryson & de Castell, 1995a, p. 20). The paucity of these approaches speaks volumes to continued resistance to challenges to traditional gender regimes.

---

[16] (Bohnen et al., 1991; Booth & Murch, 1981; Braundy, 1992, 1993, 1994, 1997b; WRDC, 2004)

Equality of Outcomes

Examination of gender relations in "the division of labor, productive and reproductive activities, access to and control over resources and benefits, and socio-economic and environmental factors that influence women and men (OXFAM; 1994 40; IPS; 1996 30)" (in Society for the Advancement of Community, 2004, G for Gender), is called *gender-based analysis*. This "systematic investigation of the differential impacts of development on women and men," being conducted across the world today, is often called *gender-mainstreaming*, with goals of equitable treatment and outcomes for women and men, sometimes referred to as equality.

In North America, there is an underlying understanding that equality is to be valued. The institutional structures of patriarchy have not crumbled, but the 'legitimation of patriarchy' has been undermined. In many places in the world, the denial of that equality has become suspect. 'Lip service' to the legitimation of equality concerns is becoming the norm, but understanding and implementing the elements required to achieve it are rare. "Achieving equality does not mean that men and women are the same, it means that one's rights or opportunities do not depend on being female or male" (Brazil - ACCC, 2002, Gender Equality Tools). But, rather than trying to create a world that is *gender neutral*, or gender blind, the goal is to ensure that policies and practices are *gender inclusive*, welcoming of difference.

Equality of outcomes, referred to as *equity* requires more than being treated the same. In Canada, it may include special measures to remedy the effects of past discrimination and requires the reasonable accommodation of differences to enable equality of outcomes.

> *Sometimes Employment Equity means treating people the same despite their differences, sometimes it means treating them as equals by accommodating their differences (Abella, 1984, in Beck, 2000; Braundy, 1997a, p. 2).*

Special measures (i.e. special training programs; short term hiring goals; developmental promotions) and the reasonable accommodation of differences (i.e. disability accommodation; flex hours) are part of the required plan which "would, if implemented, constitute reasonable progress toward implementing employment equity..." (Canada, 1995, Ch. 44, p. 49), at least producing some level of economic equality. There is an expectation that women need to perform the same as men. Connie, the composite female character in the play, *Men & Women and Tools* questions this notion.

Feminism intersects male norms:

Connie: Why is it women have to conform to how the <u>men</u> want it to be?

Equity seeking programs can get into trouble when expectations of gender performances contradict individual socialization processes. For example, in Jason's statement, in the interview for this study that led to the play *Men & Women and Tools*, regarding a woman he found working beside him in construction:

> **I expect that she's representing women out there, so she needs to make an effort to stand, you know, I'm here, and I'm a woman and I'm going to kick ass like the rest of you guys.**

It is clear that Jason wants the women on the job to display "masculine virtues" (Cockburn, 1991, p. 69). This double-bind is explored by Kate Braid in *What Happens to Women in Tradesland* (Braundy, 1983) and in the early Saskatchewan women in trades exploratory programs. Such double-bind expectations are reinforced on the worksite (Martin & Collinson, 1999, p. 297). Once women make "a decision to compete with men there is a tendency for them gradually to take on masculine traits" (Cockburn, p.69) making it more difficult for the women who come newly into the jobsites, unwilling to change their persona, as Steve, another research participant, suggests:

If a woman wants to succeed in trades or tech, she could just become one of the boys. But a lot of the women who are feisty enough to work in a trade say, "I'm not interested in being one of the boys! I know who I am, and I just want to make a living."

Often the pressure to conform, or perhaps just to blend in, is great, experienced as an internal pressure as well as an expectation from coworkers and supervision. And once a woman can learn the rhythm of the banter of the worksite, relations are easier. She is accepted. But the communication patterns prevalent on the worksite don't come easily to many women traditionally socialized into gender roles with the characteristics listed as feminine. And yet, Legault found:

In SME (small and medium-sized enterprise) settings, when a women responds to a male colleague in anger, the incident ends without turning bitter. The employees accept it when a female colleague expresses her anger, even in front of their peers. Moreover, these women will become best friends with their male colleagues and will be acknowledged as 'one of us' if not 'one of the boys'! (2001a, p. 25).

Girls and boys "learn how to adopt a certain identity and produce a certain gender performance" (Butler, 1990a; Connell, 2002, p. 81). Connell suggests that engaging in such *gender projects* is an opportunity for active learning, for developing "the pleasure of creativity and movement," perhaps even finding "a moment of separation from *hegemonic masculinity*," opportunities tempered by already constructed "class inequalities, ethnic diversity, regional difference, nations origin," (p. 83), sexual orientations or parental biases. Men and women are confused about what role women are to play. Traditional expectations are limited to specific roles: wives, girlfriends, mothers, lovers and sometimes sisters. These are all socially prescribed gender roles, not always challenged by women or by men. The notion of a woman as co-worker on a construction site or in an industrial setting is not familiar, and the rules for roles aren't clear. It interrupts. Jerry and Jason,

characters in *Men & Women and Tools*, trouble the implications of gender on their worksites, and Connie interjects:

> Jerry: ...But, when you go into the lunchroom with some of the women, the conversation stops. If they accepted the male conversation, they were accepted.

> Jason: The rules of the game didn't change.

> Jerry: You had your work and your interaction with the guys. It's not whether a female is better, smarter, more intelligent, faster, whatever. If you couldn't say what you thought...that's where it would jam.

> Jason: We have a couple of women apprentices, and Jane is really struggling to fit in...

> Connie: I wonder why???!

> Jason: ...while Darlene fits in quite well. . Darlene is clear. If you are stepping over the boundaries, she'll let you know. Jane is not fitting in at all. The guys have to be very, very careful.

This double-bind is explored in Cockburn (1991, p. 69). These differing expectations of gender performance are exemplified in *What Happens to Women in Tradesland* (Braundy, 1983), the A/V presentation, as well as in the handouts, developed by Kootenay Women in Trades and Technology (WITT) for the seminar, *The Workplace in Transition – Integrating Women Effectively* (Braundy, Mackenzie & Ward, 1983), created to assist male co-workers, supervisors, vocational instructors and counsellors to better integrate women into the technical workforce.

DOUBLE BINDS

If she doesn't swear, they feel they have to stop swearing which they resent
If she does swear, they are shocked by her "unladylike" behaviour

If she asks for help, then she isn't holding up her own end

If she doesn't ask for help, then she's trying to show them up

If she is too friendly with her co-workers, she is seen as loose
If she keeps to herself, she is stuck up and anti-social

If she is unassertive, they think she is not capable of standing up for herself
If she is assertive – she's a pushy dame

If she accepts help, she's not capable of doing the work
If she refuses help, she is seen as unfriendly and hostile

If she appears too feminine, they say she will never make it in a man's world
If she dresses in workclothes and acts tough, they say she is trying to be like a man

When the sexual banter gets really rough:
If she goes along with it they don't respect her, she is not a decent woman
If she objects, they say she can't take a joke

Women in Trades Kootenay Council   © 1983

These double binds have changed little over the years[17]. Cockburn, looking at male resistance to sex equity in organizations (1991), describes situations involving primarily white-collar work, while Braid and Braundy are looking at blue-collar construction and industrial settings. Cockburn focuses her discussion on managing and positions of authority. Females she interviewed said

> *that women are specially competent and practical, make better managers because of their experience of running households; that women are better at detail, are more conscientious than men, have a more caring attitude toward staff and public, are less aggressive in their approach (Cockburn, 1991, p. 68).*

However, the males she interviewed criticized women as

---

[17] (Braid, 1991a, 1991b, 2003; Braundy, 1997b; Cockburn, 1991; Legault, 2001, 2003a)

not capable of authority...'lack a bit of judgement', and 'get a bit emotional', 'are not cut out for it', 'find it difficult to be ruthless enough'..." At the same time, the men said the women "are 'bossy', 'pushy', 'absolute bastards', trampling on others in their ambition...insufficiently authoritative, or too authoritarian' (p. 69).

The double bind is clear for women seeking promotion in white collar work: *the environment they have joined, which is that of men in power, has threatened to repel them if they do not adopt to its culture...once such women have made a decision to compete with men there is a tendency for them gradually to take on masculine traits (p. 69).*

I was interviewed once by the CBC[18], in the bar with some of my union brothers after the first paycheck on a job where I was the first woman carpenter on a union jobsite in British Columbia (1981). The reporter had tracked me down and was asking me some questions. "What is it that you will bring to the Brotherhood[19]?" he asked. "Sisterhood," I replied, none of us really knowing what that might mean, but I was certainly hoping that it might reconstruct the gender relations to achieve the kind of camaraderie that I had found on that job, as opposed to the harassment I had experienced in pre-apprenticeship training.

The expression of the experience across disciplines

During the course of the research for this dissertation, I became friendly with a South African doctoral student, a math teacher who had spent six years teaching, just out of school herself, in a multi-racial, all-boys traditional and historic independent school. She faced many of the challenges, contradictions and conundrums that I consider here. Her description of her experience integrating into that environment was so profound that I asked her to write it down for me. She is

---

[18] Canada's national broadcaster interviewed me in June 1980.
[19] My union was the International Brotherhood of Carpenters and Joiners of America.

an excellent storyteller, in both oral and written forms, and the story performs in the spirit of theatre as epistemology, provoking a realization of an essential emotional reality. It represents and evokes an understanding of many of the elements of gender and the exercise of patriarchal masculinity that are under discussion in this dissertation. With her permission, it is included in its entirety in Appendix A, with some key excerpts here.

> *There were very few women teachers at the school at the time and none that were 'young' and female, other than myself, teaching in a prominent curriculum subject such as mathematics. It was an alienating experience for me as a woman, but the satisfaction I felt from my interaction with my students greatly compensated for it. I tried to blinker myself from the blatant chauvinism I often was forced to endure and accept, keeping my head down, focused on my work and my students, and hoping outwardly that if I didn't 'make waves', it would somehow go away or, at least, become more invisible. Inside me, I knew it wouldn't, that the layers of 'white patriarchy' were deeply entrenched and hegemonic, informed by the rituals and traditions within the school and the dominance of its colonial cultural ethos. I realized that this was how the power of prejudice operated… that it makes its mode of control invisible and irreproachable in context and that it takes some legitimate power base from within another context to begin to contest it. I was alone, vulnerable and weakly positioned within the context, all because I was a woman, and there was no legitimate space for a woman's voice in this place. But, I needed the job, I loved my job in the classroom, and I was trying my best….*
>
> *One day, after a little while at the school, a male member of staff confronted me at a mathematics department staff meeting, suggesting that my students were 'doing so well' simply because I had seen the examination papers beforehand and I was 'obviously' teaching towards the exam. His evidence? Well, this was the interesting part! His argument was that: "it is not possible for the students of a young female teacher with so little experience to be achieving such consistently high results." The Voice was singular and uncontestable. It was situated in a place whose values and principles allowed for such blatant*

prejudice, illegitimating the voice of the victim. Although the overlying principle of 'respect' was that you had 'to earn' it, this was the underlying rule... that if you were a 'woman' you could never 'earn it', ... that 'earning it' was the precinct of men only, that you were exempt from these rules simply by 'being' a woman, and that the 'right to earn it' was beyond your control. I realized, even in my outrage, that I had overstepped the mark of the rules of this context in playing out the very rules that informed it... that I had achieved 'too highly', I had 'earned the respect' too well and I had shown them up ... and they didn't like it ... it made them uncomfortable and threatened. It began to challenge the existing stereotypes on women teachers and achievement, and made a mockery of the man-made rules of this context. I was beating them at their own game. How dare I? Who was I to challenge the existing social relations? I was being an upstart, even in my silence, through being 'good' at what I was supposed to be good at....

Even as I expressed my outrage at the blatant sexism of the remark, I knew that to take the issue further as a complaint to the principal or school board, would be to provide it, in this context, with some 'legitimacy' and to forever feel the shroud of doubt hanging over me. The other members of staff were obviously shocked by the male member of staff's unexpected challenge and in their bodily-visible discomfort and embarrassment, they remained silent, watching to see how I would 'handle the situation'. Would I 'handle it like a man', the only way to 'handle' situations in this context?! I was all alone, a victim in my own department... no one daring to stand up for me like a decent 'human' would. I was caught visibly and firmly in a double-bind, although, perhaps, it only highlighted that I had, in fact, never been otherwise in this context. I was forced, yet again, as if I had not had to do this enough, to 'prove' my innocence, to exonerate myself by turning myself inside out, being more 'male' than the men. I was a suspected criminal by being woman and I had to prove my 'manliness' so as to divest myself of the charge of criminality.

And so she proceeded to do, with elegance and alacrity, teaching her students with her own methods and ideas, with no possible reference to exams. Her students achieved even higher levels than before.

I was elated! I had 'proven' myself unequivocally at their own game. But it had no joy. I expected some announcement... maybe some comment... I even hoped for an apology to be given to me. Perhaps I still had, or wanted to have, faith in them ... more faith in them than they had in me.... I waited.... There was nothing.... Only silence.... This time the silence came from them, but it was still my silence they held inside it. It was a silence of power, with the silence of alienation subsumed within.

She again took the bull by the horns:

So eventually I raised the issue myself. I made an announcement! At a department meeting I stood up and thanked the person concerned for providing me with the opportunity to teach my students with some freedom, away from the tyrannical considerations of the evaluation instruments at the school... I rubbed it in a bit ... I told them what a wonderful pre-exam teaching experience I had had, that they should try it some time ... that it was a liberating experience and that last, but not least, I was thankful and grateful for the opportunity for my students to have been granted the opportunity to do even better than before! Thank you! ... There was silence. Nothing ... nothing was said. No comment was ever made about the issue again. I knew, though, that they thought that I had taken it 'like a man.' I was still conforming to male rules... I had shown my disgust, but, according to them, I had kept my 'dignity' in that context, ... in a context, ironically, that allowed you no real dignity ... that was the precinct of men!

I continued to teach at the school for many years and after a time I realized that I had become part of 'their' family whether they liked it or not. They now tolerated my sex and reconstructed my gender because I had become an old-timer. I was simply a familiar part of the fabric of the school that could not be done away with. I had a part to play in the history of the family, albeit an uncomfortable one for them, for I continued to gain a reputation for 'effective teaching' and for my students' achievements. I realized that I had become an 'honorary male' to them within the school, and at the same time, contradictorily and similarly as usual, I was also the school's mascot...But, for me, the full trust could never be regained. I learned to care for them, but unlike the way I

cared for my students, which was caring wholly, I cared for them without full or real respect.... They had taken that from me forever! ...

This story captures so many elements that also came through in the interview that led to the play, and the stories of women's experiences on technical worksites: the sense of isolation and vulnerability experienced by women on mostly male worksites, the delight in the actual work, many women's hope that the sexism will somehow go away if we just ignore it, and our willingness to do so to keep the needed job. The story is explicit in the assumption of incompetence and the requirement to constantly prove capability, as well as the need to care for men's egos, to watch that women never "show them up" by demonstrating a higher calibre of skill, "to beat them at their own game," so well expressed in the play:

Jason: But I'm just not sure how I would feel if a woman came on the job knowing more than me.

And the contradiction is that if women don't prove their capability, they will be forever relegated to "the ones that didn't make it." The story shows the need for women to "handle it like a man," while no one else dared to stand up and challenge the perpetrator. And when the job was complete, there was silence; no one willing or even able to say, "Job well done!"

Jason from the play would have been proud of her, she had

Kicked ass like the rest of the guys,

and was allowed to remain as an "honourary male." But they had lost her respect, and their own dignity seems, poignantly, to be tied up in performing a role.

Masculinities

> *'Masculinity', to the extent the term can be briefly defined at all, is simultaneously a place in gender relations, the practices through which men and women engage that place in gender, and the effects of these practices in bodily experience, personality and culture (Connell, 1995, p. 71).*

White masculinities are constructed in relation to men of colour as they are constructed in relation to white women and women of colour. Working-class blue-collar men define their masculinity in relation to middle-class white-collar men, and a different construct is created in return. Military men construct another sense of their masculine identity in relation to those outside the military, and towards the women who enter, and towards gay men who might enter the military (Connell, 1995; Pinar, 2001).

Bob Connell delved more deeply into particular constructions of masculinity, in his life history studies. "The Social Organization of Masculinity" (1995) is helpful in understanding the multiple forces that construct gender relations not only with women but also between and among men. He, Jeff Hearn (1994), Tim Carrigan and Harry Brod (1987) were instrumental in proposing the concept that there are multiple masculinities, found at the intersections of race, class and gender. In that chapter, he uses a number of organizers to examine the relations between men specifically. He describes *hegemonic masculinity* "not as a fixed character type, always and everywhere the same," but rather, "the masculinity that occupies the hegemonic position in a given pattern of gender relations, a position always contestable" (Connell, 1995, p. 76). Attributing the term, *hegemony*, to Antonio Gramsci's analysis of class relations, Connell identifies it as "the cultural dynamic by which a group claims and sustains a leading position in social life" (p. 77). He uses it to describe a situation in which one form of masculinity holds a hierarchical

relationship to another: Hegemonic masculinity is found in places where the

"cultural ideal and institutional power" intersect, such as that exhibited at the top

levels of the corporate sector, the military and the government. "It is the successful

claim to authority, more than direct violence, that is the mark of hegemony (though

violence often underpins or supports authority)." bell hooks (2004) calls it

patriarchal masculinity.

Judy Wajcman posits that hegemonic masculinity "is more strongly possessed

by working-class than ruling-class men." However, her notion that "the exaggerated

masculinity found amongst working-class cultures must be viewed against the

background of their relative deprivation, their low status and their comparative

powerlessness in the broader society" (1991, p. 145) reflects a class bias, and a lack of

understanding of the multiple expressions of hegemonic masculinity. What she is

referring to as 'exaggerated masculinity' is only one form of the potential

expressions of hegemony. However, it is clear that "no matter how masculinity is

defined...it always constructs women as ill-suited to technological pursuits" (p. 146).

Connell uses the terms *subordination, complicity* and *marginalization* to

explicate the nuances of hierarchy and domination exhibited in particular sets of

relationships between men, i.e. gay men and straight men, black men and white

men, middle class and working class men. He is quick to assure the reader that he

recognizes that *a* working-class or *a* black masculinity does not exist; that these,

too, are multiple. But there are some things we can learn by examining the

categories. Connell states that "oppression positions homosexual masculinities at

the bottom of the gender hierarchy among men." I would argue that while the

display of effeminacy in men may precipitate explicit violence, those gay men who

present a more muscular, "traditional" masculinity are less likely to be the victim of

such actions. For violent men whose patriarchal masculinity is threatened, it is the display of the feminine that precipitates the response (Pinar, 2001, Ch. 19). Connell makes this clear when he posits that "some heterosexual men and boys too are expelled from the circle of legitimacy" with such words as "wimp...sissy ...pantywaist...mother's boy," along with "four-eyes...dweeb...and geek...Here too the symbolic blurring with femininity is obvious" (Connell, 1995, p. 79). As well, there is a hierarchy of colour and class that interacts with homosexuality, representing marginalization practices of their own, e.g. "Massive unemployment and urban poverty now powerfully interact with institutional racism in the shaping of black masculinity" (with Robert Sharples, Connell, p. 80). Bill Pinar's incredibly well-researched and explicitly written explanations of the intersecting and interacting practices noted here (Pinar, 2001) provides extensive background to these constructions of masculinity.

Connell is quick to emphasize that "terms such as 'hegemonic masculinity' and 'marginalized masculinities' name not fixed character types but configurations of practice generated in particular situations in a changing structure of relationships" (Connell, 1995, p. 81), structures which are in a slow but constant process of change.

Gender at Work in Trades and Technology

With all of the aforementioned in mind, this dissertation is focusing on a particular sector of practice: working-class and white-collar trades and technical workers. Here too, Connell provides some analysis. While some of these 'grand statements' are useful, his lack of experience in the milieu is somewhat visible. In presenting three responses distinguished by Gerschick and Miller in a study of men

affected by disabling accidents or illnesses, he does not problematize the rather simplistically presented ideas, or the fact that there are certainly more than those three types of responses possible. It is true that those who work with their body, mind, heart and hands at once are vulnerable to physical disability, and that, "heavy manual work calls for strength, endurance, a degree of insensitivity and toughness, and group solidarity" (p. 55). Those who experience the impact of such disablizing often suffer the marginalization referred to above. "Emphasizing the masculinity of industrial labour has been both a means of survival, in exploitative class relations, and a means of asserting superiority over women" (p. 55).

Chapter IX in this dissertation examines the historical nature of these practices. It will be important to remember, "normative definitions of masculinity...face the problem that not [all] men actually meet the normative standards" (p. 79), and yet, many have enjoyed the *patriarchal dividend.* "Men gain a dividend from patriarchy in terms of honour, prestige, and the right to command. They also gain a material dividend" (p. 82), well documented by Connell as he notes that men's wages worldwide in capitalist countries "are approximately *double* women's average income," a fact that is often obscured by presenting the statistics for only full-time employment, which obfuscates the unequal division of labour in childcare and home support work for which women are not paid, facts clearly presented in Marilyn Waring's excellent analyses of women's economic contributions worldwide (1988; 1999).

> **Gus: Why do women want to become construction workers? It just baffles a lot of guys. I assume it's because they can make 25 bucks an hour as opposed to making seven.**

Time-budget studies show women and men work on average about the same number of hours in the year (The major difference is in how much of this work gets paid (United Nations Development Program, 1992, in Connell, 1995, p. 82).

The ultimate end of all of these unequal relations is the exercise of power over another person or group of persons. This hierarchical relationship is noted in most books I have read on masculinity, and its exhibition has been present in almost all of the relations I have had with men in construction, the provincial apprenticeship systems, and the national training systems in Canada. That does not mean that *all* such relationships represent inherent qualities of patriarchal masculinity, but that particular versions of masculinity may be interfering with opportunities for shared peace and prosperity around the world.

It follows that the politics of masculinity cannot concern only questions of personal life and identity. It must also concern questions of social justice (Connell, 1995, p. 83) [Emphasis added].

Chapter III

Deconstructing Destructive Gender Constructions[20]

An intervention approach to epistemic understanding

While this research focuses on men, it ponders the interactions and relationships between men and women. The impulse for this research comes from a deep, abiding commitment for equal opportunity and responsibility for women and men together, to build, and maintain, sustainable lives on this earth. It is autoethnography, being present, creating interaction, participating, observing and reflecting in and of the group, initiating relatedness (Gergen & Gergen, 2002). This is a case study, where an examination of the part provides a metonym for the whole. This is performance ethnography (Denzin, 2003), an ethnographic performance text (Saldana, 1998), ethnodrama (Mienczakowski, 2001), using "data as drama" (Donmoyer & Yennie-Donmoyer, 1995). It is research meant to evoke, and provoke, an intervention into the social construct, as a tool for social and political change (Lather, 1986). If the world is to change, men have to start talking to each other and to women about what underlies male resistance to women in technical areas. Representing their voices in a *performative autoethnography* may help others understand, through opening it up in a more personal way, striking a chord, and invoking dialogue.

If "all researchers construct their object of inquiry out of the material their culture provides" (Lather, 1991, p. 105), then as a journeylevel carpenter with

---

[20] I attribute this phrase to one of my key informants, Dale Norman, whose way with words entices me, and who became my husband during the course of this research.

experience in a variety of trades, it seems appropriate that I would undertake the study of masculine resistance to women in trades and technology using what have been considered to be the "masters tools" (Lourde, 1979, 1984). I appreciate Maloney, as she suggests, "are they really the master's tools? ...They're just culturally defined that way, and there are ways to take that back" (2001, para. 2). They also can be steamed and bent to [re] form them, so they can reach beyond the constructed veneer of intellectualism into the hearts of the matter.

I have lived in the culture of men, trained and certified as a journeylevel construction carpenter with 25 years at my trade. I am often seen in opposition to men in power. Men also seek me out as an insider who is also an outsider. I can tell them the pain of the experiences of our joined working lives. I have advised them and exhorted them. I have appreciated and despised them. But I have earned my place at the tables of their lives.

Organizing three national conferences as a place for women to come together to speak publicly about their experiences and to build personal and professional skills that would enhance their ability to respond to the challenges and difficulties they faced, I invited employers, unions, government agents and educators to join the women, to listen to their understandings derived from their experiences and to work to solve the problems together. I transcribed and edited all of their voices into a book (1989b) and fostered production of a video (Browning & Webb, 1989) to broadcast increased understanding of the issues. I have earned the right to explore more specifically what underlies the construction of the resistance to women becoming skilled in trades and technology.

This dissertation uses a *performative autoethnography* threaded through the excavation, investigation and elucidation of fears underlying the historic and current resistance on the part of men to allow, honour or appreciate the women who would work alongside them in trades and technical work.

For the most part, the men I have encountered are white men, skilled and working in trades and technology occupations. Historically, at least in the Northern Hemisphere, these skills and occupations have been reserved for white men (Baron, 1991c; Downs, 1995; Parr, 1990). The struggles may have been bitter, but, though there are geographic exceptions where racial diversity is found, the historical construct remains, for the most part, intact. I did not study those racially diverse settings. I cannot say how similar are the experiences for women and men. And I do not speak of "all" men, for there have always been some in each era and situation who often quietly, sometimes more vocally, support women's equal participation. But so far, their voices have not held sway.

In referring to Carol Ronai's 1996 "account of what it is like to be parented by a mentally retarded mother", Mary Gergen and Kenneth Gergen (2002) suggest that "she invites others to hear her story through their own frames" (pp. 14-15). Such ethnographic positioning invited the reader into their own experiences. By giving voice and the potential for more public presentation of this ethnography, I hope to spark yet another relationship, that of the author, text and reader/audience (Ellis, 2000b). How do you judge these stories? Do the narratives ring true? Resonate with our lives? Engage us? Are they plausible? Do they cohere? (Ellis, 2000b). What do they say to you as a man? As a woman? As a worker? As a scholar? Within whose context?

One is not told *the* truth, perhaps not even *a* truth, but something is evoked. Using Laurel Richardson's poetic vehicles of expression as an example, Gergen & Gergen (2002) note that we are being shown "one way of putting things...invited into the dialogue with her point of view from the perspective of our own" (p. 18). It seems that we are invited in not to refute, but to add. They posit that "scholarship is not chained by the imperative of cerebral order, but is given full latitude of revelation in action...if the performance is effective, the audience participates in an embodied fashion" (p. 19). An emotional understanding (Ellis, 2000a, 2000c) of the experience is invoked.

This is relational work, work that performs, making space for conversation.

Impressionistic/Interpretive Qualitative Research

Research re/presentations that engage a variety of epistemologies make knowledge creation the responsibility/possibility of the audience/reader as well as the author. Thus interpretation and interaction in dissemination of research incorporates pedagogy (the content and process of teaching and learning) as an integral part of the research methodology, because without the ability to communicate what is being learned, what is the point of research? And if that communication does not touch an emotional as well as an intellectual space (Capra, 1996), can integrated learning take place? Providing a space for a "relationship between author, text and reader" (Ellis, 2000b; Ellis & Berger, 2002), the play provokes an "emotional understanding" (Ellis, 2000c) that could be deepened through subsequent discussion and exchange, but whose potential for reflection and re/action exists regardless of follow-up discussions.

This dissertation uses Impressionistic/Interpretive qualitative methods (Ellis, 2000b), "multi-voiced...evocative...interested in learning about a particular setting." By author/iz/ing the voices of the research participants, and considering myself among them, stories "resonate with our lives," evoke and provoke response, and "involvement." "Do the stories ring true? Resonate with our lives, engage us, are they plausible, do they cohere?" "Are they open to multiple interpretations? Discover more with each telling," or showing? Can "cultural, theoretical stories" be found, "embedded in the personal and concrete?" (Ellis, 2000c). This is a work that "illustrates," and then leaves room for other voices to engage in the *interillumination* and *interanimation* (Bakhtin & Holquist, 1981) begun by the participants in the play and continued through this dissertation. A "political stance" is stated, but complexity is acknowledged with a willingness to engage in dialogue with others. Pedagogy, creating space for curriculum/teaching/learning, is foundational to this project.

Bricolage

Bricolage in research[21] is concerned with the necessity to engage an array of philosophical, epistemological, and ontological frames, while sorting through theoretical constructs, which are exceptionally valid in particular situations, and often lose vigour across disciplinary boundaries. Bricolage also has in its roots the naming of a person who brings the ability to wield a wide range of tools to solve a practical technical problem, a hands-on skilled practitioner of a variety of trades. My first encounter with the term was through the YWCA in Montreal, where they hired out tradeswomen to seniors, and others, without the ability to take care of

---

[21] (Denzin & Lincoln, 2000; Kincheloe, 2001; Lincoln, Pinar, & McLaren, 2001)

their own maintenance and repair concerns. The YWCA referred to these women as Bricoleurs, handyones!

My role is as bricoleur in this project: to explore and bring together the multiple threads of complexity illuminated when one focuses upon resistance to integrating women into trades and technical occupations, historically and in the present day. Employment Equity initiatives, the Columbia Basin power projects (Braundy, 2001), Women in Trades and Technology exploratory courses, the Hibernia Oil Development project (Grzetic, 1998; Grzetic et al., 1996), and the under-representation of women in Apprenticeship provide the impulse.

As a bricoleur, I utilize a multiplicity of methodologies, including ethnography, autoethnography[22], performance ethnography, institutional ethnography, literature refraction, "textual analysis" (Ellis, 2000b), interviews and case study research into the ways that social, cultural, historical and psychological forces construct masculinities in a variety of disciplines to re/produce resistance to women in technical fields. Conversations winding their way through epistemological, social, political and educational domains find their representation in a bricolage of storytelling, a dataplay and theatrical performance, expository reflective writing and conversations with texts. These evocative performances elucidate and expose some of the underlying elements that make crossing the

---

[22] "David Hayano (1979)...credited as the originator of the term...limited the term to cultural-level studies by anthropologists of their "own people," in which the researcher is a full insider by virtue of being "native," acquiring an intimate familiarity with the groups, or achieving full membership in the group being studied (p. 100)" (Ellis & Bochner, 2000a, p. 739). The authors extend this definition to include a vast array of reflexive explorations and their methodological strategies in a medley of disciplines (p. 740-743).

chasm[23] between men and women so unobtainable. Engaging history and culture through performance evokes a liminal space where "the critique and reevaluation of culture through subjectivity" (Diamond, in Garoian, 1999, p. 6) can emerge in a reflexive process.

Is this dissertation feminist research?

This dissertation draws on ethnography, observing a group to understand the cultural impulses and interactions, "that form of inquiry and writing that produces description and accounts about the ways of life of the writer and those written about" (Denzin, 1997, p xi). It does not meet all the criteria of "Feminist Ethnography" as described by Beverly Skeggs (2001) which specifies features of ethnography to include fieldwork "conducted *over a prolonged period of time*"; using a variety of research techniques;

> conducted **within the settings of the participants, with an understanding of how context informs the action; involving the researcher in participation and observation;** involving an account of relationships between researcher and the researched and focusing on how experience and practice are part of wider processes (p. 426) (emphasis in original).

Describing the elements of feminist ethnography, Skeggs (2001) acknowledges that for "Reinharz (1992) it is ethnography in the hands of feminists that renders it

---

[23] On the cover of the foundational book, *The longest war : sex differences in perspective* (Tavris & Offir, 1977), is a cartoon drawing of a naked man and woman standing, looking across to each other, on either side of what appears to be a bottomless chasm. The first chapter is preceded by such a cartoon, but the woman is now at the bottom of what appears to be a fairly, craggy pedestal, rather than a cliff, looking up with a pick axe in her hand. The man is standing comfortably at the top of the object. Each succeeding chapter is preceded by a progressively activist drawing of the female carving away at the foundation of the pedestal, until prior to the final chapter, they are standing, on the same level, facing one another in the rubble, each on a flat rock, only a step away. Perhaps when I bought that book new in 1977, it was prescient, foreshadowing the efforts that have taken up so much of my life.

feminist" (p. 426). Skeggs outlines what she see as requirements for a feminist ethnography, mapping out the "physical, cultural and economic possibilities for social action and meaning. But when she comes to "enabling participants to both establish research agendas and to have some say in how they are studied, foregrounding 'giving voice' to those whose lives may traditionally have been silenced through *ignor*ance, thereby providing the potential for a 'liberatory strategy'" (p. 427), she seems to deny the possibility of the power balance in the relationship being potentially weighted with the studied, rather than the researcher. She does acquiesce that some ethnographic researchers will base their studies on "a small number of interviews and some human contact."

The element that crosses all feminist ethnography is "that feminist research is related to wider political positions," a position that is shared by Elizabeth Ellsworth (2004). Ellsworth holds that research must make a difference in the social milieu, and that social change should be a goal, similar to Denzin's notion that research-based performance texts "have the ability to move audiences to reflective critical action..." (1997, p. 94). I also share Patti Lather's commitment to openly ideological research (1986; 1993).

In exploring feminist standpoint epistemologies, Skeggs uses Dorothy Smith (1987, 1999), Patricia Hill Collins (1990, 1997, 1998), Nancy Harstock (1983, 1997, 1998) and W.E.B. Du Bois (1968) to demonstrate the range of theoretical and practical uses to which feminist methods can be put in ethnographic research projects. Smith's notion of "insisting on women's right to speak from the actualities of our experience (1999, p. 17)," independent of *"ruling relations"* and Hill Collins' perspective that "only those who have the appropriate experience of oppression are

able to speak about it" (in Skeggs, 2001, p. 432), can be combined to set a framework

for a particular kind of feminist research. This is reinforced by Harstock's argument

that "it is the perspective gained from political opposition to power that produces a

standpoint," something that I assume comes from the deeply engaged consciousness

raising that has been going on in the feminist movement since the 1960s, greatly

enhanced in the 1980's and 1990's by ethical intervention by "subaltern groups,"

who Du Bois argues have "a double consciousness." Referring to Du Bois's (1926)

manifesto for an all-black theatre and Deavere Smith's work as researcher,

playwright and actor (1993; 1994; 2000), creating space for response at the

intersections of society, race and gender, Norman Denzin reminds the reader that

"radical theatre is a weapon for fighting racism and white privilege" (Denzin, 2003).

Denzin's notion of a "radical performative social science" must include its potential

impact for understanding and intervening in the practices of sexism as well.

Denzin (1997), a widely read qualitative research author and editor, posits

that ethnography is in its fifth historical moment. Ethnography passed through the

"traditional (1900- World War II), modernist (World War II to the mid-1970's), blurred

genres (1970-1986), crisis of representation (1986 to present,)" (p. xi), and arrived in

the fifth moment. "The sixth moment (Lincoln, 1995a, p. 40) charts the future"

(Denzin, 2003, p. xxi). He suggests that at the present time, "the writer can no longer

presume to present an objective, noncontested account of the other's experiences".

In line with Skeggs, he notes that "those we study have their own understandings of

how they want to be represented" (p. xiii). At the same time, it is the way that these

texts are "dialogical" that demonstrates the complexity of the lives under study. [See

also Bakhtin (1981)]. Through the exposition of positionalities at work for both the

researcher and the researched, "experience, discourse, and self-understandings collide against larger cultural assumptions concerning race, ethnicity, nationality, gender, class and age" (p. xiii-xiv).

Finding ways to enhance the "subjecthood" (Skeggs, 2001, p. 433) of research participants is noted to be part of the agenda for the fifth and sixth moments of ethnographic research. But, if feminist researchers "often use prescriptive ethics such as reciprocity, honesty, accountability, responsibility, equality, etc. in order to treat research participants with respect" (p. 433), I have to wonder how a feminist researcher is supposed to handle her research with those who are not women needing someone to "equalize power differences." How shall feminists handle those who actually hold the power to which we may aspire? When the feminist principle espoused by Stanley and Wise (1983, in Skeggs, 2001, p. 434) is about relinquishing control, in my own research, I could not accept that "the researched should control the outcome and analysis of the research." Can I still be a feminist researcher? Skeggs argues that it is about "exercising discretion and responsibility" (p. 434). I would agree with both Skeggs and Denzin that it is about ethics. Perhaps in my unique struggle to come to terms with "studying up" (Bryson, 1999, personal communication) with these men who could be my co-workers and have always been my gatekeepers, I have found in the method of theatrical re/presentation, an ethical mode for this research.

Methodologies in context

To quote Cynthia Cockburn (1991), one who has studied both those engaged in technical occupations and those who resist equity initiatives:

*This was qualitative research. That is to say its legitimacy does not spring
from number, either of organizations studied or of people interviewed. Rather
it gains what authority it has from the depth of insight made available.
Qualitative research is able to approach questions that are not answerable by
quantitative research. It is better for seeing relationships, processes and
contradictions (p. 4).*

If "the central issue is how to bring together scholarship and advocacy in
order to generate new ways of knowing that interrupt power imbalances" (Lather,
1991, p. 110), then the very process of research, as well as its representation, plays a
role in the concept of intervention. Studying 'resistances to equity initiatives' is an
intervention in/of itself, a disruption of stasis, an interruption of things as they are.

In pursuing the notion of uncovering what is underneath the resistance
experienced by many in the process of increasing the participation of women and
girls in trades and technology work and schooling, it is important to acknowledge
the work already done in documenting the resistance. This work has been ably
accomplished before: from my own experiences of facilitating seminars for technical
men (Braundy et al., 1983), creating space for the voices of women working in
technical areas (Braundy, 1989b; Schom-Moffatt & Braundy, 1989), counting the gaps
in design and technology education (Braundy et al., 2000), and illuminating the sex-
disaggregated participation and performance date in technology-intensive
classrooms in British Columbia junior and senior secondary schools (Bryson et al.,
2003). Facts of inequity can be found in research that was done for the Royal
Commission on Equality in Employment (Abella, 1984a), the historical studies of
union, industry and technology development[24], the documentation and explication of

---

[24] (Baron, 1991c; Cockburn, 1983, 1985a; Downs, 1995)

gendered and discriminatory technical settings[25], and the ideas and valiant efforts to effect change in that sector[26].

What bears highlighting is the slow pace of movement or change from the early 1800's through to the 1970's (Baron, 1991c; Downs, 1995), and on to 1991, when Cockburn was exploring the integration of women under mandated equity provisions in several sectors in England, through to 2001 when Marie-José Legault examined the integration of women into trades and technical sectors in Quebec. All found the reiteration of manifestations of that same resistance. These latter studies were looking at the 'how' of integration and came upon the realities of resistance.

I endure the existence of the resistance, so well documented by Cockburn (1983; 1985a; 1991), Legault (2001; 2003a) and Schom-Moffatt & Braundy (1989). Exploring what may be underneath that resistance is the focus of this research.

Previous studies looked at the lives and experiences of women working in technical fields, and came upon the effects of that resistance, and the strategies the women used to overcome it (Braid, 1979; Ferguson & Sharples, 1994; Martin, 1988; Walshok, 1981). Interestingly, many of those explorations focused on who the women were, what brought them to that work, the impact on the rest of their lives of developing and getting paid for their skills, and what programs could or should be in place to increase the numbers of women in technical fields. There were only small sections that dealt with the negative aspects of these women's efforts to get training

---

[25] (Braundy, 1994; Cockburn, 1991; Cockburn & Ormrod, 1993; Cohen & Braid, 2000a; Davidson & Black, 2001; Goldberg, 1992; Gray, 1987; Grzetic, 1998; Grzetic et al., 1996; Hacker, Smith, & Turner, 1990; Legault, 2001, 2003a; Murch, 1991; Wajcman, 1991)

[26] (Braundy, 1994, 2000; Brooks, 1986; Fields & Gordon, 1992; Gordon, 1989; LeBreton & Loevy, 1992; McKnight, 1994; Minty, 1992a, 1992b; National Advisory Board on Science and Technology, 1993; National Coalition of Women and Girls, 1995; Rexe et al., 1996; Ross, 1989; Sanders, 1986; Scane, 1994; Thomas, 1993; WIR, 2003)

and work and on their difficult relationships at work, often stemming from blatant sexism and racism. The women were telling their stories, and did not dwell in their experience of that resistance, nor were they probed to present that material. Little was said about what initiatives might have been in place to rectify that experience. The focus was on what may have been significant, different about the women who would be interested in these fields, or sometimes on how much like everyone else they really were.

Focusing on the constructive and positive aspects of our lives as we have changed them through technical skill acquisition and blue-collar work helps us make it through the days and nights. But it is only in naming the daily-lived difficult aspects of that work, in problematizing the every day/every night experience (Smith, 1987) of resistance and difficulty, that we might undermine the reproduction of it. Notable exceptions to the lack of emphasis on men's resistance to women's presence are found in *Blue Collar Women – Trailblazing Women Take on Men-Only Jobs* (Ferguson & Sharples, 1994) and *Surviving and Thriving – Women in Trades and Technology and Employment Equity* (Braundy, 1989b). In these volumes, we begin to get a picture of what daily harassment and resistance mean to the women who experience it. This is in no way to say that all women have horrendous experiences on the job or in school. It is to notice and put on notice the unacceptability of those episodes that many women find all too familiar. Why, in their working lives, might any women have such experiences?

What undergirds the fear?

While many others play a part in constructing the environment in which these episodes take place, women themselves among them, it is the men with whom

this study is concerned, the gatekeepers: in union halls, vocational institutions,

government agencies, apprenticeship offices, and with co-workers and employers,

foremen and supervisors. What undergirds the fear that has lead to the practices,

historical and current, experienced by women seeking training and work in

technical and blue-collar fields of endeavour?

This study acknowledges the fact of the resistance, and tries to look

underneath it for elements that could, in future, be probed more deeply, in a

reflective action process: *reflexive praxis*[27].

I recognize that the very act of asking a question about resistance to equity

initiatives positions me as I am already positioned, inside the "belly of the beast"

(Haraway, 1992).

---

[27] One definition of the term Praxis is: The intellectual commitment...is to the promotion of positive social change through informed action (http://www.ssw.upenn.edu/~restes/praxis.html). Another is prax-is (prak'sis) n., pl. prax-es (prak'seez'): Practical application or exercise of a branch of learning (http://www.waste.org/praxis/history/). Micheal Zlotnik refers to Wilfred Carr (1995) for a discussion of praxis that associates it with the Greek, and states that it is "concerned with morally informed, thoughtful action (email communication, 9 November 2001). Leslie Roman notes that a notion of praxis comes from Marx, and refers to the "sensuous human activity, practice" to transform one's social world (email communication, 9 November 2001).

Paolo Freire fostered the development of small groups which examined and acted upon issues, both personal and political, from their lived experience, and then reflected on the social and political implications in their actions. This was done under the aegis of literacy education in the poorest areas of Brazil. I share Freire's notion that through the raising of consciousness, or *conscientização,* "even with my slips in the direction of idealism, my tendency [is] to review and revise promptly, and thus, adopting a consistency with the practice I had, to perceive that practice is steeped in the dialectical movement back and forth between consciousness and world"(1997, p.104). This is part of what I have come to understand as *reflexive praxis.* ("The term conscientização refers to learning to perceive social, political and economic contradictions, as to take action against the oppressive elements of reality" (Freire, 1970, footnote, p. 17).

How many times have I poked this beast, searching for a soft spot, a way in to the heart or mind? ...hoping to engage a sense of justice, an ethic of care. Little did I know the depth and breadth of this thing I now call resistance. It crosses sexes and genders, classes and cultures, industrial sectors and educational institutions. It hides in the heart of those who staked a claim to make fairness in the workplace. It is bred into those whose heads are swollen with a sense of their own right to power. It is passed on to the next generation who find the doors opened by those who can shut them in the face of the unacceptable.

The difference here is that this study begins on the inside of the problem, with a conversation 22 years ago, among workers trying to tease out potential theories from the observations and incidents of their lives. The two females and one male were construction workers, carpenters building high-rises, hospitals, coal silos, senior citizens housing, apartment complexes and Victorian renovations. One was an apprentice and two were journeyed. All were activists in their own way. One had a prior BA in communications, and had done research on women in trades in British Columbia. The man was a songwriter/folk singer, when he wasn't pounding nails. I was the third participant. We had all seen and experienced the challenges that women face on the job and in school as they tried to integrate into the construction workforce. We agreed to meet to explore what that might be about. This was a real conversation, consistent with the insights of Ellis & Berger (2002) regarding emotional intelligence and evocation.

The following autoethnographic story, based on this real event was written as I tried to reconstruct from memory the origins of the impetus for this study in a style described by Carolyn Ellis (2000c). Serendipitously, in December of 2002, I received the actual audio tape recording of the original discussion, confirming the clarity of my memory.

We were workers, looking at it from the inside (Lather, 1991).

The First Nugget

The three of them sat around the low table, throwing side glances at the others. Having come together for the express purpose of trying to figure it out, each was reluctant to start; reluctant to give voice to the questions, hoping, perhaps, that the issue might just go away by itself. These were people who had worked together, shared sweat and lunch, pounded nails, discussed the figuring of angles on jack rafters for complex roof lines. They had trusted each other with their lives as they constructed those roofs, built forms and held their collective breath as the trucks came and the concrete began to pour.

"Why do you think it is?" asked Marta, addressing the question to the man sitting beside her. "What is it about men's response to women coming onto the job?" as if picking up a theme dropped earlier in the day with the closing of their worker's lunch boxes. "What are they so afraid of?"

"Hey," Bill said with a cautionary, challenging tone. Then he visibly relaxed, taking a moment. "I don't know about all men, but I love it when a woman comes on the job. I'm thrilled to share my skills with her, teach her everything I know." He paused.

The two women looked at him quizzically. They knew his openness in sharing technical skill; he was que/e/ried around the site sometimes for being so welcoming. They were also not surprised by this admission of paternal tendencies. "Whatever the motive, it's great for the women he works with," thought Claudette, one of the most skilled workers on their shared construction site. They waited for him to go on. This was a conscious 'truth or dare' session, set up in advance to try to talk about some issues that had been alluded to all week in the lunchroom, most dancing around them cutely. These three had decided to try to get under the surface.

"But you know something?" The women waited, curious to hear what was coming. "I'm not sure how I would feel if a woman came on the job who knew more than me." It was OK for her to learn it from him, OK for him to be the teacher. But if somehow, she had come by the secret knowledge by herself, without his support and assistance, she would be suspect.

Marta looked up, not sure how or whether to challenge what seemed like blatant sexism. Bill was her friend. What rift might this conversation cause?

"Why do you think that is?" she asked quietly, knowing they were treading slippery ground.

Bill was silent, whether thinking or biding his time was unclear. His poignant blue-eyed gaze questioning the faith each had in their friendship, weighing the pros and cons of self-disclosure. "If you have the tool skills too, then you will have everything...." It seemed to be hanging there, awaiting conclusion, seeking some easy realization. What was it? "Then you wont need us anymore?" "You can take your marbles and go home?" "I will not be essential to your life, and you might not stay?"

Each of them pondered the elephant on the table. Should they poke it? The honesty and the vulnerability it implied was almost astonishing. The women did not look at each other, knowing their glance might destroy the moment of integrity. Little did they know that their failure to do so would bury the issue for another 20 years.

Little did we know this conversation held so many of the nuggets of open, honest truths[28] to be explored, investigated and uncovered in future by myriad male and female researchers. Two statements from that evening have stayed with me, resonating over the years, perhaps enabling a certain generosity in viewing the clumsy, discomforting, occasionally downright mean manner women experienced in the challenges of male-dominated workplaces. That Bill would respond with difficulty to a woman who knew more than he did, is quite common, and reflects a notion of rank and privilege embedded in practices of masculinity that I, and others[29], refer to as *hierarchy*. The second holds some sense of pathos. It suggests a

---

[28] When I use the word truths here, I am referring to the level of self-reflection and emotional honesty that was present in the discussion, a willingness to dis/cover together, which I also found in the group interview upon which the play, *Men & Women and Tools* is based. Many people have expressed surprise that the research participants were willing to be so forthcoming. I believe it is because they see me as one of their cohort.

[29] (Connell, 1997; Creese, 1999; Grzetic et al., 1996; Kaufman, 1997; Messner, 1997; Ochberg, 1987).

deep fear of the loss of women's dependency; that the slender bond between men and women can only be prolonged through need and not through want.

> *Therapist 1: What's your understanding of how men operate?*
> *Fred[30]: Most men that I know? They'd try to work overtime to get themselves needed by you. That's how men operate with women (Holzman & Mendez, 2003, p. 146)*

The men who acted as my *key informants* [31] confirmed that such feelings often underlie their actions. Concerns about being shown up by a woman, or being replaced in the hierarchy of skill by another man undergird some of the challenges of the technical workplace. The need to be essential creates another dynamic. What else is at work? What forces invoke the harassment? The gatekeeping? What was underneath the resistance? These questions struck a cord for me, and laid the foundation for this exploratory study.

---

[30] Fred Newman, co-founder with Lois Holzman of the East Side Institute for Group and Short-Term Psychotherapy, and a leader in the Social Therapy movement, has been a practicing social therapist and educator for over 30 years. He has published nearly 30 plays (see: *Still on the Corner and Other Postmodern Political Plays*), four of which were written expressly for production at annual conventions of the American Psychological Association.

[31] During the process of this research, three men acted as key informants, or guides, listening as I described what I was finding, what I was thinking about it, reflecting on this with me, and answering some of my questions about the applicability of these ideas to their own experience. One is a 26 year-old physics teacher who had left Engineer training halfway through his program, the second, who ultimately became my husband, is a 54 year-old engineer who had originally trained, qualified and worked as an electrician for 10 years, and the third is a 53 year-old construction union carpenter who has gone on to design and build museum displays.

Chapter IV

Data as Evocation

Research Representation as Provocation

As stated earlier, this study explores what is behind the resistance and impedance produced by men in the integration of women in trades and technology training and work. Through raising the question, and reflecting/on the responses, the research illuminates some of the fears that are at the base of this, as the men reflect on what their challenges are. Expressing this through a performative autoethnography, this dissertation opens up an epistemic framework for social change.

While essentialist positions in differentiating the sexes are problematic (Unger, 1998, pp. 110-156) and the spectrum of gendered characteristics are extant within both women and men (See Chapter II), experience has shown that many men and women each share a wide range of similarities. By acknowledging both the nature/nurture debate of those similarities, and the wonderful myriad exceptions which confound any rules, reflections on both similarities and differences may provide an understanding of shared and diverse experiences which may be useful to educational projects.

As a social activist wending my way through a Ph.D., I have been challenged to discover vehicles for sharing what I am learning with a wider audience, to engage in an interactive approach to knowledge production. My standpoint is both as an insider, one who has lived the working lives I am studying and also as an outsider, the sex that is Other than male. I have been a critic, a joiner, an advocate, and a

member. It has been suggested that I am "studying up" (Bryson, M. personal communication) in terms of Ruling Relations (Smith, 1999), though the fact that I come to my interviews as a co-worker has enabled a deeper level of conversation than might be afforded another researcher and her "subject." I appreciate that all of our positionalities are very complex, and recognize the importance to my research participants of being able to tell their stories both from their perspective, and also as they intersect with mine (Smith, 1999, p. 64). It is always difficult to know when the questions asked construct the answers given, and so I tried to make the queries as open-ended as possible (Cockburn, 1983). It is in response to the issue raised by Dorothy Smith "regarding writing into texts that seal in a knowledge divorced from the lively part it might play in coming with others to know, together, our relations and society differently" (p. 69) that I have been seeking another way of re/presenting what I am learning. I am seeking an epistemic event, one that can evoke an "emotional understanding" (Ellis, 2000a) of the complexity of these lived lives.

Exploring both the experiences and the experiencing of those who are sharing their stories with me demands creative concern for the interpretations I reflect back. As I bring the understandings of those in the literature to bear on these stories, I hope to enable interpretations that honour their complexity. Returning these reflections back, through public performance of the play, to their communities of origin could broaden the scope of their impact, providing for a spiral out of the closed system, opening the way for further reflection and change of practice: *reflexive praxis.*

Expressing Data to Evoke Subjectivity

For Carolyn Ellis, one of the leading proponents of autoethnography, there is a need to humanize the institution of research, to bring into focus the actual experiences of the real people with whom we must interact to discover that which we query. Research and scholarly writing for social justice require "systematic sociological introspection," bringing the personal and social voice to social science with "ethics and responsibilities to co-researchers, sponsors, participants and readers." Exploring both the personal and social voice with our research participants develops and evokes an emotional understanding of how we come to know that can then be included in our research, "not as bias, but as the lens through which we understand"[32]. Through writing which can evoke, Ellis says, "I give you an experience of the experience...that I can live in and with as you enter the story through your own frame and life."

This re/presentation "starts with the self and then engages outward to others." The social and cultural practice of engaging in human experience differs from making researcher distant from the 'data' to analyze it from the outside. "It is more akin to biography, and repositions the reader in co-position in dialogue." It is an emotional and physical experience that "resists the impulse to abstract and explain" (Ellis & Bochner, 2000a, p. 744), and provides an episodic form over "a curve of time." Evocative stories evoke subjectivity lessons for further conversation based on intimate detail rather than abstracted facts. Evocation provides a 'space

---

[32] All unreferenced quotes in this section are drawn from the 2000 UBC Faculty of Nursing Summer Institute Seminar with Dr. Carolyn Ellis, and her subsequent address to the Learning Love conference at the University of British Columbia.

between' the text and the reader, the actors and the audience, in which new knowledge can be created and/or integrated.

Traditional approaches to intellectual understanding and description rarely touch the emotions needed to affect a response/ability to change (hooks, 2004). The heartfelt dimension must find a relationship for research representation to evoke emotional understanding. Ellis (2000a, 2000c) described the meaning of a new brand of ethnographic research representation as "making the connections between the experiences that enable other people in...I want it to have a therapeutic impact on me and others. It should also have a social justice/social change impact." It was the first time I had heard an academic speak so boldly in public about the social uses of their work.

To do this, Ellis proposes researchers must move from distant observer to engaged participant, and "find ways to treat the lives we find with care and compassion." Ellis came to her notions of epistemology through her experience when her brother was killed in a plane crash, and through the years she spent living with her academic and life partner as he was dying of emphysema. She shifted her positivist quantitative research paradigm to research and writing in the direction of greater subjectivity, telling stories of human experience that evoke understanding and ongoing reflection in the reader.

In analyzing the differences between qualitative research which is realist/representational, and that which is impressionistic/interpretive, Ellis notes "the Realist side may speak as an I, but holds as the voice of authority, distinguishing themselves from The Other: Them. This provides order, and stability, and helps us to understand what properties are held in common." The

words validity, verifiability, replicability are still associated here; people/words are still coded; "the reader is taken for granted;" there is an aura of neutrality.[33] "I look and record what I see and tell you the facts (rigorous) of what I see – (generalizable) – patterns show us what is general/typical – I am Authority: my voice is Nowhere and Everywhere."[34]

Expressive multi-voiced stories, on the other hand, provide a context for an interpretive relationship. It is "always unfinished, [you] discover more with each telling, reading." It "illustrates." In this impressionistic/interpretive approach, performative or autoethnographic texts bring into focus the actual experiences of those who are research participants. Their presence, invoked through the stories/presentations of their actions, challenge the reader to engage. The impression is one of a mirror, where the viewer may choose to look directly or obliquely, but engages with what is there in front of them.

Using impressionistic/interpretive method, researchers and readers may develop and evoke an *emotional understanding* of how we come to know. To do this, researchers and readers must "get into the head of each of the people in the story— you have to get their experience—it becomes more difficult to vilify them...You are positioning yourself, and contextualizing their story."

Only when researchers open themselves to the experience and spirit of the other, can they interpret and portray the circumstances, motivation and emotion of those whose stories are being told; only then can an evocative relationship be built

---

[33] See Unger (1998, pp. 152-156)and Lather (Lather, 1986, 1993, 2001)
[34] This is a uniquely clear representation of a Separate Knower (Belenky, Clinchy, Goldberger, & Tarule, 1986, pp. 103-112).

with the reader/audience. "Written dialogue is concise, minimalist, succinct. There

is a cadence that conveys thought through rhythm."

The authors almost never became characters in their stories

In the Second Edition of *The Handbook of Qualitative Research*, Ellis &

Bochner (2000b) bantered about distinguishing the elements of

autoethnographic/reflexive research writing, and what may have been missing in

the First Edition of that Handbook. "And the authors almost never became

characters in the stories they wrote..." was a very telling comment. "They couldn't,

because their chapters weren't really stories. They included little in the way of

dialogue, dramatic tension, or plotline..." Recognizing that handbooks do provide a

service, that "[t]hey provide citations and sources, a sense of history, and arguments

others can use as justifications for their own work" (p. 734), Ellis & Bochner

proceeded to incorporate all of the above into a rich, evocative, serious, humorous,

practical guide which is also a reflection on methods of collecting and analyzing

empirical materials using autoethnographic and personal narrative styles of

writing. Their chapter, filled with historical, current and complex references and

additional sources of justification and inspiration, is written in a performative

fashion, and includes them as characters in the story.

The researchers are embodied: reflective, textualized, represented and

recognizable in their work. "Embodiment has this double sense: it encompasses both

the body as lived experiential structure and the body as the context or milieu of

cognitive mechanism" (Varela et al, 1991, in Fels, 1998, p. 30). This is an enactivist

approach, which "challenges us to reconsider the interplay of researcher and

participants..., and the possibilities arising when research and participant 'bring

forth a world together' through performance" (p. 30).

Things are revealed and constructed in interaction

Things are revealed and constructed in interaction between a performative or

autoethnographic text or experience, and the reader or audience in what may be

called the liminal space[35] between.

In their article, *Their Story/My Story/Our Story: Including the Researcher's*

Experience in Interview Research, Ellis and Berger (2002) demonstrate the concepts

of data as evocation: 'impressionistic/interpretive' rather than 'realistic' or

'scientific' and creating a 'relationship between author, text and reader.' The article

begins with a musing by one of the authors, and moves quickly into a story told with

dialogue and description, sometimes of the researchers, at other times we see the

voices of their participants. Adjectives and adverbs, contextualizing phrases, and

personal reflections on specific aspects of the interviews bring the research to life. I

am excited with the undertaking. I am reminded that often when we share the

impacts of our own experience as it entwines with the stories of others, we can

evoke engagement, draw others out into a meeting in what I call *'the space between'*

where sometimes it is easier to see what the mirror might have to say.

---

[35] *A limen is a threshold, a border, a neutral zone between ideas, cultures, or*
territories that one must cross in order to get from one side to the others. According
to performance theorist Richard Schechner (1982, p. 80), people anxiously want to
negotiate the limen quickly, to take sides. Its condition is unstable, indeterminate,
and prone to complexity and contradiction. For the anxious, the limen serves no
purposes other than demarcating absolute value between conflicting opinions. For
the artist, the limen is desirable (Garoian, 1999, p. 40).

Ellis & Berger demonstrate the actualities, both the "messiness" and the rich complexity of giving readers "multiple places to stand and look". "[A]s we examine ourselves, we invite readers to do the same, and to enter into their own conversations...**things are revealed and constructed in interaction that might not be accomplished with one voice**" (p. 38) [emphasis added].

Peggy Phelan, Professor of Performance Studies at New York University reflects upon this space in which performance artist Robbie McCauley's images, actions, and narrative recall five generations of racism in her family in fragmented testimonial vignettes (Phelan & Lane, 1998). McCauley's work provides

> *audience members with multiple points of reference for witnessing and interpretation...creates opportunities for audience members to return testimony to her. In doing so, she breaks through the 'fourth wall' of theatre, the invisible border of the proscenium that separates audience from performer. As she crosses back and forth over that border, she creates a liminal space wherein audience members are repositioned from passive spectators to active participants (p. 13).*

When performance provokes, the actors and the audience engage and come to know more about the story, and more about themselves.

The roots of performance studies

Performance has so many meanings today: the ways in which we are pressured, consciously or unconsciously into roles and play out these identities on the stage of life as "the parodic proliferation and subversive play of gendered meanings" (Butler, 1990a), as well as the ways in which we choose to present or use performances of ideas and emotions as pedagogical tools (Hart & Phelan, 1993a).

I have found the some of the roots of these ideas in Erving Goffman's (1959) book, *The Presentation of Self in Every Day Life.*

Goffman's idea that people perform a show in daily life has particular significance when one considers the constraints required to ensure each individual audience believes all of the impressions of a particular role, and that "the attributes claimed by or imputed to [the performer] are their most essential and characteristic attributes" (p. 136). The efforts required to maintain the illusions are Herculean, and might demand a level of stage management not frequently attributed to the general population. Such performances, Goffman seems to say, happen on a daily and hourly basis, with the purpose of evoking respect and advantage from the audience/witnesses. He refers to this as *impression management.* Looking back, one might say this notion could well have been an early detection of the ways in which gender is constructed in society.[36]

His later analyses of gender performances (1979) in photographs and advertisements show a much greater appreciation for the nuance of gestures and the notions communicated by them in the "portrayal of gender" (p. 8). Socially learned and socially patterned expressions provide "the evidence of the practice

---

[36] The examples Goffman (1959) uses to illustrate his ideas reflect the sexism, racism and classism unconsciously pervasive in his era. But the notions developed in that thesis, and in his subsequent works, demonstrate why his influence has been widely embraced and acknowledged in recent times (Denzin, 2003, pp. 4, 25). *The Presentation of Self in Everyday Life* (1959) was published on the cusp of a massive social and intellectual shift away from the corporate reality and towards a recognition of the oppressions the corporate image signified: culturally, historically, politically and socially. It was a culture come to consciousness, and Performance Studies has been able to use Goffman's ideas to provide a context within which to interrogate, reflect upon and educate about social relations.

between the sexes of choreographing behaviourally a portrait of relationship." While

he acknowledges that such *gender displays* are an enactment, or a reification of

cultural norms as they pertain to power relations, representing and reinforcing the

hierarchical roles of "protector and protected, embracer and embraced, comforter

and comforted, supporter and supported," he also reminds the reader of the

complexity of human emotional expression at stake for both the men and the

women. Goffman notes that women are particularly disadvantaged by these

"asymmetries" (p. 9).

"Performance Studies" seems to take Goffman's sociological behavioural

notions of performance to the conscious level where such ideas are examined,

analyzed, interpreted and restructured through reflective practice. This new field of

study incorporated, in its most early stages, social anthropology, psychology,

semiotics and the performing arts. Performance Studies has grown to include

political science, comparative literature, gender studies, history, geography and law

(Schechner, 1998). Education is threaded through all of these, as meaning is

constructed through 'interstanding' (Taylor and Saarinen, in Fels, 1998) between the

performers and the audience.

> *New interfaces will be added as time goes on, and older ones dropped.*
> *Accepting "inter" means opposing the establishment of any single system of*
> *knowledge, values, or subject matter, Performance Studies is unfinished,*
> *open, multivocal, and self-contradictory. Thus any call for or work toward a*
> *"unified field" is...a misunderstanding of the very fluidity and playfulness*
> *fundamental to performance studies. That sidewinder again, the endlessly*
> *creative double negative at the core of restoration of behaviour (Schechner,*
> *1998, p. 361).*

"Any event, action, item, or behavior may be examined as performance" (p.

361). So Schechner sets the frame for breaching the boundaries between art and life,

laying the groundwork for the study of both the conscious and unconscious

performance of constructed identity, the "performative," as dis/entangled by Austin

(1962) and Butler (1990).

Peggy Phelan (1998), chief of the organizing committee of the First Annual

Performance Studies Conference, held in New York in 1995, may provide another

perspective. Could the "`theatrical acts' that intercultural observation was

everywhere revealing" (p. 3), constitute the notion of performance to which Goffman

was alluding? It is interesting that in each of the encompassing lists of heritage and

referents of Performance Studies, e.g. (Phelan & Lane, 1998; Schechner, 1998),

sociology is missing. Certainly in a field of this breadth, there are diverse

influences.

It is the concept of "escap[ing] the conventions of methodological allegiance

to a particular field's system of knowledge" (Phelan & Lane, 1998, p. 4) that I find

particularly pertinent. "In the eyes of its adherents, performance studies was able

to combine new work in critical theory, literary studies, folklore, anthropology,

postcolonial theory, theatre studies, dance theory, and feminist and queer studies,

while forging a new intercultural epistemology."

"Remember the Future!" the Performance Studies conference participants

were told by a contemporary French performance artist, Orlan. "For the future is

the stage...that promises to dramatize our pasts, to enact them in such a way that

we might begin to understand those pasts, to touch them, to know them, to become

intimate with them" (Phelan, 1998, p. 6). Phelan reminds us that other roots of

Performance Studies lie with Freud, psychoanalysis, and "the retrospective account

that reinterprets the past in such a way that what had been repressed by the

unconscious can be joined with consciousness."

> *This talking after and talking over is where the curative interpretation*
> *occurs within psychoanalysis: In the rehearsing of the event that has*
> *passed, the analyst and the analysand learn how to play the past when it*
> *happens again in the future. Performance studies as a discipline has, until*
> *recently, been in the first part of this process: the careful recitation of facts*
> *of the event. It is only recently that the field has given a sharper attention to*
> *curative interpretations...Such interpretations, which are always*
> *reinterpretations, are also what I most hope will become the future of the*
> *field and the truest end of performance—truest in the sense that they help us*
> *move past the time of the diagnosis and bring about, enact, give us the time*
> *of the cure (p. 7).*

In a theatrical re/presentation, there is the possibility of recognition, and a

retrospective reinterpretation to occur in the space between. The possibility for a

public interpretation of actions that occur in more private circumstances requires

that the "behaviour," or the performance, be performed again, open to greater

scrutiny and the potential for "reading the performance". There is also a potential

for reflection within an interactive educational process.

Schechner (1998) refers to performance as "twice-behaved behavior"

reminding us that what we are watching is a somewhat rehearsed re/interpretation

of past actions. Phelan suggests that "this mimicry and iteration is the place where

performance and performativity intersect." Does this mean that performativity is

the re/production of the re/interpretation of a role? And that performance is the

public exploration or representation of that?

This notion of conscious intent may be the guiding line of distinction for the

recognition of a performative behaviour. But consideration must attend to how

much such intention is influenced by societal norms (i.e. the socialization process).
Even when we are consciously performing, for example, gender, the level of
conscious reflection on those actions may be occurring anywhere on the spectrum of
reflexive analysis. Butler, in *Critically Queer* (1993) refines her reading of
performativity with this in mind:

> *In no sense can it be concluded that the part of gender that is performed is*
> *therefore the "truth" of gender; performance as bounded "act" is*
> *distinguished from performativity insofar as the latter consists in a*
> *reiteration of norms which precede, constrain, and exceed the performer and*
> *in that sense cannot be taken as the fabrication of the performer's "will" or*
> *"choice," further, what is "performed" works to conceal, if not to disavow,*
> *what remains opaque, unconscious, un-performable. The reduction of*
> *performativity to performance would be a mistake (Butler, 1993, p. 24).*

In a most playful interrogation of these notions, Jon McKenzie (1998)
explicates the ties between Butler's uses of performativity/gender performance and
the historical roots of performance studies. He notes "she uses theories of
anthropological and theatrical performance, specifically, Turner's theory of ritual, to
construct a theory of performativity as the citation of social gender norms" (pp. 226-
227).

Is it possible in all this talk of Schechner's restor[ative]ed behaviour and
Turner's rituals of passage and "Butler's own concept of performativity as the "re-
enactment" and "re-experiencing" of socially established meanings" (p. 226), that one
might reflect back through performance, (theorized by Butler as both normative and
transgressive), and provoke a self-reflective process?

Diana Taylor's (1998) description of a politically charged interchange of
which she found herself a part comes close to the notion of practices of performance

in "everyday life." Her critical response to a graphic theatrical depiction of violence against women found her awash in antagonism. Her reflections on both her own actions and the performances of others attest to the conscious recognition that each was acting out in performative fashion... "recognizing the performative frame of the encounter allows us to recognize how both of us were caught in the spectacles we critiqued" (pp. 183-184). She goes on to point out the responsibility required on the part of the "witness" to the performance, regardless of whether the performance is consciously produced:

> *Looking entails a responsibility, a risk, and a danger. However, it is not only the responsibility or receiving, decoding, and acting on a scenario... witnesses, of course, make witnesses of others, ensuring that the memory of injustice and atrocity is engraved upon, rather than erased from, collective memory (p. 184).*

Taylor's notion of the *spectator* who does "not take on one's fear or the other's guilt," but understands their role in "enabling or disrupting the scenario" (p. 181), leads one to question what the actions of a witness should entail (Simon & Eppert, 1997). Lynn Fels refers to Felman's (1992) construction of the word respons/abilty when noting that "in the telling of a story where the teller 'bears witness,' we must consider the ability of both the teller and the listener to respond to the testimony" (1999, p. 58).

Performance as Epistemology

There is the potential for learning within performative sites of intersection between audience and performers, text and readers. Performative inquiry as a research methodology was conceptualized and articulated by performance theorist Lynn Fels (1995). Performance is formulated as an action site of learning, evoking

"an ecological interstanding that invites the co-evolving world(s) of performance and cognition in a transformative dance" (Fels, 1998, p. 30; 1999, p. 56). Performative inquiry refers to a range of research practices that incorporate performance in the process of inquiry, reflection, and/or re/presentation of research. Performativity, on the other hand, describes consciously and unconsciously performed, socially structured behaviours which reproduce or challenge norms, often associated with gender performances (Butler, 1990). Performance on or off stage is made up of self-reflective or constructed behaviours (could this be Richard Schechner's "twice-behaved behaviour"?)

Deborah Britzman (1998) uses analysts Michael Balint, Alice Balint, Sigmund Freud and Anna Freud to explore the tensions between education and psychoanalysis, finding the "unconscious" also represents the individual's struggles with learning from within and learning from without. "Something unravels the narrative's coherence, something interferes with the individual intention, something resists knowledge" (p. 29). This resistance creates the acts of impedance, putting on the brakes, acting out a "refusal to learn" (p. 31). But it is only with a coming to consciousness that learning can take place: "the self must bother itself. It must learn to obligate itself to notice the breaches and losses between acts and thoughts, between wishes and responsibilities, between dreams and waking life" (p. 32). Non-propositional knowledge (Babbitt, 1993), or emotional understanding[37] evoked through performance may well be a way to reach into the unconscious to allow the conversation to take place.

---

[37] (Bochner & Ellis, 2002; Ellis, 2000a, 2000b; Ellis & Bochner, 1996, 2000a)

It is with the notion: "things are revealed and constructed in interaction that might not be accomplished with one voice" (Ellis & Berger, 2002, p. 38) that the concept of performance, or performative inquiry takes hold for me. For in performance there is always the other, the audience. Even with a text, you are not alone: there are many forces behind and within the written or performed word, and these reach the many voices that are internal to each of us as well. It is through the tension created when someone allows the impact of someone else's experience into their own consciousness that something occurs that can be called learning. That impact can create danger. Sometimes it is safer when learning can occur in a slightly removed context (i.e. between the reader and the page; between a character on a stage and those watching in a dark theatre.) Such learning takes place in a very private /public engagement.

Performance as Pedagogy - Performance provokes

Engaging with performance is always a learning process, there in the space between. There is opportunity to choose a level of participation: respond to the intervention, ask and answer questions, either as an individual or as a part of a larger collective endeavour. Is my experience represented there? What impact does it have on others? On myself? What are the issues it raises? What do I feel about how the issues are presented? Am I pleased? Shocked? Satisfied? Provoked? To what? What issues does it raise for me? What does it remind me of? What does it cause me to think about? How does it make me feel? Why?

Performance as a pedagogy involves

a process of making, doing, production in dance, music, and theatre, architecture, landscape architecture, and the various genres of the visual arts. Performance includes audience members' embodiment of aesthetic experiences, their absorption while viewing, listening, and participating in works of art" (Garoian, 1999, p. 8).

Performance includes the audience, as in performative writing includes the reader. "[I]dentity and ideology are not fixed but in continual formation" (p. 5). Performances construct the world in which we live, and as performance theorist Elin Diamond suggests,

performance enables the critique and re-evaluation of culture through subjectivity—a reflexive process of embodiment that enables the subject to turn history onto itself and to explore and interrogate its terrain. Learning history from a subjective vantage point in this way makes possible the construction of new historical ideas, images and myths (in Garoian, , p. 6).

Such self-reflection and analysis of purpose or result in performance becomes an intervention, an opportunity "to expose and interrogate cultural inscription and to re-consider and construct culture anew" (Diamond, in Garoian, 1999, p. 5). My concept of educational intervention denotes an understanding of learning as embodied experience with potential as a tool for social and political change. Intervention suggests that there is a construct requiring adjustment: social or political change. If there is a construct requiring adjustment, there is usually a resistance to that change, therefore a resistance to the intervention promoting that change. With performance, there is the possibility of educational intervention. "The border has suddenly moved... [we become] aware that the 'object ' of our gaze is also the subject who looks back, who challenges and objectifies us" (Taylor, 1998, pp. 182-183).

How useful it might be to engage the resistance in reflexive praxis provoked by a performance, providing The Stop (Appelbaum, 1995). The concept of providing "the stop" is a good one: that moment of respite, alone with one's self, in which to come to terms with the emotional impacts and reactions to performance.

The stop hides a secret dimension of experience. To stop is to uncover what is hiding, which is to say, to experience ourselves in hiding. Yet the stop means something more. The stop opens and closes. It open to an actual unfolding of a life event, that which lives on the other side of hiding. To come to experience is always to come from a disembodied, disengaged state of thought construction. The first is the unhinging of the second, and the stop is the hinge. The stop is not the negation of movement. It is movement itself, a form of movement way from the entrapment of automatic and associative thought, just as it is a movement toward an embodied awareness. The stop is a movement of transition (Appelbaum, 1995, p. 24)

Pause is not a bad thing, if it gives time for one to listen to another, the actual opportunity to reflect, there in the darkness of the theatre, in the space between.

A performance authorizes itself not through the citation of scholarly texts, but through its ability to evoke and invoke shared emotional experience and understanding between performer and audience (Denzin, 2003, p. 13).

Chapter V

Play Development

Scripting itself can function as a mode of inquiry
(Strine, Long, & Hopkins, 1990, p. 186)

The integrity of experience

Theories constitute and facts construct, a notion put forth by feminist sociologist, Dorothy Smith (1999). I began this research with my own experience (Smith, 1987), rooted in 25 years of active and aware observation of the practices of gender relations acted out in the technical workforce. These experiences provoked my curiosity, and led me to question what was creating the fear that must lurk in the hearts and minds of men involved with technical fields, a fear that could cause a resistance so fierce.

> *Phillips and Taylor, in "Sex and Skill," [contribute] to our understanding of skill by exploring how men satisfied their gender interests by using their organizational strength to control the definitions of jobs.*[38] *Their explanation for women's subordinate economic positions hinges on the existence of a societal gender ideology that through **some unspecified mechanism** works its ways into the sphere of production (Baron, 1991c, p. 36) [emphasis added].*

Disquieted by historical and continuing evidence of resistance to women's participation in trades and technology, I returned again and again to the questions raised for me in the worker's conversation described in "The First Nugget." Early in my doctoral research I organized a group interview, with male tradesworkers and

---

[38] *[Cockburn (1983, 1988) and Downs (1995) also document this process quite clearly].*

myself, to explore their perceptions of that resistance. Their comments led me back into the literature on gender, masculinities, masculine identity and work, as well as historical studies, looking more specifically at the policies and practices of the exclusion of women from technical workplaces throughout North America, England, Scotland and Wales. My investigations were also fuelled by an institutional autoethnography[39] [40] at the various sites of my working life.

The intention of that initial group interview was to assist me to develop questions I could use in further interviews with men and women training and working in trades and technology about their experience of resistance. I chose five men of my acquaintance, [four of whom showed up], of varied trades backgrounds, who had experience with integrating women into their trades/technical workplaces. They were men on whom I felt I could count for open and forthright response. Present were two unionized construction carpenters, 43 and 47 years old, then working on a site with employment equity requirements in the collective agreement; a 38 year old auto service technician with his own garage, and a 63 year old tool and die maker who had worked in a wide variety of mostly unionized industrial settings. The interview took place in the Vallican Whole Community Centre, a locus for me as a site of contention, exploration and some resolution for women and men trying

---

[39]

Ethnography does not here mean...restriction to methods of observation and interviewing. It is rather a commitment to an investigation and explication of how "it" actually is, of how "it" works, of actual practices and relations. Questions of validity involve reference back to those processes themselves as issues of "does it indeed work in that way?" "is it indeed so?" Institutional ethnography explores the social relations individuals bring into being in and through their actual practices (Smith, 1987).

[40] (Bochner & Ellis, 2002; Denzin & Lincoln, 2000; Ellis & Bochner, 2000a; Gergen & Gergen, 2002; Pinar, 1992; Sparkes, 2002)

to work together. It was, for them, a comfortable, neutral space for such a unique conversation.[41]

These men had known me peripherally, which may have influenced their willingness to participate. They knew me as a construction carpenter, and as a contributing member of the larger community in the Slocan Valley in south eastern British Columbia, Canada. Some were aware of my activities as a WITT advocate. I had worked on a couple of different construction sites with two of them, and they respected me for my technical skills. One I would call a friend, and the others were acquaintances. I believe they showed up out of curiosity, as well as a desire to put their "two cents worth" into my work on this subject. We did not discuss their reasons for coming, and it was obvious from their starting postures that they were nervous and somewhat self-protective. Yet, they did come, and engaged with me and each other, and drew up from their hearts and minds the quality of reflection and analysis that became the centrepiece of this dissertation.

With permission, I videotaped our two-hour discussion. While I did not dominate their discussion, and provided only a few guiding questions for an open-ended reflection, I was also not an uninterested party, occasionally interjecting or contributing to the conversation. To begin to arrive at questions I might use in future, the participants engaged a complete discussion of the issues underlying the

---

[41]

As is often the case in employment equity related situations, particularly if there are no "others" present, those who are in the majority do not process or recognize the absence of those who are seeking access, i.e. in an all white group, it is rare for someone to identify the fact that there are no persons of colour present. It is not noticed. It takes the presence of at least one, to draw attention to the fact that there are few. And sometimes when there are only a few, it is perceived that there are too many, i.e. "they are taking over!" In this case, the fact that this was a site of contention was most probably only noted by myself, who had been in the middle of it for lo, those many years.

questions that might be asked, thereby undergoing their own self-reflective process, examining their own experiences, demonstrating their own struggles.

It was a rich discussion, though I felt I needed more clarity to create in-depth questions for my research. I set that interview aside to review the literature and undertake additional interviews. When, over a year later, I went back and transcribed that interview, the clarity of the whole interview was striking. It reminded me that "the truth is not born and does not reside in the head of an individual person; it is born of the dialogical intercourse between people in the collective search for truth" (Mikhail Bakhtin, 1973, in Leggo, 1994). It was the permission these men gave to one another to express, in interaction, their truths, their understandings derived from their experience, that I recognized. The years spent 'on guard,'—working, watching—equipped me with the experience to perceive that a representative group of trades people had covered a wide breadth of the issues and demonstrated quite a variety of the positions often taken on the subject; positions which corresponded deeply with the notions being expressed in the body of literature examining masculinities and masculine identity and work. The salience of the emotions, perceptions, deliberations and musings expressed in the interview, and their appearance in such order and comprehensiveness, denoted a unique opportunity for reflection and re/presentation. The transcript of their discussion was rich with historical, psychological and sociological significance. The process they went through to get there was eminently insightful. I thank them for their honesty and willingness to engage the discussion.

I had my case to study, and I was a part of it. Much of the other individual interviews undertaken with women and men functioned as confirmation, affirmation, evaluation, interpretation, judgement and/or analysis of what had been

raised in colloquy with those four men and myself. The question then became, what was the most effective mode of re/presenting the material, a mode that would in itself be an educational intervention.

"Men and Women and their Tools"

Theatre is an 'empowering' force..., through the transformations of time, space and the body that occur in all genres of theatre there is also the capacity to transform not just our dreams and aspirations but also the societies and cultures in which we live (Neelands, 1996, p. 28).

"Show me, don't tell me!" the professor exhorted in an Alternatives in Research Writing class. "The key to playwriting is that everybody has to be an alcoholic so they say things they wouldn't normally say," our guest speaker flippantly interjected, as she entered on the tail end of our critique session. How, I wondered, could those voices be present without everybody being drunk?

"The play's the thing, wherein I'll catch the conscience of the king"
William Shakespeare (1564–1616) Hamlet. Act ii. Sc. 2

Fear...is another mask...Confusion habitually provokes reactive emotions, notably fear. The reactive configuration stands as an obstacle to a moment of poise. It is what must be met to become responsive to the needs of the situation (Appelbaum, 1995, p. 21)

Rather than subduing or supplanting voices of the men in my group interview (Smith, 1999), by interpreting or mediating the potential public response to their words, I wanted to create an opportunity to reflect back out to others, what they were actually saying, to create a mirror for their struggles, a pedagogical tool.[42] My

---

[42] This was the reason that I was undertaking my doctoral studies in a faculty of education, rather than in sociology or psychology.

impulse is to educate, and in educating, evoke a response/ability[1] to transformative social change.

> *We do not despise our knowledge and our skills...But we are hampered by methods of writing into texts that seal in a knowledge divorced from the lively part it might play in coming with others to know, together, our relations and society differently, from within yet not subjectively, knowing them as we actively participate in them and as they are brought into being in the actual practices of actual people in the multiple sites of their experiencing (Smith, 1999, p. 69).*

The resistance to women in technical fields is overt, covert and often deeply embedded in persons and practices. As Dorothy Smith would say: The Everyday World [i]s Problematic (1987). If these men were willing to engage the conversation, then I needed to find a way to re/present them that did not deny them their voices; that was not an interpretation, and yet still provided the possibility of an intervention into the world that had been constructed over such a long period of time.

> *A primary concern of discourse toward critical social science is how to generate knowledge in ways that turn critical thought into emancipatory action...[find] the juncture between human agency and structural constraints...that subordinated groups [can] arise to construct more democratic social forms (Lather, 1991, p. 109)*

For interventions, there must be an intervener, one who sees something as problematic, and chooses to act to change that. For interventions to be successful, collaboration is needed among those who play a role in both the problem creation and the resolution.

Both a way of knowing and a way of showing

In this dissertation, I have used the play "both as a way of knowing and as a way of showing" (Kemp, 1998, p.116). The copy renders performance authentic and allows the spectator to find in the performer "presence" (Phelan & Lane, 1998, p. 10). Hopefully, "audiences will understand how these sorts of dramatic and rhetorical tools create rather than simply reflect meaning" (Donmoyer & Yennie-Donmoyer, 1995, p. 418). If, as Donmoyer and Yennie-Donmoyer suggest (with reference to Denzin), "we can never free ourselves from the process of interpretation" (p. 419), perhaps we might at least create a space for audience engagement.

The possibility for a public interpretation of actions that occur in more private circumstances requires that the "behaviour," or the performance, be performed again, open to greater scrutiny and the potential for "reading the performance".

The Development of Ethnographic Performance Text

It seems foolish at best, and narcissistic and wholly self-absorbed at worst, to spend months or years doing research that ends up not being read and not making a difference to anything but the author's career (Richardson, 1994, in Gray, 2000, p. 377).

Should it be Readers Theatre or Role Play?

In exploring alternative means for representing my research that also achieved acceptability in academia, an article on using reader's theatre to re/present data struck a strong cord (Donmoyer & Yennie-Donmoyer, 1995). Not only was it a notion that took me back to my childhood and early undergraduate roots in theatre, it reminded me of the potential pedagogical uses of a public mirror. There were moments early on where I imagined men in union halls across the country re/presenting the words of their brothers and sisters, reading scripts together,

performing the performances they had been structuring for so long, reading aloud the words that created a mirror.

As I explored this potential theatrical vehicle, my mind went to the 1980's. Kootenay WITT, advocates for women in trades, technology, operations and blue collar work, had developed the seminar for men, *The Workplace in Transition, Integrating Women Effectively* (Braundy, Mackenzie, & Ward, 1983b), referred to earlier in this dissertation. Designed as a tool to assist vocational instructors, apprenticeship counsellors, job stewards, etc. to develop the skills to hire, train and retain women in the technical workforce, the seminar was delivered across Canada. The participants were a primarily male audience, though after the first pilot, we asked groups to include several tradeswomen and technologists so they might speak for themselves in response to some of the stereotypes suggested by the men in the groups. It was important that the facilitators did not become targets for the unresolved, often free floating anger and resentment in the group. Elucidation of all of the elements engaged and learned from the delivery of the seminar will be the subject of a paper at another time. One element stood out as I explored varieties of theatrical presentation for this dissertation.

In the early stages of taking the seminar on the road, it included a section where the participants were given a scenario and were asked to, in small groups, role play the problem and try to come up with some resolution. For the most part, these are men who work with their hands, head and heart, and are or were technically proficient. As I said earlier in the dissertation, they often sat with their arms folded across their chests in a gesture that sometimes appeared defiant, at other times, protective. They had great difficulty with, and resistance to, role playing. When Kootenay WITT modified that section, and presented the scenarios

as what is, today, known as Problem-Based Learning, with questions[43] for

discussion, they participated with efficacy and enthusiasm.

> *Research-based theatre represents another attempt to come to terms with*
> *issues such as: the nature of knowledge construction, considerations about*
> *how to best honour and represent others' voices, concerns about truth and*
> *validity, and especially the desire to have research make a difference in the*
> *world (Gray, 2000, p. 377).*

Reaching people where they are would be essential, and putting them on the

defensive if they have discomfort with playing roles would be self-defeating. Role

playing was out; perhaps even Reader's Theatre would be too much of a stretch.

According to Vygotsky, individuals become motivated to grow by first learning. "In

other words, learning leads development" (Newman & Holzman, 1993, p. 60).

> *A fundamental part of what we understand growth to be demands an*
> *acceptance of who you are in order to move beyond it...its not easy to change*
> *the world, even the little piece of it that happens to be you (Holzman &*
> *Mendez, 2003, pp. 61-62).*

What lurks might hold up a mirror to the self

What I was looking for in the representation of this research was to provide a

space where "every insight was both a doorway and a mirror—a way to see into

their experience and a way to look back at mine" (Schwalbe, 1996, in Tillmann-Healy &

Kiesinger, 2001, p. 82). A performance piece would be created, which the audience

could engage on their own side of the Fourth Wall[44]. The concept of a mirror

provides a porthole into the potential for reflective practice leading to growth,

change, and new action. Watching scenes we think we know well, reinterpreted and

---

[43] See Problem Questions Appendix B.
[44] The Proscenium or archway between the stage and the audience is known as the Fourth
Wall.

reified in a public performance, may provide that access to awareness, the moment
of The Stop (Appelbaum, 1995), "an active concentration of awareness—the poise
before movement..." and in that moment, we might find that "what lurks might
hold up a mirror to the self and its fears and desire" (p. xi, 16). "The performance
text is the single, most powerful way for ethnography to recover yet interrogate the
meanings of lived experience" (Denzin, 1997, pp. 94-95).

Most appropriately for re/presenting my research, a play would be carved, for
the most part, from the two-hour group interview. Some material would be drawn
from other interviews, but the primary source would remain with the five people
who came together in a group interview to explore the questions around this topic.
The play would have future use as a pedagogical tool.

> *By representing ethnographic data...in artistic form we can access a richer*
> *understanding of the complexities of lived experience which can throw light on*
> *broader social structures and processes. Such work can also reach a wider*
> *population, beyond academic communities, facilitating*
> *understanding/interpretation and, maybe, action/praxis in relation to certain*
> *social issues (O'Neill , Breatnach, Bagley, Bourne, & Judge, 2002, p. 70).*

Tensions between dramaturges and ethnographers

Never having written a play, I approached the Creative Writing Department
at UBC, where the Graduate Advisor willingly welcomed me into their joint pilot
program. Combining the student actors, directors and dramaturges of the Theatre
Department with the Creative Writing students, the Play Development Workshop
had been running for 1 year. Supported by faculty from both departments, it was a
truly timely and amazing opportunity. I already had the "words" of my play, though
I had too many words, and putting them together in a vehicle that had theatrical

appeal and maintained the integrity of those who had trusted me with their words would be my challenge (Gray, Ivonoffski, & Sinding, 2002, p. 62).

The fifteen or so members of the class were, for the most part, 2nd year Creative Writing/Theatre students who had written plays before, some more extensively than others. We spent part of each class critiquing each other's work. Listening without reacting was expected. Some read the plays of the others with great attention, and were a rich source of feedback. Others were less forthcoming with critique. The general response I received was that my play lacked theatrical impact. "Who is the protagonist?" they asked. "Where is the climax?" "Too many characters!" they urged. Most, including the writing professor, stated that they could not imagine a situation in which the men would say the things I had them saying. "But I have it on video tape," I defended. "It comes straight from the transcripts."

It was actually an affirmation of the gift of open, verbal reflection the research participants had afforded me. But if no one believed it, I might have a problem. It was important for me to remember who my critiques were: Caucasian, twenty-something creative writing, English and Theatre Arts undergraduates, and a couple of Master's students in creative writing, with little experience of the world I was trying to portray. This does not mean they did not have depth. Several of their plays dealt well with challenging experiential moments. But, as has been true for many years, I was the expert in my own field, and needed to keep my focus on telling the stories as they were expressed to me.

It was a two-term course. Not far into the first semester, I was given the opportunity of working towards honing my play to fifteen minutes for presentation as part of the Brave New Play Rites Festival. It would mean cutting to the bone,

and then some. It was strongly suggested that I choose some small incident described in the two-hour interview, and dramatize it.

My deepest commitment was to maintain the integrity of those who had given me their words, not to stereotype them or minimize the breadth of their characters. The stories they had to tell, and the expressions of their social constructions as men were too important to trivialize. I was not willing to take only one part of the conversation, or eliminate any of the individuals. The many elements of our conversation formed a gestalt, and it was the whole created in interaction with the group that sustained the truths told. This created a struggle and a tension with one of the professors. While he intellectually supported the concept of my work, he seemed not completely comfortable with the subject matter. The other instructor worked with me outside of class, teaching me how to "use the pen as a paring knife". I am thankful to both of them.

Early in the development of this dissertation, I excitedly told a friend about the plans to turn my interviews into a play. Her question in response was, "Will you be the conductor or the composer?" I replied that I did not think I would be the composer, as the words were already written/spoken, so that must mean that I am the conductor, at which point she suggested that I listen to *Pachabel's Cannon*, for an exploration of a weaving of themes. The question has remained with me over the years that this work has developed. Just last weekend, I attended a performance of *Pachabel's Cannon* by the Vancouver Symphony Orchestra at the Chan Centre at the University of British Columbia (UBC). In sharing that original conversation with another at the event, she suggested that perhaps I was also the compiler. I

thank her for this insight. I am both the compiler, and the conductor, though I had an able director to assist me.

Initially I considered the material to be their story, the working-class men who use their tools to build their lives. I, in the role of a participant observer, have been privileged to tell their story through their own words. But I also must recognize it is my story, as a "deep insider researcher" (Edwards, 1999). I have been of them; among them and their worlds for close to 30 years. Much as I have respected the conversation they engaged, it is I who set them to it, and abbreviated their words. It is also my eye/mind/heart through which I view their stories. While seeking to remain true to their context, sequence and continuity, and building on my own participation in the discussion, both voiced and silent, a re/construction has been formed (Gergen & Gergen, 2002, p. 13).

In Gray, Ivonoffski & Sinding's (2002) description of the script development for *Handle With Care?* and *No Big Deal?*, "ethnodramas" based upon research interviews with women suffering from metastatic breast cancer and men with prostate cancer respectively, the process was described as two separate projects, one the primary research interviews and analysis, and second, the ongoing knowledge development using a group of additional cancer sufferers, oncologists and actors in discussions around the development of the actual script. They chose this route in recognition of their own experiential limitations in understanding the realities behind the original interview (a recognition that to reconfigure those words, they needed confirmation of their interpretation).

In contrast, I chose to use my own years of experience to hone the dialogue of these research participants. Instead of drawing from a wide range of individual

interviews, constructing a completely new script and confirming that it captured the depths and varieties of experience (Gray et al., 2000; Mienczakowski, 1995), I immersed myself again in the threads and stories, challenges and conflicts emergent in the two-hour group interview. I did not rearrange or reconstruct to suit some notion of the themes (Saldana, 2003), but allowed those themes to emerge as a direct consequence of the progress of their discussion. One method is not better or worse than the other. The mode that I chose was a result of being *of* the group, rather than an outsider viewing the group. The meanings of their words struck viscerally, a result that I hope to achieve, in future, with others who are also of the group but who were not present that night of the interview. I had my audience in my mind's eye. "Theatre has the potential to present research material in a way that helps to clarify and transform social understandings; where insights occur because of the audience engagement with dramatic material, the potential for positive individual change is heightened" (Gray et al., 2000, p. 138).

> *Drawing upon the work of Adorno and Benjamin it is argued that alternative re-presentations of ethnographic work can create multivocal, dialogical texts that can make visible 'emotional structures and inner experiences' (Kuzmics, 1997: 9) which may 'move' the audience through what can be described as 'sensuous knowing' or mimesis (Taussig, 1993)... The 'audience' is brought into the action and invited/enabled to live through the experience 'as though they are having the experiences and emotions the performers represent' (Becker et al., 1989:93, cited in O'Neill et al., 2002, p. 71).*

Preparing for Production

The Director

Unlike Johnny Saldana (1998), both playwright and director of his "ethnographic performance text", I was assigned a director by the Brave New Play Rites producers, a situation for which I was alternately thankful and terrified. In her second year of Master of Fine Arts Directing Program, this was her first play, and we did have some struggles over whose play it was, and what 'theatrical' meant. I heard it is not an unusual struggle for a director and playwright, but it was challenging as it was the first time for both of us. We did succeed.

The Actors

The director and I attended the city-wide auditions which brought professional and semi-professional actors to try out for roles in any of the fifteen Brave New Play Rites Festival plays. We sat with directors and some other playwrights through two days of auditions. Not all playwrights were present, a fact I found odd, considering the amount of investment I felt in the work. With five characters to cast, it was heartening to find that my director and I agreed easily on four of the candidates. We struggled over the fifth, perhaps because I knew the individual being portrayed, and finally, the actor I chose was agreed upon. It was the first sign that caricaturing of the men in the play might be an issue.

The next stage of selection allowed the actors to choose from among those plays that were seeking them. Most actors did not participate in more than two of the shows, and we did not have a finished script to show them, only the main idea and some of the dialogue. I was still cutting the play from a two hour interview into

a 15 minute play, then called: *The Step Change*. The Director and I were thrilled when all of the actors we had selected, four men and one woman, chose our play.

The actors and director proffered welcome recommendations for reducing the script, and unacceptable notions of changing the characters to create more "dynamic theatrical tension," or to increase their satisfaction with their roles. As with the work of Gray et al. (2002; 2000), the actors' interactions and responses with performing the roles needed to be taken into account as the performance of the work developed, as did the notions of the Director.

We started with a play that was still 42 pages long, and the advice and impulses of the cast and director were invaluable in helping me decide where and what to cut. At the same time this made visible my own tensions related to keeping the voices of participants intact. It was very difficult for me to eliminate some scenes and some dialogue, though ultimately each of the areas covered by the participants found its place in the text, albeit in an abbreviated form, a theatrical form. Often, I felt that I was the guardian of the persons who had been willing to share their thoughts and feelings with me in the original interviews.

What is in a name?

The play has had three names since I began honing the script: *The First Nugget, The Step Change,* and *Men & Women and Tools.* I began with "The First Nugget", because it was my initial intention to create a play with three acts: The Men's story, The Women's story and the final act, which would miraculously emerge with some kind of resolution. I had written a story called The First Nugget describing the initial impulse for my research [see p. 69]. Writing three acts was an idea that drove me for a long time, reflecting my efforts and desires of the past 30

years to make some inroads through this deep divide I have observed since working

on the Vallican Whole Community Centre[45]. But the opportunity to construct, for

the Brave New Play Rites Festival, a 15 minute play shifted my thinking. It was an

ideal length for an A/V intervention tool, around which discussion might take place

in the future. Other acts might be constructed at other times, but now I would work

towards a whole one act piece.

Crafting Theatrics

I first constructed the play with a couple of introductory expository scenes,

inserting additional made up characters to introduce the ways that race can

intersect with sex, and how they both interact with the embedded class dynamics.

These scenes were removed from the play that was ultimately performed, partly

because they were "made up," and partly because my critics felt they were being hit

over the head with the message. In the discussion that followed showing the video

of the play to one of the participants recently, he expressed concern at the kind and

quality of the lunchroom conversations he had been hearing, related to women

working on the construction site where he worked. The scenes he described were

very close to those I had "made up" and removed.

---

[45] In a completely volunteer building project, when unskilled women came on the site, men
(of a variety of skill levels) would take the tools out of their hands, give them sweep-up jobs
to do, and generally discount their efforts and contributions. The women became quite
demoralized, not a good sign on a project that depended on the women for the bulk of the
volunteers. After we decided to have special 'women-only' work days, this changed
markedly. The joy on the faces of the women as they learned to use the hand and power
tools, and started to see the results of their work emerge in tangible form, was
extraordinary. It led to many wonderfully satisfying and productive days of work on the
building, and ultimately to much better relations on the site when the women and the men
worked together. As the women's skill levels grew, so did their confidence in speaking out
strongly to those who tried to interfere in their work.

There were two female characters inserted into the play at that time. Writing the script gave me the option to create on the page a circumstance for which I longed, and so I created a "Messenger" who could speak all the words the women ever wanted to say, but could not find the space inside of themselves or within the context of their lives to speak. For example:

The Messenger: I come to you as a Witness, one who has both experienced the depths of misogyny and heard testimony of the trauma of hundreds of others. In a paraphrase of Albert Camus,

I follow the dictates of my heart and find Thus: decidedly, it was up to me to speak...to compile this chronicle so ...not to be one of those who hold their peace but should bear witness in favour of those...so that some memorial of the injustice done them might endure (Camus, 1972)

The Messenger, a rather prophetic and somewhat didactic androgynous being, and a character called Anywoman, who performed the experience of difficult and challenging events on the worksite, were inserted and eventually discarded. Again, the students in the Play Development workshop assisted as they expressed concern at being "hit over the head with the facts." I began to think it might be better to keep to what actually transpired in the interviews. Gray (2000) talks about both the challenges of wanting to be sure that the meanings of concern are clearly represented, and the potential of adding additional material. His team, too, came back to what was actually said, leaving the audience to receive what they might, and finding, as I did, the benefits accrued to limiting the texts primarily to those collected in the research, including my own, sometimes unspoken, responses.

Those elements written for the Messenger really were the voices of women interviewed and those who had told their stories in the past (Braundy, 1989b). They were her words and my words and their words, and I finally had to put those words

back. My fellow playwriting student critics suggested that many of these statements

came more effectively from "Connie's" mouth. Thus Connie became a composite

figure, speaking the thoughts of other women as well as her own. It was easy to do

this because I had been the original participant, and there were some things that I

had chosen not to say out loud during the group interview.

The Messenger's comment,

**Deeply embedded in the cultural context of work are expectations of all
employees to conform to what <u>men</u> do?**

Became:

Connie: Why is it women have to conform to how the <u>men</u> want it to be?

Statements and questions for Connie came from my other interviews, some

from the stories told in forums by the 120 trades and technical women at the

Surviving & Thriving Conference and others of a similar nature. The men in the

interview spoke for themselves, with all of the dimension that each of them brought

to the discussion.

Through the combination of both presentational (symbolic representations of

experience, and the outward depiction of internal dialogue that invite the audience

to make meaning) and representational theatre ("a faithful rendering" (Denzin, 1997,

p. 97) of actual dialogue from research interviews), I opened the space to give voice

to critical reflection. Not necessarily Ethnodrama, which implies a iterative process

with informants (Mienczakowski, 2001, p. 468), my ethnographic performance text has

as its overt intention, "to be a form of public voice ethnography that has

emancipatory and educational potential" (p. 469) to create an opportunity for the

audience to experience that moment of The Stop (Appelbaum, 1995) that "lives in the

interstices of action." In that moment, in "the poise[46] before movement," before we

pick up the next tool, we might find "a key to a deeper engagement in a meaning

that unfolds our lives. For it offers a choice" (p. xi), to reflect, to (re)consider, to

re/evaluate how to respond. "Either to remain habit-bound or to regain a freedom in

one's approach to an endeavour. The stop is the advent of an intelligence of choice."

There is also a space for the researcher to "talk back":

Christine Griffin (1991) in a study of racism, argues when the participants in the research are reproducing damaging and racist ideas, enabled and legitimated by years of collusion from other white people, then the 'researcher should talk back", arguing that not to do so would reproduce, legitimate and collude in the racist ideas being articulated. Griffin argues less for caring for the researched and more for caring about wider inequalities (Skeggs, 2001, p. 434).

Except to include the ideas from the original impetus for the study, [see The

First Nugget in Chapter III], the integrity and sequencing, the statements and

reflections made by the men were as in the original interview. It was not an easy

process, going from 55 pages of dialogue, to nine. After going through 32 iterations,

I did reach a point of cutting beyond the bone to achieve the 15-minute limit. I

rectified this afterwards, in the text version, which comes in at 12 pages without

academic notes.

During the course of the playwriting, I also engaged with the literature,

highlighting elements in the play's text with endnote references, comments and

analysis. As the men's voices spoke to the historical and sociological reflections in

---

46

Poise is the response of awareness to the call of a situation. Dancer, athlete, player, and performer—as well as we ordinary agents—all embody poise...Poise is ever fresh in its ability to answer...in its continually renewed sensitivity, it is unlike its apparent siblings—control, steadiness, and firmness of intent. Poise has flexibility. It stretches, bends, adapts, and accommodates...Poise is fluidity of response (Appelbaum, 1995, pp. 14-15).

the literature, my work began to go deeper rather than more broadly. When I finally

reached the end of the editing period, finding the endnotes section almost

completely intact affirmed for me that I had retained the generative elements of the

work. I had had edited out little of vital importance.

A Step Change

I soon realized how clearly reflected in the drama of the interview was the

fear and tension I had been discussing with Dale, one of my key informants. An

electrical engineer, he had become fascinated with the language that I was using to

describe the situation for women, my efforts to make a difference there, and what I

was experiencing in that process, including in the recent interview explorations. I

kept talking about resistance, and impedance. With him ensuring that my use of

the language of physical systems was recognizable to his constituency, I began to

explore a metaphor for the challenges we were facing in trying to integrate women

into technical fields: a metaphor that could be understood by men who were

standing in the way, consciously or unconsciously.

By the end of January, when the Brave New Play Rites producers were awaiting

the finished script, the Messenger's metaphor was again looking for someone to

perform the words that so well expressed the concept:

> **It appears that what is being suggested here is a Step Change. The kind of Step
> Change the oscillations of which could explode the bridge under the marching
> men. If they do not act to impede those forces by changing their steps, their
> world could blow apart, like a glass subjected to the oscillations of a brilliant
> voice in high C. And so consciously and unconsciously in their efforts to create a
> critical damping force, they impede, overdamping the oscillations, slowing
> down the Step Change, resisting, impeding, protecting their world from
> explosive Social Change. [See Appendix C].**

By February, we were getting close to the deadline for changes. As the actors were learning their lines, the play was down to 17 pages. I had removed extraneous characters and scenes, investing those lines, where necessary, in one of the remaining main characters. Many of the voices of Anywoman and the Messenger had been integrated into Connie's character, and yet, not all the Messenger had to say could be absorbed in that way. I gave one of the men the opportunity to reflect with Connie after the climax, using the concept of the Step Change.

Each man responded as per his character to the notion of the Step Change. It seemed natural and "worked" theatrically. But it was still too long.

There continued to be a great struggle with classmates, a professor, and now my director to continue to reduce the numbers of characters, and the range of issues addressed. This I resisted, being committed to demonstrate the range and dimension of topics discussed which represented the men as the whole characters they were, and not caricatures for expediency's sake.

> *The reflexive performance text must contest the pull of traditional "realist" theatre, "method" acting, (and ethnography) wherein performers, performances, and texts solely or primarily re-enact and re-create a "recognizable verisimilitude of setting, character and dialogue" (Cohn, 1988, p. 815), in which dramatic action reproduces a linear sequence, a "mimetic representation of cause and effect" (Birringer, 1993, p. 196). A postmodern performance aesthetic and evocative epistemology must be developed...[which] potentially answers Trinh's (1991, p. 162) call for the production of texts that seek the truth of life's fictions in which experiences are evoked, not explained...[turning] tales of suffering, loss, pain and victory into evocative performances that have the ability to move audiences to reflection, critical action, and not just emotional catharsis (See Coger & White, 1973, pp.29-31; Maclay, 1971, pp. 37-38) (in Denzin, 2001).*

There was a version that had gone to the Brave New Play Rites Festival producers on January 28th, still a bit long, though it was now within moments of being the 15 minutes required. I was feeling the internal struggle of getting it right for them, for the actors, and for my research participants. I had renamed the play The Step Change, and the concepts were exposited by characters created to do so. But such exposition was beyond the scope of the timeframe in which I was working, and perhaps even too didactic for the evocative medium in which I had chosen to work. It was still my hope to educate, by creating a mirror in which the metaphor was visible. With each pass of the penknife, the essence of the idea was unfurled, and the expository hammers were removed. When the wonderful producers of Brave New Play Rites asked for a one line description of the play for the record, I sent an email: *The Step Change explores the vulnerable underbelly of male resistance to women in trades and technology.*

The men, themselves, were exemplifying, characterizing and conveying that metaphor.

From Metaphor to Metonym

> *Metonomy, less well established in the discourse of performance than its companion trope, metaphor, is also of practical and theoretical use to the researcher. When the performance is considered metonymically, its meaning emerges as relational rather than representational. The performance is contiguous to; it is partial, thus opening the study to a wide range of associations and affiliations—part of a biography, part of another text, part of an institution, part of a social reality, and so on (Said, 1983). The performed text achieves meaning in terms of its relations, some near, some remote, and all somehow different from the literary work (Evans, 1986; Johnson, 1986) (in Strine et al., 1990, p. 185).*

The play emerged as a metonym, the part that speaks for the whole: a trope (Chandler, 1995). Elliot Eisner, an historical champion of artful expressions of research (Donmoyer & Yennie-Donmoyer, 1995, p. 405), refers to the concept as a "structural expressive equivalent of an idea, a feeling...the public embodiment..." (cited in Donmoyer & Yennie-Donmoyer, 1995, p. 403). Ted Aoki, a renowned curriculum theorist influenced Rita Irwin's description of "an entity closely associated" (Irwin, 2003, para. 27), when he refers to metonymy as "a space of doubling". In this context, the plays potential as a curricular intervention is affirmed.

And on to Production

We met as a group several times, and at the actors' request, I shared with each of them the intentions and constructs, as I knew them, of the people they were playing. They asked good questions about motivations and how they would express certain statements in the play. The actors and director started workshoping the characters, finding and giving them "back stories." There were times when I would have to interject, when to create some theatrical tension, they went off in a direction that contravened what the person that I knew stood for.

Interestingly, one of the actors was a construction carpenter in his 'day job,' and provided affirmation that the dialogue represented his experience and was a contribution to the realism of the events. Another was a theatre lighting technician as well as being an actor, and his contribution to the theatricality of the piece was invaluable.

Each of the actors was fascinated that they were playing real people, and were most interested in the "back stories" of their "characters". At the same time, during initial readings, as actors they wanted to push the limits of their characters,

often to the point of caricature. I continued to urge them to respect the multiple
dimensions of these people who had given me their words.

I provided as much background on the characters as was possible in the first
few weeks. During read-throughs and evenings away with their parts, the actors
and the director also assisted me in identifying superfluous dialogue. I heard that it
was unusual for actors to suggest elimination of their own lines.

On March 7th, still trying to get it down to the inimitable 15 minutes, I took
out the last scene, with its mention of the concept of the Step Change. The play was
reduced to the bone, and beyond. And the Director and the Actors really went to
work.

Email to co-supervisor, 19 March 2002:

[47]*Sunday was quite interesting, as the Director was asking each actor
to state the motivation of their character for the play, and in doing so was also
asked what her concept was. It was both good and hard for me to see what
they were each doing with what was there. But, as we say, it is all data.*

*The Director's idea is that "people should leave the play outraged
that in 2002, women and minorities are still treated in this way" (and this
after all the work I have done with her to help her understand the complexity
of the characters!).*

*Luckily, the actors have greater beliefs in who **they** are:*

Connie: to get these guys to start calling each other on this shit!

*Gus has five: 1) To solve my workplace problems, 2) Defender of Right, 3)
Create a forum, 4) To show Jerry it's not such a big leap, 5) To be a catalyst
for change;*

*Jason has three: 1) Put Connie in her place, 2) Back up Jerry 3) Have a good
time without being a total pig;*

---

[47] The major italics in this section are direct quotes from my journal notes, some of which
were sent by email to committee members.

Jerry: To get Connie to accept that he is too old to change, and so is everyone else!;

Steve: 1) Arbitrate, observe and disseminate in ways others can understand, 2) Don't confuse it with passivity—"I would rather die than allow injustice," 3) Active and quiet resistance.

It is quite remarkable that the four men who were selected by both the Director and I (and we got who we wanted) are so completely engaged in the process. The woman who plays Connie is wonderful, someone who is young enough to have to go through a number of the stages of "growing up as a tradeswoman" to reach the level of character she is being required to play. She is doing so, and also has excellent suggestions for cuts, blocking, and has even contributed to the name.

Because the Producers had seen one version which had as the title: The Step Change: Men and Women and Tools, they suggested that The Step Change was a bit pedantic: I might shorten it to just the latter part... "Connie's" suggestion, which I have accepted is: Men and Women and Their Tools. Somewhat explicitly provocative. [May 2004, I have since changed it back to Men & Women and Tools, as the tools have multiple meanings and I prefer the flow.]

The play was at its final edit. A feeling of strain developed with the director. The actors looked to me for character background, and this undermined her authority. We met together once with her directing professor who helped both of us understand that the tension between playwright and director was natural. When I discussed this with the Festival's producers, they said, "What, you didn't have any shouting matches? That's rare!"

I recognized that I had given all I could, and now she needed the space to put her own mark on the performance. I left for three rehearsals to let them fly at it without my critical eye. When I came back, I found that the director and the actors

had found and built upon, through lighting, staging and characterization, the essential elements of the script, and they had formed a "theatrical" piece at last. It was clear they were moved by the stories they were telling.

For the evening of the dress rehearsal I thought about using my video camera to capture the performance, and prepared consent forms. After a brief discussion with each of the actors, I received permission and signed consent forms to videotape the dress rehearsal and the three performances, and to use the material for all educational purposes except broadcast. For that, I would have to come back for additional permission. It was an amazing fluke, for which I had not really prepared, and only thought of at the very last moment. Otherwise, I would have found microphones for everyone, or at least one to set on the table. As it was, the only microphone was on the camera, which made for difficult sound reproduction. Each night I placed the camera at a different angle, and amateur that I am, was able to ultimately produce something of use.

The dress rehearsal began in darkness. One of the actors was also a lighting designer, and in the process of making the show more "theatrical," they had pulled one of the scenes described by a research participant (which originally had been given to Anywoman to perform) and brought it to light, virtually. Connie was walking the thin beam of light, in silence. And then the cat calls came from the men, loud and obnoxious. Oh, my God, Connie was losing her balance! No, she found it again, she centred herself. She finished walking the beam...but at what cost?

Taussig (1993) understands 'mimesis as both the faculty of imitation and the deployment of that faculty in sensuous knowing' (p. 68). Moreover, Taussig concludes his book on mimesis and alterity by re-affirming his interest in the power of the copy to influence what it is a copy of...(O'Neill et al., 2002, p. 80).

Opening Night

On the evening of the first performance I wrote in an email:

> *Being exhuberantly proud of and pleased with my actors, and wanting to heal any rift with the Director, now that it was too late to do anything else about it, I bought a miniature rose plant for each of them and walked back over to the Chan Centre. The first to get his rose began a rich conversation where he spoke of his understanding of who Jerry is, and his struggle with how to play him.*
>
> *A bit later I found "Connie," and gave her the off white roses that were the only ones that actually had a scent. Her contributions to this production have been wonderfully constructive. Each of her questions has made the play, and her playing of the role, deeper and more eloquent. Her suggestions were most useful in terms of what could be cut or edited. Her understanding of and dedication to playing the women who Connie represents was astounding for someone who had never worked in a technical field. In many ways, she is a lynch pin. But each of the guys has a grasp of their role, and a willingness and ability to play that role in contributing to the story. I feel graced.*

While I knew well what directions they were going with the material, the first public performance was a wonderful achievement of their work.

Chapter VI

A Performative Autoethnography

"It is often said that a play only really exists when it is given life in performance; the text, the argument runs, is a mere shadow of any realisation"
([Dollimore and Sinfield:1985, p.130] in Goodman, 1998, p. 5)

"Performativity must be understood not as a singular or deliberate 'act', but, rather, as the reiterative and citational practice by which discourse produces the effects that it names" (Butler, 1998)

— SEE DVD —

Chapter VII

Dataplay

Men & Women and Tools

Connie (35) construction carpenter
Gus (42) – construction carpenter crew leader
Jerry (43) Automotive repair shop owner
Jason (38) construction carpenter lead hand
Steve (62) tool and die maker, retired union activist

A dark stage. Silence. A beam of light appears on the floor. Connie, in construction clothes, comes up to the beam, puts on her hard hat and stands on the beam. She starts to walk, about three steps, and men catcall from the 4 corners of offstage:

Male voices: Hey, baby, I got something long and hard you can balance on! Nice Ass! Etc.

Connie starts to falter, gets her balance, and continues to the end of the beam of light, where she takes off her hard hat and throws it on the floor. Blackout.

Music comes up and lights come on.

Jerry owns a small automotive repair shop, the front end of which sells milk, juice, confections, and hot soup. A round table is set up for a card game with 4 chairs. Jason, Steve and Jerry are already there with a pizza. Gus and Connie arrive laughing. Jerry and Connie have an intense, somewhat uncomfortable moment.

Jerry: What's she doin' here?

Gus: There's been some shit happening at work this week, and I thought it might be good to invite Connie to Poker Night. OK?!

Jerry: Isn't there any place left where guys can just be guys anymore?

Jason: Connie's OK. She gets along fine with the guys at work.

Connie: Hey Jerry, if you're good enough to tinker with my truck, you're good enough to play cards with me!

Steve: *(Breaking the ice...)* OK, what'll it be?

Jerry: 5 card draw. One-eyed Jacks wild. Ante up!
They all ante up. Steve stays the dealer (the choice of game rotates around the table from game to game). They pick up their cards and sort them. There is a round of betting. Everyone calls, and signals how many cards they want. Steve deals the new cards. The dialogue takes place, paced over the action.

Connie: You know? I have worked construction for 15 years with men who were thrilled to have me around, and men who couldn't bear the sight of me. Women have been telling me horror stories since I started this work.

Jason: *(with a cautionary, challenging tone)* Hey! *(He pauses, taking a moment to visibly relax.)* I love when a woman comes onto the jobsite. I'm thrilled to share my skills, teach her everything I know. *(He pauses again, this time as if he has more to say but is reluctant.)* But I'm just not sure how I would feel if a woman came on the job knowing more than me.

Connie: *(Pauses, shocked, then half-joking)* Yeah? Well you'd better figure it out.

Jason: Makes the guys nervous. *(With some bravado)* Not me, of course. *(Throw in a chip to see, and one to raise)*

Gus: I'm in for a buck. *(Pause)* You know, Guys equate themselves with their jobs...it's the last bastion of maleness. There's a lot of bright guys, but there's a lot of real narrow-minded guys, in terms of women, in terms of race, -- everything. When a woman comes on, some guys don't know how to act, so they react the only way they know how, real macho: Hey Babe! Hey, Nice titties kinda line.

Jason: *(Pretending to be someone else)* "I ain't training no goddam woman to take my job when she oughta be home anyway!". *(Call by throwing in a dollar chip)*

Jerry: Sorry folks, but I **am** the red-neck. We go to work for two reasons. Money, and enjoyment. We talk about our jobs, cars and women. You know, the girl in the bathing suit walking by the worksite, right? When you get a female in the place, you can't do that. *(Throws a loonie into the pot)*

Steve: So you lose your freedom. *(Steve folds his cards)*

Jerry: I can't walk over to you and say *(pointing)* God, she's got nice tits, right? Cuz there's a female on the job. (Pause) At the industrial plant, the women were 300 pounds, 6' tall, built like trucks...

Connie: *(Interjecting)* What kind of trucks, Jerry?

Jerry: They belong there. No problem...But, when you go into the lunchroom with some of the women, the conversation stops. If they accepted the male conversation, they were accepted.

Jason: The rules of the game didn't change

Jerry: Yea, You had your work and your interaction with the guys. It's not whether a female is better, smarter, more intelligent, faster...whatever. If you couldn't say what you thought...that's where it would jam.

Connie: Why is it women have to conform to how the men want it to be?

Jason: We have a couple of women apprentices, and Jane is really struggling to fit in...

Connie: I wonder why???!

Jason: ...while Darlene fits in quite well. . Darlene is clear. If you are stepping over the boundaries, she'll let you know. Jane is not fitting in at all. The guys have to be very, very careful.

Connie: Whose fault do you think that is? *(Connie lays down cards/collects the pot.)*

Jason: I expect that she's representing women out there, so she needs to make an effort to stand, you know, I'm here, and I' m a woman and I'm going to kick ass like the rest of you guys.

Jerry: Right, should the rules be different for her? This is my point.

Gus: No, they shouldn't be treated differently but they are! A woman is under the microscope all the time. I remember Connie saying years ago...

(Lights fade and the beam of light comes up. Connie begins to walk across it, towards the audience, walking carefully, balancing between nervous at being watched and self-assured in her ability.)

Gus: *(as a voice over)...* it was the first time she had to walk across a beam. The crew stopped to watch. Was that to see if she could make it, or if she would fall off halfway through? A woman has to work a lot bloody harder. It's not fair, and it's not bloody right, but they have to recognize: if they're getting into our trade, they're gonna be scrutinized that closely.

Lights fade up and the men come back to the table as Connie comes back with a beer. Steve deals another hand, and the poker play continues gently through the dialogue.

Jerry: I don't believe they should be treated any differently. Male or female, they have to keep up.

Gus: To an extent that's true, but there's great big guys in construction and little wee men. The big guys get the big jobs and little guys get into the tight places.

Jason: People in physically demanding trades, male or female, are going to have to have some capability.

Jerry: They have to be able to pick up an air nailer.

Jason: Some women are dynamite. Like Della. She's right beside those guys, banging and lifting and toting. She is a good tradesperson, she's got good skills. And her social skills...

Jerry: If you can't handle those sheets of lead: You won't be there. Sorry, they hired you and you can't do the job...

Connie: But what about the men who create an unfair test? Like the instructor at BCIT who told women that if they couldn't lift a 100 pound battery and put it on the third shelf, they couldn't be in the program? And the fact that no man ever lifted that by themselves?

Jason: On my job, I have to carry green 4x6s or 2 inch fir planks, 16' feet long and heavy. I don't want to spend my day carrying twice as much for anyone.

Jerry: *(To Jason)* What if it takes you and two other strong people?

Connie: Are you suggesting that the women aren't strong?

Steve: When I was a kid, on a construction job, non-union—may I be forgiven—a young guy was carrying two cement blocks up a board and giving it to the masons. I saw the crew go to the boss and say look, this kid is going to die! He didn't have the

upper-body strength to carry blocks like that. It was the crew that intervened. But I sure as hell have never seen a crew do that for a woman.

Connie: Why are you guys so protective of these skills?
(Silence)

Jerry: Wasn't smart enough to go to college. I wanted to be something with a future, they said sorry, you don't have enough schooling for it. We could put you in the plant. Ok, I'll take the job. *(Jerry and Gus split the pot)*

Steve: When I finished my apprenticeship, I thought, I'm not inferior to any punk that just got out of college with a BA. He's gonna take that to some employer and hope they will teach him something real. My 5-year apprenticeship was equivalent to any BA! As far as I'm concerned, it still is!

Connie: But women weren't even allowed to try. Tech classes are <u>still</u> a male bastion. Men are so resistant to women getting skills. What? Are they masculine skills?

Steve: I think if you go to work every day for thirty years, and you're surrounded by men, and men only, that you come to look upon it as a men thing. I mean, in twenty–five years in the machine shop *(holding up his finger)* I've worked with one woman.

Jerry: Was she any good?

Steve: She was very good…a machinist. A fire-eater. She took no crap whatsoever. But that's one in twenty-five years. So, yeah, I look on it as a man's job.

Jason: I think our self-worth is tied into our jobs.

Gus: Oh I think it's more than tied to it. My Italian father was proud to use his hands to provide for the family. That was his focus, -to provide well. That's <u>my</u> mission in life. I know when I'm not working, I don't feel good about my self.

Jason: *(quietly)* I feel the same…

Steve & Jerry nod.

Connie: Mission in life, eh? Some men have said that if women have the tool skills too, then we'll have everything. It seems there's a fear you're becoming redundant.

Gus: You're a man when you provide for your family, and you're honest and you're fair. My job as a carpenter doesn't make me masculine. The fact that I <u>have</u> a job, and I'm a good worker, <u>that</u> makes me masculine.

Connie: It amazes me! When you ask men about the meaning of tools in their lives, they say it's so they can take care of everyone. Trades and technical women love that they can take care of themselves! *(Connie wins the pot)*

Gus: Why do women want to become construction workers? It just baffles a lot of guys. I assume it's because they can make 25 bucks an hour as opposed to making 7.

Connie: That's one reason.

Steve: They find a lot of satisfaction in that work. *(Steve deals another hand)*

Gus: Yea! Most guys like that.

Connie: I do too! I created the blade for my spokeshave from a car leaf spring, bending it to fit my carved wooden handle, hardening it in that intense oven; honing the cutting edge. I made gorgeous folding chairs...

Jason: You're creating something real.

Steve: That's a lot of it. But everybody in manual work, which is not so damn manual, there's a lot of brainwork involved in every trade. The men are scared...Automation has killed a whole bunch of jobs, certainly in forestry and metalworking. Machines are doing stuff I never thought I'd see a machine doing.

Gus: Like in our trade, used to be, you get a million dollar job, there are 10 guys on the job. Now you got a 10 million dollar job, we still only got 10.

Steve: So everybody feels their job's on the line.

Gus: *(slightly joking)* and then women are coming on the job *(All laugh and uncomfortably shake their heads yes.)*

Steve: *(slightly ironically)* and to add insult to injury you suddenly got a bunch of people who aren't really "breadwinners..."

Gus: *(slightly ironically)* and they want to let some more Vietnamese in too, you know, Holy shit! We can't deal with that.

Steve: Most tradesmen want to go back to the days when they were really skilled, all male and preferably white. But, it can't happen, and it's not gonna.

Jason: Jobs are getting scarce, especially if you live outside the big urban areas. Men are concerned.

Jerry: Security for my family. That's all I need. Working, doing a job, helping my wife and family: security.

Jason: That's how we've been socialized.

Connie: What does that mean?

Jason: Cubs, scouts... Those sort of outdoor things with men and boys. I guess its a few steps away from a paramilitary group. My father, he was a very gentle man. He would take us all fishing, but hunting? He never took my sister. Guns were a boy's thing. Christmas time we got bikes, and mechano sets. My kids have both been given the same toys, but I have a very masculine little boy and a very feminine little girl. We gave him dolls... he had no interest.

Gus: My wife is a feminist, and I always have been. But my son is pretty bloody redneck. He certainly wasn't taught that at home. You should hear him talk about women in the trades. Holy shit! He sounds like a 60 year-old teamster. Can't put his finger on why, just knows they don't belong there.

Steve: It proves that the kids at school put on the peer pressure. You learn more about what your right attitude oughta be from your peers than you do from your parents.

Connie: *(to Jerry)*: How were you socialized?

Jerry: Oh, German upbringing, male-dominated. I shouldn't say my mom was at home, she worked half her life in the Post Office. Boys did the chores. Girls cleaned the house. Boys shot guns, boys played hockey. I haven't seen much change, to be honest.

Jason: You've had a woman mechanic

Jerry: She needed two more years to complete her apprenticeship, so I took her on. No problem.

Steve: Well, she is making a lot more money than a till clerk. *(Pause)* My father and mother were both union organizers. They taught me that I lived in a Patriarchy, that males are in a privileged position, have been for several thousand years, and men were going to fight like hell to keep those privileges. *(Pause)* But, those privileges aren't so real anymore. *(Pause)*

Jerry: How are we going to survive as a human race? Someone has to stay home and raise the children!

Steve: Nobody knows how to make it change. *(Steve deals another hand)*

Connie: Nobody is willing to make the move. The unions are acting as gatekeepers, the vocational instructors are protecting the industry from the hordes of women, and the government doesn't want to upset anybody. I'd like just once to walk onto a job site and see a bunch of happy workin' women and feel welcome! It would be better for everyone.

Jason: The dynamics are different when you are working with women. There is some sexual energy there. I am not saying it's appropriate or inappropriate. It's just there.

Steve: It's not necessarily a bad thing. (Laughter)

Gus: No it isn't.

Jerry: *(Exaggerating)* We're all male. We're all heterosexual males, We're all...you know... aren't we? *(There is a moment of pause, with a variety of thoughts quickly going through all of the minds on the stage. Connie is rolling her eyes.)*

Connie: Are we?

Gus: I act differently when a woman's there, whether it's on the job, or off. It comes down to that sexual thing. Guys don't know how to deal with that, they don't feel comfortable because they are not in control.

Connie: Not in control of what?

Gus: Their feelings... the situation. We have a pretty structured set of rules on a construction site. You see a beautiful young woman comes into the trailer and she takes her T-shirt off, and she's got beautiful breasts, well, I mean, it affects every guy in that room.

Connie: *(In a shocked, joking and comradely tone)* Holy shit Gus! Can you really imagine a situation where a female construction worker comes into the lunch trailer, and takes her T-shirt off? Sounds like wish fulfilment! Probably took off her flannel shirt an' had a T-shirt underneath. But did you ever expect that she didn't have breasts?

Gus: It's just something it'd be easier not to deal with. If the woman was gone, we wouldn't have to deal with this shit. We could have our posters up and we'd be quite comfortable.

(Lights down, spotlight on Connie standing at the back, Gus is just visible standing at the edge of the light.)

Connie: *(losing it a little)* So those guys at trade school were just uncomfortable, the ones who put up the Fuck You Ms, signs on the toolroom door, and "Connie's tits" on the blackboard. They didn't want to have to deal with that shit, so they twisted my framing square into a little ball and wrote CUNT on my desk. The instructors, didn't want to have to deal with it, so they gave me a new square and shut up the fuck up about it. When are men going to start calling each other on this shit?!

(Gus turns away, Lights dim and come back up on the table with everyone present)

Gus: It comes down to: do you feel comfortable with women in your personal life? We have guys on the job that are absolute social misfits. They are fine at work, but when a woman shows up, they don't feel bloody comfortable and they don't fuckin' like it.

Connie: How come men have such a hard time looking at women as co-workers?

Gus: I view the women I work with as co-workers. I am certainly in the minority. The only ones who really seem to accept women are the old hippies, that group of guys are quite comfortable with it.

Connie: Respect is the bottom line. There is something about men and women being able to respect each other.

Jason: I respect both those apprentices on the site. I think, maybe you want to see change quicker than it's gonna come.

Steve: If a woman wants to succeed in trades or tech, she could just become one of the boys. But a lot of the women who are feisty enough to work in a trade say, "I'm

not interested in being one of the boys! I know who I am, and I just want to make a living."

Jerry: No, they don't want to do that.

Connie: Yes they do.

Jerry: They want to come in...

Steve: I've seen 'em!

Jerry: They want to come into your lunchroom and take your Playboy pictures off the wall. That's the problem. The whole thing is, if you are going to come into the workforce, why do you need to change it?

Gus: A lot of construction workers are pigs, but a lot of guys don't like looking at pussy pictures while they are eating their sandwich.

Jason: Maybe they're religious.

Gus: I think where the line gets goofy is when you have a beautiful young woman standing there in a bikini holding a power tool and they take offence at <u>that</u>. It's something we see in any bloody magazine we open.

Steve: You mean like the advertising?

Gus: Yea. That doesn't bother <u>me.</u> But if there's Penthouse Pets glued all over the walls, she's got every right to come in and say something. But some say,"Guys, I don't feel comfortable. Could you take it down?" And others will walk in, rip it down, and say, "you guys are assholes!"

Jerry: Geez, we're finally getting to the bottom of this. I've been working here for 22 years. You come in and want to change the way I've done my life. I'm too old to change.

Gus: Women don't want a <u>whole</u> lot of change, and I don't think a <u>whole</u> lot of change is required. We can still sit around the lunchroom and talk about hunting and fishing, talk about trucks and cars. We just don't talk about pussy in a real gross way, and that's fair enough.

Jerry: Yea, but if I have a Playboy in my back pocket I could get accused of sexual harassment. That's bullshit. I'll read and do whatever I want, cuz I am Canadian!

Connie: Yea, but you can't put it up in the workplace.

Gus: It's against the law, whether you disagree with the law or not.

Jerry: Or guess what! You just don't hire a woman!

Steve: Listen, if you don't reason your way through this, you're gonna get more laws. Affirmative Action laws. Men won't like that. Employers didn't like to pay union wages either, but everybody didn't just go home. They forced it. Then you can reason with them, after the law says 50% of your workforce has got to be female.

Jason: It might take that, but it seems to me there's already been <u>some</u> change to the good. If only women would...

Jerry: *(Gets up and throws down his cards.)* 4 Aces, I have 4 bloody Aces!

Connie: Can't beat a Straight Flush! *(Connie lays down her hand and the Lights go off!) (Music up)*

Chapter VIII

Green Room Conversations

Performing Gender

If, as Judith Butler suggests, "the 'being' of gender is *an effect*...an insistent and insidious practice, sustained and regulated by various social means...the repeated stylization of the body, a set of repeated acts within a highly rigid regulatory framework...to produce the appearance of substance" (Butler, 1990b, pp. 32-33) then bringing those practices and stylizations to the light of day provides an opportunity to "expose the contingent acts that create the appearance of a naturalistic necessity."

During the week of April 10-13, 2002, a 15-minute construction of my play, Men & Women and Their Tools, was performed at the Telus Theatre in The Chan Centre at UBC, as part of the Brave New Play Rites Festival. Set in a weekend poker game, it was a holistic honing of my two-hour group interview[48] with current and retired tradesmen. I videotaped the dress rehearsal and all three performances, with written consent from the actors for use in my dissertation work and all other educational purposes except for broadcast. I have since digitally edited it into one piece, with colour and sound correction, and an introduction.

The actors, chosen in collaboration with my assigned MFA Directing student, found their place in the hearts of those I had interviewed, and with the Director,

---

[48] The original 41-page play was edited down to 9 pages while doing my best to maintain the integrity of all of the issues being addressed.

produced a wonderfully theatrical rendition. But more than that, the quality of discussion it has precipitated is a sign of its potential as a pedagogical tool to intervene in the social constructions of gender.

For the initial performances at UBC, I invited a woman who works in a box factory with 120 men, and her male computer engineering partner one evening, and an activist for the building trade unions on another, and a doctoral student from environmental engineering came that evening as well. Between my own guests, and those who were my colleagues in the theatre and play development work, the level of thoughtful engagement with the work, and the diversity of questions it raised, was wonderfully provocative. All recognized the challenges in the issues being represented and yet felt safe to engage them because of what they saw as a valid and "balanced approach" which avoided "stereotyping" and "essentialism".

Nestor Korchinsky, now retired Director of UBC Intramural Sports and Recreation for UBC, with whom I had been sitting on the "Building Campus Community" sub-committee for CABSD [Campus Advisory Board on Student Development}], unbeknownst to me, came to my play. I had passed out advertising postcards for the Brave New Play Rites Festival at a committee meeting, for information and my own enthusiam. Two weeks later, when I called Nestor to check the time of a particular meeting, he said, "Marcia! I am so glad you called! I have been meaning to call you. I went to see your play." And he proceeded to spend the next 15-20 minutes telling me what he had seen, what further thoughts it had provoked in him, and how impressed he was that such a small play could contain so much to think about.

An interesting contrast to those types of comments came with the video presentation for a group at UBC, attended by graduate students, 8 women and one man. Two other men sent their busy regrets. The women were incensed that such attitudes and behaviours existed in 2002, and engaged the conversation from that perspective, while the man presented a wonderful and thoughtful reflection on the play in itself as a pedagogical tool.

If it is true that identity and ideology are in continual formation, and we know that each person will do with those moments of reflection according to what has been previously constructed in their experience, and if we come to learn through a combination of experience, observation, emotional impact and reflection, the question may be if we can ever all achieve a similar end through a particular educational intervention (Bordo, 1990). Those who will come to see the play have reached many different places in their development, and will move to many others in their time to come. The moment of poise, the stop, will mean something different to each of them.

Perhaps it is through the follow-up of group discussion and interaction that notions become ideas become reflections become thoughts and conversation, and then form more firmly into knowledge upon which action takes place: performance, questioning, providing feedback and further reflection on what is seen, exploring what can be known, what might need to change, what might preclude that, and what might assist. Perhaps all we can hope for is each to open up the question. But it will be essential to remember that to "find a gap in the revolving door of habit...requires exquisite timing" (p. 29).

Responses

Many came to watch the performance from the Centre for the Study of Curriculum and Instruction, (now the Centre for Cross-Faculty Inquiry in Education), and brought their partners and friends. The hugs and kudos were heartfelt and sincere, they saw something important in the work. Through their comments, and those of a number of others who watched the play over the next few days, I was able to see the value in the work, aside from the initial joy of production.

One comment heard several times was that it had a clear message, but it was balanced and the complexity of the issues was well represented.

The creative writing professor, who strongly suggested I focus on one or two scenes in constructing a play from the interview, was

> *impressed that I had been able to retain all the characters and circumstances, and had still been able to find the humour and theatricality in it*[49].

Men and women see very different things in this play, as they experience very different things in the workplace.

> *A male environmental engineer's comment was that while the message was clear, I really left it to the audience to decide how they felt about that, or what they might want to do with it.*

> *A male member of the Play Development Workshop said that the two elements were intent and content, and that the intent was not to be stated, or obvious, but should emerge through the content, and that I had achieved that. Many members of the Workshop, male and female, were surprised and pleased at the result.*

Women without technical experience are shocked by what they see, that at this point in history such language and values could still be present. So in effect, the

---

[49] The material in italics is quoted from emails I sent to a co-supervisor.

director got what she wanted. On the other hand, the men who have viewed it have often said they felt they have been represented fairly. An airline worker said he:

recognized all the men in the play, and was glad that I had represented them with dimension.

A senior Building Trades activist said that he

knew everyone there, and really couldn't think of anything I had left out.

Another man said I had

pushed all the right buttons.

Other venue responses

When I took the video of the play back to one of the original research participants, Jason's initial response was that I

had done a good job... represented the men fairly, and had produced a useful tool.

He wondered whether it would be good to show it on the jobsite where he continued to work in a situation where employment equity for women was being implemented.

One evening I showed it to a group of people in a church group. When I asked their occupations I found that I had a very useful cross-section: a female electrician, a male electrical engineer, a male college math teacher, a retired female occupational therapist, a retired counselling therapist, a female employment counsellor, and a male and female couple who identified as community activists. He had worked years ago in a plant which introduced women into technical areas.

They had all self-selected to be there, but were not actually research participants, just there to watch the show and engage in a discussion.

The female electrician said that she was

*amazed to find that someone else could document, and present the feelings
and perspectives on experiences so similar to her own, She had not known that
others were going through such a thing.*

One man said

*it seemed that things hadn't really changed very much from his experience in
the 1970's [integrating a large industrial plant].*

Several women were shocked by what they saw, but one of them said

*the female in the play was a model for appropriate ways of dealing with the
issues with humour, assertiveness, etc.*

The employment counsellor and one of the community activists felt that
women should be shown this film if they were considering going into the
trades, to see that there are ways to handle themselves, to demonstrate that
there is a way to exist in this environment. *"We lose so many to the crap!"*

The men expressed that Connie was a good role model,

*she was calm, she handled things with humour—she was willing to show up.
She modelled and we could learn from her in that situation. She had
credibility. This model is needed so women don't feel personally attacked. She
countered with questions rather than arguments.*

This latter comment provides insight into the educational process needed to
engage men in the discussion. Most of the men who have since seen the video of the
play do not want to be told they might be doing something that needs changing. By
holding up the mirror of the play, women and men are provided with an opportunity
to examine and compare their own performance with those of the lives they are
watching, and choose how they want to respond.

In another small group, a woman with years of experience working with men
in construction, viewed the play and commented that she could see the "artistic

license" I had taken, because she was sure "these men would never say such things in front of a woman." "Rest assured," I told her, "these are their words, in the order in which they were spoken, in the fullness of the complexity of their concerns. I have the original interview on videotape."

The Future

When I approached a leader in the building trades sector about presenting the video of the play at their upcoming conference, there seemed to be some discomfort. Whether this was coming from the shortness of lead time, or some resistance to opening that door to his brotherhood was unclear. There was no invitation to future potentialities. It is clear to me that it will take a willingness, one men have shown before, but for other purposes. This notion of willingness found its way into a brief story at the urging of a professor who heard me talk about it:

Willingness

My frustration with not being able to access one particular Endnote library drove me out of the room for a quick walk around the Centre. It was after 6, and a professor was at the photocopier. To her "How is it going?" I had to reply that I was frustrated, but that I was walking away and would be back. "But you at least have the skills to think about what might be going wrong." "No," I said, "I have a willingness to keep trying different things. I learned many years ago that 9 times out of 10, when your car stops on the side of the road, if you are willing to get out and look under the hood, you will find just a loose wire, or one disconnected from your distributor cap, a hose connection or something else simple and easy to fix. When you are on a dark country road, that willingness is a necessity. The same applies to computers. Just getting in there and trying different things can lead to a solution." "Willingness," she mused, "that's a new term, you may be onto something there. Have you ever written about that?"

Our conversation explored some of the potential gender differences in the use of willingness. She wanted to use the word courage. Yes, there is some of that in the kind of risk-taking behaviour required to approach engaging in new hands-on learning. But I was thinking more about Bluffing, how when someone says "So and so needs to be done, who can do it?" and the women will think, "well, I have only done it three times, perhaps that is not good enough," while the men will all yell out "sure!, I can do it," knowing they have never done exactly that before, but being willing to try and perhaps succeed. It is the difference between letting the history of learned helplessness prevail, instead of finding the willingness to try to prove oneself. Interventions for women, like Women in Trades and Technology (WITT) and Girls Exploring Trades and Technology (GETT) Courses have been focusing on providing the space and the tools in a safe environment to engage that courage, that willingness. Some women have learned it before, when challenged by brothers or fathers, or by their own desire to succeed in all that they do. Many have been stopped by rules, or walls, or unwelcoming attitudes. Their willingness was suspect, and faded. For some, the interventions have provided the impetus to take tools in hand and try, the willingness to make mistakes for a greater success. But still the walls are there. What builds those walls? The ones outside of ourselves?

Now is the time for the men to come forward. Will they be willing?

Chapter IX

Gender, Masculinity and Work

Introduction

In the spirit of Bakhtin's dialogism[50], I present this chapter and the next as an interillumination, an orchestration of heteroglossia[51]. The "differing individual voices flourish" (Bakhtin & Holquist, 1981, p. 263) and create themes within the play and between the literature and the play, much like Pachabel's Canon. I hope to provide space between the text and the reader for thoughtful reflection/action with the participants voices, for revelling in that moment of The Stop (Appelbaum, 1995), where new knowledge can be constructed.

I draw on Bakhtin's notion of polyphony, where, within the "many-voicedness" of the play, *Men & Women and Tools*, the "author" "does not speak over the characters' heads..." *(Vice, 1997, pp. 4, 6)*. The characters speak with their own

---

[50] Dialogism is "the characteristic epistemological mode of a world dominated by heteroglossia (At any given time/place, there will be a set of conditions—social, historical, meteorological, physiological—that will insure that a word uttered...will have meaning different than it would have under any other conditions, p. 428.) Everything means, is understood, as a part of a greater whole—there is constant interaction between meanings, all of which have the potential of conditioning others (Bakhtin & Holquist, 1981, p. 426).

[51]

The novel orchestrates all its themes, the totality of the world of objects and ideas depicted and expressed in it, by means of the social diversity of speech types and by differing individual voices that flourish under such conditions. Authorial speech, the speeches of narrators, inserted genres, the speech of characters are merely those fundamental compositional unities with whose help heteroglossia can enter the novel; each of them permits a multiplicity of social voices and a wide variety of their links and interrelationships (always more or less dialogized). (Bakhtin & Holquist, 1981, p. 263).

voices and words, as they did in the original interview, "author's and [characters']
discourses interact on equal terms" *(Bakhtin, Voloshinov, Medvedev, & Morris, 1994, pp.*
248-249). In the play, *Men & Women and Tools,* one might, then, argue that

> *characters are represented not as objects who are manipulated and*
> *commented upon by an omniscient narrator, but as subjects, on an equal*
> *footing with the narrator (their voices are constructed in exactly the same way*
> *as this figure's voice), whose own word about themselves and each other is all*
> *we know about them (Vice, p. 114).*

In this chapter of interweavings of the voices of the play interacting with
scholars looking at sex and gender in technical work from historical and cultural
perspectives, "dialogic interaction will occur within textualized heteroglossia, with
potentially position-altering effects" *(Vice, 1997, p. 18).*

Polyphony and yet Parody

As the "author" of the play, I "reproduce the speech of the other" if not
"neutrally" and "objectively," at least "in all its authority, as in 'recitation'"
(Manjali, 2001). And yet, while the multiple voices that make up the play have
become an "internally dialogized interillumination of languages, the intentions of
the representing discourse are at odds with the intentions of the represented
discourse; they fight against them" (Bakhtin, 1981, pp. 363-364).

And, though I fought and struggled during the creation of the play to
maintain the integrity of the men I interviewed, to ensure their dignity, to
"represent them fairly," the complex result is that I have also used their voices to
create "an exposé to destroy the represented language" (Bakhtin, 1981, pp. 363-
364). I have created a parodic[52] stylization. The play is both parodic and tragic.

---

[52] "...a joyous, chaotic, subversive, energetic play with/play against the dominant language
forms for the purposes of shaking free the mind and spirit, an energy and activity often

Hopefully, it is not a "gross and superficial destruction of the other's language, as happens in rhetorical parody" (p. 364). Hopefully it is "authentic and productive," able to "re-create that parodied language as an authentic whole, giving it its due as a language possessing its own world inextricably bound up with the parodied language." By combining my own voice with each of the other unique perspectives: those I interviewed, and scholars who write from less personal perspectives, "the multiplicity of social voices" (Bakhtin & Holquist, 1981, p. 263) will create a "critical interanimation of languages," an interillumination that "enters into interanimating relationships with new contexts."

Ideas, expressed in language, are located as outcomes of social and historical processes. As an interactive part of ongoing historical processes, language, and hence ideology, is open to change; and it is open to it through dialogue and narrative, heteroglossia and polyglossia, interaction, history, and the parodic (Lye, 2003, para. 18).

When I was able to hold the two elements, the play and the voices of the literature, side by side, I discovered some interesting roots and relationships for the words spoken by the men in the interview. There was an interanimation: they both illuminate and inform one another.

Context

While some have documented the facts[53], there have been few interrogations by feminists of what underlies male resistances to equity initiatives and women in technical fields. Ava Baron suggests that "the history of working class masculinity has yet to be written" (1991a, p. 30). bell hooks decries the lack of feminist writing

---

officially recognized and sanctioned" (Lye, 2003, bottom third). Could it also be seen as an intentional mockery; a burlesque, a travesty? *[i.e. The trial was a parody of justice.]*
[53] (Braid, 1981; Braundy, 1989b; Cockburn, 1983, 1985a, 1991; Grzetic et al., 1996)

that addresses men and masculinity in clear, concise ways (hooks, 2004, p. 111). This section explores the historical construction of masculine identity as it relates to work, particularly in trades and technical training and work, and how that construction has influenced resistance to the integration of women in those fields.

The historical facts of such resistance have been well-documented, from the industrial revolution to the present day. The current experience of women in trades and technical fields is rooted in these historical constructions, as seen in the words of the men in the play, *Men & Women and Tools*. I am not looking "for the original or founding cause" (Barrett & Phillips, 1992, p. 3) of the structures of oppression, the elements are too complex and interacting to be able to identify singular specificities. Shedding light on the historical roots of practices that continue to construct this oppression may help others to see how their own behaviours contribute to these effects.

Power and Hierarchy: the historical roots of practices

The historical construction of *patriarchal masculinity* (hooks, 2004) in work outside the home, in North America, France and Great Britain since the 1850s[54], offers "a myriad of relations of power and hierarchy, including between employer and employee, men and boys, whites and blacks" (Baron, 1991c, p. 1) and also between men and women. Ava Baron (1991a) documents the changes in labour history itself, as it moved from a study of labour unions towards a reflection of the history and sociology of the working class overall, and their relations to production. She notes the continuing gap in the expression and analysis of women's experience as part of that working class, and the missing analysis of male experience in the

---

[54] (Baron, 1991c; Cockburn, 1983, 1988, 1992; Downs, 1995; hooks, 2004; Noble, 1992)

work world as gendered: "the history of working class masculinity has yet to be written...[we need to understand] the significance of gender regardless of women's presence or absence" (pp. 30, 20).

She goes on to postulate questions for examining employment practices, work processes and workplaces as gendered spaces that shape our lives, e.g. how do people construct and understand what it means to be a man or a woman? What are the terms, the discourses, the social practices and the material power relations that influence working class [and male technical] experience? How are they formulated and changed? How does race intersect with these elements? (pp. 32-35). The essays in her book reflect a deep engagement with history from these perspectives, to show us how "gender is important for understanding men's as well as women's work and participation in the labor force" (p. 38). The progression of ideas in the first chapter of her book provides an excellent frame for some of my own conceptions, and the reflections of others I have read on these subjects.

Labour history as women's story

Women's labour history is often isolated as part of Feminist scholarship, rather than incorporated and analyzed within the context of their relationship to the "working class." Baron asserts that labour historians relegate women workers to their "primary" roles as "wives, mothers and daughters" (p. 7), and analyze their participation in the work world as "transient," and their "femininity" as a symbol of their lack of "skill, economic independence, and commitment to work..." This is contrasted with efforts by women's labour historians, often sidelined as feminist and not as worthy, to incorporate women's participation in labour unions and labour activity in general, noting that they were often "stymied by the discriminatory tactics of the male-dominated labor movement" (p. 9).

The current experiences of female trades and technical workers bear witness to the ongoing nature of discriminatory practices. These are described by Braid in the construction sector (1981; 2003); in my own representation of the voices of women in trades and technology in Canada (1989b) and the reflections of men who work in trades (2002); in Cockburn's studies of the printing industry (1983), the history of technology (1992), and sex equity in organizations in England (1991); Ferguson & Sharples' stories of blue-collar women in the United States (1994); Goldberg's research into the construction industry for the Amalgamated Construction Association of British Columbia (1992); Gray's exposé of shop floor practices at Westinghouse (1987); Greztic's policy study of women and technical work in Atlantic Canada (1998), her earlier probe, with Shrimpton, & Skipton, of women's experience in the offshore oil project at Hibernia, and Hart & Shrimpton's in-depth examination of women's training and work there (2003); Rübsamen-Waigmann et al.'s documentation of women in industrial research for the European Commission (2003); and in Schom-Moffatt & Braundy's quantitative and qualitative survey of those who graduated from trades and technical exploratory programs for women (1989).

Returning to a more historical view, Baron (1991a) notes that "women's labour historians initially downplayed differences between men and women," and highlights the important clarifications gained from looking at the unique ways women formed the bonds that led to a successful level of solidarity in a variety of labour struggles in both unionized and non-union worksites. She poses questions, "What assumptions about gender have been structured into unions? How does the union organization serve to recreate or challenge gender hierarchies?" and others that might explicate the underlying factors for the denial of access and acceptance of women in working-class labour and history.

Skill acquisition and ownership as gender identity

Across the literature on masculinities through the late 20th and early 21st centuries[55], men and women have delved into male psyches and social structures to either justify, excuse, remould or illuminate men's relations to women, to themselves, to power, violence, sports, organizational and management activities and sexuality. The steel wires undergirding themes of masculinity and technical work with tools have rarely been explored in great depth. Even Bob Connell, considered by many to be an authority on men and masculinity, only examines work in terms of class relations and unemployment, with a fleeting, superficial reference to technical skills and expertise as constructors of a particular type of masculinity (Connell, 1995) . He does, however, reference Cynthia Cockburn's work on engineering and technical know-how in new technologies (1985a). Cockburn is among a select group of women who have explored, examined and investigated men at work in trades and technologies (Hacker, 1989). In each of the books written on her unique research projects, Cockburn takes us into and analyzes the working lives of those who are engaged with the *technologies of production* (Cockburn, 1988) [Italics added].

Cockburn (1992) explicates the factors that led to the perception of women's absence as she tracks the development of technology from feudal times when women were an integral part of producing what was needed for family and community life, to a more class-based society, where warfare based on metal tools and weapons segregated women into activities related specifically to domestic consumption: dairy work, spinning, weaving, and gardening (p. 196-197). The craft

---

[55] (Brod, 1987; Cockburn, 1983, 1985a, 1991; Connell, 1987, 1995; Edley & Wetherell, 1995; Hearn, 1994; Hearn et al., 2002; Kaufman, 1987; Kimmel, 1987; Kimmel & Messner, 2001; Legault, 2003a; Mac an Ghaill, 1996; Messner, 1997; Noble, 1992; Pinar, 1992, 2001; Tolson, 1977; Willis, 1981)

and merchant guilds constructed the rules for apprenticeship and controlled who had access, not only for production of goods, but especially for those who "produced tools and implements: carpenter, shipwright and various kinds of smith. The guilds were male in character..." (p. 198). Women in the towns were found in occupations related to their domestic purview: brewers and bakers, inn-keepers and textile workers. Cockburn notes that this division of labour was not absolute, that women were also found in skilled and semi-skilled occupations such as shoe-maker, draper or chandler, and might even be a member of a guild "without actually plying the trade," having inherited it from a husband or father. Women did not have a place in

> *skills that were required for making tools, implements and weapons...[which] involved competence in the production or adaptation of other producers instruments of labour...those that make machinery...**those who possessed these skills had a source of power over everyone who did not** (p. 199) [Emphasis added].*

Cockburn adds, "the technological skills, defined as male property, were therefore both a cause and an effect of male supremacy." She posits that as the newly emerging capitalists structured new relations, as owners of the tools, between producers and their products, "working men alone had the craft know-how to use [the tools]" (p. 202), giving them their strongest bargaining power over the next couple of centuries. "These technical men were the one category of worker whose earning power was not reduced by the introduction of machinery" (with Marx, p. 203).

Ava Baron turns to skill as a factor for illuminating the gaps in the analysis of work-based masculinity. Working class historians have "paid much more attention to skilled workers and their craft", conflating skill with militancy, skill that gave male workers greater leverage "both as men and as workers." She

highlights that "women were less likely to be found in artisan trades" (p. 14), but notes that "skills are not simply ideological epiphenomena; they are a part of a larger process by which the occupational structure itself is created" (p. 36).

In Ben Birnbaum's study of the clothing industry, it was found that "the same type of machine work was classified as skilled when performed by men, and semi-skilled when performed by women" (in Segal, 1997, p. 299). Such a process constructs a world in which "the craftworker's belief that skill was linked to manhood influenced the form and content of class conflicts and relations between male and female workers" (p. 14). Men's working-class historians contributed to this construction in their writings by making women "subservient to the study of modes of production." This construction of the ownership of skill is a significant part of the foundation upon which women's exclusion from training and technical work has been predicated for "the intervening 200 or 300 years" (Kirkup & Keller, 1992, p. 202). Such a conflation of skill with masculine industry is a denial of women's active participation in crafts work and productive labour both in feudal times (Noble, 1992) and throughout the rise of capitalism and socialism (Cockburn, 1985a; Zuga, 1998).

> *Women were also employed, particularly when single, in the heaviest types of manual labour, were exploited as domestic servants,...working in the fields, and even carrying coal, washing lead and breaking ore in the mines...[they] became outworkers in their own homes...and followed the work to the factories (Kirkup & Keller, 1992, p. 205).*

The technical skills needed and used by women in the domestic sphere are easily transferable to other materials and industries[56]. But, the female labour force was subjugated to the needs of both patriarchy and capitalism. While women were

---

[56] (Booth, 1981; Booth & Murch, 1981; Cockburn & Ormrod, 1993)

often forced into earning some form of an independent wage, "it was quickly

subsumed into household income for the disposition of the head of the household"

(Kirkup & Keller, 1992, p. 206). The earnings may have been from occupations

traditional to women or from the wider range of labouring work afforded to them in

the factory systems in making "nails, bolts, screws, buckles, locks, bits and stirrups"

(p. 207). They may have been tending production of the machines, but would never

have set them up or kept them running. "It could be taken as a given that those jobs

belonged to men" (p. 207).

Constructions of gender divisions of labour

For the men in the play, *Men & Women and Tools*, gender is a dichotomy, "a

static structure...reified," with little understanding of the "multiplicities of co-

existing gender[ed]...processes embedded in social relationships, institutions and

processes" (Baron, 1991a, p. 36). There is little comprehension that those processes

are integral to "a myriad of other relations of power and hierarchy" the study of

which means going beyond looking at male and female workers to how gender is

"built into the organization and social relations of work." As Baron (1991c)

"examine[s] how the cultural meanings attributed to sexual differences developed

and changed and with what consequences for work and labour conflicts" (p. 37), she

unpeels the layers of the *gender schema* referred to in *Why So Slow? The

Advancement of Women* (Vallian, 1998)[57]. Baron's depiction of the minute and global

challenges faced by women and men as they struggled to find economic sustenance

provides an historical context for how concepts and practices of gender difference

have been constructed, contested and continue to change, creating space for new

deconstructions and reconstructions with attendant political and social

---

[57] The concept of a sex/gender system or gender schema has also been noted by Connell (1987; 2002), Carrigan, Connell and Lee (1987) and Edley & Wetherell (1995).

implications. One is both heartened and disheartened at the tenacity of women who fought those battles both within and outside of labour unions.

We also find the roots of the current catastrophic undermining of apprenticeship training as a skill building tool, when Ava Baron demonstrates the contradictions created as male workers tried to redefine their craft in light of changes wrought by the Industrial Revolution (1991a; 1991b), struggling against the employers who were looking to emasculate (deskill) the individuals who gained their strength from their unique abilities to wield the tools of production. We are able to see how, in all of these struggles, women were the losers as they were characterized and genderized as less fit or seemly for the work, and not suitable to the task. The fine lines that were drawn to define the distinctions between "manly" work and what was to be left to the women seem ludicrous to some today, and stand as a representation of the "perpetuated sex segregation and gender-based wage differentials" (Baron, 1991a; Downs, 1995).

An interesting note here is the different characterizations and results obtained in knitting factories on both sides of the Atlantic Ocean. Feminist historian Joy Parr, in her extensive socio-cultural historical account of the industrial bases of two Ontario towns, documents the migration of workers from the midlands in England to the small town of Paris, in southwestern Ontario. Following the pattern of family production in the hosiery and knit goods industry, men and women worked in the knitting industry on both sides of the Atlantic. At the turn of the century, after the move into the factories from handcrafting to steam production, differences emerged:

> *In the technological and organizational changes that followed, knitting rooms became disputed terrains. As the sexual division of labour was reformulated with increasing automation, the knitter was the worker whose appropriate*

gender was most in question, most frequently seen to require explanation and defence. In the midlands and in Ontario knitting was made men's or women's work through a complex interaction which combined tradition from the workshop and the early factory with social prescriptions about who was entitled to work for wages at all and characteristics of the local labour market and labour organization and of both the product market and the prevailing technology (Parr, 1990, p. 60).

But the gendered occupational distribution was sold to the public in terms of the skills required to perform the work, and the workers' ability to adjust the machines, skills that, more often than not, were obtained through apprenticeship as well as through use, and often, particularly in unionized factories in the midlands, contested to be men's work. "Women did not join the unions in as great numbers as did men," perhaps for the same reasons that plague some unions today: women's double work role with home and family responsibilities, and the treatment they often undergo once they do become members (Braundy, 1989b; Cockburn, 1991; Legault, 2003a). Regardless, "union officials intervened more frequently and firmly to defend men's jobs than they did those of women and, in disputes over entitlement by gender to jobs, consistently favoured males" (Parr, 1990, p. 66).

The difference in the Ontario mills, where the machinery and knitting practices were almost identical, was that rather than small English factories independently producing specific goods, there was only one major employer who controlled the "yarn mill, dye house, three knitting mills, and a box factory" and "Canadian managers...saw a good community mix of men's and women's jobs as the best way to secure a stable female labour force"(Parr, 1990, p. 70), while at the same time keeping clear divisions of labour between men and women with mechanical skills as a divider. When women's participation in industry during the First World

War proved them to be skilful on all the elements of production, the gender division was recreated, this time based on day and night shift work.

Along with Parr, from the 1820s to the 1970's, Baron's essays document the facts of the gendered, class-ridden and racialized struggles of workers as the effects of technological changes were felt in industry in North America, and the impact that had on women's labour history as those struggles were won and lost.

Masculinity at Work

It is fascinating to discover that the most well articulated analyses and proposals for considering the area of masculinities and work have come from women[58]. While men have explored masculinities related to sports, politics, sex roles, psychoanalysis and hetero/homosexuality, there is a dearth of studies among male researchers which look at the construction and defence of masculinity as a gendered project relating specifically to work and work-related subjects, particularly in trades and technical work, with a few noted exceptions[59].

Roger Horowitz, associate director of the Hagley Center for the History of Business, Technology, and Society in Willmington, Delaware, is one of the exceptions. With ideas growing out of the "germinative impact" of Ava Baron's *Work Engendered, Boys and Their Toys—Masculinity, Class and Technology in America,* Horowitz's edited volume (2001) has a balance of male and female authors. They recount, from a variety of applicable settings, how gender as an analytic category, along with other factors, is embedded in and produces the social construction of work identities. Also a socio-cultural historical explication, the essays in this book look at 19th and 20th Century settings where versions of "manhood" were consciously

---

[58] (Baron, 1991a, 1991b, 1991c; Braid, 1981, 2003; Cockburn, 1983, 1985a, 1991; Hart & Shrimpton, 2003; Legault, 2001, 2003a; Parr, 1990)

[59] (Gray, 1987; Horowitz, 2001; Noble, 1992; and to some extent, Willis, 1981)

created and "rough" vs. "respectable" manhood were contested and co-opted by both

unions and employers in their struggles for the hearts, minds and bodies of workers.

In Stephen Meyer's examination of *Masculine Culture on the Automotive*

Shop Floor, 1930-1960 (in Horowitz, 2001), the swaggering competition for

impression management (Goffman, 1959) as "each tried to impress the others with

how important his particular job was, how much skill it required" (Meyer, 2001,

p.14) fed into increasingly masculinized versions of who belonged in the world of

manufacturing and construction. "For Marquart [an early autoworker and labour

radical who wrote reflectively in 1975] and his circle, manhood meant work

(especially skilled work), daily drinking, and the weekend foray to what they

nicknamed 'Joy Street,' the red-light district" (p. 14). While I am concerned at the

lack of self-reflection and analysis of this particular construction of women in the

lives of these men, the descriptions of the workplace as "central to the forming,

nurturing, widening, and deepening of masculine culture" rings true today. "Yet

men were men...and they persistently insisted on their male right of social

interaction on the shop floor" (p. 21). Jerry, the participant in this study who came

out as a "redneck," makes it clear that these lines are still being drawn in the 21st

Century when he cries out:

Isn't there any place left where guys can just be guys anymore?

To become a man requires the denigration of women

Jerry: And what do they talk about? Their jobs, cars and women! And goin' out drinkin'. And let's say, 80% of the males will talk like that. I got this girlfriend, she's hot, really hot. OK? We can talk about our trucks, we can talk about our females, we can talk about the girl in the bathing suit walking by the worksite, right?

For construction workers, manliness took on a 'decidedly male idiom'

characterized by 'physical jousting, sexual boasting, sports talk, and shared

sexual activities,' which consciously operated to exclude and debase women....The remasculinization of the shop floor often resulted in the general degradation and dehumanization of all women" (Meyer, 2001, pp. 17-18).

There was a struggle for definitions of manhood between rough and respectable in the first decades of the 20th Century, with "drinking, fighting, gambling and confrontational opposition to management" on the one hand, and demonstrating their competence and right to the respectable side of male culture with "relatively high wages...economic stability and independence" (pp. 17-18) on the other. Women had no place on either side in the automotive industry.

Close to 100 years later, Jerry is willing to incorporate women into his reflections, but damns their presence in even small numbers, his complaint indicating the small cultural changes that have evolved early in the 21st Century:

Jerry: When you get a female in the place, you can't do that.

Cynthia Cockburn found similar desires for female exclusion in male-dominated worksites in her historical tracing of men, women and technology in the printing industry:

> *But for many of the men, it was unthinkable that women should be allowed to join the all-male trade society from which they drew so much of their self-respect as artisans and men. It was their club, as sacrosanct as the gentleman's dining club in Pall Mall...it has always been men's work...a large number of men are attracted to the trade because it is man's employment (Cockburn, 1983, pp. 152-154).*

In their chapter on Masculinity and Social Relations, Edley & Wetherell (1995) citing Tolson (1977) depict working-class men as "more directly humiliated by capitalist practices, and more directly subordinated," compensating for this with "an exaggerated masculine culture...a language of brotherhood, a chauvinistic sexuality, blatant machismo...," a greater willingness to direct confrontation with

authority, and "...[t]alk of sport, sex, and practical joking" for the basis of a "highly stylized symbolic exchange of masculinity" (p. 105). In *Brothers – Male Dominance and Technological Change*, a study of the history and current status of masculinity construction in the printing trade, Cockburn (1983) suggests "the social currency of the composing room is women and women-objectifying talk, from sexual expletives and innuendo through to narrations of exploits and fantasies." It is interesting to note the way the reality of that gritty characterization emerged in the interview the play is based upon.

Meyer (2001) noted that skilled craft workers' respectability and economic security, founded on a masculinity that valued skill, control and independent decision making, was not above the inclusion of other pleasures of the flesh, which then became an intrinsic part of their social interaction.

Moving back and forth across the shop floors of various working-class industrial sites, Meyer focuses on the automobile and auto parts sector to explicate the impacts of the industrialization mandates of Taylorism and Fordism on the formation of masculine identity and culture. The subversion of the hard-won "respectable" identity came from the loss of control and loss of skill with the onset of progressively more complex automation and was exacerbated by "the growing movement of women and children into formerly all-male terrain," leading to a derogation of "those who appeared to threaten them." "The oral histories of women who worked in the automobile and auto parts plants in the 1930s testify to the harassment and abuse from their male colleagues at the workplace" (2001, p. 17).

It is curious where, in Meyer's presentation of the unskilled "rough...crude male communities" (p. 15) the Chinese railway and logging camp workers fit. He does acknowledge that these issues are not fully explored in his work, nor is there an adequate exploration of the aspects of gender that include women. He refers to it

as "the gendered component of masculine culture on the shop floor" intimating that the subject is not gendered unless women are present, an inherent flaw in much research about masculinity.

These elements are more effectively addressed in Paul Taillon's chapter on Railroading (2001) where the stratifications of skilled and unskilled labour are clearly intertwined with race, and women were never included in the Brotherhood, a fact that ultimately led to Canada's first court ordered integration of women into Canadian National Railways's technical workforce (Cox, 2003; Supreme Court of Canada, 1987).

Speaking out from the belly of the beast[60]

Gus: No, they shouldn't be treated differently but they are! A woman is under the microscope all the time.

The more moderate men don't speak up or challenge the sexist bullies, afraid of having their masculinity questioned (Gray, 1987, p. 386).

There is a set of literature by male academics, well documented in some of the feminist explorations, which examines the history of work in particular settings. Some of those even those focus on the construction of masculinity in those male cultures, but my work here is more informed by those who use the construction of gender idea(l)s to look at the inclusions and exclusions of women as well, in those technical work processes.

Stan Gray is a unique example of this latter category. A worker and union activist in the Westinghouse plant in Ontario during the 1970s and 1980s, he broke ranks with his brothers, and wrote from within the belly of the beast to challenge

---

[60] This notion was first expressed by me, in 1989, in relation to my participation on the Canadian Labour Market and Productivity Centre National Task Force on Apprenticeship, where I was the lone woman among 12 male scions of industry and labour. Donna Haraway's (1992) work using this concept has since been called to my attention.

the "policy briefs and unanimous convention resolutions" which masked "a male resistance within the unions and on the shop floor that doesn't surface publicly" (1987, p. 378).

Acknowledging his own complicity, where for years he watched from the sidelines, he advocates for male unionists "to confront chauvinism openly with their brothers in the shop and in the labour movement" because "sexism is harmful to working men. It runs counter to their interests and undermines male trade unionism". He goes on to describe the "debates and struggles among the men on the shop floor at Westinghouse," when women tried to move out of the traditional ghettos to which they had been delegated in the Westinghouse factories in Ontario. As a health and safety activist, he was quite aware of the unsafe lengths to which men would go to prove they were "manly," and the ways management used this. He became more aware of their embedded sexism when women, whose plant had closed, transferred into his plant.

During some of his union brothers' challenges to these transfers, particularly the one where they suggested that women might be able to do some of the jobs, but certainly not all of them, Gray found he had to remind them that many of the men could not do all of the jobs, and there had been great struggles to ensure that those members with health problems or back trouble or who found some work distasteful were protected and kept "their rates." Judy Wacjman notes,

> *Craft workers, who have been seen as the defenders of working-class interests in struggles over technical change, in part derive their strength from their past exclusionary practices. Their gains have often been made at the expense of less skilled or less well-organized sections of the workforce, and this has in many cases involved the exclusion of women (1991, p.34).*

Stan Gray pushed them "to apply their class principles: universal standards of equal treatment. Treat women just as we treat brothers regarding work tasks, seniority, illness, etc." (p. 383). Gus reiterates this when he responds to Jerry:

Jerry: I don't believe they should be treated any differently. Male or female, they have to keep up.

Gus: To an extent that's true, but there's great big guys in construction and little wee men. The big guys get the big jobs and little guys get into the tight places.

One aspect of Stan Gray's article stands out, amongst the important exhortations of his union brothers: his willingness to identify and explicate what I call "the wolf pack" mentality (Braundy, 1999, p. 203).

At Westinghouse as elsewhere, many of the men are less chauvinist and more sensible than the others. But they often keep quiet in a group context. They allow the group pattern to be set by the most sexist bullies, whose style of woman hating everyone at least gives in to. These "psycho-sexists" achieve their result because they challenge, directly or by implication, the masculinity of any male who doesn't' act the same way. Your manhood is on the line if you don't gloat at the pornography or ridicule the women or join in the harassment. All the males, whatever their inclination are intimidated into acting or talking in a manner degrading to women (Gray, 1987, p. 386).

Having first experienced the impacts of this mentality during my pre-apprenticeship training in Dawson Creek, British Columbia, it was heartening to find a man willing to speak openly to condemn the practices. Connie, the composite female character in the play, *Men & Women and Tools*, recognizes the necessity and also the infrequency of such a stance when she calls out,

When are men going to start calling each other on this shit?

Instead, they pat each other on the back and share in "good-natured insults" (Braid, in Braundy, 1983; Gray, 1987, p. 391) while enjoying the *patriarchal dividend,* "the

advantage to men as a group for maintaining an unequal gender order" (Connell, 2002, p. 142). Regardless of individual men's actual feelings towards the women in their lives, be they co-workers, lovers, wives or sisters, "men gain a dividend from patriarchy in terms of honour, prestige and the right to command. They also gain a material dividend" (Connell, 1995, p.82). "Monetary benefits are not the only kind of benefit. Others are authority, respect, service, safety, housing, access to institutional power, and control over one's own life" (Connell, 2002, p. 142).

Cockburn calls clearly for men to make a choice: "And men today have a choice: accept the patriarchal system or work collectively to contradict it. Be part of the problem or part of the solution." Such a notion leads directly to the statement that "[w]hat in the long run has to change is the pattern of men's lives" (Cockburn, 1991, pp. 8-9, 104). Such challenges strike fear in the hearts of many men,

> **Jerry: Geez, we're finally getting to the bottom of this. I've been working here for 22 years. You come in and want to change the way I've done my life. I'm too old to change.**

This has resulted in the continuing impedance and undermining of women at every level, well documented by Rosalie Abella, in the Royal Commission Report on Equality in Employment (1984b); Kate Braid's (1979) MA thesis on female blue collar workers in BC; the voices of trades and technical women from across Canada (Braundy, 1989b); Cynthia Cockburn's study of male resistance to sex equity in organizations in England; Marie-Josée Legault's (2003a) examination of Worker Resistance to women in technical fields; and the unique survey of the experience of graduates of trades and technical exploratory courses for women (Schom-Moffatt & Braundy, 1989).

Occasionally, we are seeing men take up this challenge. Stephen Petrina's review essay critique of the 44th Yearbook of the Council on Technology Teacher

Education (1998) notes the lack of acknowledgement of extant female contributions to the field, feminist analysis of technology itself, or any reference to race and gender-based discussions of technological literacy. Petrina suggests that based on *Foundations of Technology Education*, "technology education arrives intellectually stunted in the academy" (third last paragraph). *Curriculum and Instruction for Technology Teachers* (Petrina, Forthcoming), has an extensive background section on participation by sex in technology intensive courses, and some of its historical roots.[61]

But challenging the status quo in the technical classroom or workplace has its pitfalls for women as well as for men. Researchers and consultants on equal opportunity and equity integration (Cockburn, p. 72) as well as both Federal and Provincial legislation and policies have noted the need for systemic organizational change in order to effectively integrate women, visible minorities, aboriginal people, and people with disabilities. The "Chilly Climate" (Castell & Bryson, 1997; Chilly Collective, 1995; Murch, 1991) created by the daily resistance and ongoing impedance wears down the psyche of both women and men, but women certainly pay the greater price.

Masculine *hegemony*[62] is under-evaluated as the men engage one another in the social discourse that constructs the world of trades and technology.

> *The male workplace culture functions as a form of rebellion against the*
> *discipline of their society...It was 8 hours full of filth and dirt and grease*

---

[61] I would argue that it would have been richer had he included the set of questions he developed for evaluating the quality of gender equity in the Technology classroom (1999), or described the Gender Panels and their contentions in student discourse so that others might get a better sense of how they might effect change their own classrooms.

[62] See Connell (1995, p. 77) for the roots of the original term *hegemony* (Gramsci's analysis of class relations), also Cockburn, 1983, p. 205.) Connell uses it to explicate relations among men of various masculinities.

and grime and sweat—manual labour, a manly atmosphere. They could be vulgar and obscene, talk about football and car repairs. Let their hair down. Boys could be boys.

The manly factory culture becomes an outlet for accumulated anger and frustration...

Working men everywhere are treated like dirt; at the bottom of the heap, under the thumb of the boss at work, scorned by polite society. But, the men can say, we are better than them all in certain ways—"man's work." Physically tough. The women can't do it, the bankers and politicians neither. Tough work gives a sense of masculine superiority and this compensates for being stepped on and ridiculed...

The Women's Invasion threatens all this (Gray, 1987, p. 388).

Stan Gray could have been sitting in on the interview on which the play was based, to develop his representation of workplace culture, as could Kate Braid for her rendition illuminated in "Woman in a Man's Territory: The Sexuality of the Non-Traditional Workplace" (1981). Little has changed in this setting from the earlier studies[63]. What is notably pertinent is the protection of the trades workplace as a "last sanctum of male culture" (Gray, 1987, p. 388),

"the last bastion of maleness"

as Gus calls it.

Braid suggests that "a woman disrupts and destroys the exclusively male-defined sexual nature of the workplace" (1981, p. 68). In practice class, gender, and race interact in complex and diverse ways[64]. When everyone in the room is white and male, no one notices there is an absence of women and people of colour. It is

---

[63] (Braundy, 1994, 1989b; Cockburn, 1991; Legault, 2001, 2003a).
[64] (Charles & Hughes-Freeland, 1996; Ferree, Lorber, & Hess, 1999; Hennessy & Ingraham, 1997; Rothenberg, 1998)

only with the introduction of an Other that the incumbents can become identifiable

as white and male.

Gus: It comes down to: do you feel comfortable with women in your personal

life?

The reality of the impact of sexual innuendo on a worksite is only seen when

one can think about that real experience in relation to a sister or daughter, a friend

or companion [See Chapter X].

Pride of a tangible accomplishment

Steve: I really liked the idea of saying "That's what I did today!" and then picking it up and making something else with it.
Gus: Yea! Most guys like that, you know.

The working men contrast themselves to other classes and take pride in having a concrete grasp on the physical world...we control the nuts and the bolts of production, have our hands on the machines and gears and valves and wires and lathes and pumps and furnaces and spindle and batteries. We're the masters of the real and the concrete, manipulate the steel and the lead and the wood and the oil and aluminium. We know what is genuine— the real and specific world of daily life (Gray, 1987, p. 389).

But I, too, have always referred to my construction workworld as the "real"

work, when I am in settings I see as removed from that, such as a community

college, boardroom tables, a university classroom. I take such pride in my work, as

do other women, so well depicted in studies and representations[65]. *Why is that so*

threatening?

The printers interviewed by Cynthia Cockburn had much to say about the

satisfaction of a job well done, "they likened it to a sense of completion...'I've done

---

[65] (Braid, 1991a; Braundy, 1989b; Ferguson & Sharples, 1994; Grzetic et al., 1996; Hart & Shrimpton, 2003)

that'...'You could feel you were involved with a base material, creating something out of it, like a carpenter with wood..." (1983, p. 51). You can hear their echo in the voices of men in the play, *Men & Women and Tools*:

And then you discover that Connie has the same intensity of feeling about her experience of the work:

Connie: I do too! I created the blade for my spokeshave from a car leaf spring, bending it to fit my carved wooden handle, hardening it in that intense oven; honing the cutting edge. I made folding chairs...

Jason: You're creating something real!

'Half the enjoyment is seeing the thing go off at the end of a shift and being able to say: I've done that...and you feel as if you had achieved something...A good comp [compositor] is an artist as well as working with his [sic] hands, like Michelangelo I suppose...I like to do a man's job. To me, to get your hands dirty and work...brings dignity to people...doing something useful...That's what it is all about. Craftsmanship' (in Cockburn, 1983, pp. 51-52).

Many tradesmen see their capacity to use tools to produce the "real" necessities of life as part of their "manhood," and are surprised to learn that female tradesworkers can have a similar experience. But it is when that "real" work is threatened that the resistance becomes even more palpable. I remember particularly the recession in the early 1980's, when the recession hit all of a sudden, after a boom period of intense construction in dam building and coalfield development in Southeastern British Columbia. As the recession went on, several of my union brothers, who knew no other work for themselves, were forced onto welfare. They were devastated by the experience, and yet, many had not the imagination to turn their skills to something else that might see them through. Heavy construction was all they knew to earn their "competence."

But it is not fear of recession alone that causes the resistance, fear complicated by the received notion of masculine identity as the breadwinner. The economic picture is often suggested as a rationale for fewer women being hired and trained, but in 1992, Employment and Immigration Canada produced a research paper looking at *Apprenticeship Trends* (Welch, 1992). It presented the registrations, completions and terminations for men and women in the twelve most populated trades for the period between 1984 and 1991 (See Appendix D). There were massive shifts in the numbers of male apprentices before, during and after the recession in the mid-1980s. There was little change in the numbers of women throughout. As an example, during the period 1986 to 1991, starting in deep recession and ending in a boom, the number of male electrical apprentices went from 848 to 2009, while the numbers of female apprentices went from 17 to 21. Similarly, male carpentry apprentices went from 875 to 1912, and the numbers of female apprentices went from 24 to 22. Concomitantly, the numbers in Alberta were in line with this[66]. The fact of the recession or the fact of the boom had no impact on the numbers of women who were able to access apprenticeship, even when the numbers of men more than doubled. The underlying factors must lie elsewhere.

It may be that some aspects can be attributed to underlying fears related to that particular recession, but perhaps these results emanate from traditional

---

[66] In 1995, out of 80 skilled trades in Alberta, there were 40 with no female participants at all. Only 7 trades achieved greater than 10 % female representation: cooking, baking, and landscape gardening among them. Hairstyling was the only one to achieve greater than 33% representation (Alberta Apprenticeship & Industrial Training).

historical constructions of messages for men about the need to keep these skills to themselves to ensure long term employability and 'stroke' or power in the workplace. But the result is the same.

Technological Change and its impact on Skill

Steve: The men are scared...Automation has killed a whole bunch of jobs, certainly in forestry and metalworking. Machines are doing stuff I never thought I'd see a machine doing.

Gus: Like in our trade, used to be, you get a million dollar job, there are 10 guys on the job. Now you got a 10 million dollar job, we still only got 10.

Steve: So everybody feels their job's on the line.

The history of technological change throughout industries, and its attendant incursion into both the application of skills and the administration of work processes, has been well documented by Cockburn (1983; 1985b), Ava Baron (1991c), and Laura Lee Downs (1995). Stan Gray, as a worker, reminds us that the technological changes occurring at Westinghouse plants had impact on the skill sets needed to accomplish the work, "eroding the heavy manual labour...making them simpler, easier, more standardized, taking the strength and skill out of them" (1987, p. 390). These industry shifts were affecting all of the workers, removing the elements that gave pride of accomplishment, as well as assured place in the work. Steve and Gus make it clear in the play that construction and manufacturing are still dealing daily with the impacts of technological changes in their industries.

The poignancy of their conversation epitomizes and reflects both the emotional and fiscal challenges this presents. It also heralds its potential and real effect on women from all the designated groups, racial and ethnic minority men and the disabled.

It was a challenge to get the members of the CLMPC Task Force on Apprenticeship to even discuss re/training people with disabilities. The recommendations (1990) do not effectively represent the denigrating conversations among the power elite, regarding inclusion in discussions of Apprenticeship and tool skill development of even those disabled at work . I represented 'Equity' as the only woman among the 12 men. And these were men who were supposed to be leaders of industry and labour. Stan Gray reminds us, as does Steve in the play, that union 'brothers' when put in the role of President or chief steward can "think like patriarchs" which is "harmful to the labour movement" when it substitutes for a democratic and active membership" (1987, p. 400). This was certainly my experience in the Carpenter's Union in British Columbia.

Many men have done others a disservice when faced with the loss of their livelihood, or even the fear of that in the potential future. Since the advent of the Industrial Revolution, cottage industry moved out of the home, where all members of a family had contributed to its economic well-being, and into factories where others controlled the process of work. With this change came sex segregated workforces where women, who had been active contributors to the economic life, were relegated to specific social duties: child bearing and raising, the sustaining of home and hearth, and menial work tasks. As well, they were socially constructed as too fragile for the rough and tumble of the 'men's workplaces,' and somehow not capable of learning the intricacies of machine tools when it came to working with metal but, paradoxically, were perfectly capable when it came to material made of cloth. A 19th-century French adage, "To the man, woodworking and metals; to the woman, family and clothing" indicated that it was a "distinction based on the resistance of the material being transformed" (Downs, 1995, p. 213).

A response to such a distinction is found with the analysis of what lessons were needed in Women in Trades and Technology (WITT) exploratory programs (Booth & Murch, 1981; Braundy, 1997b), where patternmaking, cutting, fitting, fastening and finishing are practiced across a variety of materials from soft to hard, from cloth to wood to plastics and metal, and an analysis of transferable skills takes place. But at the turn of the last century, moving among the materials was unimaginable, and the acquisition of machine tool skills in the metal trades was denied to women (Baron, 1991c; Downs, 1995).

Responses to technological change

Responses to technological changes in the printing industry, for example, highlight the meaning of skill in the lives of men. The local union organizations were called 'chapels,' denoting their close association with the sense of religious fervour used in the early days, to successfully protect their positions in the hierarchy of working people. Those who have gone through the time and rigour of apprenticeship, who have gotten their hands dirty and used their skills to produce needed objects in the world, whose body/mind/soul are the means of production: they are the most affected when the machines come in and the work processes change, taking "the soul out of the job".

> *Skill in the man was now out of kilter with skill in the job, and the union*
> *was only with great difficulty ensuring that skill as a class political concept*
> *held the line in the turmoil of this employer-sponsored revolution...is the loss*
> *of skill equivalent to the 'degradation of work'? (Cockburn, 1983, p. 116).*

Cockburn does an excellent job of uncovering the nuances and implications of the changes in work processes pertinent to men's sense of being men. One of the elements of this is their sense of feeling

reduced to the level of women. 'If girls can do it...then you are sort of deskilled you know, really.' ...levelling them down to what they see (and have always feared) as the undifferentiated mass of the working class: unskilled men, unemployed men, old men...and women (p. 118),

each named in their relative sequence in the hierarchal system of the patriarchal order.

She conflates the relation of skill with control of the working environment and control of production, using a well-developed Marxist analysis, shorthanded as "a theory of classes defined by their relation to the means of production" (p. 195). It was not a slow erosion. Because the printing industry has undergone such tremendous technological changes in fairly short order, the workers in what was a heavily unionized field can easily describe what the process had been like for them. Dealing with the challenges of such formidable change brought quickly to the surface their hubris, the sense of hierarchy and entitlement that undermined both women and their unskilled, or racialized brothers.

Incorporating patriarchy as part of her analysis, Cockburn enriches our understanding of these complex relations. Using Heidi Hartman's description: "Patriarchy is a set of social relations which has a material base and in which there are hierarchical relations between men, and solidarity among them, which enable them to control women," she demonstrates how "...an alliance between skilled and unskilled men over-rode their rivalry on a matter concerning women" (p. 125).

Oh woman! In our hours of ease

You are so soft and nice to squeeze

And hold, as something ever bright

To minister to man's delight.

When in our daily work you dare

To boldly ask that you may share

We fail to see your special use –

And straightway send you to the deuce! [67]

The need to be in control

The issue of control is an elemental one for skilled workers, and one that I have not found explicated in the literature in any detail. Reference is made to issues of controlling the work processes, the relations with employers, and here in relation to their feelings and interactions. Gus addresses the issue in terms of sexuality on the worksite when he suggests

Guys don't know how to deal with that, they don't feel comfortable because they are not in control.

bell hooks (2004) mentions control in her discussion of the elements of patriarchal masculinity. She faults Susan Faludi for the bald statement, "the underlying message: men cannot be men, only eunuchs, if they are not in control" (p. 30) because Faludi "never interrogates the notion of control" (p. 31).

Using tools to subdue materials to one's bidding is one of the satisfactions of technical work. It also provides the status of being a required element of the work process. Emasculation is a term found in some discussion along with control:

> *For working-class men, Maynard asserts, "the crisis of the craftsman' was... both a crisis of work and masculinity, of class and gender"...the internal forces of the American Industrial Revolution emasculated both the physical and intellectual bases of working-class male identities...These forces undermined the rough masculine identity through the elimination of brawn and strength from unskilled work and subverted the respectable identity through the removal of independence and control from skilled work (Meyer, 2001, p. 16).*

---

[67] Typographical Association of New South Wales, 1891 in (Cockburn, 1983 p. 187)

Looking at the printing industry from this perspective, it is deeply saddening to recognize that all their efforts to protect their "competence" have come to naught. The printing industry was one of the first in Canada to have a federal Industrial Adjustment Service (IAS) Committee associated with it, in which union and labour came together to preside over the demise of this once proud and honourable sector in which to earn one's living. I share Cockburn's sadness at all the time wasted conflating masculinity with skilled manual labour, creating exclusionary work processes, inventing theories and sending 'memorials' (p. 155), demanding to keep women out of the club; and for the men to end up unemployed in a world where traditional office skills are required, or higher level electronic technologies have gained ascendancy. To have come from a place where "men's self-respect depends on the idea of being able to do work that men alone are fit to do...[to feel] degraded...at having to descend to such vile practices as competing with women for work (Scottish Typographical Journal, 1886 in Cockburn, 1983, p. 179), depicts a level of *hubris* which, unfortunately, begs the chastening of ignominy.

But we find the same existing in 1980.

Some of the shine would go out of the job for me...if I said to my mates I was working with a woman, they would feel, say, oh, he's doing a woman's job—because they can see that a woman can do it. They wouldn't think to say that she is the one who is doing a man's job (p. 180).

In 2001, industrial relations professor Marie Josée Legault (2003a) found similar, though slightly less overt, responses. The elements of resistance to women in technical fields are complex and many.

The printing industry again provides a useful example. Beginning with the notion of patriarchal ascendancy over apprentices, almost always already male in

the printing industry, Cockburn takes us to the trade societies that protected the sanctity of craft workplace, the early precursor of today's unions, and shows how they staked their claims on the labour supply. Craft organizations in compositing and printing insisted that it took seven years for a boy to learn their trade, and individual workers ensured that the tasks available to apprentices were limited. Capitalism and its mechanistic solutions to increased production and profits, created the struggle in which the printers worked to ensure their livelihood. Cockburn tells us that women were working in bookbinding and paper manufacturing, but were completely absent in printing.

A particular exception to this came about during a labour dispute in 1872, with the introduction of women compositors in Edinburgh, trained to replace striking men. The women increased to 750 by the end of the century, working at lower pay which undercut men's wages and union strength (Cockburn, 1983, p. 153). In the struggle to put food on the table, in most ways the same struggle for women as for men, women were put into the untenable position of strikebreakers, and set a historical stage for a justifiable, to some, rationale for keeping women out of skilled trades training and work: the notion that women undermine wages. But without the recognition of their equal needs for liveable wages and working conditions, the safeguard of incorporating women as sister workers in the struggle for safe, economically viable and consistent work was beyond the ken of the (male) skilled trades workers of the time.

As machines were introduced in the first half of the nineteenth century, a result of which was to make the work more accessible, these early 'Brotherhoods' "stood by the absolute right of skilled men to the machines" (p. 28), and all of the

other skilled and unskilled jobs in the compositing room, to ensure no competition for their jobs.

The compositors held fiercely to the ideology of 'the family wage'...the norm they wished to establish was that of a family dependent upon a single male breadwinner[68].

To uphold their patriarchal dignity, male workers in the printing industry were willing to sacrifice their class relations ideology. It is within this context that Cockburn makes explicit the elements and implications of the interplay between Marxism/capitalism class issues and the "sex/gender system". "Feminism, like Marxism, is a worldview and its subject is the world itself: a totality" (p. 195) which we can also use to explain the workings of the material world. She suggests that Marxism relies more on economic factors, and the sex/gender system places a special degree of importance in physical and social realities, noting that both concepts "have material form and that materiality has full phenomenal expression in economic, in socio-political and in physical reality. Both, too, have ideological expressions" (pp. 196-197):

> *If men had represented themselves and women to employers as an undifferentiated labour market, with undifferentiated skills and rights to work and pay, to challenge the employer's manipulation of labour, then the occupation and earnings pattern in the industry might look much less lop-sided that it does (p. 200).*

Even the notion of the male pecking order, valuing differently skilled and unskilled performance, has undermined the establishment of a real working class, with real common interests.

---

[68] "This theme...runs through the Minutes of Evidence to the Fair Wages Committee, report to Parliament...vol, 34, 1908, p. 622f" (Cockburn, 1983, p. 238)

Change as the thin edge of the wedge

Rigid control of all aspects of printing work is based on the traditional notion of male breadwinner out in the workforce and the woman at home maintaining the base and raising the children. This paradigm has shifted significantly in the past 35 years. 79% of women in British Columbia between the ages of 25-54 were in the paid labour force in the late 1990s and into the 21st Century, accounting for 47% of total employment (STATS, 2002). "67% of women with children less than age 16 and who had a spouse were employed, up from 40 per cent in 1976," rendering this particular gender schema out-moded, if it was ever useful at all.

In parallel with Baron's notion that we still have no adequate theory for what motivates patriarchy (1991a, p. 29), Cockburn (1983) questions Marxist theory's ability to remove the stranglehold of male control in society. She cites countries around the world that aspire to a socialist ideal, but are unable to engage men's participation in the caring work that makes up women's double burden. Noting that some have said, "men's power will only fall when women challenge it" (p. 198), she reminds us that while some gains have been made by suffragists at the turn of the century, and feminists in the 1970s, "male power does not wither so easily. The power elites in the multinationals are men...it is just as likely that patriarchy is merely giving way to another form of male superiority..." (p. 199). But it seems clear that "sex-essentialism" and "gender-complementarity," in the minds of many men and women, have combined as "functional ideologies...to make patriarchy, like capitalism, as system to which men and women find it very hard indeed to imagine a viable alternative" (p. 206).

Almost as an addendum, Cockburn posits, "even if sex roles break down, few men can see themselves taking up the new options. So, they may be jealous that a

woman can take on a man's capabilities without losing her own, reaching a new wholeness. They may feel bitter..." (p. 208).

It was not until the First World War that, for a brief period in history in both England and France, women were urged into industries beyond their traditional work in textiles, baking and brewing. With the advent of war taking men to the front, women became proficient, highly skilled and extremely productive in the munitions and metalworking industries, and though they did the work with alacrity:

> *Even those who praised women for learning their work more quickly than the men believed that this agility of mind sprang from absence, in this case of male hubris, rather than from any positive virtue: "they do not pretend to have any knowledge whatsoever about machinery, but the men pretend they have some knowledge...and will go their own way. The woman will take all that is told here and she will carry it out (Major Evans, manager of five national factories, War Cabinet Cmtte. Minutes, October 1918, pp. D44-45, in Downs, 1995, p. 103),*

they were never allowed to obtain the certificates of apprenticeship and qualification in their trades.

In her in-depth historical documentation and analysis of the integration of women in the technical workforce in France and Britain during the war and interwar years (1914-1939), Laura Lee Downs (1995) uncovers the contradictions and convoluted thinking that structured women's participation while limiting their use.

> *Management and workers of both sexes pressed constantly on these gendered boundaries, and frequently renegotiated the contours that distinguished men's work from women's work, men's skills from women's "special abilities"...the specific content of the categories "men's work" and "women's work" often varied over national and even regional boundaries; what was a man's job in Paris might well be performed by a woman in St. Etienne.*

The language of skill differentials... represent[ed] the multiple divisions of labor in metalworking as smoothly intersecting in a stable hierarchical order, build on 'self-evident' distinctions in skill and gender. But this hierarchical system, constituted by a series of nonparallel binary oppositions (skilled/unskilled, male/female), produced a set of categories that were in fact incommensurable. Hence, "woman" could be a trope for "unskilled labor" (though not visa versa); but employers could in the same breath speak enthusiastically of their skilled women workers.

The ostensible coherent discourse on skill was thus riddled with internal instabilities...as concrete instances of women as skilled (and hence highly valued) workers vied with generalized conceptions of women as paradigmatically unskilled...To workers and employers alike the sexual division of labour that was grounded in this unstable discourse on skill seemed perpetually on the verge of collapse. Yet the distinction endured, defining the horizontal and vertical structures that shaped gendered divisions of labor, occupational segregation, and relations of authority in the workplace (p. 225).

Such convoluted thinking also shaped the wage rates. Men's pay was based on the value of their work, and women's pay was based on their sex and their needs as defined by the sexist perceptions of the society in which they lived (p. 107), practices we are still struggling with almost 100 years later.

The Breadwinner Role

Jerry: How are we going to survive as a human race? Someone has to stay home and raise the children!

The male role literature took it for granted that being a breadwinner was a core part of being masculine. But where did this connection come from? Wally Seccombe has shown that the male 'breadwinner' wage is a recent creation and was far from universally accepted. It was produced in Britain around the middle of the nineteenth century in the course of a broad realignment of social forces. Both capitalists and workers were deeply divided over the issue. Trade

unions gradually adopted the 'breadwinner' wage objective, at the price of driving divisions between male and female workers, and between craftsmen [sic] and unskilled labourers (Connell, 1995, p. 28).

A concept that continues to elude factual challenges is that of "the breadwinner," an ideology that assumes men have more need of work and wages as it is they who support their family. The early foundations of "breadwinner" notions are foundational in the exercise of masculine identities as they relate to work (Parr, 1990; Suzik, 2001). As we saw in the play, Gus and Steve both understood the power of the idea(l), while at the same time using it in a teasing way that showed that they didn't fully subscribe to it as they expressed their overbearing comments regarding breadwinners and Vietnamese people.

Steve: *(slightly ironically)* **and to add insult to injury you suddenly got a bunch of people who aren't really "breadwinners."**

Jerry, on the other hand, despite the factual experience of the daily toil of his own mother and wife, still held dearly to the image of the male as the breadwinner, demonstrating that "patriarchy as a system remains intact, and many people believe that it is needed if humans are to survive as a species" (hooks, 2004), a notion that hooks sees as ironic since patriarchal notions of social control have led to the slaughter of millions on this planet.

Cynthia Cockburn analyzes the ways in which men construct/obstruct women's participation in the workplace based on "...what women are to most men [and to most women]: people who have domestic ties."

She found, in her historical study of the printing industry, that the conflicted notion of being the "male head of the family...its breadwinner," able to "keep a wife and children" in the home, was at the core of the bitterness of the struggle to eliminate women from the industry in Scotland (1983, p. 181).

These practices can only exist through the construction of women as supplemental to the workforce and not capable of the same quality of production as the male. Even if the woman in question is celibate or childless she is seen and represented as one of the maternal sex" (p. 76). And Jason reproduces this notion when he says,

> **"I ain't training no goddamn woman to take my job when she oughta be home anyway!"**

which is a direct quote from a male worker on the Island Highway Project (Cohen & Braid, 2000a), considered one of the more successful equity integration initiatives.

In describing the way in which "...women's presence in the workplace is a highly political issue for men" Cockburn, in her fulsome analysis of the resistance experienced in the implementation of equity policies in several sectors of British employment, reminds us that historically, and according to the findings of her research, currently, it is still accepted that "[i]n the original terms of the sexual contract a woman's proper place is at home" (1991, p. 142). One doesn't have to dig far to find these roots in Jerry's lament:

> **Jerry: Security for my family. That's all I need. Working, doing a job, helping my wife & family: security.**

The notion of the male breadwinner has provided men with "both ideological and economic strength" (Cockburn, 1983, p. 183) and at the same time driven them to desperation with a fear of loss of that position; a fear that feeds a sense that if women have success with tool skills, "then you will have everything", as we heard from Bill in The First Nugget. "A man has got to be a flicking man, whatever that means. He has to fight for his family, for his wife" (Cockburn, p. 183).

Male pre-eminence in the family

Jason: I think our self-worth is tied into our jobs.

Gus: Oh I think it's more than tied to it. My Italian father was proud to use his hands to provide for the family. That was his focus, to provide well. That's <u>my</u> mission in life.

> *"Skilled craftsmen, such as compositors, continued within the labour movement to resist the introduction of state family allowances which alone could have made a more equal distribution of income" (Cockburn, 1983, p. 182).*

The Brotherhoods of railway workers, through the efforts of their leaders, "articulated a vision of 'respectable' manhood" that "would earn a family wage as a result of productive labour and support their households as breadwinners" (Taillon, 2001, p. 44). I find it curious, on the one hand, that Labour was participant in shifting the notion of masculinity from its identification with unique craft skill towards the more general conception of the ability to earn a competence to sustain a family by producing goods and services. The relationship between one's tangible accomplishment and one's paycheque becomes less direct. On the other hand, the traditional notion of the workshop promoted the idea that all worked together to create the products. Perhaps this notion carried over, allowing the original sense of the camaraderie of production to be used to construct social forms that served to control a larger number of production workers of varying skill levels. It is important to note that such reengineering of masculine identity was in response to massive changes in work structures and practices brought about by industrialization, mechanization and technological change in both traditional and emergent industries.

Edley & Wetherell (1995) refer to Tolson (1977) in defining patriarchy as, among other things, a "practice of male pre-eminence within the family, captured in the ideal of the male breadwinner and represented in the duties and privileges of

that position (p. 102). But these duties and privileges were constructed from the joint efforts of unions and employers in hopes of assuring a stable and docile labour force producing a panoply of goods for regular public consumption, thereby lining the pockets of those who owned the machinery of production. There needed to be a *raison d'etre,* or reason for being in the servitude of the working conditions of the time.

Social historian Joy Parr reviews in detail the shifts in male furniture manufacturing workers' defence of their work, originally based on the quality of life as producers and controllers of their work on the shop floor. This changed to a defence based upon their role as breadwinners, a position promoted by the newly joined union, in 1919. The message "was that cash would smooth the way to domestic satisfaction, to all those good things a couple shared when the wife was not nervous *[sic]* and the husband was doing what husbands should do" (Parr, 1990, p. 150). This also paved the way for a new class of owners and managers. Rather than demonstrating "their manliness and earn[ing] their authority over the men they employed by practising craft skill" (p. 154), as was done by the developers of the early production workshops, these new managers were encouraged to work apart from their craftsworkers and labourers, setting a new rung in the hierarchy of the workplace.

The evolution of male identity from craftsworker/producer to provider comes about as a result of the shift from skilled craft workers and engineers to a greater preponderance of unskilled factory workers and managers in the first quarter of the 20th Century.

> *The notion that masculine identity could be found outside manual work, in the explicit rejection of craft knowledge, in the delegation of workplace competence to others—this took some selling...[m]any male workers were unwilling to*

follow…this route. For them the connection between manliness and craft practice—the arbitration of quality, the control of pace, the mutuality of confraternity—was too close. [But] in the 1920's managers and owners too were offered their manliness in cash…Amid all this change, where were the elements from which manliness was made? (Parr, 1990, pp. 142-164).

In looking at the railway industry, it becomes clear that race was a factor, as well as gender. "Railroading in the late nineteenth and early twentieth centuries was a man's world, and in the running trades it was a white man's world" (Taillon, 2001, p. 36). The "complex job hierarchy" was constructed by "multiple gradations of skill, prestige, arduousness, and race" with men of colour and immigrants receiving the bulk what were considered less skilled jobs. Native-born white Americans, sons of "old immigrant stock" populated the more prestigious running trades. Women were not acceptable at all in this environment, where the union brotherhood saw itself as participating in the construction of "successful man-building" through the articles and expectations laid out in the many journals for each segment of railway workers.

The young boy learns to "associate work with masculinity" and "hopes to duplicate" the alienating practices of a father preoccupied with a world outside the home which he comes to see as a privilege, "an instantiation of masculinity" (Tolson in Edley & Wetherell, 1995, p. 103).

Brotherhood leaders assumed their members would earn a family wage as a result of productive labour and support their households as breadwinners, and they expected brotherhood men to dedicate themselves to their crafts and conduct themselves as dependable employees at work…translating the virtues they preached—cultivated manners, practicing self-control, and striving for self-improvement—into 'heroic,' 'manly' qualities (Taillon, 2001, p. 44).

The breadwinner role is noted by Parr as a construction of the mid-19th century (1990) in her in-depth case study of two industrial towns which emerged in Ontario, one in the textile industry and the other, a furniture manufacturing site. Her analysis is well-presented, describing how the meaning of work shifted, in the discourse and identity construction of workers, from producer to provider in response to the onslaught of technological change in the mid-19th and early 20th centuries. Ava Baron, in her historical study of the printing industry, also refers to the way

> *the completion of apprenticeship symbolized passage simultaneously into manhood and into competent worker status...one acquired an ability 'to earn a competence' by learning a craft. Through apprenticeship a boy became a proficient in a trade, obtained a means of earning a 'family wage,' and gained a position of 'honorable independence' (1991b, p. 50),*

conflating the development of skill with earning 'a family wage' or becoming a 'breadwinner'. She attributed the quote referring to the notion of earning a 'competence' to the "Circular letter to the Master Printers of the City of New York, July 13, 1811", thus setting the date of this notion of breadwinners back another 50 or so years.

Segregation practices: Division of workers

The implementation of the notion of the male 'breadwinner' deeply divided male and female workers, as well as driving a wedge between craftsworkers and un-skilled or semi-skilled labourers and apprentices[69], and has continued to construct gender relations to this day.

At Westinghouse in Ontario, in the mid-1970s:

---

[69] (Cockburn, 1983; Connell, 1995; Downs, 1995; Gray, 1987; Parr, 1990)

The company went after the women. They were to be weeded out of the plant, despite seniority or skills...the progress the men had made [in accepting and supporting the women] seemed to vanish. From the first day of the layoff announcements, many of them rallied to the call of Get the Women Out First. The harassers and psycho-sexists came out again into the open and campaigned full-blast. They found many sympathetic responses on the shop floor: protect the breadwinners, all the women out before the men (Gray, 1987, p. 397).

Some of the roots of this vitriol come out of the slow eroding of apprenticeship training during and after the Industrial Revolution, as machines (which still required skilled craft attention to set up and maintain) replaced much of the hand tooling work, limiting opportunity and the need for significant numbers or skill levels of apprentices and skilled craftsworkers. Employers and "middle-class reformers" (Baron, 1991b, p. 62) advocated for and set up training schools to teach the broad range of skills in the classroom to "lower-class boys." The descriptions of the struggles and the rationales at the turn of the last century between those favouring the training schools and those opposed makes clear that little has changed almost 100 years later (Dewey, 1915a, 1917; Snedden, 1915). My experiences prior to and during my five-year tenure on the Provincial Apprenticeship Board and the Canadian Labour Force Development Board highlighted the same struggles between employers, government, training institutions and the trade unions noted by both Baron and Downs, and this is explicit in the reconstructions of apprenticeship training in British Columbia today, and during the past decade.

In the early 1900s, afraid for their livelihoods, unionized craftsworkers negotiated limitations on the numbers of apprentices required or allowed onto the shop floor, and "articulated a version of masculinity in which white, working-class,

native-born sons were the heirs to true manhood: …the qualities necessary to be a competent craftsman" (Baron, 1991b, p. 62).

When Steve says:

Most tradesmen want to go back to the days when they were really skilled, all male and preferably white,

he wasn't looking that far back. Cynthia Cockburn, in a foundational study of male resistance to sex equity interventions, cites race along with gender, and we are able to see how such notions are as alive today:

> *It can be shown that there are cumulative advantages in being variously a man, white, non-disabled and heterosexual, which enable the individual to attain and hold economic and political power (1991, p. 173).*

Black (and in Canada, Aboriginal) women find themselves in the most disadvantaged positions, along with women with disabilities. Cockburn documents the perceived impacts of blacks and women in a public service setting (p. 60). A 2002 sub-theme on the popular TV program, The West Wing, dealt with the Press Secretary whose white, working class father was passed over for promotion. Her personal negative reaction to the Affirmative Action proposals on the docket clearly arose from her attribution of progress for blacks as the source of his troubles. Choosing to highlight that issue through the mouth of a woman on the program was an interesting device, which some might characterize as making it both palatable and implacable, and others might see as manipulative (BCTV, 30 January 2002).

Subdivision by Tool Skill

The gender divisions born of the turn of the last century ensured that the sons of craft union members had first call on any apprenticeship opportunities (Baron, 1991b, p. 69). This has continued through the 1990's and into the 21st Century in some unions. I modified this with great effort, in my small Local of the

B.C. Carpenter's in the late 1980's, through a motion, that such opportunities went not only to the sons, but to the daughters of members as well. It is unknown whether any daughters have taken advantage of this. It was impossible to win an opening of apprenticeship to just anyone who wanted to train in the trade.

The tension created, in the 1890s to the First World War, between who could acquire these skills, and whether that acquisition would be in a training school or on the job, has too many factors for effective exploration within the scope of this dissertation. Suffice to say there were pros and cons that related to women's participation, but the piecemeal training in small components of particular trade jobs added to the challenge. Those who were educated to their work in this way were incompetent, be they women or boys who had entered the system outside of the union's control. This ultimately led to the creation of union-sponsored trades training institutions during the early part of the 1900s, some of which have lasted until today. "Apprenticeship came to mean a combination of classroom instruction and job experience," and pressure was put upon the government in 1912 to provide public funding for this training (p. 67).

Skill differentials, power, hierarchy and the denigration of women's potential were most pronounced in manufacturing and construction, where women were often used to undermine the stranglehold union men held over "skilled work". The hierarchies existed long before women entered the scene in great numbers during the war. "Skill—that body of knowledge and host of capacities learned from the craftsman *[sic!]*—seemed a constant component of labor value in this productive system" (Downs, 1995 p. 80). But

> *[i]ndustrial rationalization was to change all that. Through a detailed subdivision of labour, employers gradually broke down the craftsman's complex task, standardizing parts and mechanizing the various operations*

so that each individual phase of the former skilled job could be performed by cheaper, unskilled labour (p. 18),

notes Downs in her examination of the development of gender divisions in British and French metal manufacturing industries during and after the First World War.

Ava Baron does an unusual job of explicating the nuances of contradiction created to distinguish the notions of manliness as it related to the performance of skill and competence. She describes the corners into which printers painted themselves while trying to define the criteria to keep themselves and hopefully their sons in jobs to ensure their success as family providers. So, when Gus says,

"My job as a carpenter doesn't make me masculine. The fact that I <u>have</u> a job, and I'm a good worker, <u>that</u> makes me masculine,"

he isn't consciously considering that it is his accomplished skill with tools that ensures his long-term success as an employed worker. Both Cockburn (1983) and Tolson (1977) discuss the importance of work as a representation of masculinity. The importance of tool skills in ensuring an ongoing supply of work led to the rivalry between skilled and unskilled workers noted in Cockburn's *Brothers* (pp. 134-140). For both skilled and unskilled male workers, physical strength and endurance is yet another way to try to distance themselves from women (Braundy et al., 1983b; Cockburn, 1983, pp. 136-137). The reconstructions of masculine identity from the skilled craftsworker who could journey anywhere to obtain work with their tools and their skills into worker who define their masculinity by the fact that they are working at all is a sad turn of events, and one that the capitalists would and did promote and welcome.

The traditional hierarchy ranged then, as it does today, from unskilled labourer through to apprentices on a track to become skilled, interlaced with

semiskilled machine operators. Very few normally move out of their category, and on to skilled craftsworker, who performs all of the tasks of the job with manual and machine skill and dexterity, as well administrating the work. Determining which level of skills was to be accessible to men, to boys and then to women became a task of the times during the early war years, "as employers sought to locate women in relation to the existing hierarchy of difference..." (Cockburn, 1983, p. 80). Some of the most significant debates "arose around the issue of training women for skilled work" (p. 81). These same constructions and debates were documented in the furniture manufacturing industry by Parr (1990). It was clear both before and after the war that men controlled to whom they passed their skills and knowledge, even among the boys coming up, but the vehemence with which they undermined female participation determined the women's lack of acceptance.

With the advent of machines which 'diluted' the skills needed to do the work, the traditional elements of a tradesperson were broken down into more simplified tasks. Women, desperately needed as workers in the war effort, became proficient at both the simple and complex machining and finishing tasks. Employers had stereotypical constructions of women's 'essential' capacities, "gentleness, regularity, assiduousness, timidity, dexterity, swiftness" (p. 84). As well, employers were dependent upon the few male skilled craftsworkers and had to negotiate with them to implement the machinery that would eliminate the need for large numbers of apprentices. Their coding of the simplified jobs as 'female' "represented the employers attempts to resolve a difficult and much-fought-over redivision of labor with their skilled men" (p. 86).

If a woman can do it, who am I?

Connie: Some men have said that if women have the tool skills too, then we'll have everything. It seems there's a fear you're becoming redundant.

Regardless of how talented and skilled women became, there was no career path into apprenticeship allowed to them. Yet, "the wall separating the skilled from the semiskilled might wear quite thin indeed" (p. 87), and in both France and Britain, some women raised themselves to the level of highly skilled metalworkers, continually being challenged by employers who would "confine women to 'an education in motion and manoeuvre' only...[to] smooth the ruffled feathers of skilled men, who eyed the new female labor force with a mixture of hostility and trepidation" (p. 94) that continues to this day.

This confinement flies in the face of notation after notation of statements found in the minutes of the War Cabinet Committee and elsewhere (Downs, 1995, pp. 103-106), during the war and the interwar periods, from male employers and women managers about the talents, skills, dedication and productivity of individual and collective women workers. Perhaps it has more to do with a male phobia about being seen to do the same job as a woman, as if this might somehow diminish their masculine capacities. This seemed to be the situation at Philco, when Laura O'Reilly was assigned, in 1937, at the end of a long and arduous strike/lockout situation, to "use an air gun to tighten nuts on a metal cylinder," a job previously done only by men.

> He kept on needling her...and complaining that she was doing man's work. Her presence confronted him with the masculine union's recent defeat, Philco's superior power, and the elimination of his and his male co-workers' jobs. It also had symbolic meaning to him as a man. Having a woman do his job challenged one of the implicit meanings of being a man in the plant—having a different and better-paying job than a woman could hold (Cooper, 1991, p. 346).

This understanding of the challenge to masculine identity is very much in line with Bill's statement in the story, The First Nugget:

Bill was silent, whether thinking or biding his time was unclear. His poignant blue-eyed gaze questioning the faith each had in their friendship, weighing the pros and cons of self-disclosure. "If you have the tool skills too, then you will have everything...." It seemed to be hanging there, awaiting conclusion, seeking some easy realization. What was it? "Then you wont need us anymore?" "You can take your marbles and go home?" "I will not be essential to your life, and you might not stay?" (See Chapter III).

If a woman can do it, who am I? Could this be the notion that Connie is responding to? bell hooks (2004) reminds us that men are socialized "to believe that without their roles as patriarchs they will have no reason for being" (p. 115).

Janet Davidson's (2001) account of the introduction of women as clerks in the railway industry highlights some of these challenges and focuses on male responses to the threat of being displaced. In poetry and song, traditional methods for communicating social concerns, women were noted to 'distract men from their jobs...cost men money..." disrupt office relations, keep men from swearing and create "tension between male workers and managers who competed" for female attention (p. 73).

Though wartime required women to fill jobs previously held by men, there was also a clear expression of the certainty of women as "a threat to men's wages." They were often found in clerical jobs, which were now being characterized, as "unmanly" (Davidson, 2001, p. 76), and were used as a "floating signifier, a concept through which to express male workers' fears...Subtly and not so subtly, the clerks' union undermined women's status as legitimate wage earners."

Despite the USRA's[70] insistence that women should receive the same pay as men, their superiors undermined women's rights to those wages. This

---

[70] The United States Railroad Association ran the railroads from 1918-1920, mandated equal pay for men and women in the same jobs, but this was constantly undermined by the

attempt to abrogate federal labor policy shows the lengths to which male

officials were willing to go to palliate the destabilizing effects of having to

pay women the same wage as their male counterparts (Davidson, 2001, p. 77).

It is beyond the scope of my work here to elucidate historical rationales and justifications for the payscale and wage differentials between women and men, such work was ably accomplished by others[71]. Suffice it to say that as a result, such wage differentials have continued to plague women around the world. Especially with the advent of Equal Pay legislation, employers have gone to a great deal of trouble to ensure that there is some differentiation in the occupational tasks that they could hold up as justification for unequal pay rates.

The sex differentiations in occupational tasks appears to be a guise for holding on to particular and specific skill sets that could provide a sustainable family wage. But women continually challenged this, demonstrating their abilities in the "flexible" work environments created by technological change. Downs' (1995) research into primary documents continually opens these contradictions to view.

Davidson uses specific case studies to demonstrate the ways the railroad companies and the unions used misapprehended notions of gender to subvert women's wages and promotions. One particular case stands out, that of Ella Barnett who had worked 31 years for the New York Central Railroad. After winning her grievance related to her rating for the job she was doing, the union, opposed to her promotion, used a technicality to have the job renamed, opening it to competition from the whole department. She was again hired for her job, and the union protested. Barnett's comment on the situation speaks to Jason's underlying fear that

---

Pennsylvania Railroad for many of the 100,000 women who were hired during the peak employment periods created by the war.

[71] (Baron, 1991c; Cockburn, 1983, 1985b; Davidson, 2001; Downs, 1995)

a woman might come on to the job knowing more than me.

"The trouble is primarily jealousy on the part of the men at having a woman raised to a position of rank and pay equal to their own" (Davidson, 2001, p. 81). This was my own experience in Dawson Creek, where I had gone to take pre-apprenticeship training after 3 years working in my trade:

> *In less than one week the tension emerged: "Today was the first day that I had to say to someone that I would rather do it myself. I may have to say something to _____ because he is a bit paternalistic, but basic relations with everyone are good" (7 Jan 77). By the 11th, the reasons were becoming clearer: "I got it in the lunchroom from a guy in Agriculture that the 1st term carpenters are quite impressed with my abilities - & that they couldn't quite understand how a woman could just walk right in and be 'as good as them' (personal journal, 1977).*

Little did I know that I would be the first woman to complete any trades training at that institution. The ensuing six months were horrific, as the men in my own class did their damnedest to make me quit, with their porno posters on the walls, non-cooperation on the shop floor and daily drawings on the blackboard, just so they could continue tell the stories of the females who didn't make it. It steeled my will and damaged my soul. But I graduated with the highest mark in the class on the final exam, and went to work building beautiful things with some fine men, elsewhere, who had chosen to challenge those constructions of masculinity. The resistances were vicious, and it was clear why all the women who had started before me didn't complete.

And when it came to railroading, though women made inroads into clerical work in many other disciplines, "the hegemonic power of the idea of railroads as a masculine domain is illustrated by the rapid removal of women from the railroad world after the end of World War 1...The Pennsylvania Railroad began firing

women clerical workers at a time when their need for clerical help was increasing"
(Davidson, 2001, p. 83).

In this and many other settings, women were "summarily ejected" from their
technical work locations, even after proving their worth in both world wars.

Construction and Reconstitution

While most of the characters in the play, *Men & Women and Tools,* would be
unable to describe gender's implications in their daily thoughts and actions, its
elements are embedded in the historic/psycho/sociologic of their lives. If you go
under the text of their words, the foundations of the play rest in the context of the
gendered constructions of masculine identity and work, constructions which have
emerged from systems of patriarchal masculinity (hooks, 2004) at work in western
economic and social lives. The men interviewed for this dissertation might be
unaware of the impact or unable to articulate the ways their lives have been
influenced by such gender constructions, but others have explored and written texts
to bring those concerns to our attention.

The play is a metonym for that social reality. Forefronting and interweaving
the voices of scholars who study the historical, sociological and cultural roots of
gendered practices with the men's voices in the play, illustrates the ways that social
reality is constructed and reconstituted.

The words, thoughts, sentiments and expressions found in the play, *Men &
Women and Tools* are, for the most part, direct quotes from a two hour interview in
which I participated with the four men. It was an open-ended discussion, based on a
few general questions about the experience of the men integrating women on their
worksites. All of them had specific experience of this. They poignantly demonstrated
the struggles facing men in a society that constructs and limits their vocational and

emotional relationships, while placing and embedding expectations regarding their contributions to society. They exposed their own fears, and concerns. They talked about how they thought it should be for women as it was for men. But also interwoven was a construction of women and their place in these men's interpretation of the social order that needs further explication and comprehension. The notions of *patriarchal masculinity* were overpoweringly present. bell hooks (2004) reiterates throughout *The Will to Change: Men, Masculinity and Work* that we in the western world live under the forces of a set of "interlocking political systems": "imperialist white-supremacist capitalist patriarchy"[72] (p. 17), and that both women and men contribute to its daily reconstruction and reconstitution.

Viewing and transcribing the interview, there was resonance with my own experience as a tradesworker. It struck cords with equity interventions undertaken with both men and women to change the social construct of gender and work. The interview was exemplary in the way the voices embodied, echoed, reinforced, and resonated with the hegemonic struggles in contention for the past 250 years.

---

[72] "Patriarchy is characterized by male domination and power" (hooks, 2004, p. 23) and governs work, family, religious and educational systems.

Chapter X

Difference – a Context for Schema

Ava Baron (1991a) chronicles a variety of approaches to scholarship to describe the necessary components and balance of gender and class analysis. She lights upon "Joan Scott's call for examination of the way meanings of sexual difference are constructed and used to signify power and hierarchy" as a resource for "a new understanding of the making of the working classes…in ways that will incorporate gender into labor history without either denying women's differences from men or segregating women into a separate sphere" (pp. 19-20).

That we must "correct the dichotomous, oppositional categories used to examine working-class men and women," and use "a continuum that allows for a range of similarities and differences between and among women and men" (p. 24) is a notion shared by feminist psychologist, Rhoda Unger:

> *It might be more valuable for the understanding of psychological processes associated with gender to examine those individuals who rate themselves as high or low in traits considered characteristic of a particular sex rather than looking at group differences between the sexes. Such a procedure would test the assumption that on any given characteristic, males and females usually form two overlapping distributions with a minority of people of either sex at the extremes (1998, p. 121), see also (Connell, 1987, p. 80).*

Baron qualifies this by saying "…we must go beyond conceptualizing gender as a linear continuum. We need to develop gender analysis in ways that allow for the historical specificity of gender identity while uncovering the ways gender assumptions are incorporated into social institutions and practices" (1991a, p. 24). I would add that this may be a way of gaining insight without holding each

individual culpable, providing the option of taking action and choosing behaviours that counter traditional hegemonic practices. Using this approach, feminist activists and academics might find common cause in confronting social institutions, and not always have to fight our way in from the margins (p. 25), as powerful as that may sometimes be.

Patriarchy

Steve: My father and mother were both union organizers. They taught me that I lived in a patriarchy, that males are in a privileged position, have been for several thousand years, and men were going to fight like hell to keep those privileges...But, those privileges aren't so real anymore.

"We exist simultaneously, rather than sequentially, in the social relations of class and gender" (Parr, 1990, p. 8)

Social historian Joy Parr (1990) counsels that the ongoing interactions and influences at the intersection of gender with race, class, and national identity cannot be ignored, and explanations that privilege patriarchy over capitalism or gender above race, while useful in some instances, "belies the wholeness of consciousness and experience" (p. 8). With a nod to Poovey, she suggests that "we lose sight of 'the multiple determinants' that constitute any individual's social position and access to power and also of the many ways in which social identities are simultaneously formed from a multiplicity of elements" (p. 9).

Baron does an excellent job of comparing and contrasting rationales for the engagement in and acceptance of the oppression and discrimination against women in historical workplace settings based on various sex, gender and class paradigms and perspectives. Using the development of the "family wage" as an example, she weighs whether and how men cooperated in or consented to their oppression by employers, and what part the concept of patriarchy played in the construction, development and acceptance of this notion. "Patriarchy assumes a material

advantage for all men in oppressing women—an advantage that conflicts with their class interests" (p. 29). This is further explicated by Bob Connell, as he explores the notion of the patriarchal dividend (1995; 2002): the benefits accruing to all men as a result of the existence of the patriarchal system, regardless of whether or not they personally subscribe to it.

In her study of the printing industry, Cynthia Cockburn adds to this description of patriarchy by noting that the hierarchical order also includes

> *the authority of older men over younger; the economic and social dominance in the family of the male head of household; primogeniture; individual (and often inherited) male power exercised through the ownership of the business firm; the 'family' values of a masculine Christian church; fraternal formalities within all-male societies—whether these are the gentlemen's clubs or the craftsmen's societies (1983, p. 197).*

Gender Schema

Jason: Cubs, scouts... Those sort of outdoor things with men and boys. I guess its a few steps away from a paramilitary group. My father, he was a very gentle man. He would take us <u>all</u> fishing, but hunting? He never took my sister. Guns were a boy's thing. Christmas time we got bikes, and mechano sets. My kids have both been given the same toys, but I have a very masculine little boy and a very feminine little girl. We gave him dolls...he had no interest.

Our interpretations of others' performance are influenced by the unacknowledged beliefs we all— men and women alike—have about [sex-based] gender differences (Vallian, 1998, pp. 2, 11)[73].

---

[73] Vallian distinguishes *sex* as being related to the possession of XX or XY chromosomes, noting that the use of the term *sex difference* may relate more often to how males and females are treated, and may have nothing to do with chromosomal or reproductive status. She uses gender as a representation of "our psychological and social conceptions of what it means to be a man or woman...In sum, sex is used to categorized people into two groups, and gender is used to describe our beliefs about sex-based categories" (Vallian, 1998, p. 11).

Perhaps a useful construct for explicating gendered constructions of tool use is the notion of a *gender schema* or *gender regime* so well described by Vallian (1998), noted by Butler (1990a), and unpacked by Connell (1987; 2002) and Segal (1997). Under the notions of gender thus described, and operant, employers have promoted the fear of being misplaced. The notion of being without the work that is foundational in most masculinities, is a fear that is among the roots of skilled workers' resistance to women.

Another foundational element, the desire to be a reproductive organism, was suggested by David Noble (1992). Brian Easlea, in Fathering the Unthinkable (1983) uses it to account for the dedication and

> *overriding pleasure and sheer joy [the scientists working on the atom bomb] experienced in achieving technological perfection...For Easlea, this behaviour can be accounted for in terms of these male scientists substituting for their lack of feminine creative power, that is, 'womb env.y. Men give birth to science and weapons to compensate for their lack of the 'magical power' of giving birth (in Wacjman, pp. 138-139).*

So still, men construct the world to keep this portion of it to themselves. This is not to say that women do not contribute to this construction, either in support of it or in their challenges to it. bell hooks (2004) provides a useful analysis of the role women play in maintaining and perpetuating patriarchy and sexism. Here I am teasing out how social and economic structures are fabricated to foster the men's ideas expressed in the play.

Jerry: Boys did the chores. Girls cleaned the house. Boys shot guns, boys played hockey. I haven't seen much change, to be honest.

Virginia Vallian has provided a remarkable compendium of study after study that demonstrates the ways in which gender schemas impact upon men's and women's educational and working lives in terms of opportunities, evaluations and performance. She ends with a chapter on remedies, the first of which is to better understand how we construct and reify these notions. Acknowledging that such examination and reflection does "not automatically correct those errors" (p. 304), she highlights a range of behavioural practices that may lead to systemic change.

Cynthia Cockburn has studied the practices that constitute these phenomena since before the 1983 study she conducted in the Printing industry which

> *began as a study of the human impact of technological change. It ended as a study in the making and remaking of men. It is also about the uses to which men put work and technology in maintaining their power over women (p. 3).*

Her findings led her to an expanded view of the gendered nature of technical know-how (1985b, 1988), and for me, her work culminated in her investigation of male resistance to sex-equity initiatives (1991). She uses the term: *sex/gender system,* which originated with Gaye Rubin (1975). Bob Connell calls it a *gender order,* referring to a general societal construct, and distinguishes it from a *gender regime,* which is represented more locally, in a particular institution or workplace (2002, p. 53). He reminds us that the structure and patterns of constructed gender relations "has no existence outside the practices through which people and groups conduct those relations. Structures do not continue, cannot be 'enduring', unless they are reconstituted from moment to moment in social actions" (p. 55), a notion also found in hooks's *The Will to Change: Men, Masculinity and Love* (2004), where she reflects on the ongoing reification of patriarchal masculinity by both women and men.

Cockburn (1983) ends with a chapter suggesting some reconstructions: "Men and the making of change." But change, even on the minute level of removing offending or pornographic material from the walls of shared workspace, is a fearful thing.

Sexuality – Secular and Religious

Jason: The dynamics are different when you are working with women. There is some sexual energy there. I am not saying it's appropriate or inappropriate. It's just there.

Gus: I act differently when a woman's there, whether it's on the job, or off. It comes down to that sexual thing. Guys don't know how to deal with that, they don't feel comfortable because they are not in control.

Historian David Noble (1992) reminds us of a time prior to the 10th Century when the Christian church was a more egalitarian organization where women and men lived and "worked together in their common pursuit of knowledge and salvation" in monasteries, often overseen by female abbesses. Trying to pinpoint the initiating moment when patriarchy's persistent notion of male power over women took hold in the current era, he notes "within this overarching patriarchal pattern of gender relations, there have been significant variations of experience, variations that have shaped particular cultures and lives" (p. 4).

He interweaves the moments when these variations created space for women's contributions to science and technology, for example between 1600 and 1710 in France and Germany, where "household-craft traditions persisted beyond those in other European countries" and enabled women to participate "in family-run workshops as daughters and apprentices, wives and assistants, independent artisans, and widows carrying on the work of their late husbands" (pp. 202-203), in fields such as chemistry, astronomy, medicine, mining, and natural history. He

contrasts that with how Issac Newton, in England during this time, schooled and schooling at Cambridge in social, scientific and religious order, maintained, promoted and ensured, along with many others of his time, an asceticism which set women as "the Devil tempting them to lust" (p. 237).

With the grace of God, and in the absence of women, the self appointed apostles of science continue to extend their heavenly rule over earth...In such a rarefied realm, masculinity came to be associated with separation and transcendence...The more 'earthy' feminine...was disdained as disorder, dreaded as the embodiment of worldly corruption (p. 281).

Jason and Gus, two men interviewed for this study, and represented as characters in the play, *Men & Women and Tools*, allude to the configuration of woman as sexual distraction promoted in the present day.

bell hooks (2004) points out that, both historically and currently, "the underlying message boys receive about sexual acts is that they will be destroyed if they are not in control, exercising power." In adolescence, "when a boy's sexual lust is often intense...patriarchal culture expects him to covertly cultivate that lust and the will to satisfy it while engaging in overt acts of sexual repression...the boy learns that females are the enemy when it comes to the satisfaction of sexual desire." They both evoke desire and require him to repress his sexual longings. To achieve "manhood" he must move past this repression to engage in sexual acts. This conundrum underlies Gus's remarks:

It's just something it'd be easier not to deal with. If the woman was gone, we wouldn't have to deal with this shit. We could have our posters up and we'd be quite comfortable.

Porn as the last stand

Jerry: They want to come into your lunchroom and take your Playboy pictures off the wall. That's the problem. The whole thing is, if you are going to come into the workforce, why the hell do you need to change it?

The wall is graced with four-colour litho 'tits and bums'. Even the computer is used to produce life-sized printouts of naked women (Cockburn, 1983, p. 134).

The lawyer for the complainant (Lapointe vs. City of Nelson) against a municipality in British Columbia, for sexual harassment in the Public Works yard, brought into the Human Rights Tribunal the life sized stand-up cut-out the male workers had placed in the lunchroom. The Commissioner, who was a woman, asked that it be removed. The lawyer said he just wanted those hearing the case to experience the impact of what was being discussed (Personal observation). Legault informs us that

> *one woman learned, to her detriment, about the sacred nature of pornographic posters when she dared to move one of the hard-core posters that stared her in the face as she ate, in a construction site shack. First, she asked for permission to move it and no one responded. Then she moved the poster and positioned it behind her. The next day, a united group of her colleagues literally wallpapered the shack with even harder core posters (2003a, pp. 14-15).*

Pornographic posters

> *"...dealing with pornographic posters is a very delicate matter for the women since there is a certain public awareness that such posters serve for their male colleagues as what anthropologists refer to as totems, taboos, the last bastion. I use this metaphor because the relation these men foster with these posters is less simple than it could seem at first glance. In many places, it is never said but although pretty well known that women should never, never touch, comment, neither criticize these posters. Actually, standing outside of this symbolic world, one can feel that evokes a kind of worship...*

Let there be no misunderstanding about it: I do not underestimate the sexism there is in pornography. That is not my point. All I want to emphasize is the depth of the men's relation, in shops and trades, with that kind of pictures and, as a result, the importance and the difficulty for women of finding their way through these problem (Legault, 2003a, pp. 15-16).

Messages of exclusion

Martin and Collinson, referencing Kimmel (1996) tell us that generally, men sexually harass women to impress other men. Workplace pornography signifies "in-group heterosexuality, conveying messages of exclusion to gay and bisexual men and of objectification to women...men proclaim their heterosexuality by using women to establish relations with each other" (p. 296) so they can continue to participate in a homosocial environment. It is also more than that. While there is the notion of some form of male solidarity, harassment is predicated upon demonstrating a clear lack of respect, the intention of which is to undermine the performance of the woman/women in the environment.

Pornographic posters demonstrate the conviction men have that they are in their place and that they are justified in acting the way they do. Women are not the only ones who often don't know what to do in this type of situation. Neither the union nor management knows what to do either.... The women would like to integrate into a setting where they are in the minority for now. But they must establish priorities with respect to their objectives, on the one hand, and their convictions with respect to pornographic posters and human rights, on the other. The attitudes of the women vary with respect to harassment and pornographic posters, but the message they perceive is always the same: you are not in your place. It is in this respect, above all, that the women are made to feel as if they are under scrutiny, that their presence is not accepted, that they are living, nothing more nothing less, in occupied territory (Legault, 2003a, pp. 15-16).

When the complainant submitted that such treatment was, in fact, systemic discrimination and should be treated with systemic employment equity remedies, the arguments were coherent and cogent. Regretfully, the British Columbia Human Rights Tribunal chose a more limited interpretation of the law, and decided that Sexual Harassment was not a systemic discrimination problem. If they had been able to base their decision on Legault's (2001, p. 56) analysis that "harassment is not always specifically sexual, but rather sexist" in nature, the more expansive definition may have held.

> *It is important to recognize the quality of insignia pornographic pictures have for many men in their workplaces, and, as a result, the importance and the difficulty for women of finding their way through these problems. Women are not the only ones who often do not know what to do in this type of situation. Neither union nor management knows what to do either" (Legault, 2003a).*

Responding appropriately is particularly challenging when the numbers of women are small. Landrine and Klonoff (1997) quantify the prevalence of non-violent sexist harassment and the impacts of its daily occurrences (cited in Legault, 2001). My own experience in pre-apprenticeship training, where the men in the class put up pornographic pictures and "Fuck you, Ms" signs on a regular basis in the college classroom, and again in 4th year technical training where I was greeted by three poster-size naked crotch-shot posters of women on the back wall of the classroom at a large provincial training institute has been documented (Braundy, 2000). It does not feel "non-violent." Choosing the most effective response is very difficult. But the one thing I learned in those situations is that responding with silence in hopes that it will go away is not a good solution. The perpetrators will escalate the behaviour. For the woman, responding clearly to the impact, and

requesting a straightforward change in behaviour is a beginning. She must also recognize that such a signal may be unwelcome.

Fear of Change

> **Jerry: Geez, we're finally getting to the bottom of this. I've been working here for 22 years. You come in and want to change the way I've done my life. I'm too old to change.**

Any request for change is seen as the thin edge of the wedge; 'give them an inch and they will take a mile' is a familiar expression in the sex/gender arena. At base, we see in Jerry a complacency with the status quo, and a deep fear of change.

Cockburn distinguishes between the materialist factors that hold the sex/gender system in the minds, hearts and daily practice of many: the comfort and ease that comes from knowing your place in the hierarchy of class and sex; the little vanities gained as a white collar worker in looking askance at "male manual production"; the social and personal satisfactions of being a traditional wife and mother, "cocooned in their 'essential' [heterosexual] femininity", and the ideologies that give rise to the contradictions inherent in those same systems and practices: the lack of working-class solidarity, the unequal wages, benefits, opportunities for skill development, and the overriding necessity for dual incomes to survive in the western economies.

Her suggestion that these "explosive contradictions" (p. 213) will lead to social change has yet to be realized, 20 years later.

Steve and Gus allude to the fears of technological change:

> **Steve: The men are scared...Automation has killed a whole bunch of jobs, certainly in forestry and metalworking. Machines are doing stuff I never thought I'd see a machine doing.**

> **Gus: Like in our trade, used to be, you get a million dollar job, there are 10 guys on the job. Now you got a 10 million dollar job, we still only got 10.**

Steve: So everybody feels their job's on the line.

And we see the ways that materials and processes are deskilling tradeswork on every worksite today.

Cockburn provides several scenarios for response to this moment of potential created by the massive technological upheaval and innovation. Using Marxist notions and sex/gender analysis, she projects futures which all look bleak, including the "alternative option" which suggests that "men are likely to respond in one of two ways: by hitting back, reasserting sexual primacy with whatever means are to hand; or by accepting the dismantling of the hierarchies of male power in favour of a more egalitarian way of living and organising," a highly unlikely utopia from the perspective of the past twenty years of equity interventions into the technical workforce.

It seems more likely that we have gone in the direction of the "workerism," seen by Cockburn as "peculiarly masculine":

> *Because of the centrality, in the lives of working men, or the shop-floor struggle for control, and because of the power of the men in the family and community, the masculine rhetoric of the workplace comes to dominate every aspect of working class-politics. It is enshrined within the Labour Party and the trade-union movement—a language of 'brotherhood', a preoccupation with the right to work and an emphasis on wage struggles in (Tolson, 1977, p. 64, in Cockburn, 1983, p. 225).*

Gus represents this position when he reiterates that:

You're a man when you provide for your family, and you're honest and you're fair. My job as a carpenter doesn't make me masculine. The fact that I <u>have</u> a job, and I'm a good worker, <u>that</u> makes me masculine.

The historical context described thus far indicates that this is a more complex issue than Gus has thought through. In many ways, his wide-ranging and particular skills as a qualified tradesperson have enabled his continued

employment, proving his flexibility in maintaining marketable skills in the face of the historical challenges of technological innovations to reduce the need for workers (Cockburn, 1992, pp.203-205).

Ownership of technical skill

Cockburn's notion of one big union that will engage in rethinking "the political use of skill" with "a critique of technology itself," with its attendant "continual, exponential growth of production and consumption" ideology seems still quite out of reach. That unions might act as an educational force is not quite so far-fetched, but the inherent conflict with real or imagined shortages of work keeps this utopian vision of ensuring "that technical knowledge becomes common knowledge" (Cockburn, 1983, p. 233) at a distance.

That "technical knowledge becomes common knowledge" is also a Deweyan dream (Dewey, 1900, 1915a, 1915b, 1917; Dewey & Dewey, 1915). Philosopher and educator John Dewey's hope of a widespread introduction and understanding of the elements and practices that underlie the production and manufacture of those things of use to our daily lives, education *through* occupations, keynoted his belief that this knowledge, "industrial intelligence" and practical application, was foundational and necessary for participation in a democratic society. Decision-making based on anything else was fatuous. He was also aware of the more limiting uses of such training advocated for by those in control of capitalist industry[74].

---

[74]

> *I object to regarding as vocational education any training which does not have as its supreme regard the development of such intelligent initiative, ingenuity and executive capacity as shall make workers, as far as may be, the masters of their own industrial fate...I am utterly opposed to giving the power of social predestination, by means of narrow trade-training, to any group of fallible men [sic] no matter how well-intentioned they may be (Dewey, 1915a, p. 42).*

The 1915 argument between John Dewey and David Snedden in *The New Republic* (Dewey, 1915a; Snedden, 1915) outlined this argument in detail, and sadly, Snedden's view prevailed: that vocational education should be for the purposes of increasing productive capacity for capitalism rather than achieving industrial intelligence for all citizens. Perhaps it was this expression of what the purpose of vocational education should be that sealed the fate of technical training to the present day (Braundy, 2004), where the training of workers through apprenticeship is being consistently diminished. Governments are giving in to employers' desires for training workers for individual task components of the complex skill sets that traditionally make up a full apprenticeship, to undermine what a tradesperson can negotiate for wages as a "skilled" person.

The social construction of the gender segregation of occupations was embedded in the trades training schools created at this time, for if training was to be *for* occupations, there would be no place for women in areas where there was little chance they would be hired. But just as there is concern today regarding which comes first, the skilled workforce or innovative technology implementation, it is possible that if women had access to training, they could be contributors to constructing an effective economy.

Currently, with the call for greater worker involvement in workplace solutions and invention, those seeking to learn and use technical skills for the benefit of society sorely feel the loss and redirection of Dewey's vision.

Under the Fear

Cockburn's, Baron's, and Down's research into historical constructions hint at the ways psychological pressures were developed and brought to bear in creating the gender divisions we find in society. Using theoretical constructs suggested by

Lynne Segal (1997), I will briefly explore elements that make up resistance in the social and psychological terrain. Focusing on practical explorations found in Cockburn (1991) and Legault (2003a), I look next at other forces at work within male resistance to women in technical fields, so well represented by the men in the play, brought forth by the participants in the group interview.

Segal, working gender at the interface of social sciences and the humanities in Great Britain, notes:

> *The force and power of the dominant ideals of masculinity...do not derive from any intrinsic characteristic of individuals, but from the social meanings which accrue to these ideals from their supposed superiority to that which they are not (p. x).*
>
> *...Nor are we simply dealing with a multiplicity of masculine styles, for these are always cut across by, and enmeshed within, other, differing relations of power—class, age, skill, ethnicity, sexual orientation, and so on (p. xi).*

She unravels and expounds upon the recent history, notions and forces motivating both change and resistance to change for men in western cultures. Segal (1997) argues that after the Second World War, when men returning received prerogatives over women for the jobs outside the home, a process of domestication took place for both women and men. She uses the books and movies taken up as popular culture, along with a number of research studies to illustrate the themes and practices promoting and representing appropriate gender performances for the times. Interestingly, themes and practices cross class lines, and she finds similar notions of the essential nature of separate spheres for men and women in both working-class and middle-class studies. To men, the 'real work'; to women, Motherhood; notions sold through books, plays, films, advertising and television, well documented in her work. "It is insufficient for the 'men' to be distinguished from the 'boys'; the 'men' must be distinguished from the 'women'...many men are

today condemned to live with ever increasing levels of insecurity over the distinctiveness of their 'manliness" (Segal, 1997, p. 132). After the Second World War, from politicians trying to settle society down to work and prosperity after the war to "angry young men" who in writing and action often expressed a hostility towards women, wives and mothers especially, the war between the sexes came out into the open.

The influence of military forces

And with these gender struggles came more public acknowledgement of fears of effeminacy, often acted out as homophobia. Social forces emerged after the actual war which demanded "the forced repression of the 'feminine' in all men…a way of keeping men separated off from women, and keeping women subordinate to men" (p. 16), reinforced on both sides of the Atlantic through continued conscription and forced military training, with

> *the casual brutality and crude insensitivity generated by the futile monotony of conscript life…The daily tedium of army life was relieved only by the swearing, drinking, and boasting of male bonding…Army training relies upon intensifying the opposition between male and female, with 'women' used as a term of abuse for incompetent performance, thereby cementing the prevalent cultural links between virility, sexuality and aggressiveness (p. 18).*

The intensified high alert of the Cold War kept the focus on military preparedness, yet conscripts had no place in which to exercise their honed skills. Sociologist David Morgan explores his own National Service experience when he says,

> *It was not that, simply, boys learnt to swear, drink, desire women, favour toughness, rely on their mates and so on…It was more a matter of learning to identify masculinity and being a male with these traits and pieces of behaviour (Morgan, 1987; in Segal, 1997, p. 20).*

There are many paradoxes here. One element that Segal puts forward reminds us that this was also a time of the public awakening of women's sexuality. The responsibilities for the "new family man" included both initiating and satisfying what seemed for many to be an enigma. Actions and attitudes might be required that contravene the codes of behaviour ingrained historically and in other contexts.

The Desire to be Desired

These "opposed faces of masculinity" continue to this day. Jules Fieffer, a revered New York cartoonist in the last half of the twentieth century, told *Look Magazine* in the 1950s, "Man has always seen woman as his enemy. But he needs her" (in Segal, 1997, p. 22).

> *Human Desire must be directed towards another Desire...To desire the Desire of another is...to desire that the value that I am or that I 'represent' be the value desired by the other...It is only by being 'recognized' by another, by many others, or—in the extreme—by all others, that a human being is really human, for himself [sic] as well as for others (Lacan, cited in Sarup, 1992, p. 68)*

Perhaps it is here that we see some needs or wants underlying those who hold onto their position as 'the one who wields the tools.' If men desire to be the value desired by another, one way would be to hone the tool skills necessary to secure the construction and maintenance of the physical components essential to living, and keep those skills for themselves (Kirkup & Keller, 1992, pp. 199-205).

I suggest it may well be this need to be essential, this desire, and the attendant fear of loss, that drives men to hold so tightly to their tool skills, believing this will ensure their place in the lives of those so necessary to their well-being. This view was affirmed by three of my key informants. Connie notes this, in the play, and the contradiction it raises for women, when she says:

It amazes me! When you ask men about the meaning of tools in their lives, they say it's so they can take care of everyone (McCloughry, 1992, p. 220). Trades and technical women love that they can take care of themselves!

It seems we have a conundrum. And yet, the nervous laughter ensues each time I say the name of my play out loud. Men wield their 'tools,' measure one against another, call each other 'tool,' or 'dickhead' sometimes in fun or in derogation. The immediate extrapolation from tools to penis, understood by each and every person, regardless of gender identification, symbolizes potency and productiveness, vigour and virtue. Recognized as both the organ and the Phallus first, and only later allowed to be the physical representation of technology, perhaps as the extension of the Phallus.

Interestingly, that was not consciously part of my literal notion when I created the title. I was referring to the struggles I have known and seen, where so often the men take the tools out of the women's hands, ostensibly to show them how to do it, but in effect, "emasculating" them, removing the power of the tool from their hands. I was highlighting the continuous efforts over centuries to ensure these divisions. It was only after naming the play publicly and hearing the response that I realized my double entendre, and the depth of meanings it implied.

But this tool, this Phallus, the potency of which seems to be expressed in the ironclad control over sex-segregated employment in trades and technical occupations, is a metaphor which becomes a metonym. A question which weighs in my work on this dissertation: *Is it possible to attack the Phallus without attacking, or being alleged to attack, the penis?*

Object Relations

Bill Pinar, a well-known curriculum theorist with a strong interest in sex and gender, encouraged me take up the theories of Object Relations, a sociocultural limb

of materialist psychoanalysis focusing on interpersonal relations, in my exploration of the roots of resistance to women in technical fields. Relations, particularly between mother and child, form as cathected (or desired) objects and part-objects, attachments, and lay the foundation for future relationship experiences. Pinar builds on the work of Dorothy Dinnerstein (1976) and Nancy Chodorow (1978), noted founders of *feminist* object relations theories. They rely on desire, (often referred to as cathexis), and Greek mythology to explain the influences created in the home by the traditional patterns of female child minding and male authority figures who are, for the most part, absent from the daily lives of children. "The boy must repress and deny the intimacy, tenderness and dependence of the early symbiotic bond with the mother if he is to assume 'masculine' identity" (Chodorow, in Segal, 1997, p. 79), and Dinnerstein posits "the universal exploitation of women is rooted in our attitudes towards early parental figures and will go on until these figures are male as well as female" (in Segal, 1997, p. 79). These theories have some merit, but regardless of the origins, Michael Kimmel contends in *Manhood in America: A Cultural History*:

> *The fears of feminization…have haunted men for a century*
> (in Pinar, 2001, p. 1139).

These fears come from somewhere, and their presence is constructing gender and gender relations. Bill Pinar deepens object relations theories, when he suggests, in his voluminous examination of The Gender of Racial Politics and Violence in America, that it is "the repudiation of the mother identification and an active identification with the father" (p. 1143) which reproduces "heteronormative, oedipal structures of self, family and society." He sees this as a key in the drive to homosociality, the need for men to relate in a single sex setting in work, sports, and

most settings outside the home; a notion that is clearly expressed by Jerry several times during the play, and described by Cockburn (1983, 1991), Legault (2001, 2003), and in Roger Horowitz's compendium of men at work and play. Some notions of its historical roots are explicated by David Noble (1992). The repudiation of the mother requires "the repudiation of femininity, a repudiation at times almost hysterical in its shrillness: hypermasculinity" (with Kimmel, Pinar, 2001, p. 1150). Seen in many varieties of current masculinities, at work, at play, in politics, and in violence against women and homosexuals, Pinar posits this "male self-division" as the process which constructed the "'separate spheres' ideology, with desexualized, saintly mothers labouring at home, and rugged, competitive men at work in a public sphere they controlled and conflated with manhood." In what might be considered a utopian postulate, he ends the section on "Men in Crisis. Again? Still?" by suggesting "a democratization of the white male 'self," by "reclaiming projected gendered and racialized fragments as well as repudiated identifications, including pre-oedipal identification with the mother" (p. 1151), that might function 'to negate the most basic premise of male subjectivity: an identification with masculinity" which might end "racial [and genderized] violence in America."

The Need to Work

Gus: I know when I'm not working, I don't feel good about my self.

For the male wage-labourer, the threat of redundancy is a humiliation...
unemployment strikes not only at the 'pocket', but also at a man's dignity - the basis of
his pride...for over and above its sheer economic necessity, the experience of working is
at the centre of a man's social life. The wage, which redundancy removes, is much
more than an economic 'wager (the exchange of money for labour-power). Not only in
its capacity to purchase, but also in what it represents (in the pub, or in the family)
the wage symbolizes a man's 'social presence'. If his symbolic power is destroyed, a
man's personality is undermined (Tolson, 1977, pp. 77-78).

Gus is expressing a malaise that is having a continually growing impact on masculine identity through the 20th and into the 21st Centuries documented by Mairtin Mac an Ghaill (1996) and Roy McCloughry (1992). Andrew Tolson's (1977) widely referenced study of working class and middle class men highlights the differences in some men's approaches and responses to their working lives in Chapter 3, *The 'right' to work*, and provides a background to Gus's remark.

I find it interesting, given the depth of impact and influence of work outside the home on, particularly, masculine identity, that there is so little mention of it in the psychoanalytic discourse. I can only guess that this is a class issue, that those whose identity has been historically most involved with 'work' are from the 'working classes,' and hardly of interest to the class of people who could afford to become or patronize psychoanalysts.

The symbolic and actual power enshrined in "men" and "masculinity" is not dissipated even when characterized as "vulnerable," "insecure" or a defensive reaction to the "all powerful" mother. All the psychoanalytic theories seem meagre in understanding the underlying factors that compel men to hold tool skill jobs as their own. There is still a need to understand the motivations underlying this drive to "take of everyone" as Connie suggests. But, with a nod to Lacan, tool skills can also prove their worth as essential to those whose desire they desire, and from whom they may still be trying to separate.

Gender Regimes

Gus: But my son is pretty bloody red-neck. He certainly wasn't taught that at home. You should hear him talk about women in the trades. Holy shit! He sounds like a 60 year-old teamster. Can't put his finger on why, just knows they don't belong there.

'Masculinity is best understood as transcending the personal, as a heterogeneous set of ideas, constructed around assumptions of social power, which are lived out and reinforced, or perhaps denied and challenged, in multiple and diverse ways within a whole social system in which relations of authority, work, and domestic life are organised, in the main, along hierarchical gender lines (Segal, 1997, p. 288).

Psychology professor Lynn Segal provides a framework for exploring some of the notions of work-based masculinity (pp. 94-103). When Gus wonders where his son learned his sexism, he is acting blind to the reproduction of masculinity which is reconstructed in the camaraderie of workplaces and union settings where exclusion of women is a sometimes unspoken 'watchword' (Legault, 2001, 2003a; Tolson, 1977). Segal gives us an example of the underlying forces using Ernest Hemingway's role models of action-packed pursuit of manliness, power and tough, competitive violence, intimating that 'they protesteth too much!' Segal highlights the dilemma:

A 'pure' masculinity cannot be asserted except in relation to what is defined as its opposite. It depends on the perpetual renunciation of 'femininity'. No one can be 'that male' without constantly doing violence to many of the most basic human attributes: the capacity for sensitivity to oneself and others, for tenderness and empathy, the reality of fear and weakness (p. 114).

I had similar thoughts in carpentry school at Northern Lights College in Dawson Creek, British Columbia, where I observed the antics of my fellow students; *'young bucks' who had all 'gone North' to prove they were men* (journal entry, 1977). Their choice for accomplishing this was to try to destroy the only woman in their midst, and they began to act like a wolf pack in running down their prey. This kind of desperate "gesture of virility" was noticed by Theodore Adorno (in Segal, 1997, p. 115) in his analyses of the rise of Fascism and the authoritarian character traits shown to underlie it. While he did not use the term 'gender', these traits have "since

been characterized as quintessentially masculine...the product of men living masculinity to its logical extreme" (with Cockburn, Segal, 1997, p. 116). Legault (2003a) refers to this when she describes

> *the individual who demonstrates hostility or closedness towards women is not generally openly criticized...he can count on the solidarity of the male group, even that of those who befriend women and support their entry. One can refer to this masculine solidarity as 'the pack' attitude.*

Segal's analysis of the roots and wings of the production of the myriad forms of masculinity in society is a tour de force. The impossibility of ever attaining mastery of all the traits and practices of the masculinity to which so many aspire leads to a constant effort of social reproduction, but, "the more it asserts itself, the more it calls itself into question" (p. 123), and any intimation of weakness or lack of successful reproduction of the masculine 'ideal' leads to violent, homophobic reaction. In twenty five years in construction, with many gay men as friends outside of work, I noticed very few 'out' gay men in the trades, which is traditionally a place of choice for acting out the reproduction of heterosexist masculinity in our society.

Jerry: We're all male. We're all heterosexual males. We're all...you know... aren't we?

Jerry is hoping to reproduce *The Myth of Masculinity* (Pleck, 1981, Ch. 5 & 7) in the camaraderie of the group, gaining currency in its sense of entitlement.

> *When men develop and deploy a discourse that dissociates them from homosexuals...they are bidding for solidarity with each other on an implicit basis of cooperative domination of females. Likewise the sexual banter about women and women's bodies that affirms, man to man, their sexual authority over women, serves to push deep into the unconscious latent homosexuality of 'normal' men (Cockburn, 1991, p. 188)...for it is woman's sexuality, not man's that is seen as a potential threat to organizational discipline (pp. 27, 148).*

"The success of men's acquisition of 'manliness' involves a complex process of dominance and exclusion, inevitably shot through with contradiction..." (Segal, 1997, p. 132). The challenges and difficulties of initiating men into manhood, as we saw in the case of the men in Dawson Creek, leads to "defensive responses to the desperation men feel when their male identity has not been adequately affirmed...the greater our insecurity, the more prone we are to overcompensating for our weakness by excessive and aggressive male posturing" (with Ray Raphael, p. 131).

The very idea that a woman might, and in fact often does, do the same or similar work as men, and to the same or higher standards of excellence, is anathema to some men.

> *Much of men's self-respect depends on the idea of being able to do work that men alone are fit to do...'I felt degraded following in the footsteps of generations of compositor-forefathers before me, at having to descend to such vile practices' as competing with women for work. (1886, in Cockburn, 1983, p.179).*

In the play, Jason shows the growing ambivalence, but still embedded resistance when he says,

Hey! I love when a woman comes onto the jobsite. I'm thrilled to share my skills, teach her everything I know. But I'm not sure how I would feel if a woman came on the job who knew more than me.

"Anti-sexist men need to reflect on the changes which are occurring in the acceptable and commercial face of dominant masculinity" (Segal, 1997, p. 291). Hopefully, the play, with its complex characterization, motivations and practices, can be a precipitant.

Steve: ...men were going to fight like hell to keep those privileges.

The fact that Steve recognizes and vocalizes this notion of a privileged position in a discussion with other men brings him into some level of allegiance with Connie (Cockburn, 1991, pp. 6-9). What is not clear from all of his interventions during the course of the play is whether he understands the concept of patriarchy as a sexual contract between 'brothers' (Carole Pateman, in Cockburn, 1991, pp. 17-25). In this analysis, the traditional classical and feudal accounts indicate a "father-right," where the first-born son inherited the father's estate. Pateman suggests that this "father-right" is really based on conjugal rights over a woman, which he would need to prove the son was really his own. That even with the "Enlightenment," liberal theory of "civil order" was, in fact, only for the men who were now constituted as "free and equal citizens," with women still technically "non-beings" and often subject to their husbands and fathers. We must remember that it has only been since the late 1990's that violence against women in war and in peace has been considered unacceptable and legally actionable. This "hidden sexual contract...assures the 'brothers' of modern society equal access to women and rights over them"...In their own sphere, that of sexual relations, they are masters."

The notion that this sexual contract might be publicly rewritten could easily be likened to the concept of a "step change" in the language of physical systems; the kind of step change the oscillations of which could explode the bridge under the marching men. If men do not act to impede those forces by changing their steps, their world could blow apart, like a glass subjected to the oscillations of a brilliant voice in high C. And so consciously and unconsciously in their efforts to create a critical damping force, they impede, overdamping the oscillations, slowing down the step change, resisting, impeding, protecting their world from explosive social change.

Terrence Real (in hooks, 2004) notes that "most men do not know what intimacy is" (p. 144) as their traditional model for relating is hierarchical. Thus, Gus's notion that men

don't feel comfortable because they are not in control

when women come on site and "sexualize" the workplace can be understood in the context that "one is either controlled or controlling, dominator or dominated," and what men really fear is subjugation (p. 144): a subjugation brought on by their own need to be desired, to be the one wielding the tools.

The rising level of what may be called "breadwinner" suicides and the despair in men with increasing male unemployment, suggest that many men are having trouble abandoning the 'breadwinner' role without serious damage to themselves (Hinojosa & Sberna, 2002; Pleck, 1987, p. 293). And yet, we face potential levels of unemployment in traditionally masculine fields automating with technological change. Along with the resistance to change, skills shifts and occupations we have seen in the past disappearing, and with the jobs opening up often requiring the relationship and administrative skills women traditionally develop, the "breadwinner" role is being redefined, regardless of the twisted strands of steel hoping to keep it from changing.

Communication differences

It might be useful for men and women to begin to examine these issues together. bell hooks (2004) urges women and men to find ways to engage with and support one another in the development of a *feminist masculinity*. But they may

need to come to some prior accord about the different ways they comprehend and handle communications in its various forms.

Expectations that women will communicate in the same style as men were challenged by Deborah Tannen (1990), but most trades and technical men have not been exposed to the ways in which communication can be misunderstood on a worksite, so well described by Braid and depicted in the audio/visual presentation, What Happens to Women in Tradesland (Braundy, 1983). So the gaps in understanding continue, often creating fuel for criticism rather than an opportunity for constructive communication and potential growth. When Jason says

Jason: ...while Darlene fits in quite well... Darlene is clear. If you are stepping over the boundaries, she'll let you know. Jane is not fitting in at all. The guys have to be very, very careful,

he is setting a parameter that all women must communicate in the same patterns the men use on the construction site. Being direct and clear are some of the elements I found most valuable from my 25 years in construction. You know where you stand; you give and get back, in straightforward, often humorous exchanges, information of direct use to what you are doing. This communication style is not generally practiced by all women, and, in fact, the majority of women are socialized to a different and somewhat incompatible style (Tannen, 1990). The double binds (Braundy et al., 1983; Cockburn, 1991, pp. 68-71) at the root of these assumptions would not create such knots if the men were willing to talk with the women about their expectations and hear what the women might have to say about it.

Instead, what we find are pronouncements:

Jason: I expect that she's representing women out there, so she needs to make an effort to stand, you know, I'm here, and I'm a woman and I'm going to kick ass like the rest of you guys.

It is clear that Jason wants the women on the job to display "masculine traits" (Cockburn, 1991, p. 69), traits that many women in technical fields learn from watching or being advised by female or male co-workers on a site. Such behaviour is, in some settings, viewed somewhat as an aberration bearing comment. In her in-depth case study of industries in Quebec implementing equity integration activities for women in traditionally male sectors of employment, Legault (2003a) found a significant difference in the acceptance of 'talking back' (p. 25) between large organizations/large industries (LOLIs) and small and medium-sized organizations (SMEs). In the LOLIs, often unionized settings, where there is "strong worker consensus" expected, women feel they must censure themselves, or be subject to exclusionary "watchwords"[75] (p. 22).

Yet, Legault found that in SMEs, women were supported for speaking out:

The employees accept it when a female colleague expresses her anger, even in front of their peers (p. 26).

Choosing the appropriate response can be tricky. Women must figure this out on a case-by-case basis, currently with little assistance.

---

[75]

Exclusionary watchwords and boycotting: the pressure exerted on the men by a common front of a group of their peers and the foreman

Sometimes the men join forces—occasionally with the foreman—to exclude a woman from the group of people working for the same department. The purpose may be to cause her to lose her job. This is definitely the worst time for a woman in a [trades or technical] sector...

What is the cause of this hostile reaction? All women do not experience this reaction, of course. The reasons given (physical inability to do the work, asocial behavior) are also not necessarily the real reasons behind the exclusion (Legault, 2001B, p. 51)

We are clearly told by Su Maddock that "deeply embedded in the cultural context of work are expectations of all employees to conform to what men do (in Legault, 2003a, p. 31), and by Cynthia Cockburn, in her 1991 groundbreaking study on men's resistance to sex equity in organizations, that, "the dominant group sets *assimilation* as the price of acceptance" (p. 13). But we know, from the extensive work of Royal Commissioner Rosalie Abella, that being treated the same is not always an effective strategy for successful integration:

> *to correct the conditions of disadvantage in employment experienced by women, aboriginal peoples, persons with disabilities and members of visible minorities by giving effect to the principle that employment equity means more than treating persons in the same way but also requires special measures and the accommodation of differences (Canada, 1995)*

Gus: No, they shouldn't be treated differently but they are! A woman is under the microscope all the time.

Gus seems to be taking a "historical materialist feminist" philosophical position here (Cockburn, 1991), or with Dorothy Smith (1987), acknowledging that the everyday world is problematic..

> *The...work is historical in the sense of examining the changes and the continuities over time in the relationship between women and men. It is materialist in going beyond ideology or discourse to analyse the economic, social, political and bodily specificity of women's lives. It acknowledges the significance of the mode of production, and of relations of racial domination, as well as of the sex/gender system in structuring women's experience.*
>
> *This historical materialist feminist tradition, together with an openness about definitions and validities in feminist practice, enable us to transcend the contradiction of equality. Men tell us "women cannot claim to be equal if they are different from men. You have to choose." We now have a reply. If we say so, as women, we can be both the same as you and different from you, at various times and in various ways. We can also be both the same and different*

from each other. What we are seeking is not equality, but equivalence, not sameness for individual women and men, but parity for women as a sex, or for groups of women in their specificity (Cockburn, 1991, pp. 10-11) .

Gus: A woman has to work a lot bloody harder. It's not fair, and it's not bloody right, but they have to recognize: if they're getting into our trade, they're gonna be scrutinized that closely.

Chicha-Pontbriand in an unofficial translation, states that "[w]hen a woman makes a mistake, it is amplified...As a result, women have to work doubly hard to prove that they are competent" (in Legault, 2001b, p. 11). Fortunately, according to former Ottawa mayor Charlotte Whitton, that's not difficult (1963).

There are other social practices at work

Describing how discriminatory practices are often unconsciously built into employment systems and practices in organizations, Martin and Collinson (1999) remind readers that

> *men's power cannot be understood apart from sexuality...Organizations are social contexts with extensive resources that men use to enact sexuality, and the conflation of sexuality with women mean that gender issues can be rendered invisible by powerful men, even as they engage in sexualized behaviour (p. 297).*

Throughout David Noble's analysis (1992), historical moments of women's innovation and scholarship are interwoven with an explication of the process of orthodox Christian church influences which constructed both religious and secular scientific explorations as a world without women well into the nineteenth century through constructions of women as witches, heretics and sexual seducers. He suggests the productive labour associated with the occupations of women: "food preparation, baking, brewing, animal husbandry, water portage, home repairs, horticulture, and of course, spinning, sewing, and weaving, and other tasks involved

in the production of clothing…" were taken over by men when "the ecclesiastical campaign for clerical celibacy" won the day, leading to "the industrial revolution of the Middle Ages" (pp. 382-283). Divorced from their traditional source of physical maintenance, the men realized the depth and breadth of the tasks required and set out to mechanize the work.

Noble ends his book highlighting how these efforts of mechanization in the replacement of the productive capacities of women have extended to their reproductive capacities as well. The "male mother" metaphor grew to "maternal mimicry, an ersatz procreative effort to stimulate life" in the tenth century, and again and again over the ages, to the present days obsession with "new technologies of reproduction and genetics…After a thousand years, the obsessive scientific pursuit of a motherless child remains the telltale preoccupation with a womanless world" (pp. 284-286). While Noble provides a unique and comprehensive history of the development of these conditions, the underlying precipitant force is still unclear.

> **"Despite various efforts to uncover the motive force for patriarchy, an adequate theory is still lacking" (Baron, 1991a, p. 29) [emphasis added].**

It is the exclusion of the investigation and analyses of masculinities in research studies of workers and working-class settings that limits our abilities to develop adequate theories (Martin & Collinson, 1999, pp. 301-302). Ava Baron sets out questions to challenge this exclusion:

> *What are the terms, the discourses, the social practices, and the material power relations that influence working-class [and middle-class technical] experiences? How are they formulated and changed? In sum, how are the meanings of being a woman and being a man formulated, and how have these formulations shaped men's and women's actions and the conditions under which they live and work? (p. 32).*

These provide an excellent starting point for conversations between men and women willing to pursue the exploration of feminist masculinity. Recognizing that, just as in training women to deliver the Workplace in Transition seminar, not all women and not all men are ready to open up these issues at the same time, two of Kay Leigh Hagan's notions about the characteristics of those men who might be ready for such action are imminently useful:

- *They practice enduring uncertainty while waiting for a new way of being to reveal previously unconsidered alternatives to controlling and abusive behaviour.*
- *They intervene in other men's misogynist behaviour, even when women are not present, and they work hard to recognize and challenge their own*

<div align="right">

(in hooks, 2004, p. 186).

</div>

For we need to develop not just theories, but practices as well. Many do not grasp the conflicts, contexts and contiguities of the various feminist viewpoints. Cockburn (1991, Ch. 1 & 7), Jackson (1993, pp. 3-7) and hooks (2004), among many others, provide elemental descriptions of the unique characteristics and interwoven threads. With grace and expansive referencing, Ava Baron helps us to understand, using a broad brush, the intersections of race with class, and how gender can and does become salient to both. As well, she notes that sisterhood is not always sufficient to defend and promote the rights of *all* women to an equitable portion of work and wealth, and that feminist theories have not traditionally dealt effectively with this inequity. Baron's (1991) reflection on the various notions of pertinent philosophical positions regarding the intersection of race, gender and class provides a sense of the arguments. A full analysis of "the interconnectedness of...race, class and gender in defining subjectivity and experience" as it relates to workers and employers is beyond the scope of this particular project, and I recognize the limited

scope of my interviewees' circumscribes the generalizability of my findings. It will be important to assess, as the play is shown to a wider audience, its reception and uptake by audience members from racial or class backgrounds different from the characters.

But one thing is certain, if change is to come, "loving justice more than manhood, is not only a worthy pursuit, it is the future". [76]

---

[76] (John Stoltenberg inhooks, 2004, p. 124).

Chapter XI

Epilogue

A Crisp Winter Evening

It was a crisp winter evening in the snow-ploughed parking lot of the Community Centre. I was just turning with my love to go back into Rita's house to get the papers so I could renew my research consents on the correct forms. A couple of my research participants were at the dance, and it was a good time to get them, one of the reasons for my long mile drive up country for the weekend.

"Hey, is that Marcia Braundy?" I heard the yell from across the parking lot, which was slowly filling with cars. I stopped and turned to see who was calling. The voice, familiar from somewhere in the back of my mind, caused me to freeze up in the region of my solar plexus. As the three men walked over, I felt the smile freeze hard on my face. I wondered if it showed.

"Hi Norm," I said as the men drew closer, Norm in the lead. I was searching my soul for the place of banter that had stood me in such good stead for all those years. But that was then, while we had some link to working together on construction, and trying to make the union better for everyone; before their betrayal.

"What are you guys doing here?" I asked, with the smile on my face, remembering the lesson Connie says she learned from me, "You can say anything you want, as long as you have a smile on your face!" "Looking for people drinking beer in the parking lot" was the answer. I replied, "You on Security detail?" "Nah," they said, "we're just looking for a drink!" all laughing at the bit of a joke.

I turned to introduce them to Dale. "Dale, this is Norm, he was on the executive of our Carpenter's local." "Still am!" he says, twenty-four years later. "And this is Davey," his head nodding, his sweet eyes glad to be recognized and remembered. "And this..." I said, turning to the third man, something familiar, but no clear recognition emerged. "Young Norm," said the older man who shared the name, and, I remembered later in the evening, the genes.

"You leavin'?" they asked. "No," I replied, "I'll be over in a bit," and went on about my business. I could feel myself shaking, and I knew it wasn't from the cold. I wondered what Dale made of it, but I wasn't ready to go into it with him.

As we walked, I remembered that the Carpenter's were co-sponsoring the event, with proceeds going to the Food Bank, part of their plan to raise their profile in the community. My stomach was tight, as were my shoulders and my heart. These guys had never been to the building before, the place where I got my start as a carpenter 30 year ago, and the one commitment that I have maintained throughout all my other dedications to all my other careers and work. Close to six hundred volunteers have built and renovated that building since 1973, and the work always continues on our living community centre and school.

I was filled with mixed emotions. The anger and hurt was front and centre. These were the men who didn't have the courtesy to respond with a phone call or a letter when they received my request for a waiver of dues as a scholarship while I was away at school. They regularly give scholarships to sons and daughters of members who go to university, and when, as a student, I could not afford to keep up my dues and asked that the policy be applied to members also, they did not even say yes or no, but they cut me out of the union for non-payment of dues. A friend who is

on the Executive said they did discuss it, and decided not to approve it. But they

never sent me a word about it.

They have no sense of their own history, and how they are creating the history

to be examined in the future. It is a mixed history as far as women are concerned.

First woman in the Carpenter's Union

In 1980, I was accepted as the first woman in the construction sector of the United Brotherhood of Carpenters and Joiners of America in British Columbia. I was a third year apprentice, having apprenticed non-union up til that point, and having spent a year talking to the Business Agent, who kept telling me to wait until the work picture was better. I had finally gotten tired of waiting, as it seemed the work picture was very good, and said that I wanted in. He told me he couldn't be there, but that I could go down to the next union meeting and talk to the Executive. When I showed up to the tiny little office in the Labour Centre, it was filled with men sitting together in sort of a circle. Many of them were Doukhabour men, Russian pacifists who had emigrated to Canada at the turn of the Century after burning their guns in a bonfire to signify that they would not bear arms to support the Czar.

"Do you want something?" they queried, looking up from their discussion as I came to the door. "Yes," I replied proudly, "My name is Marcia Braundy and I am here to join the union." The shock on their faces, and the distance of the drop of their jaws indicated to me that the Business Agent had not yet mentioned to them all the conversations that he had had with me over the year. With a great deal of hrumffing and coughing, they finally came up with a piece of paper that I should fill out, and the suggestion that I should come back next month to the meeting. "Could I have a copy of the constitution? And the collective agreement? So I can study up for next month..." I asked, with a smile on my

face. At a loss to do anything else, they gave me the pocket-sized booklets I requested.

The following month, armed with advice from a lawyer friend that there was nothing in the constitution that I did not meet or that could keep me out, I went again to the Labour Centre. They had me wait out in the hall, then come in and stand before the membership, and then they sent me out again. I felt a bit like a piece of meat, but was determined to complete the process.

When they called me in 10 minutes or so later, the old Doukhabour dam builder who was the President stood up and offered to shake my hand, at which time he welcomed me as the first woman in the Carpenter's Union in British Columbia. I was quite shocked, as I knew there were women carpenters in many places in the province, "How could I be the First?" but I thanked them and became an active member of the union, attending meetings and contributing to the somewhat foreign discussion when I could.

At the next meeting, I was introduced to the foreman and job steward on the big construction project in town, and told that I would be dispatched there. "You don't have to take any shit from anybody!" I was told, "You're a union member now."

I remember when they were trying to raise a more positive profile in the community some years ago, and I brought forward a proposal that they join with groups like the Credit Union, local employers and small businesses, to sponsor a 6th, 7th or 8th grade girl to go to the one week Girls Exploring Trades and Technology (GETT) Camp where they would learn to use hand and power tools to build go-carts, change tires, and wire power cords. Not only did the union refuse, but they damned me for asking. The familiar ring of the pater familias was in the air.

But I digress.

This was also my community centre, a place where, along with other members of the Board of Coordinators, I always try to make new people feel welcome, to feel a part of what is going on. At least I needed to be civil. "So," I said, walking down to where the Carpenters were hanging out together, away from the music and the dancing. Walking up to Norm Sr., I said, in a voice tinged with some trepidation, "How do you like the building?" "Its great!" was the quick response, but it opened the door to a real conversation about how the building came about, and all those who had worked on it. "There's something under that plywood on those beams," one of the carpenters said. "Sure is," I replied, and launched into shop talk with the guys about the physical challenges of the work before nail guns and lift trucks, when we pounded those thousands of ardox nails with our hammers, and raised those beams with ropes and sometimes pulleys.

Later on, I went up to get some punch, and found Davey at the counter. I wish I could remember exactly how the conversation started, but very quickly, we were talking about power, and hierarchy. Surprised to hear such notions from him, I replied, "That's what my research is about!" I drew him out on to the freezing back porch so I could hear what he was saying away from the live reggae/rock-and-roll band.

Wondering if I was pulling him away from enjoying the party, I asked him if he had danced yet, and he shook his head. "When we go back in…" I promised, remembering the fun I had on a camp job when a bunch of us had gone to town and they told me, "I never danced with a carpenter before." I was finally beginning to feel like myself.

On the porch he asked if it was possible for men to relate to each other without the hierarchy and 'power over' as the base. The poignancy of his query seemed almost seemed a cry for help. "Yes," I affirmed. "I have met enough men who are able to do this and who recognize the difference, to believe it is possible." Our conversation went on in that vein for a few moments, before Norm Jr. interrupted by sticking his head out the door, ready to leave, trying to round up the troops. It was an abrupt ending to what was a rich conversation, the kind I really loved having when I was partners on the construction site with someone...The kind that had once led a man to say, "I like working with women, we talk about real things."

Little by little, I felt the icicles in my chest and stomach break down. Looking back at the evening from three days later, I find I was "performing a head taller"(Holzman, 1999; Holzman & Mendez, 2003; Newman & Holzman, 1993), and came through with increased self-esteem and improved mental health.

The evening was a series of these events, short moments of superficial and deeper conversations, a bit like the lunchroom chats of old. With the completion of each one, I released a bit more of the tension in my gut, until finally, it became clear that the only person being hurt by the burden of my grudge was I, and to what end?

In a conversation with Dale about my dad, on the drive back, there were some things that could apply here. His question was, "can anyone ever really forgive?" "One can forgive and not forget," I said, "not carry around the anger and pain, but acknowledge what was done, and remember, so as not to allow it to happen again."

"It's a hierarchy thing..."

Gus didn't show up the next day to watch the video of the play, and I wasn't ready the night before to offer it to all the guys. Besides, they were busy with holding the place of the sponsor. But I showed it to another of my research participants, Jason, on Sunday.

He quickly slid down onto the floor, to be closer to the sound. He has been deaf in one ear for awhile, from an industrial accident.

"You did a good job," he said, as soon as it was over.

"Can you tell me why you think so?" I probed.

"It raises a lot of issues that men have to look at. We are dealing with it all the time. It should be shown in grade school where the problems really start."

"Where else?" I inquired, tired of hearing how the solution to the problem lay in educating the children.

"In apprenticeship school, union meetings, grade schools and high schools where men and women are portrayed stereotypically. There is a lack of wanting to change. Only men's perspective should prevail. That was shown in the play. We need to change the way we look at the world. I have to change some of my attitudes, but out there, the big gang mentality takes over."

"I used to call it the wolf-pack mentality," I interjected.

"The loudest wolf can change the feeling," he mused. I wasn't sure if he understood that this could be for good or ill.

"Issues are more prevalent today than ever before. There is a lot of talk about this in the lunchroom, and its not all positive either. The collective agreement has targets for women and first nations. But we had a Human Rights case here with the Operators and the Labourers, and as a result, the legal compromise got rid of just

setting targets. Women are the first to be hired, then native men. There is resistance to that. It has created a backlash." It is interesting to note that he missed the line in the Collective Agreement that said that equity hiring takes precedence over all other hiring practices (Allied Hydro Building Trades Council & Columbia Hydro Constructors, 1993, 1999). But he is not alone in that, and that's why there was a major human rights case on the site. It was a negotiated agreement, and the quid pro quo for the equity provisions was that the jobs would be unionized sites.

"Its harder in Industrial Work. We are all getting beat up out there and its even more challenging, so macho and brutal. There's resentment coming from old stereotypes of men having to produce more and faster, and women not cutting it. I get uncomfortable in the lunch room when this stuff comes up...that the women shouldn't be here – I hear that on the job every day, from a certain percentage, and not a small percentage."

"How big?" I asked.

"66%. Maybe 20% are accepting and willing. It's a hierarchy thing, like the carpenters and the labourers, with the labourers lower on the hierarchy. Women are on the bottom no matter what trade they are in."

"The anti-harassment policy doesn't work. The Coordinator came into the lunchroom and read us a three page document for five minutes. The training was a joke, and it's the biggest joke on the site now. 'Didn't you learn anything from your sensitivity training?!!!' If you really want to change things, you have to take the time to talk about things, expectations and stuff." His comments were particularly disturbing because I had discussed with senior company and union management the possibility of putting on equity and harassment seminars, so the guys could

bring up the hard questions and spend some time figuring out what was OK and what was not. They decided against it, saying they "didn't want to raise the issues in the minds of the workers." More like, "Let sleeping dogs lie," a strategy that clearly has proven futile, and is now backfiring.

"What about the play did you find particularly useful?" I encouraged, trying to get back to the purpose of my visit.

"Walking the line of light was really effective. The women are walking an invisible line when they are out there, never knowing what the expectations are, and the same for the men. Carpenters need to have some kind of workshop where there are men and women present, with the women leading. The more you can get it out front, the more understanding can grow. And it's going to have to be mandatory, and it should be for the building trades in general! It needs to be top down and bottom up."

He wrapped up by saying "implementing change can cause more problems than implementing a program to deal with change."

Interestingly, Jason made no mention of recognizing himself, or anyone else that had been present in the interview, and I did not lead the discussion that way. He did talk about some particular problems they were having on the site, and would be again once this particular woman came back to work. After discussing some ideas about how they might handle it, he asked me if I could send him an outline of a way to approach the issues with her. What goes around, comes around.

Dale read this over the evening I wrote it, and seemed a bit agitated. "Is it not what happened?" I asked. "Did you see something different?" "No," he replied slowly, holding something back. "Please be frank with me," I urged, concerned that I

had somehow misread the situations. "But I am worried for you..." a long pause, and then, "all these he said, she mused, they interjected...they don't sound very scientific...Maybe they wont believe you."

"But did everything happen the way I have described it here?"

He had been present at both events, and was therefore a witness, a triangulation you might say. "Yes, yes it did, and it's a good story too. I just wonder if they will take what you are saying seriously, presented in this form."

I felt like I was in the middle of an Ellis & Bochner article (2000a).

The potential for stories and evocative theatre to make a difference is a question I will carry with me as I take the play on the road, exploring resistance with men and women in union halls and schools – intervening in the social constructions of gender. "There needs to be more feminist work that specifically addresses males. They need feminist blueprints for change" (hooks, 2004, p. 140). For what has been constructed can be deconstructed, reframed, and reconstructed anew.

Reflections II[77]

An elucidation of a journey into unfolding explanation.

With each unfolding, layer by layer,

allowed to renew,

to review the reflection,

to query the interillumination

Hold it up, to the light,

and see how the reproduction occurs.

More contemplation and intimation;

it appears and in the process is emergence.

The scenario pointed to the schema,

the scene was set for reverberation.

Would the scintillation shimmer,

Illuminate, and shine and spark?

 Or does it just provide a glimmer?

Have these soul-searching ruminations

captured a recognition in the minds-eye?

Do we have a commentary here?

Will there be repercussions to this snappy comeback[78]?

This is not a declaration,

---

[77] Most of the words on this page can be found among the 27 different definitions of the word *reflection* on www.thesaurus.com.

[78] "Snappy comebacks" is the title of a workshop given by Heather Watt, the first certified female Boilermaker in Canada, at the second Surviving and Thriving Conference. The phrase symbolizes the wish of many trades, technical and operations (TTO) women to have, at the ready, responses to some of the more obnoxious and ignorant comments directed at them on the worksite or in the classroom.

but it is an exposition, an explication,

an illustration of a retrospection

that might allow a reassessment.

I don't expect capitulation,

only a second look, a second thought,

a bit of study, with a view to revision.

This is not an accusation.

It's not meant to cast aspersion, to blemish, blot, or brand.

I don't infer insinuation, stigma, stain, or slam.

Perhaps a bit of cogitation,

meditation on conjecture;

surmise a bit of supposition,

thinking thought, consideration.

The muse could lead to ponder questions,

weighing in anticipation

without concluding ideation

discerning hope[79] and speculation.

---

[79] Paulo Freire provided some additional insight here:

> The idea that hope alone will transform the world, and action undertaken in that kind of naïveté, is an excellent route to hopelessness, pessimism, and fatalism. But the attempt to do without hope, in the struggle to improve the world, as if struggle could be reduced to calculated acts alone, or a purely scientific approach, is a frivolous illusion. To attempt to do without hope, which is based on the need for truth as an ethical quality of the struggle, is tantamount to denying that struggle one of its mainstays. The essential thing...is this: hope, as an ontological need, demands an anchoring in practice...hope needs practice in order to become historical concreteness...Without a minimum of hope, we cannot so much as start the struggle. But without the struggle, hope, as an ontological need, dissipates, loses its bearings, and turns into hopelessness. And hopelessness can become tragic despair (Freire, 1997).

Appendix A

'Man -I- festations and Confessions:
the socially constructed oxymoron of being a woman mathematics teacher in a historic all-boys independent school.

by *Dalene Swanson*

Sometimes past events in our own lives are re-evoked by other's narratives and they form interwoven threads that inform our identities in social relation with others. These threads seem to weave a tapestry of a much larger narrative, although we are unable to see the whole from the perspective of the past. Often, these past happenings fragment our identities and we choose to have it so by breaking the threads and tossing them aside as if to dismiss their relevance to our greater purpose. But the threads float, never far from our fractured selves, forever wanting to find meaning, wanting to play a part, wanting to create new creative patterns of being, ... and searching for the center. Without our realizing it, they coalesce and intersect with other threads of our lives and soon there is a texture and coherence which we, perhaps, did not initially see, looking for it elsewhere, until we could no longer ignore its relevance and place within the whole.

I was still very 'young' when I was asked to apply for a post as a secondary mathematics teacher in an all-boys traditional and historic independent school in South Africa. I was an education student and the school concerned had enquired about me at my university and 'done their homework' as to who I was, what I could do and how I could 'add value' to their school. When the telephone call came, I was taken aback! There were very few jobs available and too many graduating education students. Very few would ever get the chance to teach, let alone be offered an interview. And now 'they' were calling 'me'! The country had been through 'states of emergency' and the

economy was very weak. My only option, if I wanted to try and teach, was to apply to teach in an 'all white' school and, being classified 'all white', to become a member of an 'all white' teachers' union, if I was ever offered a post at all! That, in principle, I could not do! So, it was a mixed blessing when the call came. "At least," I thought, "it is a multi-racial environment, albeit an elitist traditional all-boys school."

I taught at the school for almost a decade, and, for the most part, it was a positive experience and I have sacred and tender memories of my interaction with students and staff, and of the role they played in my life and I in theirs. I loved to teach and I naively thought, at the beginning, that that was all that would be needed for acceptance into the school. I soon learnt the rules on the ground and the social codes for survival in this very patriarchal environment. I learnt, at first, that I had to be very many times better than any other male teacher to be granted a modicum of 'respect'. And 'respect' was key to survival! 'Respect' from the students and 'respect' from the other staff members. Respect, in this context, was something that had to be 'earned'. You had to prove yourself and, being a woman, that meant proving yourself over and over again, 'beyond doubt'. I offered my students my enthusiasm, my love of teaching and my joy of teaching young people. But I also knew that I had to 'get results'. And that I did! My students achieved well and I developed a reputation as an 'effective teacher' in the community and further a field within the independent school family. But this was still not quite enough within the teaching environment at the school. I was still a woman...

There were very few women teachers at the school at the time and none that were 'young' and female, other than myself, teaching in a prominent curriculum subject such as mathematics. It was an alienating experience for me as a woman, but the satisfaction I felt from my interaction with my students greatly compensated for it. I tried to blinker myself from the blatant

chauvinism I often was forced to endure and accept, keeping my head down, focused on my work and my students, and hoping outwardly that if I didn't 'make waves', it would somehow go away or, at least, become more invisible. Inside me, I knew it wouldn't, that the layers of 'white patriarchy' were deeply entrenched and hegemonic, informed by the rituals and traditions within the school and the dominance of its colonial cultural ethos. I realized that this was how the power of prejudice operated, ... that it makes its mode of control invisible and irreproachable in context and that it takes some legitimate power base from within another context to begin to contest it. I was alone, vulnerable and weakly positioned within the context, all because I was a woman, and there was no legitimate space for a woman's voice in this place. But, I needed the job, I loved my job in the classroom, and I was trying my best....

One day, after a little while at the school, a male member of staff confronted me at a mathematics department staff meeting, suggesting that my students were 'doing so well' simply because I had seen the examination papers beforehand and I was 'obviously' teaching towards the exam. His evidence? Well, this was the interesting part! His argument was that: "it is not possible for the students of a young female teacher with so little experience to be achieving such consistently high results." The Voice was singular and uncontestable. It was situated in a place whose values and principles allowed for such blatant prejudice, illegitimating the voice of the victim. Although the overlying principle of 'respect' was that you had 'to earn' it, this was the underlying rule... that if you were a 'woman' you could never 'earn it', ... that 'earning it' was the precinct of men only, that you were exempt from these rules simply by 'being' a woman, and that the 'right to earn it' was beyond your control. I realized, even in my outrage, that I had overstepped the mark of the rules of this context in playing out the very rules that informed it... that I had achieved 'too highly', I had 'earned the respect' too well and I had shown them up ... and they didn't like it ... it made them uncomfortable and threatened. It began to challenge the

existing stereotypes on women teachers and achievement, and made a mockery

of the man-made rules of this context. I was beating them at their own game.

How dare I? Who was I to challenge the existing social relations? I was being an

upstart, even in my silence, through being 'good' at what I was supposed to be

good at....

    Even as I expressed my outrage at the blatant sexism of the remark, I

knew that to take the issue further as a complaint to the principal or school

board, would be to provide it, in this context, with some 'legitimacy' and to

forever feel the shroud of doubt hanging over me. The other members of staff

were obviously shocked by the male member of staff's unexpected challenge and

in their bodily-visible discomfort and embarrassment, they remained silent,

watching to see how I would 'handle the situation'. Would I 'handle it like a

man', the only way to 'handle' situations in this context?! I was all alone, a

victim in my own department... no one daring to stand up for me like a decent

'human' would. I was caught visibly and firmly in a double-bind, although,

perhaps, it only highlighted that I had, in fact, never been otherwise in this

context. I was forced, yet again, as if I had not had to do this enough, to 'prove'

my innocence, to exonerate myself by turning myself inside out, being more

'male' than the men. I was a suspected criminal by being woman and I had to

prove my 'manliness' so as to divest myself of the charge of criminality.

    It was the practice at the school for each member of the mathematics staff

to be assigned the task of setting several examination papers in mathematics

and to moderate other mathematics examination papers for each grade. I

challenged the department not to give me any examination setting or

moderating assignments for the upcoming examinations and we would prove

the veracity or otherwise of the male member of staff's accusation. And so it was

done. I quite enjoyed the freedom of not having to set examinations that half-

year. More importantly, I enjoyed being able to teach my students with some

*freedom without having to avoid certain kinds of questions because I had
known that there were similar ones on the examination paper. I knew that such
a practice was not accepted here... that it would be construed as providing
unfair advantage to your own class students over other class sets... a form of
cheating. And I say this with ambivalence, because I am not entirely convinced
of the unsoundness of the practice ... as if preparing students for an
examination is so criminal... but these were the rules on the ground and I knew
them and, ironically, made sure to practice them so as 'to survive'. Ironically,
not knowing what was on the examination papers gave me the freedom to teach
and prepare my students for the upcoming examinations unhindered by these
other considerations. It was liberating!*

*And so the examinations came and went and my students achieved even
more highly than before! I was elated! I had 'proven' myself unequivocally at
their own game. But it had no joy. I expected some announcement... maybe
some comment... I even hoped for an apology to be given to me. Perhaps I still
had, or wanted to have, faith in them ... more faith in them than they had in
me.... I waited.... There was nothing.... Only silence.... This time the silence
came from them, but it was still my silence they held inside it. It was a silence
of power, with the silence of alienation subsumed within.*

*So eventually I raised the issue myself. I made an announcement! At a
department meeting I stood up and thanked the person concerned for providing
me with the opportunity to teach my students with some freedom, away from
the tyrannical considerations of the evaluation instruments at the school... I
rubbed it in a bit... I had so little opportunity to rub things in of this nature... I
told them what a wonderful pre-exam teaching experience I had had, that they
should try it some time ... that it was a liberating experience and that last, but
not least, I was thankful and grateful for the opportunity for my students to
have been granted the opportunity to do even better than before! Thank you! ...*

There was silence. Nothing ... nothing was said. No comment was ever made about the issue again. I knew, though, that they thought that I had taken it 'like a man.' I was still conforming to male rules... I had shown my disgust, but, according to them, I had kept my 'dignity' in that context, ... in a context, ironically, that allowed you no real dignity ... that was the precinct of men!

I continued to teach at the school for many years and after a time I realized that I had become part of 'their' family whether they liked it or not. They now tolerated my sex and reconstructed my gender because I had become an old-timer. I was simply a familiar part of the fabric of the school that could not be done away with. I had a part to play in the history of the family, albeit an uncomfortable one for them, for I continued to gain a reputation for 'effective teaching' and for my students' achievements. I realized that I had become an 'honourary male' to them within the school, and at the same time, contradictorily and similarly as usual, I was also the school's mascot. They also became a part of me, like a family with siblings you don't always get along with but love nonetheless. But, for me, the full trust could never be regained. I learned to care for them, but unlike the way I cared for my students, which was caring wholly, I cared for them without full or real respect.... They had taken that from me forever! ...

Once, when I was still in elementary school, towards the end of my last grade in that school, I overheard my mathematics teacher in conversation with my mother. My mathematics teacher's name was Mr. Nieken and he was a strict and stern male teacher. But I hadn't minded him. I liked mathematics and he hadn't been a bad teacher. He was telling my mother how good I was in mathematics and that he believed in my abilities. But then, as if he had said what shouldn't have been said, he added a quick addendum: " ... but, it is usually the boys that take over from the girls later on. Usually, when they mature, it is the boys that become better than the girls... I put my money on

Brent Sharper," he said. I was heartbroken at the time. I had never thought of my sex as informing my learning. I couldn't understand what being a girl had to do with it ... or what it had to do with my future success or lack thereof in mathematics. Why was being a girl a necessary limiting criterion for success in this subject? Later, I learned that this was the agency of prejudice and I never allowed it to prescribe the limits of possibility for me, although I learned to see how it delineated the spaces of 'success' and 'failure' for others. I learned to see how principles of power informed pedagogic practices, as well as ways of being and living in the world, and I could recognize it when it was happening and understood, to some small degree, what it must feel like to the victim(s).

There have been times when I once dreamed of bumping into my old mathematics teacher in the street and telling him that I had achieved a B.Sc. degree in mathematics and that I was a successful secondary school mathematics teacher. I may even have told him, in my dream, of my future success in a Ph.D. program in mathematics education, just to make him eat his words. But that has no appeal now. If I saw him in the street today, he would probably be a very old man and I would be sorry for him... sorry for him in case he had never overcome his prejudice.... sorry for him as a teacher of young people for the heavy weight on his soul! I know that it would be a pitiful experience for me!

Over the years, I have come to realize how the threads of past happenings often tear our souls and that the broken threads of these come together again, in good time, in a woven fabric that the paths of life inform and which could be made to heal wounds. We can choose to listen, or not, to the searching of the broken threads in their paths towards new meaning. One way would be to weave a shroud to hide the pain.... Another would be to weave a tapestry of vivid colour that tells the story of lives well lived and makes visible its elements in ways that can uplift and empower others, thereby claiming one's own

dignity. I have found some dignity in my own practices, in the classroom, in my mothering, my marriage and in my research work. I haven't always succeeded in what I have aimed to do, but I am still trying! And in that trying, lies my dignity. I have found it through trying to push the boundaries of possibility for those that I am responsible for, and for others where I can, and by attempting to be a 'worthy example'. This has been my personal goal. I have gained my own dignity by recognizing the dignity in others and trying to give back dignity ... and by attempting to weave, through my life stories, tapestries of hope!

(Dalene received her PhD in December 2004 at UBC)

Appendix B

ISSUES TO BE ADDRESSED IN PROBLEM SOLVING

1. **What do you see happening here?**

2. **What is the root cause of the problem**

3. **What is the responsibility of the _____?** [roles of the individuals in attendance, i.e. instructor, job steward, apprenticeship counsellor]

4. **Who else has responsibility in the situation?**

5. **What are the possible avenues of action?**

6. **And the repercussions of each?**

7. **Which do you feel most comfortable in choosing? Why?**

8. **Follow up?**

Copyright 1987

WOMEN IN TRADES, KOOTENAY COUNCIL

Appendix C

A Step Change – Veering Into Metaphor

Impedances have been placed regularly in the way of interventions to increase the participation of girls and women in trades and technology, which in all other ways were deemed successful and useful tools by those they served. The concept of resistance kept knocking at the door of my mind. And so I began to talk about the site of women in trades and technology as a site of intervention and resistance. In looking at the concept of resistance, I discovered a variety of conceptions. Foucault's idea of resistance reminded me of the word Résist which I had seen scratched into the floor of the prison tower in the south of France where the Huguenot women had been kept imprisoned: it was a call to righteous opposition. By what right had these new resistors put such blocks in the way of women and girls who chose to engage with technical occupations? So my thoughts went to Lacan, and the concept of resistance in the psychoanalytic sense of resisting a change in the status quo, a refusal to grow in new ways. This led me to research differing concepts of masculinities, which might explain some of what might cause such a refusal. Still I pursued other understandings. I began to think about the process of resistance, as a factor in the laws of movement in the physical world. The flow of current, be it water or electrical, or even social change forces, can be acted upon (through intervention) in a number of ways, which will determine the direction, rate, and force of flow.

This might even be a language with which to engage those whose world I was trying to understand and enter successfully. I want to try to explicate what is

underneath the fear of men towards women and girls engaging with tools and techniques. To do this, a model might prove useful. A heuristic is needed that depicts the systems of interlocking and interacting raisons d'etre for men and for women at the site of trades and technology.

My interest became a conversation with an electrical engineer who had his own understanding about the language of the physical world. He became my guide in this journey into interpretation, querying and prodding me to clarify what I meant in using the words of his language to describe human activities that occurred at the site of gender and technology. He was confirming that the actions were congruent with his own meanings.

He told me how the language I was using related to a concept called a Step Change. I immediately translated the concept into a metaphor, and as I built the frame, the engineer ensured that I was using the terms correctly. The metaphor of the Step Change in the language of physical circuits and systems seemed very appropriate as a theoretical speculation.

> *The advantage of the circuit approach is that the techniques used for analysis of electric circuits are highly developed. These same techniques may be applied by analogy to problems in mechanical, fluid, and thermal circuits. In this way, the similarities between problems, in different physical media, are made obvious. As a result, solutions in one physical medium are transferable, by analogy, to the other media. (Lindsay & Katz, 1978, p. 2).*

However, it is essential in our complex web of a world to remember that:

> *Since the amount of effort involved in obtaining solutions for linear systems is significantly less than is required for non-linear systems, the linear model is an attractive tool for determining the general nature of the performance of fluid systems. It is of course, necessary to have some appreciation of the conditions under which the linear model ceased to be accurate (p.83).*

A step function occurs when a sudden change in slope or amplitude is experienced, such as turning on a water tap, or turning on the light. It is an abrupt change from one mode to another. It is not instantaneous, for we know that it takes time for a valve to be opened fully or a pull chain to complete its operation. But it does appear to be immediate and fast-acting.

In image, a Step Change happens when

two full 90° angle turns
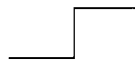
are navigated.

If there is no damping (some type of valve or resistor) at the first 90°turn, the infinite harmonics created by the natural resonance of the system can vibrate at such a frequency as to explode the system, i.e. glass breaking at sound of an operatic High C. The sharper the slope, the stronger the oscillation, but even a small oscillation can become large and destructive. If it is insufficiently damped, the overshoot could set this oscillation in motion. It is a frightening thought that even a small amount of change can lead to the end of the world as we know it.

We know that "when the flow rate increases beyond some critical value, the flow breaks up and contains circulating currents called vortices" (Lindsay & Katz, 1978, p. 85). Perhaps, what has been in effect is an underlying fear of change based on the potential result of an insufficiently damped Step Function. In apprehension of this singularity[80], perhaps we could say that a reactive damping

---

[80] The Singularity -- technological change so rapid and profound it represents a rupture in the fabric of human history <http://www.kurzweilai.net/articles/art0134.html?printable=1>

(impedance/resistance) has been put in place in hopes of creating a curve that is critically damped.

Inductance is resistance to change of flow of current (creates an inertia effect) (p.87). Capacitance is resistance to change of potential (would create different circumstances). Inductance and capacitance are always 180° out of phase with each other, like the North and South Poles. With no damping in the cycle, energy continues to be thrown back and forth with catastrophic potential. The value of resistance, and capacitor plus inductor reactance equals complex impedance.

What seems to have occurred at the site of gender, trades and technology is an over-damping with inductive and capacitant reactance that has led to an unresponsive or sluggish system and a high impedance.

While this systems approach has the metaphoric capacity to help us understand the current situation at the site of gender, trades and technology, it is in many ways a simplistic system that requires significant adjustment to make it fit. This is also true for this to work across the various current systems: fluid, electrical, thermal etc.

> *In actual electrical elements it is not possible to achieve the ideal characteristics given for the resistance and inductance...Thus the actual inductance always has some resistance and the actual resistance has some inductance. However we will assume throughout the text that the components are ideal and represent only one phenomenon (p.78).*

> *Let us be aware...that the analogy between fluid components and electric components is not perfect (p.81)*

Still, as I pursued my research on the Web, I did find one reference to the concept that seems to be using the metaphor in a similar fashion, with regard to human interactions and social change:

Step Change in venture performance comes about by designing actions for results while avoiding catastrophic consequences. Successful entrepreneurs are "risk commandos:" astute, quick, and agile. They do their homework, take measured, contained risks, and accept help in finding their way through these minefields. http://www.cha4mot.com/c_sc_ht.html *(Retrieved from the world wide web: 20 December 1999)*

By using this broader field, I hope to be able to communicate the ways in which education has the potential to act as a damping factor to achieve "critical damping" so that rather than impeding diversity in the technical workplace "to keep it from being blown apart", just the right amount of resistance is applied to reassure the whole system without creating the unresponsive or sluggish system we encounter today.

Appendix D

Apprenticeship Trends
Economic.Services, BC & Yukon Region, Employment& Immigration Canada
BC Gov. Stats

Apprenticeship Trades in British Columbia by Gender

	1984		1985		1986		1987		1988		1989		1990		1991 August		1998		1999	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Carpenter	1262	16	974	16	875	24	1024	25	1148	20	1622	23	1902	20	1912	22	1677	31	627	15
Ind/Com Electrician			949	21	848	17	949	14	1154	18	1598	17	2073	20	2009	21	1880	46	682	19
Plumber	454	4	393	1	367	0	390	1	496	2	727	2	873	3	943	4	844	10	294	5
Steam/Pipefitter	205	1	148	1	116	1	129	0	166	1	206	1	249	2	245	4	82	0	41	2
Machinist	259	1	214	0	214	4	271	4	326	3	380	2	379	4	329	4	211	14	81	1
Sheet Metal Worker	331	3	267	2	241	0	225	1	250	1	358	3	449	3	432	2	229	2	157	2
Welder	56	0	66	0	53	1	59	3	92	2	99	1	120	0	1103	0	0	0	33	2
Boilermaker	129	3	121	3	110	3	92	3	113	2	107	2	114	1	105	4	73	6	29	0
Industrial Mechanic	476	2	353	1	283	0	311	0	400	1	565	4	673	4	635	4	51	1	19	0
Heavy Equip. Repair	579	2	463	3	459	3	462	1	460	0	546	0	581	0	512	0	375	1	118	0
Motor Vehicle Mech	1016	8	1012	9	1180	13	1336	16	1366	10	1446	11	1527	9	1502	7	1403	20	505	12
Vehicle Body Repair	308	3	263	4	282	5	308	1	299	0	315	2	307	2	290	1	406	0	163	2

The Federal Government withdrew from responsibility for providing in-school training for apprentices in the early 1990s, reducing the availability of quality statistics. Between 1991 and 1997, it was extremely difficult to access information disaggregated by sex through the Provincial Government information systems, regardless of requests I made as Chair of the Provincial Apprenticeship Board Equity Committee. It became even more difficult when the private sector Industrial Training and Apprenticeship Commission (ITAC) took over the system, even though they were responsible under a legislated mandate to increase the participation of under-represented groups. After 1999, ITAC included the additional category of unknown when requesting identification by sex, i.e. Male, Female, Unknown. It is now impossible to determine progress on equity integration in apprenticeship. The new Industrial Training Authority took over in 2004, which eliminated any legislated requirement to pursue equity in apprenticeship.

References

Abella, R. S. (1984a). *Equality in Employment - A Royal Commission Report* (Royal Commission Report No. MP43-157/1-1984E). Ottawa: Government of Canada.

— (1984b). *Report of the Commission on Equality in Employment*. Ottawa: Supply and Services Canada.

— (1987). *Employment equity : implications for industrial relations*. Kingston, Ont.: Industrial Relations Centre Queen's University.

Allied Hydro Building Trades Council, & Columbia Hydro Constructors. (1993, 1999). Collective Agreement between Columbia Hydro Constructors Ltd. and Allied Hydro Council for British Columbia. Victoria: Columbia Hydro Constructors.

Appelbaum, D. (1995). *The Stop*. Albany: State University of New York Press.

Apprenticeship Branch. (1997). *Equity Subcommittee Report* (Faxed). Burnaby, BC: Apprenticeship Branch of the Ministry of Skills Development and Labour.

Austin, J. L. (1962). *How to do things with words*. Cambridge: Harvard University Press.

Axworthy, L. (1980). *Keynote address to Women In Trades Conference by then Minister of Employment and Immigration Canada*. Paper presented at the National Conference of Women In Trades, Winnipeg.

Babbitt, S. E. (1993). In L. Alcoff & E. Potter (Eds.), *Feminist epistemologies* (pp. vii, 312). New York: Routledge.

Bakhtin, M. M. (1981). Discourse in the Novel. In J. M. Holquist (Ed.), *The dialogic imagination : four essays* (pp. 259-422). Austin: University of Texas Press.

Bakhtin, M. M., & Holquist, J. M. (1981). *The dialogic imagination : four essays*. Austin: University of Texas Press.

Bakhtin, M. M., Voloshinov, V. N., Medvedev, P. N., & Morris, P. (1994). *The Bakhtin reader : selected writings of Bakhtin, Medvedev, and Voloshinov*. London ; New York: E. Arnold.

Baron, A. (1991a). Gender and Labor History. In A. Baron (Ed.), *Work engendered : toward a new history of American labor* (pp. 1-46). Ithaca: Cornell University Press.

— (1991b). The "Other" Side of Gender Antagonism at Work: Men, Boys, and the Remasculinization of Printers' Work, 1830-1920. In A. Baron (Ed.), *Work engendered : toward a new history of American labor* (pp. 47-69). Ithaca: Cornell University Press.

— (1991c). *Work engendered : toward a new history of American labor*. Ithaca: Cornell University Press.

Barrett, M., & Phillips, A. (1992). *Destabilizing theory : contemporary feminist debates*. Cambridge, UK: Polity Press.

Beck, R. (2000). *Employment Equity and the Columbia Basin Hydro Projects* (Worker notice). Nelson: West Kootenay Women's Association & Columbia Power Corporation.

Belenky, M. F., Clinchy, B. M., Goldberger, N. R., & Tarule, J. M. (1986). *Women's ways of knowing : the development of self, voice, and mind.* New York: Basic Books.

Bem, S. L. (1993). *The lenses of gender : transforming the debate on sexual inequality.* New Haven: Yale University Press.

—   (1998). In a Male-Centered World, Female Differences Are Transformed into Female Disadvantages. In P. S. Rothenberg (Ed.), *Race, class, and gender in the United States : an integrated study* (4th ed., pp. xvii, 604). New York: St. Martin's Press.

Bernard, E. (1989). Women Changing Technology Changing Women. In M. Braundy (Ed.), *Surviving and Thriving - Women In Trades and Technology and Employment Equity* (pp. 225-232). Winlaw: Kootenay WITT.

Bland, J. (1998). *About Gender.* Retrieved 21 May, 2004, from http://www.gender.org.uk/about/index.htm#begin http://www.gender.org.uk/about/00_defin.htm

Bochner, A. P., & Ellis, C. (2002). *Ethnographically speaking : autoethnography, literature, and aesthetics.* Walnut Creek, CA: AltaMira Press.

Bohnen, E., Booth, S., & Klie, J. (1991). *Bridges to Equity - Program Manual and Trainer's Guide - Women into Trades, Technology and Operations Work.* Toronto: City of Toronto.

Bohnen, E., & Klie, J. (1991). *Retention: Support Strategies for Women in Trades, Technology and Operations Work.* Toronto: City of Toronto.

Booth, S. (1981). Mechanical Reasoning and Women. *Unpublished but widely circulated rationale for WITT programs in Ontario.*

Booth, S., & Murch, K. (1981). *Women In Trades and Technology.* Toronto: Ontario Ministry of Skills Development.

Bordo, S. (1990). Feminism, Postmodernism, and Gender-Scepticism. In L. J. Nicholson (Ed.), *Feminism / Postmodernism* (pp. 133 - 156). New York and London: Routledge.

Braid, K. (1979). *Invisible Women: women in non-traditional occupations in B.C.* Unpublished Thesis M A Communication - Simon Fraser University, s.n., Burnaby, B.C.

—   (1981). Woman in a Man's Territory: The Sexuality of the Non-Traditional Workplace. *Canadian Women's Studies / les cahiers de la femme, 3*(2), 65-71.

—   (1991a). *Covering rough ground.* Vancouver, B.C.: Polestar Book Publishers.

—   (1991b). Foreigners to the Culture: Women in Trades and Technologies. *Women's Education des Femmes, 9*(2), 52-55.

—   (2003). The Culture of Construction: or, Etiquette for the Non-Traditional. In M. G. Cohen (Ed.), *Training the excluded for work : access and equity for women, immigrants, first nations, youth, and people with low income* (pp. xii, 276). Vancouver: UBC Press.

Braundy, M. (1973-2003). The Vallican Whole Slide Show [Recorded by v. builders] [Slide Show with audio tape]. Winlaw, British Columbia: Rural Alternatives Research and Training Society.

—   (1983). What Happens to Women In Tradesland? [Slide/Tape & Video formats]. Winlaw, BC: Kootenay WITT.

—   (1986). *Discussion Paper on Trades and Technology Exploratory Course for Women*. Victoria: British Columbia Ministry of Education - Post-Secondary Branch.

—   (1989a). Surviving and Thriving : women in trades & technology and employment equity. In K. W. i. T. Technology (Ed.), (pp. 265). [Winlaw, B.C.]: Kootenay Women in Trades & Technology.

—   (1992). Out of the Stream and Into the River: Exploratory Courses in Trades and Technology for Women. *Canadian Vocational Association Occasional Paper Series*.

—   (1993). Building Foundations for Technical Training: WITT Standards and Guidelines. *Women's Education des femmes, 10*(No. 3/4).

—   (1994). What Needs to Change to Get More Women Into Apprenticeship? No More Lip Service! In J. Scane, Staton, P., & Schneider, M. (Ed.), *Strategies that Work - Women in Trades, Technology and Applied Science*. Toronto: Green Dragon Press.

—   (1996). Memo to: Stuart Clark, ED Apprenticeship Revitalization. In a. w. c. Stuart Clark (Ed.). Burnaby.

—   (1997a). *Discussion Paper on Employment Equity, Women's Needs and the implications for the Columbia Basin Trust* (Discussion Paper). Castlegar, British Columbia: Columbia Basin Trust.

—   (1997b). *Orientation to trades and technology : a curriculum guide and resource book with special emphasis on the needs of women* (Rev. for the Province of British Columbia Ministry of Education, Skills and Training and the Centre for Curriculum, Transfer and Technology with support and assistance from the WITT National Network ed.). [Victoria, B.C.]: The Ministry.

—   (1999). Marcia Braundy, First woman to work in the construction sector of the B.C. Carpenter's Union. In J. Finlayson (Ed.), *Trailblazers : women talk about changing Canada* (pp. 200-207). Toronto: Doubleday Canada.

—   (2000). Diversity in Technology Education. *The Journal of Industrial Teacher Education, 37*(3).

—   (2001). *Employment Equity and the Columbia Basin Power Projects*. Paper presented at the WITT National Network: Remembering Our Past, Living Our Present, Celebrating Our Future, Banff, Alberta.

—   (2002). *Men & Women and Tools*. Vancouver: UBC Brave New Playwrights Festival.

—   (2004). What Have They Done to Dewey? Technological Literacy: Past, Present and Future. *Journal of Industrial Teacher Education, submitted*, 30.

Braundy, M. (1989b). (Ed) *Surviving and Thriving : women in trades & technology and employment equity*. [Winlaw, B.C.]: Kootenay Women in Trades & Technology,.

Braundy, M., Mackenzie, S., & Ward, V. (1983). *The Workplace in Transition - Integrating Women Effectively*. Winlaw, British Columbia: Kootenay Women In Trades and Technology.

Braundy, M., Petrina, S., O'Riley, P., Dalley, S., & Paxton, A. (2000). Missing XX Chromosomes or Gender In/Equity in Design and Technology Education? The Case of British Columbia. *Journal of Industrial Teacher Education, 37*(Number 3).

Brazil - ACCC. (2002). *Gender Equality Tools*. Retrieved 21 May, 2004, from http://brazil.accc.ca/english/gender/definition.htm

Britzman, D. P. (1998). *Lost subjects, contested objects : toward a psychoanalytic inquiry of learning*. Albany: State University of New York Press.

Brod, H. (1987). *The Making of masculinities : the new men's studies*. Boston: Allen & Unwin.

Brooks, C. (1986). *Instructors' Handbook for Working with Female Relational Learners in Technology and Trades Training*. Toronto: Ontario Ministry of Skills Development.

Browning, G., & Webb, J. A. (1989). Let's go to the shop [Video]. Winlaw: Kootenay WITT.

Bryson, M. (1998). New technologies and the cultural ecology of primary schooling imagining teachers as Luddites in/deed. *Educational Policy, 12*(5), 542-567.

Bryson, M., & de Castell, S. (1995a). A Chip on Her Shoulder? : New Technologies, Gender, and In/Equity. *Women's Education des Femmes, 11*(3), 15-23.

— (1995b). So We've Got a Chip on Our Shoulder! Sexing the Texts of "Educational Technology". In J. S. Gaskell & J. Willinsky (Eds.), *Gender in/forms curriculum : from enrichment to transformation* (pp. xiv, 298). Ontario: OISE Press; New York: Teachers College Press.

— (1996). Learning to make a Difference: Gender, New Technologies, and In/Equity. *Mind, Culture and Activity, 3*(2), 119-135.

— (1999, April). *Learning to Make a Difference: Girls, Tools and Schools*. Paper presented at the American Educational Research Association.

Bryson, M., Petrina, S., Braundy, M., & de Castel, S. (2003). "Conditions for Success"?: Gender in Technology-Intensive Courses in British Columbia Secondary Schools. *Canadian Journal of Science, Mathematics, and Technology Education.*

Butler, J. (1990a). Performative Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory. In S.-E. Case (Ed.), *Performing feminisms : feminist critical theory and theatre* (pp. 327). Baltimore: Johns Hopkins University Press.

— (1990b). *Gender trouble : feminism and the subversion of identity*. New York: Routledge.

— (1993). Critically Queer. *Gay and Lesbian Quaterly, 1*, 17-32.

— (1998). From: BODIES THAT MATTER:ON THE DISCURSIVE LIMITS OF 'SEX'. In L. Goodman & J. w/ de Gay (Eds.), *The Routledge Reader in Gender and Performance* (pp. 282-287). London & New York: Routledge.

Camus, A. (1972). *The Plague* (S. Gilbert, Trans.). New York: Random House.

An Act Respecting Employment Equity. (1995). Ottawa: Government of Canada.

Canada Employment and Immigration Commission. (1988). *Employment Equity Act, annual report to Parliament. Loi sur l'équité en matière d'emploi, rapport annuel ... présenté au Parlement* (Vol. 1988-). [Ottawa]: Employment and Immigration Canada = Emploi et immigration Canada.

Capra, F. (1996). *The Web of Life - A New Scientific Understanding of Living Systems*. New York: Anchor Books, Doubleday.

Carrigan, T., Connell, B., & Lee, J. (1987). Toward a New Sociology of Masculinity. In H. Brod (Ed.), *The Making of masculinities : the new men's studies* (pp. xvi, 346). Boston: Allen & Unwin.

Cauley, C. D. (1981a). *Time for a Change - A Woman's Guide to Non-Traditional Occupations*. Cambridge, Massachusetts: Technical Education Research Centre.

Chandler, D. (1995). *Semiotics for Beginners*. Retrieved 21 December, 2003

Charles, N. (1996). Feminist Practices : identity, difference, power. In N. Charles & F. Hughes-Freeland (Eds.), *Practising feminism : identity, difference, power* (pp. 1-37). Houndsmill, Basingstoke ; New York: Macmillan ; Routledge.

Charles, N., & Hughes-Freeland, F. (1996). *Practising feminism : identity, difference, power*. Houndsmill, Basingstoke; New York: Macmillan; Routledge.

Chilly Collective. (1995). *Breaking anonymity : the chilly climate for women faculty*. [Waterloo, Ont.]: Wilfrid Laurier University Press.

Chodorow, N. (1978). *The reproduction of mothering : psychoanalysis and the sociology of gender*. Berkeley: University of California Press.

CLFDB. (1989-1994). *Equity in Apprenticeship Task Force and Committee Reports & Minutes*. Ottawa: Canadian Labour Force Development Board.

—   (1991). *Report on the 1992 Budget for the Developmental Uses of Unemployment Insurance* (Publication). Ottawa: Canadian Labour Market and Productivity Centre.

—   (1994). *Equity In Apprenticeship Discussion Paper*. Ottawa: Canadian Labour Force Development Board Apprenticeship Committee.

CLFDB, (Margaret Scopick).-. (1992). *Impact of CJS Budget Cuts on Designated Groups* (Memorandum and Report to Regional Equity Contacts of the Canadian Labour Force Development Board). Ottawa: CLFDB/HRDC.

CLMPC. (1993). *Tapping Our Potential - Technician and Technologists of Tomorrow*. Ottawa: Canadian Labour Market & Productivity Centre.

CLMPC, & EIC. (1990). *Report of the CLMPC task forces on the labour force development strategy*. Ottawa: Canadian Labour Market and Productivity Centre & Employment and Immigration Canada.

Cockburn, C. (1983). *Brothers : male dominance and technological change*. London: Pluto Press.

—   (1985a). *Machinery of dominance : women, men and technical know-how*. London: Pluto Press.

— (1985b). *Machinery of dominance : women, men, and technical know-how* (Northeastern University Press ed.). Boston: Northeastern University Press.

— (1988). *Machinery of dominance : women, men, and technical know-how* (Northeastern University Press ed.). Boston: Northeastern University Press.

— (1991). *In the way of women : men's resistance to sex equality in organizations* (Vol. 18). Houndmills, Basingstoke, [Eng.]: Macmillan.

— (1992). Technology, Production and Power. In G. Kirkup & L. S. Keller (Eds.), *Inventing Women - Science, Technology and Gender* (pp. 196-211). Cambridge: Polity Press.

Cockburn, C., & Ormrod, S. (1993). *Gender and technology in the making.* London: Sage.

Cohen, M. G., & Braid, K. (2000a). Training and Equity Initiatives on the British Columbia Island Highway Project: A Model for Large-Scale Construction Projects. *Labour Studies Journal, 25*(3), 70-103.

Connell, R. W. (1987). *Gender and power : society, the person, and sexual politics.* Stanford, Calif.: Stanford University Press.

— (1995). *Masculinities.* Berkeley and Los Angeles: California University Press.

— (1997). Disruptions: Improper Masculinities and Schooling. In M. S. Kimmel & M. A. Messner (Eds.), *Men's lives* (4th ed., pp. 141-154). Boston, Mass: Allyn and Bacon.

— (2002). *Gender.* Malden, Massachusetts: Blackwell Publishers Ltd.

Cooper, P. (1991). The Faces of Gender: Sex Segregation and Work Relations at Philco, 1928-1938. In A. Baron (Ed.), *Work engendered : toward a new history of American labor* (pp. viii, 385). Ithaca: Cornell University Press.

Cox, R. (2003, 23 March 2003). *Canadian Human Rights Act Review.* Retrieved March 11, 2004, from http://canada.justice.gc.ca/chra/en/action1.html

Creese, G. (1999). *Contracting Masculinity: Gender, Class, and Race in a White-Collar Union, 1944-1994.* Don Mills, Ontario: Oxford University Press.

Davidson, J. F. (2001). "Now That We Have Girls in the Office" *Clerical Work, Masculinitiy and the Refashioning of Gender for a Bureaucratic Age.* In R. Horowitz (Ed.), *Boys and Their Toys? Masculinity, Technology, and Class in America* (pp. 55-90). New York: Routledge.

Davidson, P., & Black, R. (2001). Women in Natural Resource Management: Finding a More Balanced Perspective. *Society and Natural Resources, 14,* 645-656`

de Castell, S., & Bryson, M. (1997). *Radical in(ter)ventions : identity, politics, and difference/s in educational praxis.* Albany: State University of New York Press.

— (1998). Re-Tooling Play: Dystopia, Dysphoria and Difference. In H. Jenkins (Ed.), *From Barbie to Mortal Kombat: Girls and Computer Games.* Cambridge, Massachusetts: MIT Press.

de Castel, S., Bryson, M., & Jenson, J. (2002). Object Lessons: Towards an *Educational* Theory of Technology. *First Monday,* 7(1).

Denzin, N. K. (1997). *Interpretive ethnography : ethnographic practices for the 21st century*. Thousand Oaks, Calif.: Sage Publications.

—   (2001). *Interpretive interactionism* (2nd ed.). Thousand Oaks, Calif.: Sage Publications.

—   (2003). *Performance ethnography : critical pedagogy and the politics of culture*. Thousand Oaks, CA: Sage.

Denzin, N. K., & Lincoln, Y. S. (2000). *Handbook of qualitative research* (2nd ed.). Thousand Oaks, Calif.: Sage Publications.

Dewey, J. (1900). *The Child and the Curriculum and The School and Society*. Chicago: Phoenix Books - University of Chicago Press.

—   (1915a). Education vs. Trade-Training - Dr. Dewey's Reply. *The New Republic, 3*(28), 42.

—   (1915b). Schools of To-Morrow. In J. A. Boydston (Ed.), *John Dewey the Middle Works, 1899-1924* (Vol. 8: 1915, pp. 546). Carbondale & Edwardsville: Southern Illinois University Press.

—   (1917). Learning to Earn: The Place of a vocational education in a comprehensive scheme of public education. In J. A. Boydston (Ed.), *John Dewey the Middle Works, 1899-1924* (Vol. 10). Carbondale & Edwardsville: Southern Illinois University Press.

Dewey, J., & Dewey, E. (1915). *The Schools of To-Morrow*. New York: E.P Dutton & company.

Dinnerstein, D. (1976). *The mermaid and the minotaur : sexual arrangements and human malaise* (1st ed.). New York: Harper & Row.

Donmoyer, R., & Yennie-Donmoyer, J. (1995). Data as drama: Reflections on the use of readers theatre as a mode of qualitative data display. *Qualitative Inquiry, 1*(4), 402-428.

Downs, L. L. (1995). *Manufacturing inequality : gender division in the French and British metalworking industries, 1914-1939*. Ithaca: Cornell University Press.

Du Bois, W. E. B. (1926). Krigwa Players Little Negro Theatre: The Story of a Little Theatre Movement. *Crisis*(July), 134-136.

Edley, N., & Wetherell, M. (1995). *Men in perspective : practice, power, and identity*. London: Harvester Wheatsheaf.

Edwards, B. (1999). *Inside the Whale : Deep Insider research*. Paper presented at the AARE Conference, Melbourne.

EIC, S. M.-. (1993). Chapter 18: Operational Guidelines for the Designated Group Policy, *EIC Employment Manual* (pp. 19). Hull, Quebec: Employment and Immigration Canada.

Ellis, C. (2000a). *Conference Presentation at the Learning Love Conference, UBC.*, University of British Columbia.

—   (2000b, 3 May 2000). *Qualitative/Quantitative Heuristic - Writing Ethnography*. Paper presented at the Faculty of Nursing - Summer Institute, University of British Columbia.

—   (2000c). *Writing Autoethnography*. Paper presented at the Faculty of Nursing Spring Institute, UBC.

Ellis, C., & Berger, L. (2002). Their Story/ My Story/ Our Story: Including the Researcher's Experience in Interview Research. In J. Gubrium & J. Holstein (Eds.), *The Handbook of Interview Research : Context & Method* (pp. 849-875). Thousand Oaks, Calif.: Sage.

Ellis, C., & Bochner, A. P. (1996). *Composing ethnography : alternative forms of qualitative writing.* Walnut Creek, Calif.: AltaMira Press.

—   (2000a). Autoethnography, Personal Narrative, Reflexivity -Researcher as Subject. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. xx, 1065 , [1057]). Thousand Oaks, Calif.: Sage Publications.

— (2000b). Autoethnography, Personal Narrative, Reflexivity: Researcher as Subject. In N. L. Denzin, Yvonna (eds.) (Ed.), *Handbook of Qualitative Research* (Second Edition ed., pp. 733-768). Thousand Oaks, Calif: Sage.

Ellsworth, E. (2004). CCFI Graduate Coffee Conversations with Visiting Scholars. In M. Braundy (Ed.). Vancouver.

Eysenck, M. W. (2003). *Key Topics in A2 Psychology.* London: Psychology Press.

Fausto-Sterling, A. (1993). The Five Sexes: Why Male and Female are not Enough. *The Sciences, 33*(2), 20-24.

—   (2000). THE FIVE SEXES, REVISITED. *Sciences, Vol. 40*(Issue 4), 18-24.

Feldman, S. (2001). Exploring Theories of Patriarchy: A Perspective From Contemporary Bangladesh. *Signs: Journal of Women in Culture & Society, 26*(4), 1097-1127.

Felluga, D. (2003, 28 November 2003). *Terms Used by Theorists of Gender & Sex.* Retrieved 21 May, 2004, from http://www.sla.purdue.edu/academic/engl/theory/genderandsex/terms/termsm ainframe.html

Felman, S., & Laub, D. (1992). *Testimony - Crises of Witnessing in Literature, Psychoanalysis, and History.* New York and London: Routledge.

Fels, L. (1995). Performative Inquiry - bodymind dancing on the edge of chaos towards an interstanding of teaching and learning science in the intermediate-level classroom (pp. 8). Vancouver: Unpublished dissertation proposal.

—   (1998). in the wind clothes dance on a line— performative inquiry - a (re)search methodology. *Journal of Curriculum Theorizing*(Spring 1998), 27-36.

—   (1999). *in the wind clothes dance on a line - performative inquiry - a (re)search methodology - possibilities and absences with a space-moment of imagining a universe.* Unpublished PhD, University of British Columbia, Vancouver.

Ferguson, T., & Sharples, M. (1994). *Blue collar women : trailblazing women take on men-only jobs.* Liberty Corner, N.J.: New Horizon Press.

Ferree, M. M., Lorber, J., & Hess, B. B. (1999). *Revisioning gender.* Thousand Oaks, Calif.: Sage.

Fields, B., & Gordon, D. (1992, January, 1992). *Women's Access to Apprenticeship: A Nuts and Bolts Workshop*. Paper presented at the Surviving and Thriving II, Ottawa, Ontario.

Freidman, R. A. (1999). Needed: Skilled tradespeople. *Sun-Sentinel*(December 11, 1999).

Freire, P. (1970). *Pedagogy of the Oppressed* (M. B. Ramos, Trans.). New York: The Seabury Press.

—   (1997). *Pedagogy of Hope - Reliving Pedoagogy of the Opressed*. New York: Continuum.

Garoian, C. R. (1999). *Performing Pedagogy - Toward an Art of Politics*. Albany: State University of New York Press.

Gergen, M. M., & Gergen, K. J. (2002). Ethnographic Representation as Relationship. In A. P. Bochner & C. Ellis (Eds.), *Autoethnographically Speaking - Autoethnography, Literature, and Aesthetics* (Vol. 9, pp. 11-33). Walnut Creek, CA: AltaMira Press.

Glick, P., & Friske, S. T. (1999). Gender, Power Dynamics, and Social Interaction. In M. M. Ferree, J. Lorber & B. B. Hess (Eds.), *Revisioning gender* (pp. xxxvi, 500). Thousand Oaks, Calif.: Sage.

Goffman, E. (1959). *The Presentation of Self in Everyday Life*. New York: Anchor Books, Doubleday.

—   (1979). *Gender advertisements*. Cambridge, Mass.: Harvard University Press.

Goldberg, S. R. (1992). *Women in Construction - A Report on Access, Training and Retention in the Construction Trades* (Provincial Study). Vancouver: The Amalgamated Construction Association of B.C.

Goodman, L. (1998). Introduction. In L. Goodman & J. w/ de Gay (Eds.), *The Routledge Reader in Gender and Performance* (pp. 332). London & New York: Routledge.

Gordon, D., & Fields, B. (1992, January, 1992). *Women's Access to Apprenticeship: A Nuts and Bolts Workshop*. Paper presented at the Surviving and Thriving II, Ottawa, Ontario.

Gordon, S. (1989). *Operation Access: A Pre-Apprenticeship Bridging Program for Women Part 3 Recommendations: A Model* (Vol. 3). Toronto: Advocates for Community Based Training and Education for Women ACTEW.

Gray, R. E. (2000). Graduate School Never Prepared Me for This: reflections on the challenges of research-based theatre. *Reflective Practice, I*(3), 376-390.

Gray, R. E., Ivonoffski, V., & Sinding, C. (2002). Making a Mess and Spreading it Around: Articulation of an Approach to Research-Based Theatre. In A. P. Bochner & C. Ellis (Eds.), *Autoethnographically Speaking - Autoethnography, Literature, and Aesthetics* (Vol. 9, pp. 57-75). Walnut Creek, CA: AltaMira Press.

Gray, R. E., Shinding, C., Ivonoffski, V., Fitch, M., Hampson, A., & Greenberg, M. (2000). The use of research-based theatre in a project related to metastatic breast cancer. *Health Expectations, 3*, 137-144.

Gray, S. (1987). Sharing the Shop Floor. In G. Nemiroff (Ed.), *Women and men : interdisciplinary readings on gender* (pp. xvii, 556). [Toronto, Ont.]: Fitzhenry and Whiteside.

Grzetic, B. (1998). *Women and Technical Work in Atlantic Canada* (Research-based Policy Study). St. John's, Newfoundland: WITT Newfoundland and Labrador.

Grzetic, B., Shrimpton, M., & Skipton, S. (1996). Women, Employment Equity and the Hibernia Construction Project - a study of women's experiences on the Hibernia Construction Project, Mosquito Cove, Newfoundland (pp. 88). St. John's, Newfoundland: WITT Newfoundland and Labrador.

Hacker, S. (1989). *Pleasure, power, and technology : some tales of gender, engineering, and the cooperative workplace.* Boston: Unwin Hyman.

Hacker, S., Smith, D. E., & Turner, S. M. (1990). *"Doing it the hard way" : investigations of gender and technology.* Boston: Unwin Hyman.

Halberstam, J. (1998). *Female masculinity.* Durham, NC: Duke University Press.

Haraway, D. (1992). The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others. In L. Grossberg, C. Nelson & P. A. Treichler (Eds.), *Cultural Studies* (pp. 285-337). New York: Routledge.

Hart, L., & Phelan, P. (1993a). *Acting out : feminist performances.* Ann Arbor: University of Michigan Press.

—   (1993b). *Acting out : feminist performances.* Ann Arbor: University of Michigan Press.

Hart, S., & Shrimpton, M. (2003). Women's Training and Equity on the Hibernia Construction Project. In M. G. Cohen (Ed.), *Training the excluded for work : access and equity for women, immigrants, first nations, youth, and people with low income* (pp. 75-90). Vancouver: UBC Press.

Haw, S., & Hoevenaars, C. (1989). Community-based training: West End Machining. In M. Braundy (Ed.), *Surviving and thriving : women in trades & technology and employment equity* (pp. 265). [Winlaw, B.C.]: Kootenay Women in Trades & Technology.

Hawkins, L. (1996). *Tapping the Community: Expanding Career Options for Young Women - GETT Camp and Role Modeling Manual.* Winlaw, British Columbia: Kootenay WITT.

Hawkins, L., Mackenzie, S., & Shirley, M. (1999). *The Opportunity to Succeed: Effecting Girls' Attitudes toward Trades & Technological Occupations.* Winlaw: Kootenay WITT.

Hearn, J. (1994). Research in Men and Masculinities: Some Sociological Issues and Possibilties. *The Austrailian & New Zealand Journal of Sociology, 30*(1), 47-70.

Hearn, J., Pringle, K., Müller, U., Olesky, E., Lattu, E., Tallberg, T., et al. (2002). Critical Studies on Men in Ten European Countries (3) The State of Law and Policy. *Men & Masculinities, 5*(2), 192-218.

Hennessy, R., & Ingraham, C. (1997). *Materialist feminism : a reader in class, difference, and women's lives.* New York: Routledge.

Hinojosa, R., & Sberna, M. (2002). *African American Male Suicide and Labor Market Participation*. Paper presented at the Southern Sociological Society, University of Illinois, Chicago.

Holt, C. L., & Ellis, J. B. (1998). Assessing the current validity of the Bem Sex-Role Inventory. *Sex Roles: A Journal of Research.*

Holzman, L., & Mendez, R. (2003). *Psychological Investigations: A Clinician's Guide to Social Therapy*. New York & London: Brunner-Routledge.

hooks, b. (2004). *The Will to Change: Men, Masculinity and Love*. New York: Atria Books.

Horowitz, R. (2001). *Boys and Their Toys? Masculinity, Technology, and Class in America*. New York: Routledge.

Householder, D. (1998). Mentors for Women in Technology. In B. L. Rider (Ed.), *Diversity in Technology Education*. New York: Glencoe/McGraw-Hill.

HRDC, Robertson, S., & Gardner, W. D. (1992b). *1993/94 Regional Framework Document* (No. 705-3 FIN93_94.FWD (bjl)). Vancouver: Employment and Immigration Canada.

Irwin, R. (2003). *Curating the Aesthetics of Curriculum/Leadership and/or Caring for How we Perceive Walking/Guiding the Course*. Retrieved 21 December 2003, 2003, from http://www.quasar.ualberta.ca/cpin/cpinfolder/papers/Rita_Irwin.pdf

ISNA. (2004). *The Intersex Society of North America*. Retrieved 27 May 2004, 2004, from http://www.isna.org/drupal/

ITAC. (1997, September 4, 1998). *Overview of Equity in Apprenticeship - Draft 2 - September 25, 1997*. Retrieved 19 February, 2003 from old bookmark, after website had been changed, 2003

Jackson, S. (1993). *Women's studies : essential readings*. New York: New York University Press.

Jenson, J., Castell, S. d., & Bryson, M. (In press). Girl Talk: Gender. Equity, and Identity Discourses in a School-based Computer Culture. *Women's Studies International Forum.*

Kaufman, M. (1987). *Beyond patriarchy : essays by men on pleasure, power and changes*. Toronto: Oxford University Press.

—   (1997). The Construction of Masculinity and the Triad of Men's Violence. In M. S. Kimmel & M. A. Messner (Eds.), *Men's lives* (4th ed., pp. 600). Boston, Mass: Allyn and Bacon.

Kemp, A. D. (1998). This Black Body in Question. In P. Phelan & J. Lane (Eds.), *The ends of performance* (pp. xi, 372). New York: New York University Press.

Kimmel, M. S. (1987). Changing men : new directions in research on men and masculinity. In M. S. Kimmel (Ed.), *Sage focus editions ; v. 88* (pp. 320). Newbury Park, Calif.: Sage Publications.

Kimmel, M. S., & Messner, M. A. (2001). *Men's lives* (5th ed.). Boston: Allyn and Bacon.

Kimura, D. (2002, 13 May 2003). *Sex Differences in the Brain - Men and women display patterns of behavioral and cognitive differences that reflect varying*

hormonal influences on brain development. Retrieved 27 May, 2004, from http://www.sciam.com/article.cfm?articleID=00018E9D-879D-1D06-8E49809EC588EEDF&pageNumber=1&catID=9

Kincheloe, J. L. (2001). Describing the Bricolage: Conceptualizing a New Rigor in Qualitative Research. *Qualtitative Inquiry, 7*(6), 679.

Kirkup, G., & Keller, L. S. (1992). *Inventing Women - Science, Technology and Gender.* Cambridge: Polity Press.

Koesterer, M. (14 December 2002). *Dr. Sandra Lipsitz Bem:An Unconventional Life.* Retrieved 27 May, 2004, from http://www.webster.edu/~woolflm/sandrabem2.htm

Koyama, E., & Weasel, L. (2001). *Beyond "Five Sexes": Addressing Intersex Issues within Women's Studies.* Retrieved 27 May, 2004, from http://eminism.org/index.html

Kreutz, E. (1992). In for a Change. A Curriculum Guide for Pre-Apprenticeship Training. In C. W. i. Trades (Ed.) (pp. 73). Springfield: Illinois State Board of Education, Dept. of Adult, Vocational and Technical Education.

Kutnick, P., Jules, V., & Layne, A. (1997). Gender and School Achievement in the Caribbean. Education Research Serial No. 21. London (England). Department for International Development,.

L. K. & Associates. (1992a). *A Survey of Women in Ontario Who Had Enroled in an Automotive Pre-Apprenticeship adn/or Apprenticeship Program.* Ottawa: Canadian Automotive Repair and Service Council (CARS).

Lather, P. (1986). Issues of Validity in Openly Ideological Research: Between a Rock and a Hard Place. *Interchange, 17*(4), 63-84.

—   (1991). *Getting smart : feminist research and pedagogy with/in the postmodern.* New York: Routledge.

—   (1993). Fertile obsession: Validity after poststructuralism. *Sociological Quarterly, 3*(4), 673-693.

—   (2001). Validity as an Incitement to Discourse: Qualitative Research and the Crisis of Legitimation. In V. Richardson & A. E. R. Association. (Eds.), *Handbook of research on teaching* (4th ed., pp. 241-258). Washington, D.C.: American Educational Research Association.

LeBreton, L. W., & Loevy, S. S. (1992). *Breaking New Ground: Worksite 2000* (Quantitative and Qualitative Research Study No. 99-1-3606-75-002-02 Employment and Training Administration). Chicago: Chicago Women In Trades & U.S. Department of Labor.

Legault, M.-J. (2001). *Report on the Integration of Women in Non-Traditional Sectors of Employment - Summary of Local Success and Failure Factors: Final Results of Case Studies* (Research Report). Montreal: Téléuniversité du Quebec (TELUQ).

 (2003a). *Workers' Resistance to Women in Traditionally Male Sectors of Employment and the Role of Unions* (Notes des recherche, 59 pp.). Montreal: Téléuniversité du Quebec (TELUQ).

Leggo, C. D. (1994). *Growing up perpendicular on the side of a hill*. St. John's, Nfld.: Killick.

Liedtke, J. A. (1998). Environmental and Climate Changes in Technology Education. In B. L. Rider (Ed.), *Diversity in Technology Education*. New York: Glencoe/McGraw-Hill.

Lincoln, Y. S., Pinar, W. F., & McLaren, P. (2001). Responses. *Qualtitative Inquiry, 7*(6), 679.

Lindsay, J. F., & Katz, S. (1978). *Dynamics of physical circuits and systems*. Champaign, Ill. Forest Grove, OR: Matrix Publishers ; exclusive distributor, ISBS, Inc.

Lloyd, P. (1992a). *Apprenticeship Revitalization Community Outreach Strategy Action Plans and Results - DRAFT* (DRAFT). Toronto: Ontario Ministry of Skills Development - Outreach Working Group.

Lorber, J. (1994). *Paradoxes of gender*. New Haven: Yale University Press.

— (1998). The Social Construction of Gender. In P. S. Rothenberg (Ed.), *Race, class, and gender in the United States : an integrated study* (4th ed., pp. 33-45). New York: St. Martin's Press.

Lourde, A. (1979). The Master's tools will never dismantle the Master's House. In *Sister Outsider* (Retrieved from the World Wide Web 24 August 2003 ed.). Freedom, CA: Crossing Press.

Lye, J. (2003, 13 September 2003). *Mikhail Mikhailovich Bakhtin on Language*. Retrieved 24 June, 2004, from http://www.brocku.ca/english/courses/4F70/bakhtin.html

Mac an Ghaill, M. (1996). *Understanding Masculinities*. Buckingham: Open University Press.

Maccoby, E. E., & Jacklin, C. N. (1974). *The psychology of sex differences*. Stanford, Calif.: Stanford University Press.

Macdonald, M., Dubel, I., & Sprenger, E. (1997). *Gender and organizational development: bridging the gap between policy and practice*. Retrieved 21 May, 2004, from http://www.eurostep.org/strategy/mainstreaming/definitions.htm

Madsen, K. (1999). *Yukon Women in Apprenticeship and Trades*. Whitehorse: Advanced Education Branch, Yukon Department of Education, The Yukon Women's Directorate, Government of Yukon.

Maloney, K. (2001). Artistic Inquiry into "(De)Segregation" - An Interview with Karen Maloney. *Harvard Graduate School of Education News*.

Manjali, F. (2001). *Dialogics, Or The Dynamics Of Intersubjectivity*. Retrieved 17 June, 2004, from Jawaharlal Nehru University. New Delhi, India http://www.revue-texto.net/Inedits/Manjali_Dialogics.html

Martin, M. (1988). *Hard-hatted women : stories of struggle and success in the trades*. Seattle: Seal Press.

Martin, P. Y., & Collinson, D. L. (1999). Gender and Sexuality in Organizations. In M. M. Ferree, J. Lorber & B. B. Hess (Eds.), *Revisioning gender* (pp. 284-310). Thousand Oaks, Calif.: Sage.

McArthur-Blair, J. C. (1986). *Tradeswomen at Work - a New Look at the Issues of Women Entering the Male Workplace* (Research paper). Vancouver: Vancouver Women in Trades Association.

—   (1995). *Gender and Diversity - Creating Inclusion in the College Environment* (Facilitator's Guide). Vancouver: Vancouver Community College, BC Ministry of Skills Development, Centre for Curriculum and Professional Development.

McCloughry, R. (1992). *Men and masculinity : from power to love.* London: Hodder & Stoughton.

McKenzie, J. (1998). Genre Trouble. In P. Phelan & J. Lane (Eds.), *The End(s) of Performance.* New York: New York University Press.

McKnight, H. (1994). *Pilot Project to Achieve Increased Equity in Apprenticeship.* Fredriction & Miramichi, New Brunswick: Advanced Education and Labour.

Messner, M. A. (1997). Boyhood, Organized Sports, and the Construction of Masculinities. In M. S. Kimmel & M. A. Messner (Eds.), *Men's lives* (4th ed., pp. 162-176). Boston, Mass: Allyn and Bacon.

Meyer, S. (2001). Work, Play and Power *Masculine Culture on the Automotive Shop Floor, 1930-1960.* In R. Horowitz (Ed.), *Boys and Their Toys? Masculinity, Technology, and Class in America* (pp. 13-32). New York: Routledge.

Mienczakowski, J. (1995). The theatre of ethnography: the reconstruction of ethnography into theatre with emanicpatory potential. *Qualitative Inquiry, 1*(3), 360-375.

—   (2001). Ethnodrama: Performed Research - Limitations and Potential. In P. Atkinson, A. Coffey, S. Delamont, J. Lofland & L. Lofland (Eds.), *Handbook of ethnography* (pp. 468-476). London: SAGE.

Ministry of Labour, & Ministry of Education. (1978). *Women's Exploratory Apprenticeship Training Course Outline* (First Edition ed.). Victoria: Ministry of Labour Apprenticeship Training Programs Branch.

Minty, M. (1992a). *Blinkers - A Workship to explore the value of diversity in trades training* (Vol. Department of Education, Industrial Training Division). St. John's.

—   (1992b). *Blueprint for Skills Development: Planning for Diversity in Apprenticeship* (Policy Paper). St. John's: Newfoundland & Labrador Department of Education Industrial Training Division.

Morgan, D. H. J. (1987). *'It will make a man of you' : notes on national service, masculinity and autobiography.* Manchester: Sociology Department University of Manchester c1987.

Muir, D. (1989). *"Strategy for Saskatchewan Apprenticeship Program Equity Plan" - Synthesized Action Plan* (widely circulated internal working paper). Regina: Apprenticeship Branch.

Murch, K. (1991). The Chilly Climate for women in colleges and universities. On *[Sedgewick Library videorecordings].* London, Ont.; Richmond, B.C.: University of Western Ontario; Image Media [distribuitor].

National Advisory Board on Science and Technology. (1993). *Winning With Women in Trades, Technology, Science and Engineering* (Presented to Prime Minister of Canada). Ottawa: National Advisory Board on Science and Technology.

National Coalition of Women and Girls. (1995). *Evaluating Perkins Equity Programs.*

National Women's Law Center. (2002). *TITLE IX and Equal Opportunity In Vocational and Technical Education: A Promise Still Owed To The Nation's Young Women.* Retrieved 7 February, 2004, from http://www.nwlc.org/pdf/TitleIXCareerEducationReport.pdf

Neelands, J. (1996). Agendas of Change, Renewal and Difference. In J. O'Toole & K. Doneian (Eds.), *Drama, Culture and Empowerment: : The IDEA Dialogues* (pp. 20-29). Brisbane: IDEA Publications.

Newman, F., & Holzman, L. (1993). *Lev Vygotsky : revolutionary scientist.* London ; New York: Routledge.

Noble, D. F. (1992). *A world without women : the Christian clerical culture of Western science* (1st ed.). New York: Knopf.

North Lake College. (1995). *Women in Skilled Trades - Final Detailed Report.* Irving, TX,: Texas Higher Education Coordinating Board.

Ochberg, R. L. (1987). The Male Career Code and the Ideology of Role. In H. Brod (Ed.), *The Making of masculinities : the new men's studies* (pp. 173-191). Boston: Allen & Unwin.

O'Neill , M., Breatnach, P., Bagley, C., Bourne, D., & Judge, T. (2002). Renewed methodologies for social research: ethno-mimesis as performative praxis. *The Sociological Review, 50*(1), 69-88.

O'Riley, P. A. (2003). *Technology, culture, and socioeconomics : a rhizoanalysis of educational discourses.* New York: P. Lang.

PAB. (1992-1997). *Equity In Apprenticeship Task Force and Equity Sub-Committee Reports.* Vancouver: British Columbia Provincial Apprenticeship Board.

— (1994). *Equity Motions of the Provincial Apprenticeship Board - 1994* (Recommendations to the Ministry). Burnaby: British Columbia Provincial Apprenticeship Board.

Parr, J. (1990). *The gender of breadwinners : women, men, and change in two industrial towns, 1880-1950.* Toronto: University of Toronto Press.

Paulston, R. (1997). Mapping Visual Culture In Comparative Education Discourse. *Compare: A Journal of Comparative Education, 27*(2), 117-153.

Petrina, S. (1998). Men At Work: Inspecting the Foundations of Technology Education. *Journal of Industrial Teacher Education, 36*(1), 99-121.

— (1999). TSED Integrated Program - Equity Resources. University of British Columbia: Curriculum Studies. (Forthcoming). *Curriculum and Instruction for Technology Teachers.* Ann Arbour: Prakken.

Petrina, S., & Braundy, M. (1998-2004). TSED Integrated Program - Equity Resources. University of British Columbia: Curriculum Studies.

Phelan, P. (1993). *Unmarked : the politics of performance.* London ; New York: Routledge.

(1998). Introduction. In J. Lane (Ed.), *The End(s) of Performance*. New York: New York University Press.

— Phelan, P., & Lane, J. (1998). *The ends of performance*. New York: New York University Press.

Pinar, W. (1992). *Autobiography, Politics, and Sexuality : Essays in Curriculum Theory 1972-1992* (Vol. 2): Peter Lang Publishing.

— (2001). *The gender of racial politics and violence in America : lynching, prison rape, & the crisis of masculinity*. New York: P. Lang.

Pleck, J. H. (1981). *The myth of masculinity*. Cambridge, Mass.: MIT Press.

— (1987). The Theory of Male Sex-Role Identity: Its Rise and Fall, 1036 to the Present. In H. Brod (Ed.), *The Making of masculinities : the new men's studies* (pp. 21-38). Boston: Allen & Unwin.

Puwar, N. (2002). Interview with Carole Pateman: The Sexual Contract, women in politics, globalization and citizenship. *Feminist Review, 70*(1), 123-133.

Rexe, D., Braundy, M., Sarenac, I., Morrison, D., & Aliyargadeh, G. (1996). *Equity Access to Apprenticeship*. Burnaby, BC: Apprenticeship Branch/ITAC.

Riddle, D. I. (1994). *Assessment of the Implementation of The Designated Groups Policy - Phase II Report* (Evaluation). Ottawa: HRDC - Human Resources Development Canada.

Robb, J. L. (1998). Diversity in Technology Education. In B. L. Rider (Ed.), *Diversity in Technology Education*. New York: Glencoe/McGraw-Hill.

Robertson, S. (1992a). Women's Employment Advisory Committee (WEAC) Meeting Minutes - 22 November 1991. In G. Rassmussan (Ed.) (pp. 5). Vancouver: Employment and Immigration Canada.

Ross, E. (1989). Bridging programs for industry. In M. Braundy (Ed.), *Surviving and Thriving - Women in Trades & Technology and Employment Equity* (pp. 199-208). [Winlaw, B.C.]: Kootenay Women in Trades & Technology.

Rothenberg, P. S. (1998). *Race, class, and gender in the United States : an integrated study* (4th ed.). New York: St. Martin's Press.

Rubin, G. (1975). The Traffic of Women: Notes on the Political Economy of Sex. In R. R. Reiter (Ed.), *Toward an Anthropology of Women*. New York: Monthly Review Press.

Rübsamen-Waigmann, H., Sohlberg, R., Rees, T., Berry, O., Bismuth, P., 'Antona, R. D., et al. (2003). *Women in Industrial Research (WIR) - A wake up call for European Industry* (Research). Brussels: EUROPEAN COMMISSION RESEARCH DIRECTORATE-GENERAL.

Saldana, J. (1998). Ethical Issues in an ethnographic performance text: The 'Dramatic Impact' of 'Juicy Stuff'. *Research in Drama Education, 3*(2), 181-197.

— (2003). Dramatizing Data: A Primer. *Qualitative Inquiry, 9*(2), 218-236.

Sanders, J. S. (1986). *The nuts and bolts of NTO : how to help women enter nontraditional occupations* (2nd ed.). Metuchen, NJ: Scarecrow Press.

Sarup, M. (1992). *Jacques Lacan*. Hertfordshire: Harvester Wheatsheaf.

Scane, J., Staton, P., & Schneider, M. (1994). *Strategies that Work - Women in Trades, Technology and Applied Science.* Toronto: Green Dragon Press.

Schechner, R. (1998). What is Performance Studies Anyway? In P. Phelan & J. Lane (Eds.), *The End(s) of Performance* (pp. 357-362). New York: New York University Press.

Schom-Moffat, P., & Braundy, M. (1989). What happened to the WITT grads? In M. Braundy (Ed.), *Surviving and Thriving : Women in Trades & Technology and Employment Equity* (pp. 265). [Winlaw, B.C.]: Kootenay Women in Trades & Technology.

— (1989a). *National Survey of Women in Trades and Technology Courses* (Quantitative and Qualitative Research Study). Ottawa: Employment and Immigration Canada (now Human Resources Development Canada.

Scott, J. W. (1988). *Gender and the politics of history.* New York: Columbia University Press.

Segal, L. (1997). *Slow motion : changing masculinities, changing men* ([Updated and revised] ed.). London: Virago.

Simon, R. I., & Eppert, C. (1997). Remembering Obligation: Pedagogy and the Witnessing of Testimony of Historical Trauma., *v22 n2*(Spr 1997), p. 175-191.

Skeggs, B. (2001). Feminist Ethnography. In P. Atkinson, A. Coffey, S. Delamont, J. Lofland & L. Lofland (Eds.), *Handbook of ethnography* (pp. 436-442). London: SAGE.

Smith, A. D. (1993). *Fires in the mirror : Crown Heights, Brooklyn, and other identities* (1st Anchor Books ed.). New York: Anchor Books/Doubleday.

— (1994). *Twilight--Los Angeles, 1992 on the road : a search for American character* (1st ed.). New York: Anchor Books.

— (2000). *Talk to me : listening between the lines* (1st ed.). New York: Random House.

Smith, D. E. (1987). *The everyday world as problematic : a feminist sociology.* Toronto: University of Toronto Press.

— (1999). *Writing the social: critique, theory, and investigations.* Toronto: University of Toronto Press.

Snedden, D. (1915). Vocational Education. *The New Republic, 3*(28), 41-42.

Society for the Advancement of Community, H., Education and Training - SACHET,. (2004). *Gender.* Retrieved 21 May, 2004, from http://sachet.org.pk/home/gender/definition.asp http://sachet.org.pk/home/gender/g_for_gender.asp#17

Sparkes, A. C. (2002). Autoethnography: Self_Indugence or Something More? In A. P. Bochner & C. Ellis (Eds.), *Autoethnographically Speaking-Autoethnography, Literature, and Aesthetics* (Vol. 9, pp. 209-231). Walnut Creek, CA: AltaMira Press.

STATS, B. C. (2002). *LABOUR FORCE STATISTICS - APRIL 2002.* Retrieved 4 February 2004, 2004

Status of Women Canada. (1995). *Settng the Stage for the Next Century: The Federal Plan for Gender Equality.* Ottawa: Status of Women Canada.

—   (1996). *Gender Based Analysis - A guide for policy-making*. Ottawa: Canada.

Stead, J.-A. (1988). *Tomorrow's Builders: An Employment Equity Guide For the Construction Industry* (Resource to Industry). Ottawa: Canadian Construction Association.

Steinhause, S. (1995). Recruitment and Retention of Aboriginal Employees Participants Manual (pp. 67, with 57 pages of Appendices). Ottawa: HRDC - Human Resources Development Canada.

Strine, M. T., Long, B. W., & Hopkins, M. F. (1990). Research in Interpretation and Performance Studies: Trends, Issues, Priorities. In G. M. Phillips & J. T. Wood (Eds.), *Speech communication : essays to commemorate the 75th anniversary of The Speech Communication Association*.

Supreme Court of Canada. (1987). Canadian National Railway Co. v. Canada (Human Rights Comm.) and Action travail des femmes: Canadian Human Rights Reporter.

Suzik, J. R. (2001). "Building Better Men" *The CCC Boys and the Changing Social Ideal of Manliness*. In R. Horowitz (Ed.), *Boys and Their Toys? Masculinity, Technology, and Class in America* (pp. 111-138). New York: Routledge.

Taillon, P. M. (2001). "To Make men out of Crude Material" *Work Culture, Manhood and Unionism in the Railroad Running Trades, c. 1870-1900*. In R. Horowitz (Ed.), *Boys and Their Toys? Masculinity, Technology, and Class in America* (pp. 33-54). New York: Routledge.

Tannen, D. (1990). *You just don't understand : women and men in conversation* (1st ed.). New York: Morrow.

Tavris, C., & Offir, C. (1977). *The longest war : sex differences in perspective*. New York: Harcourt Brace Jovanovich.

Taylor, D. (1998). Border Watching. In J. Lane (Ed.), *The End(s) of Performance* (pp. 178-184). New York: New York University Press.

Thomas, G. (1993). *B.C. Officials Equity in Apprenticeship Study Tour*. Victoria: British Columbia Ministry of Advanced Education/Provincial Apprenticehsip Board.

Tillmann-Healy, L. M., & Kiesinger, C. E. (2001). Mirrors: seeing each other and ourselves through fieldwork. In K. R. Gilbert (Ed.), *The emotional nature of qualitative research* (pp. 201 p.). Boca Raton, Fla.: CRC Press.

Tolson, A. (1977). *The limits of masculinity*. London: Tavistock.

Unger, R. K. (1998). *Resisting Gender*. Thousand Oaks, Ca.: SAGE.

Vallian, V. (1998). *Why so slow? : the advancement of women*. Cambridge, Mass.: MIT Press.

Various. (2002, 21 February 2002). *Brain Difference and Sex*. Retrieved 27 May, 2004, from http://research.umbc.edu/~korenman/wmst/braindiffs1.html

Vice, S. (1997). *Introducing Bakhtin*. Manchester, UK: Manchester University Press; New York, N.Y.: Distributed exclusively in the USA by St. Martins Press.

Volk, K., & Holsey, L. (1997). TAP - A Gender Equity Program in High Technology. *The Technology Teacher, 56*(4).

Wajcman, J. (1991). *Feminism Confronts Technology*. University Park, Pa.: Pennsylvania State University Press.

Walby, S. (1990). *Theorizing patriarchy*. Oxford: Basil Blackwell.

Walshok, M. L. (1981). *Blue-collar women : pioneers on the male frontier* (1st -- ed.). Garden City, N.Y.: Anchor Press.

Waring, M. (1988). *If women counted : a new feminist economics*. San Francisco: Harper & Row.

—   (1999). *Counting for nothing : what men value and what women are worth* (2nd ed.). Toronto: University of Toronto Press.

WEEA. (mulitple). WEEA Online. Newton, Massachusetts: WEEA. http://www2.edc.org/WomensEquity/

Weedon, K. (1998). "Revisiting Occupational Sex Segregation in the United States, 1910-1990: Results from a Log-Linear Approach." *Demography, 35*(4), 475-487.

Welch, L. (1992). *Apprenticeship Trends / BC Economic Services Branch, BC / YT Region*. Vancouver: Employment and Immigration Canada.

Wellmeier, I. (1993). Transitions Research by the Women's Reference Group. *Women's Education des femmes, 10*(no. 3/4), 36-39.

—   (1994). *Women Making Transitions*. Ottawa: Canadian Labour Force Development Board.

Whitton, C. (1963). Whatever women do they must do twice as well as men to be thought half as good. Luckily, this is not difficult. *Canada Monthly*.

Willis, P. E. (1981). *Learning to labor : how working class kids get working class jobs* (Morningside ed.). New York: Columbia University Press.

Wiltshire, R., & McGregor, E. (1995). *Gender in Science & Technology for Sustainable and Equitable Development - A Working Guide to Issues, Networks & Initiatives*. Ottawa: IDRC - International Development Research Centre

WIR. (2003, 2003). *Women in industrial research - Good Practices in companies across Europe*. Retrieved 9 January 2004, 2004, from http://www.eubuero.de/arbeitsbereiche/fraueneuforschung/wir/Download/dat /fil 463

WITT National Network. (1999). *Construction Technology for Women (Secondary Schools)*. London, Ontario.

WRDC. (2004). *Orientation to Trades & Technology, Techsploration*. Retrieved 7 June, 2004, from http://www.wrdc.nf.ca/programs overview.htm

Zuga, K. (1998). A Historical View of Women's Roles in Technology Education. In B. L. Rider (Ed.), *Diversity in Technology Education*. New York: Glencoe/McGraw-Hill.