Athabasca University

The Hegemonies and Antagonisms of Sexual Harassment and Sexual Discrimination Discourse in a Professional Engineering Association

by
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Approval of Dissertation

The undersigned certify that they have read the dissertation entitled

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The dissertation examination committee certifies that the dissertation (and the oral examination) is approved.

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Epigraph

A Limerick

There once was a man named Michel
Who said all institutions are hell
Organizations are prisons
He said with derision
And I, for all time, must rebel

response…

Michel, you must cease and desist
Why so anti-positivist?
Your undoable rules
Eliminate schools?
Where would we put the poststructuralists?

Janet Porter, 2009

Acknowledgements

To my supervisors and committee members, and my colleagues at Humber, Athabasca and Saint Mary's, who never failed to be genuinely curious about how it was going

To my family, and to Rosalie

To my teachers

Dedication

To the women and men of the engineering profession, past, present, future.

Abstract

Around the world, females typically represent fifteen per cent or less of registered professional engineers. They also leave the profession at significantly higher rates than their male counterparts. Incidences of sexual harassment and sexual discrimination continue to be reported in interviews with female graduate engineers. Despite many years of study and initiatives to get more females into engineering, girls and women continue to avoid this profession.

Research into the workplace experiences of female engineers tends to neglect organizational and institutional contexts. In particular, there is a lack of attention paid to the ways in which engineering associations, as regulatory bodies in the profession, support their female members.

To that end, Laclau and Mouffe's discourse theory and concept of hegemony were used to open new empirical terrain by providing an account of the sexual harassment and sexual discrimination discourse of the Ontario professional engineering association. It was found that the discourse of sexual harassment and sexual discrimination is hegemonized by the discourses of regulation and the practice of engineering. Critical gender equality issues that academic research has reported for female practitioners inside engineering workplaces, such as sexual harassment and

sexual discrimination, are considered outside of the practices of regulation and engineering. Gender work within the association is confined to supporting the female members of the profession and is performed by the female members of the association. This contributes to the maintenance of the status quo, the illusion of gender neutrality, and the privileging of one gender over another in this local setting of the profession. It is recommended that engineering associations examine the effects of hegemonized spaces created by their practices of regulation and professional engineering discourse, particularly in the area of the workplace conditions of its members. It is also recommended that the scope and range of gender equity change actions practiced by engineering associations go beyond mainly providing modes of support for females in the profession.

Key words: Discourse theory; hegemony; sexual harassment; self-regulation; engineering; professional discourses

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Chapter One Introduction

My initial motivation for embarking on this work is connected to my workplace experience as a registered professional engineer in the province of Ontario, Canada. While working in several construction engineering organizations for over a decade as a professional engineer, I found that, despite having education credentials, feminist leanings, previous work experience, and personal and professional mentoring and support, being a female engineer in the organizations that I chose was often problematic. I experienced work environments and work situations that were blatantly sexist and chivalrously supportive. After twelve years I left full-time engineering work to begin a second career in academia. It was not until I began my doctoral work in organizational analysis that, out of curiosity, I began to read academic studies on female graduate engineers in the work place. I discovered that my story was neither anomalous nor unusual. On the contrary, difficult and inequitable workplace experiences of female graduate engineers are reported by academic researchers world-wide, including Bangladesh and Thailand (Hossain & Kusakabe, 2005), Malaysia (Ismail, 2003), Norway (Kvande, 1999), India (Patel & Parmentier, 2005), Sweden (Singh & Vinnicombe, 2000), Australia (Bastalich, Franzway, Gill, Mills, & Sharp, 2007; Faulkner, 2000), the U.K. (Singh & Vinnicombe, 2000),

Canada (Miller, 2002, 2004; Ranson, 2003, 2005), and the U.S. (Auster & Ekstein, 2005; Hacker, 1981; Robinson & McIlwee, 1989, 1991). Females in the profession generally experience relatively slower career progression, less job satisfaction, and more stress than their male counterparts (Auster & Ekstein, 2005; Ismail, 2003; Ranson, 2003, 2005; Ronen & Ronen, 2008; Singh & Vinnicombe, 2000). Site-specific engineering workplace studies have revealed gendered organizational processes (Evetts, 1994; Miller, 2002) maintained through overt and covert individual and group discourses and social closure (Evetts, 1993; Faulkner, 2000; Fletcher, 1999; Gray, Kurihara, Hommen, & Feldman, 2007; Miller, 2002, 2004), managerialist policies and procedures (Robinson & McIlwee, 1989, 1991) and identity management and discursive positionings (Jorgenson, 2002; Kvande, 1999). More serious gender-related organizational issues such as overt sexism (Eden, 1992), sexual harassment (Evetts, 1998; Professional Engineers of Ontario, 1998; Roberts & Ayre, 2002; Robinson & McIlwee, 1991), and higher rates of workplace bullying for females than males (Women in Engineering Advisory Committee, 2010b) are also reported. Disadvantages for working female graduate engineers range widely in their manifestations and persist after decades of study and interventions.

As will be more fully discussed in the next chapter, the majority of the academic studies conducted in this area focuses on female engineers as the subjects of investigations and much of the empirical data has been gathered by interviewing those at the bottom of the professional work categories of organizations that perform engineering work. This has produced a rich, valuable and important reporting of individual female (and some male) engineer experience in lower employment category ranks. However, if the disadvantages experienced by women at work derive from a combination of mutually reinforcing processes (Acker, 1992; Hearn, 2000; Martin, 2003; Mills, 1988), then the reporting of female engineers' standpoints, identities, and subject positions is an important, albeit one, piece of the puzzle. In order to pull "organization out of the shadows, exposing a major figure minimized by the focus on individual identity" (Ashcroft, 2004, p. 281), one inroad is the study of practices of engineering professional associations in dealing with workplace inequalities as reported by their female members. These associations have reach into and influence on engineering workplaces through the licensing and regulating of engineering activities of member engineers and member organizations, and through the legal requirement to hear and address complaints about

the professional conduct of licensed engineers and engineering organizations.

Consequently, the purpose of this research is to provide an account of the sexual harassment and sexual discrimination discourse of the professional engineering association of Ontario, Canada and to analyze the implication of that discourse. I use Laclau and Mouffe's discourse theory and concept of hegemony to identify the hegemonies and antagonisms of the articulations of sexual harassment and sexual discrimination within the association. In this way, the dominant and competing discourses are plotted and struggles for meaning are highlighted. This approach helps to reveal the discursive mechanisms by which meanings are created and maintained, thereby establishing the practices of the professional engineering association in Ontario with respect to workplace harassment and discrimination. I then evaluate whether these practices serve to maintain or to change some of these disadvantages. I then argue and demonstrate that although the professional association has improved its meanings of professional conduct, and supports its female members through activities of mentoring and career development, its practice of leaving workplace inequality issues for its female members to be dealt with by employers and legislation serves to maintain some of the reasons why

females continue to avoid this profession. The final chapter contains the limitations and contributions of this research.

Chapter Two Literature Review

Reading the literature of the paid work experience of female engineers triggered my curiosity about what engineering associations had done for its female members. However, arriving at a more formal version of this question included a journey through several iterations of literature searches. I will use the steps in this journey to structure this chapter; refinement of the specific research question arose from sequential exploration and critique of available literature.

A great deal of research on the topic of female or women engineers focuses on elementary, secondary, and post-secondary school mathematics and sciences pedagogy and curriculum, in support of the strategy of increasing representation through the attainment of relevant educational qualifications. These results were excluded. In addition, there is also a large body of workplace studies available where the researchers (see Rhoton (2011) or Devine (1992), for example) aggregate female engineers as research subjects with other females under the umbrella of science, technology, engineering and mathematics (STEM). I chose to omit the STEM-based journal articles in order to isolate the research of workplace experiences of females who have graduated and had worked or were working as engineers. I also did not include reports of research conducted

with engineering students as subjects (Eisenhart & Finkel, 1998; Friedman, 1977; Powell, Bagilhole, & Dainty, 2006, 2009; Tonso, 2007) and/or engineering faculty (Chesler & Chesler, 2002). These restrictions are of value, at least initially; by separating female working engineers' work experiences from those of females who study or work in other scientific professional settings, the female graduate engineer is not obscured among other female scientists, and it allows access to empirical descriptions specifically of engineering work place environments, cultures, and organizing processes. This restriction will also assist in determining which texts, contexts and discourses may be suitable for using discourse theory methodology to study the research question. Before I start with an overview of findings, I would also like to note that, in keeping with poststructuralist feminism, I understand gender as a discursively constructed process. As I recount the findings of other researchers, I have left original language in place with respect to researchers' conceptualizations of gender. Hence the reader will perceive multiple understandings of gender throughout the findings by the cited researchers, as demonstrated by the mixed use of the terms 'gender', 'female', and 'woman'.

Findings

As one might expect, the body of empirical academic research of the paid work experience of female graduate engineers in the male-dominated engineering profession ranges widely in organizational theoretical approach (managerialist to poststructuralist), applied social science discipline (sociology, psychology, and anthropology, for example), feminist theory, and focus (e.g. macro-level employment practices, micro-level discourse practices). The findings, which have been collected by many research teams over a time period of more than 30 years from many different work sites in North America, Western Europe, South-East Asia, and Australia, cover a wide range of research questions about female engineers and their participation in engineering workplaces.

Difficulties for females in engineering are reported world-wide: Bangladesh and Thailand (Hossain & Kusakabe, 2005), Malaysia (Ismail, 2003), Norway (Kvande, 1999), India (Patel & Parmentier, 2005), Sweden (Singh & Vinnicombe, 2000), Australia (Bastalich, et al., 2007; Faulkner, 2000), the U.K. (Evetts, 1993, 1994, 1998; Singh & Vinnicombe, 2000), Canada (Miller, 2002, 2004; Ranson, 2003, 2005), the U.S. (Auster & Ekstein, 2005; Bailyn, 1987; Hacker, 1981; Robinson & McIlwee, 1989, 1991; Shih, 2006); and Greece (Kyriakidou, 2012). Females in the profession, especially

those with children (Ranson, 2005; Watts, 2009) report relatively slower career progression, less job satisfaction, and more stress (Auster & Ekstein, 2005; Frehill, 2010; Ismail, 2003; Ranson, 2003, 2005; Ronen & Ronen, 2008; Singh & Vinnicombe, 2000). Incidences of sexual harassment (Eden, 1992; Evetts, 1998; Robinson & McIlwee, 1991) and sexual discrimination (Bastalich, et al., 2007; Frehill, 2010; Gray, et al., 2007; Hacker, 1981; Hossain & Kusakabe, 2005; Kyriakidou, 2012; Shih, 2006) continue to be reported in interviews with female graduate engineers.

Given this stark picture, many researchers explore how females cope psychologically in these male-dominated engineering work cultures. Using identity theory, Kvande (1999) found that Norwegian female engineers constructed four identities - two based on likeness (sameness) with the masculine culture, and two based on difference. The author noted that female engineers who challenge gendered processes tend to be upper-class, daughters of male engineering managers, and/or to possess some form of collective experience with other women in similar positions thus avoiding individualizing and internalizing their negative experiences (Kvande, 1999). Jorgenson (2002) used discursive position theory to determine that women engineers take up positions as self in several, sometimes contradictory, ways: career identified, organizationally adept,

nonfeminist, good mother, singular individual, and feminist. That women were just as good as male engineers (sameness) and alternatives to what constituted a good engineer (difference) were two identities of female engineers reflected in a study by Bastalich et al (2007).

Researchers have also tried to gain greater understanding of how some male behaviour (masculinities) specifically influence engineering organizational cultures. In 1991, Robinson and McIlwee found members of the male-dominated engineering environment that they studied valued behaviours and orientations consistent with the male gender and devalued behaviours and orientations consistent with the female gender. Examples of male culture include emphasis of aggressive displays of technical competence. "Men are not better engineers, but they are better at *appearing* to be better engineers in a *male-defined* way" (Robinson & McIlwee, 1991, p. 417). Specific gendered discourses of the engineering profession were discussed by Faulkner (2000) in a theoretical paper based on secondary empirical research. These discourses included symbolic representation, symbolic gendering of knowledge, gender differences in how engineering is executed, and subjective experiences and identity of engineers. A study of the engineering culture in an oil industry Canadian multi-national (Miller, 2002) revealed that male hegemony is established

and maintained by Acker's (1992) themes of frontierism, entrepreneurialism, division of labour by gender, gender closure in daily interactions, and women's responses which reproduce the culture. Miller's 2004 study documented the struggle of women engineers to dismantle the industry's gendered organizing processes that are maintained through several male discourses such as paternalism or condescending chivalry.

The `linguistic turn' (Phillips & Hardy, 2002) in academic research is evident in the number of papers that address the topic of meanings of career-related words in the discursive formations of the engineering profession and whether those meanings differ between genders. Singh and Vinnicombe (2000) compared gender differences in meaning for the term "level of commitment", which, according to the authors, is often used as an indicator of suitability for management promotion. The U.K./Sweden comparative study of engineering managers and senior technologists identified gender differences in the mix of behavioural components of their construct of the term commitment. Top female managers shared more of the male meanings than female managers at mid-level and senior technologist positions. The authors suggest that gender differences are likely to impact the assessment of women's commitment by male managers, and provide recommendations for individual behaviour change

in how women express commitment. Similar studies have documented gendered differences in meanings of disparate career-related terms in the discursive formations of the engineering profession such as career progression (Ismail, 2003), job security and autonomy (Ranson, 2003), job satisfaction (Auster & Ekstein, 2005), and job burnout (Ronen & Ronen, 2008).

The studies discussed above focus on one central research question, namely what do females experience in male-dominated engineering workplaces? It is common in these studies to treat gender as an isolated variable. Moreover, many of the researchers aggregate the female engineer respondents into a demographically homogeneous group with respect to race, class or ethnicity factors. Only a few of the studies contain the voices of minority female engineers – see Shih (2006) for example, who describes her female respondents in terms of race or Kvande (1999) who discusses female engineers in terms of class differences. Much of the data on the research topic has been collected from female graduate engineer respondents who are employed in the lower rungs of the hierarchies of the engineering workplace sites.

Martin (2006) argues that the extensive feminist research material that has been generated about how gender is accomplished through

interaction must be supplemented by work that describes and studies the shape, fluidity, and dynamism of gender in collective contexts such as groups and organizations. As well, it is becoming less methodologically acceptable to omit race, ethnicity and class or other social divisions (Hearn, 2004), given the interactions and intersections that are created and re-produced from inter- and intra- gender, class, racial and ethnic organizing processes (Acker, 2006). Lastly, within the imposed boundaries of this collected body of knowledge, there is a lack of information about the contexts within which the engineering profession must operate, including the implications of self-regulation and exposure to public scrutiny. For the most part in these studies, organization is taken for granted.

There is a smaller body of studies in which researchers have approached the topic by studying engineering organizational cultures *in situ*. In the early days of this type of research approach, Hacker (1981, 1989, 1990) began to document what the engineering workplace was like for female graduate engineers in American military and telecommunications sectors using ethnographic methods. One observation, that the future for female engineers would not be friendly, was prescient; since then, researchers have found engineering workplaces to be homosocial (Gray, et al., 2007), to be governed by a narrow set of norms

that is intolerant of diversity (Bastalich, et al., 2007), and to exhibit formal and informal gendered processes, maintained through overt and covert individual and group discourses, social closure, and managerialist policies and procedures (Evetts, 1993; Faulkner, 2000; Fletcher, 1999; Gray, et al., 2007; Miller, 2002, 2004; Robinson & McIlwee, 1989, 1991).

Poststructuralism, feminist standpoint theory, relational practice (psychology), structured observation methodology, and discursive practice analysis were used in Fletcher's (1999) job shadow study of six female engineers in a California high-tech company. In this study, power was explicitly framed in the poststructuralist tradition - formulated as present in systems of shared meaning by organizational members, including the "unobtrusive exercise of power whereby the marginalized internalize, accept and give voice to dominant thinking" (p. 17). Fletcher found that the women engineers and their practices of relational work (calling on, for example, skills of empathy, collaborative behaviour, and actions supportive of teamwork) had been "disappeared", that is, the types of relational work required to make work move smoothly through an organization is either not noticed, is ignored, and/or is not valued. Gray, Kurihara, Hommen, & Feldman (2007) studied how daily micro-level work practices such as chats, friendly gestures, and invitations to participate in sports events serve to

exclude female electrical engineers from social networks in the U.K. information technology industry, theorizing that benefits resulting from these social networks are unequally distributed, thus creating and maintaining labour market inequalities. The reproduction of engineering culture in the Alberta oil industry through hegemonic expression of masculine identities was researched by Miller (2002, 2004), as previously mentioned. Miller found that barriers to women in this workplace are largely symbolic, embedded, and aligned with stereotypically masculine values. In the engineering environment studied by Miller, gendering of the workplace is maintained through several male discourses, evidenced through many incidences of everyday interactions of gender closure, particularly of paternalism or condescending chivalry. It is also found that gendered processes are reproduced by both males and females (Evetts, 1994; Miller, 2002).

The presence of informal social barriers is accompanied by evidence of a number of formal organizational and structural barriers. Numerical representation appears to be a necessary but insufficient condition for attaining parity in the profession (Patel & Parmentier, 2005; Ranson, 2003); and divisions of work by gender are still present (Miller, 2004). Robinson & McIlwee (1989, 1991) argue that "organizational and occupational power

relations constitute the framework in which experiences of women engineers are best understood" (p. 456), concluding that occupational prospects of female engineers are more affected by sets of power relations and opportunities in each organizational structure, such how engineering employment categories are established and administered, than by individual worker characteristics. Similarly, Evetts (1993, 1998) asserts that ideological power of engineering organizations lies within gendered social closure techniques used to restrict women from entering engineering management paths, such as the low representation of women in managerial positions being legitimated and disseminated by organizational members "in terms of gender neutral rules such as those relating to formal qualifications, length of service, work experience, commitment to the organization and aspirations for career" (Evetts, 1993, p. 22). Kvande and Rasmussen (1995) observe that women's prospects in engineering organizations improve as the level of hierarchy in the organizations decline. This finding was expanded by Evetts (1994) who argued that the career actions of women, in accordance with their own personal ambitions, both modify and reproduce gendered processes within the organization.

These studies provide us with the voices of many female engineers, contained within rich, concentrated, and undeniable descriptions of the

difficulties that they face in the profession world-wide. From these studies, I now know that engineering workplaces are sites of numerous, fluid, contradictory and gendered identity construction. Barriers to gender equity exist and are practiced formally and informally every day. From data that has been collected over many years, from many work sites around the world, there is long-term failure to create positive and sustained changes in gender equity in engineering workplaces. There is substantial reason to continue investigating and monitoring the many difficulties that female engineers face in engineering workplaces. There are many interesting opportunities to increase the range and diversity of research on this topic. Firstly, researchers can consider expanding beyond the central research question suggested by the literature, namely, what do females experience in male-dominated engineering workplaces that serves to reproduce or mitigate inequities at work? Secondly, since much of the data has been collected from individual respondents, there is opportunity to focus on interactive effects as collectivities of people make sense of gendered relations. Lastly, within the imposed boundaries of this collected body of knowledge, there is a lack of information about the contexts within which engineering workplaces must operate, including the implications of a profession that is privileged with self-regulation and subject to public

scrutiny. There is little light shed on the influence of self-regulation in forming monitoring professional conduct with respect to discriminatory behaviours, such as sexual harassment and sexual discrimination.

The bases of evidence created by researchers of this topic provide grounds for further empirical research into different but related issues within engineering workplaces. I leave this plump set of valuable opportunities to future research programs. My initial curiosity related to asking if, and if so, in what ways the profession of engineering, as represented by engineering associations, has supported its female members in light of reported workplace related gender inequities. The role of a professional association is to represent its members, to advocate for them, and to ensure professional conduct of member individual and organization association members. Self-regulated engineering associations have reach into and influence on engineering workplaces through the certifying of engineering labour, and through the legal requirement to hear and address complaints about the professional conduct and competence of engineering practitioners (individuals and organizations). At this point, based on my search, there is little focus on organization and even less information about practices or remedies initiated by professional engineering associations. In order to see whether research has been done

by professional engineering associations, I went beyond the boundaries of scholarly journal articles.

In doing so, I noted that the work of associations does not appear in the academic literature *and vice versa*. Moreover, I found that people who are in organizations associated with engineering work have long been concerned about skewed social demographics and workplace environments in national or local settings of the engineering profession. Roberts and Ayres (2002) reported on the results of an Engineers Australia survey commissioned to investigate the issues surrounding women's retention, satisfaction and progression in the professional engineering work force. Engineers Australia is the national forum for the advancement of engineering and the professional development of more than 90,000 members (Engineers Australia, 2012). Within atmospheres of general female and family unfriendliness, twenty seven per cent of the women surveyed reported having been sexually harassed, compared to 4% of the male respondents. The authors identify specifically workplace focused recommendations, with onus placed on corporate and managerial levels of engineering, suggesting that many engineering workplaces are at risk of being found out of compliance with Australia's human rights legislation. A second association example is from Engineers Canada, the national

organization of the 12 provincial and territorial associations that regulate the profession of engineering in Canada and license the country's more than 160,000 professional engineers (Engineers Canada, 2009). The organization, in collaboration with several provincial engineering organizations, has thrice commissioned surveys of the working conditions of its member engineers. Following the first study in 1989, in 1994, the membership was surveyed on topics such as perception of equal access to promotions, the importance of key success factors such as networking and mentoring, and the presence of employment equity policies regarding harassment, employment equity, and unpaid leave (Women in Engineering Advisory Committee, 1994). Sixteen years later the study was repeated, similar questions were used, and workplace bullying was added as a question (Women in Engineering Advisory Committee, 2010a, 2010b). The membership reported high rates of workplace bullying and discrimination (promotion and otherwise) in general, and higher rates for females than males. The authors concluded that modest improvements had been made in the profession's working conditions. In the last example, Fouad and Singh (2011) studied reasons underlying troubling retention rates of females in the U.S. engineering profession, be it not joining the profession after completing engineering school or leaving the profession after several

years. The authors reported high rates of respondent reports that engineering workplace climates were unfriendly to women, identifying workplace culture, including uncivil and undermining behaviours, as a major area of concern requiring attention. In conclusion, it does appear that the associations feel obligated to study the under-representation issue within its profession. However, the challenges with regards to method are the same; data is collected at the micro level, omitting various levels of organization and situational contexts. There is also a lack of conversation about what the associations do with the collected member information.

I then sought research on professional regulation within scholarly journals. Many articles focus on professional conduct as related to business ethics in a specific occupation. See Neale's (1996) account, for example, of how the Australian definitions of professional behaviour in accounting arise from a balance among groups affected by the profession's activities, and how this balance can shift over time. Adams notes in her studies of Canadian professional regulation (2007, 2009) that the engineering occupation is more highly regulated in Canada than in the U.S. or the U.K. and that self-regulation differs from province to province. This suggests the need to study local settings and that generalization of implications of self-regulation across countries, or even across Canadian

provinces, may be problematic. Slade (2008; 2003) and Girard and Bauder (2007) assert that the impact of the Professional Engineers Ontario's credentialing rules on immigrant engineers marginalizes these engineers culturally and professionally. In one of the few association-based articles that relate to how to study gender, Joan Brockman (2000) critiques her own member surveys and interviewing techniques of the Law Societies in Alberta and British Columbia. Brockman's data is a fascinating description of the range of difficulties that female lawyers face in their practices; an example of the difficulty of performing studies across bureaucracies of two professional law associations in two provinces; and the resistance to gender equity work in professional settings.

Summary

My knowledge of the academic research into the paid work experience of female engineers, and related strands, allows me to state that the body of knowledge is lacking in several areas: data is missing at the organizational level; studies do not broadly treat the context of engineering workplaces; and there is neglect in the area of the addressing of critical gender inequality issues by self-regulating professional engineering associations. It is clear, as Martin (2006) has noted, that the mere visibility of inequities does not guarantee their dismantling. Thus, the

purpose of this research is the quest to **provide an account of the sexual harassment and sexual discrimination discourse of one professional engineering association and to analyze the implications of that discourse**. The site of investigation is the professional engineering association of the province of Ontario, Canada.

In the next chapter, I will discuss why I consider Laclau and Mouffe's discourse theory to be a plausible and appropriate methodology for creating this account and review some of the dynamics and difficulties inherent in applying it. In addition, I will continue to provide details of the research question, and how I intend to apply the research methodology.

Chapter Three Research Foundations

In this chapter I will more fully elaborate the analytic framework that I chose for this study. Philosophical (ontological and epistemological) and methodological concepts taken together form the research perspective adopted herein (Harding, 1987a, 1987b). I will argue that within the intersection between poststructuralist feminism and discourse theory exists a plausible approach to providing an account and analysis of the implications of the sexual harassment and sexual discrimination discourse of one professional engineering association.

Philosophical Foundation

The feminist poststructuralist approach to critical discourse analysis that I am taking emanates from my ontological and epistemological reflections on the foundational concepts of truth, objectivity, rationality, language, subjectivity, relativity, reflexivity, and metanarrative, which will be described in this section.

My foundational belief is that although much of the external world is independent of what I know or think about it, one fixed and stable reality (one truth) is not apprehendable. Human experience influences the perception of the external world (De Waal, 2005); pragmatic enactment by humans constitutes social reality, and constructions of individual, group,

and organizations are continuously created and maintained by actors. Although these constructions can at times be relatively stable in fixed situations (Jorgensen & Phillips, 2002), they should not be treated by the researcher as universal but rather as non-static and continually emerging (Chia, 2000). Reality or experience viewed as constructed as well as reflected by subjects can thus be depicted or described by identifying patterns of language (discourses). These systems of discourses may have relatively fixed or stable meanings, but there is always capacity and possibility of multiple, changeable or alternative meanings. Analysis of discourses as constructed through language offers a window into understanding social process such as how institutions are organized and how group and organizational identities are established (Scott, 1994).

Epistemologically speaking, emergent forms of human rationality suggest that it is built from communal interactions of individuals rather than from the domination of superiority of language (Gergen & Thatchenkery, 1996; Messner, Clegg, & Kornberger, 2008; Parker, 1995). A second epistemological issue is the grand theory or the metanarrative, developed from a postmodernist critique of normative science's emphasis on observation, objectivity, and measurability (Gergen & Thatchenkery, 1996; Martin, 2000). When the production of knowledge directs attention

away from the centrality of traditional knowledge (Jacobson & Jacques, 1997) and includes neglected aspects, a position is taken against "powerful entrenched interests" (Kilduff & Mehra, 1997, p. 460). The poststructuralists problematize both the knowing subject and being able to know and interpret a verifiable reality (Hardy & Clegg, 1997; Jacobson & Jacques, 1997) and otherwise take a critical approach to taken-for-granted knowledge (Jorgensen & Phillips, 2002). Lastly, a poststructuralist approach includes a view of knowledge as historically and culturally specific and contingent on world views and identities which can change over time (Jorgensen & Phillips, 2002).

Taken together, application of these three philosophical features of poststructuralism will serve as grounding for the study. Firstly, knowledge about the professional association's ways of organizing will "create space in which to explore the way in which subject positions within bureaucratic discourse influence social/organizational practices" (Fletcher, 1992, p. 37). Secondly, emphasis on language will allow surfacing and exploration of the sources and structures of meanings (Clegg, 1989; Martin, 1982), situated and maintained in local context. Thirdly, deconstruction of collective subject positions will offer a way to uncover assumptions and contradiction in fixed or closed systems (Martin, 1982) and to "move them from the

unconscious into the conscious organizational psyche" (Fletcher, 1992, p. 36).

Methodological Foundation

Juxtaposition of academic research of the paid work experience of female engineers, social constructionist ontology and poststructuralist epistemology creates methodological opportunity for organizational researchers of gender equity related issues within discursive formations of professional engineering associations. The purpose of this chapter is to explore one such opportunity – the use of Laclau and Mouffe's version of discourse analysis to provide an account of sexual harassment and sexual discrimination discourse enacted by the professional engineering association in Ontario and an analysis of the implications of this discourse.

I will begin this section by laying out the theoretical framework chosen to underpin this methodological approach. Since the many versions of social constructionist ontological approaches to discourse analysis can be differentiated by the degree to which Foucauldian analysis is followed (Howarth, 2000; Jorgensen & Phillips, 2002; Kelan, 2008; Weedon, 1997), a brief treatment of Foucault's theories of discourse and power/knowledge is warranted. Foucault lays the groundwork for Laclau and Mouffe's post-Marxist poststructuralist conceptualization of discourse

theory, which will be used to construct the objects of investigation in in this study. I will then offer considerations for evaluation of the plausibility of the account and its analysis.

Foucauldian Discourse Analysis

Foucault's original theory of discourse first emanates during his archaeological phase (Howarth, 2000; Jorgensen & Phillips, 2002; Knights, 1992) as a set of reflections that has interest in excavating the historically and culturally contingent rules that determine which statements are accepted as meaningful and true in a particular social context. The archaeological research project aims to "investigate the rules for what can and cannot be said and the rules for what is considered to be true and false" (Jorgensen & Phillips, 2002, p. 13). In his subsequent genealogical phase, Foucault abandoned the ontological premise of viewing research objects as separate and remote from the researcher by incorporating the researcher as a subject situated in the research context. He also rejected the essentializing and totalizing Marxist concept of power as solely universally repressive, dominating or coercive by developing a view of power as dispersed across different social practices (Jorgensen & Phillips, 2002) and circulating through systems of thought (Hennessy, 1993). "This form of power applies itself to immediate everyday life which categorizes

the individual, marks him by his own individuality, attaches him to his own identity, imposes a law of truth on him which he must recognize and which others have to recognize in him. It is a form of power which makes individuals subjects" (Foucault, 1982, p. 780). Epistemologically speaking, this re-jigged the archaeological conceptualization of discourse as "autonomous systems of scientific statements" (Howarth, 2000, p. 67) to compound products of power and knowledge – power relations and truth effects that mutually create and are created by each other. According to Howarth (2000), the amended Foucauldian sense of the term discourse describes systems of discursive practice that literally constitute their objects of knowledge. In Foucauldian analysis, power is the determiner of truth (Hennessy, 1993), the constituter or driving force for competing meanings, the maintenance of established meanings, and the prevention of new alternative meanings from entering into conversation or being incorporated into discursive practices. Analysis of the mechanisms of truth production allows for critically viewing specific discursive practices as nested and embedded, producing and produced by other broader discursive practices. Taken together, Foucault's theories of discourse and power/knowledge offer an opportunity to observe social reality (Jacobson

& Jacques, 1997) that arises from the interaction of subjects, power and knowledge mediated through both what is said and what is unsaid.

By asking us to think about how we are trapped by our own history (Foucault, 1982), Foucault has authored an important approach (Merquior, 1985) to social inquiry. Critics of Foucault focus on a variety of fronts: the philosophical (Merquior, 1985), the theoretical (Howarth, 2000) and the methodological (Jäger, 2001; Jorgensen & Phillips, 2002; Phillips & Hardy, 2002). Although criticism of Foucault's work is valid to consider in a discourse analysis project, in this case it is rather more direct to introduce Laclau and Mouffe's conceptualization of discourse, which partially addresses critique of some of Foucault's conceptualizations (Howarth, 2000) and to discuss the limitations of their theoretical framework. Since this helps to explain the methodology in this study, I shall explore this next.

Laclau and Mouffe's Discourse Theory

Laclau and Mouffe construct their theory of discourse by combining and modifying aspects of Marxism (a theory of the social), structuralism (a theory of meaning), and Saussurian linguistics (Jorgensen & Phillips, 2002) along with adoption and adaptation of Foucauldian discursive concepts and Gramsci's conceptualization of hegemony. As discourses are formed through systems of language, I will begin to provide a broad outline of

Laclau and Mouffe's theory (hereby referred to as discourse theory - Jorgensen & Phillips, 2002) by starting with de Saussure's signification of language theory. Human thought is generally agreed to consist of 'signs' – images and/or sounds that are conjured up by the human brain when terms are expressed. The sign consists of what the sign is (the signifier) and what the sign means i.e. the content or what is signified (Jorgensen & Phillips, 2002). In de Saussure's linguistic modelling of language as a system, the meaning of a term is 'purely relational and determined only by its opposition' to other terms within a network (Laclau & Mouffe, 1985, p. 113). However, Laclau and Mouffe dismiss this notion, deeming it to be only possible within a closed system of an underlying pre-determined essence that is stably structured. While agreeing that signs are constructed from form and content, and that signs take their meanings from positions in relation to other signs, structuralist and poststructuralist linguists disagree as to whether significations can be completely determined and stable. Poststructuralists see signs and therefore the internal relations within networks of signs as fluid and changeable - not derived from an underlying stable and thus ultimately knowable structure. Structuralist linguistics and its subsequent critique allow the poststructuralist discourse analyst to view systems of language as having signs of relatively fixed or

stable meanings with capacity and possibility of multiple, changeable or alternative meanings (Jorgensen & Phillips, 2002).

Laclau and Mouffe differentiate among signs with respect to the degree of fixity of meaning of the sign in relation to other signs. To start, an 'element' is a sign that has multiple (*polysemic)* meanings. For example, the polysemic sign of 'the body' is an element in that there are multiple and competing ways of understanding its meaning, such as those contained in Western medical, alternative medical or religious discourses (Jorgensen & Phillips, 2002). When the potential for multiple meanings of an element is tied down to only one meaning, as determined by the presence and position of other signs and the relations among these signs, this element has been reduced to a *moment*. A *nodal point* is a moment that has *privilege*; it has particular influence in ordering relations among the gathered signs. As privileged signifiers, nodal points serve to stabilize terms, phrases, concepts and identities into systems of meaning (Solomon, 2009). A nodal point is a sign that appears as universally structured, thereby providing a taxonomising (Harding, 2005) or organizing process in the discourse. For example, in Western medicine, the sign 'the body' is a nodal point around which other meanings are organized – the terms 'scalpel', 'tissue', and 'symptoms' gain meaning when positioned in relation

to 'the body' (Jorgensen & Phillips, 2002). Whereas a nodal point is temporarily fixed, a *floating signifier* is a sign whose meaning is the site of struggle. 'The body' is a floating signifier when comparing its meaning in Western and alternative (non-Western) medicine (Jorgensen & Phillips, 2002).

In Laclau and Mouffe's discourse theory, an *articulation* is any practice that establishes a set of relations among elements, creating differential positions between elements, reducing the elements to moments where 'all identity is relational and all relations have necessary character' (Laclau & Mouffe, 1985, p. 106). The structured reality emanating from a set of articulatory practices is called a *discourse*. The infinite set of possibilities of meaning that naturally challenges moments and articulations is denoted as the *field of discursivity*. The meaning encompassed by a moment, an identity, an articulation or a discourse must have limits in order to be coherent, establishing frontiers between what is meant and what is not meant. These frontiers are dynamic sites of tension, the constant threat of nodal points by antagonistic differences of meaning, establishes the terrain of political struggles for meaning. There are reciprocating mechanics of suppressing differences (logic of equivalence) and emphasizing differences (logic of difference). "The logic of equivalence

functions by creating equivalential identities which result in the institution of a political front between two opposed camps" (Harding, 2005, p. 268). "The logic of difference dissolves existing chains of equivalence and incorporates the now disarticulated elements into an expanding order" (Harding, 2005, p. 268). All social identity is constructed through the tensions between these two logics (Solomon, 2009); mutually limiting and/or subverting the frontiers between dominant and alternate meanings.

Laclau and Mouffe's Concept of Hegemony

For this work, *hegemony* will be used to signify the space within which political relations are constructed (Laclau, 2000). What are Laclau and Mouffe's poststructuralist specifics of a hegemonic space? They first adapt the Gramscian concept of hegemony by stripping away its essentialist character (Harding, 2005). Nodal points are never truly fixed, all social formations ultimately emanate from discourse, and there is no central, underlying *a priori* essence. Laclau (2000) specifies four conditions for hegemony to exist in a discursive formation. The partial fixity of meaning of privileged moments in a dominant discourse creates instability at its frontiers and vulnerability to alternate meanings in competing subordinate discourses (Laclau & Mouffe, 1985). Therefore, hegemony requires the recognition of unevenness of power between discourses

producing tensions and antagonistic forces that will challenge dominant meanings at the frontiers. Second, there is hegemony only if a particularity is made to appear universal in its ability to prevent the hegemonized from becoming whole. Liberation from the particularity (e.g. terrorist groups) is made to appear to be liberation from the general (e.g. evil) (Solomon, 2009). Third, there is production of tendentially empty (biased and ambiguous) signifiers which enable universals to construct the division of a single political camp into two opposed fields. Particularities which do not cease being particularities assume a universal representation. In the case of the U.S. 'war on terror', freedom was an empty ambiguous signifier that had no positive content, but was represented by the negative. For example, "if the US defined itself against the lack of freedom; 'so long as nations harbor terrorists, freedom is at risk'" (G.W. Bush in Solomon, 2009, p. 278). Fourth, the universalized empty signifiers are taken as common sense, or the constitution of a social ordering. The universalized empty signifiers makes reality appears objective and natural (Jorgensen & Phillips, 2002). It is through hegemonic relations within discursive formations that alternative understandings of the world are suppressed, leading to antagonisms for the establishment of dominant meanings and the naturalisation of single perspectives. The American government's war on

terror "arguably achieved hegemonic dominance in the U.S. from late 2001 to at least early 2003" (Solomon, 2009, p. 275). Hegemonic relations establish control over meanings, antagonistic relations proposition resistance to meanings, thus producing discursive effects that enable dominant systems of thought. Laclau and Mouffe are interested in how sets of articulations (discourses) simultaneously limit and create possibilities for action, for example, how the use of wage-labour by firms is articulated through discursive practices that serve to ensure and/or problematize such use (Willmott, 2005). Similar examples can be seen in Brown and Humphreys (2006), da Costa & Silva Saraiva (2012), Harding (2005), Spicer and Böhm (2007), and Thomas and Davies (2002). By studying how meanings are maintained and/or successfully dissolved and re-constituted, researchers can help to identify attempts to fix or uncouple and change meanings (Clegg, 1989), to spot areas susceptible to specific pressures for change (Weedon, 1997), and to outline the social consequences of particular discursive constructions (Jorgensen & Phillips, 2002).

Some Considerations

Postmodern/poststructural approaches are often open to charges of excessive relativism or nihilism. A corollary criticism of organizational

research projects is that textual data is often overemphasised as the basis for analysis (Fairclough, 2003; Merquior, 1985). In discourse theory, discourse, closure of nodal points, and struggle for meaning around floating signifiers are enacted by and through individuals and/or groups, in the positions that are adopted. People's positions (both collective and individual) produce and result from discursive processes and struggles for meaning (Jorgensen & Phillips, 2002). Often in research, discursive processes are identified and analyzed by using discursive psychology theory. This helps to reveal how individuals are transformed into subjects who secure their meaning and reality through identification with a particular discourse (Knights, 1992). The overemphasis of individual identity work has already been noted in the engineering workplace studies that were reviewed in Chapter Two. This echoes Phillips and Hardy's (2002) comment that many researchers who use discourse analysis in fact only link text and context, omitting the exploration of the role of the discourse of which the text is a part. It is thus advantageous in this setting to use Laclau and Mouffe's discourse theory in the study of this research question, as the theorists maintain a stronger focus on discursive sociology – viewing group formation itself as a form of closure and therefore as a reduction of

possibilities, where differing meanings and identities are excluded and ignored and antagonisms arise.

Transference of theoretical discourse analysis conceptualizations to empirical applications through methodology and methods has been noted as problematic; Foucault's theoretical work can be difficult to apply (Phillips & Hardy, 2002) and Laclau and Mouffe do not do much detailed analysis of empirical material (Jorgensen & Phillips, 2002). The very nature of the poststructuralist approach creates difficulties in developing a broad set of methodological guidelines (Phillips & Hardy, 2002), in fact, according to Howarth (2000), there is no one method, although there can be a "certain marching order" (p. 44).

Considerations for Plausibility

There is no pre-determined agreement about how to evaluate the results of applying discourse analysis methodology (Jorgensen & Phillips, 2002). This does not, however, release the discourse analyst from producing an account that is plausible to a community of qualified scholars (Jorgensen & Phillips, 2002) and from providing the means for evaluating the truth claims of the discursive account (Howarth, 2000). In other words, after the account has been produced by the author and read by others, by what criteria will the truth claims of the researcher be evaluated? Under

what general conditions will readers accept the author's discursive representations and analysis of the situation under investigation? Readers may differ in their opinions. However, I will offer to treat the plausibility of the overall research project as the sum of plausibilities of the following areas: the approach, the data, the account, and the evaluation and interpretation. I offer the following criteria.

When evaluating the plausibility of the approach, I expect the reader to ask whether the production of the knowledge content is consistent and coherent with the proffered poststructuralist theory and discourse theory methodology (Jorgensen & Phillips, 2002). For example, poststructuralists see signs and therefore the internal relations within networks of signs as fluid and changeable, and not derived from an underlying stable and thus ultimately knowable structure. Consequently, the approach should stay true to the notion that there is no centralizing truth that will confirm or refute "instances of a separately constituted empirical theory" (Howarth, 2000, p. 130). A second responsibility that issues from the assumption of the poststructuralist position is that the "discourse theorist is always situated in a particular discourse formation and within a specific tradition in which he or she has been constituted as a subject just like any other subject" (Howarth, 2000, p. 124). This creates the responsibility for me to

be transparent in this work; to explicate and then follow the principles of plausibility to which I adhere. This involves explain how the discursive representations are assembled before making knowledge claims about it (Howarth, 2000). It also creates an onus for me to reflect and articulate on how my own experience, including that of the engineering workplace and engineering association, and my academic training in applied sciences, figures in the plausibility of the assembled discursive representations and their meanings. Transparency and reflection go hand in hand; for example, in the documentation of the analytical steps from the discourse data to the conclusion (Jorgensen & Phillips, 2002).

When considering the plausibility of the research data, I must ask myself if the method of data collection aligns with the theoretical foundation as well as whether the specific data adequately serves the consideration of the research question. In the first instance, Knights (1992) suggests that Foucault's genealogical approach to social inquiry uses evidence selectively 'to render a problem intelligible' (p. 519). By extension, I suggest that this is also true of Laclau and Mouffe's approach. Rather than building discursive representations through centralization of data i.e. by "reference to the same object, a common style in the production of statements, constancy of the concepts, and reference to a common theme"

(Laclau & Mouffe, 1985, p. 105), the unifying principle of a discursive representation is itself the dispersed natures of the discursive elements under consideration, governed by the rules of formation of the differential positions of articulated elements (moments) (Laclau & Mouffe, 1985). Once having built my version of the representations of the discursive formations, I can ask myself, and the reader can ask as well, whether the selected objects of investigation are appropriate to the specific research question; the discursive representations of the objects have been carefully constructed; an appropriate range of discursive features been gathered; and a sufficient amount of data been collected.

The plausibility of the discursive analysis is related to the interpretations of the constructed discursive formations. Care must be taken to perform the analysis on the full range of textual features that are collected, rather than focusing on just one feature (Jorgensen & Phillips, 2002). As well, have the questions that emanate from the reader's consideration of the data been satisfactorily addressed in the analysis? Speaking more generally, the analysis should provide adequate explanations of how, under what conditions, and for what reasons the articulations of the sexual harassment and sexual discrimination discourse of the discursive formations of the engineering association are constructed,

contested and undergo change (Howarth, 2000). A final consideration might be whether the analysis delivers against the promise of the research question – do the explanations supplant a less than complete understanding of a given event or process with a fuller understanding thus providing a new interpretation (Howarth, 2000)?

Conclusion

Selecting a poststructuralist approach implies that I will seek neither roots of the problem nor a meta-narrative. The impact of material practices is already clear in the extant body of literature. I will seek to surface how material practices are organized, and to create awareness around taken-for-granted processes that create and reproduce the material practices. In this decentralized approach, the data are the discursive formations and articulations of the engineering association, consisting of dispersed rather than unified elements. In this approach, the researcher is a discursively constituted subject in the study of the objects of research, problematizing taken-for-granted knowledge that is historically and culturally specific, localized, and not fixed, i.e. can change over time. The limitations of this theoretical framework will be considered as the study develops.

As stated in Chapter One, the overall purpose of this study is to provide an account and analysis of sexual harassment and sexual discrimination discourse enacted by the professional engineering association in Ontario. By viewing this discourse as socially enacted in the engineering association through language, structures, and interaction (Buzzanell, 1995; Fletcher, 1999), the study of these gender inequality articulations can serve to help pull "organization out of the shadows, exposing a major figure minimized by the focus on individual identity" (Ashcroft, 2004, p. 281). Discourse theory will be used to "view underlying motivational forces shaping the decisional priorities of practitioners" (Chia, 2000, p. 514), as well as hidden effects these decisions may exert (Fairclough, 1989) and how dominant discourses produce and maintain power imbalances (Buzzanell, 1995). This research project will produce a localized analysis that is derived from localized data. The work will not expose an underlying stable structure, nor produce causal explanations that can be generalized. The purpose of this inquiry is not to deem one truth as superior to another but rather to illuminate and create conversation around the various discursive positions within the association, thereby contributing to the existing body of knowledge by exploring a new empirical terrain.

Chapter Four The Investigation

The overall aim of this work is to provide an account of sexual harassment and sexual discrimination discourse enacted by the discursive formation of the professional engineering association in Ontario and an analysis of the implications of the discourse. This requires careful application of the theoretical framework to the naturally occurring materiality of the discursive formations that organize the Ontario engineering association. I will now broadly outline the steps of investigation, to be aligned with the philosophical and theoretical frameworks of this study; as well prepare a foundation for a position of plausibility of account.

As previously mentioned, the process of formulating discursive formations is iterative; the data itself is of no centralized logic; it builds upon itself, and it has no defined starting point. It is similar to dipping into a container of time (Ermarth, 2000). The strategy for data collection will be to pick a point to jump in and start swimming. I will thus begin this study by broadly drawing the boundaries of the site of investigation. This will outline the broader discursive formations that organize the localized notion of the Ontario-based association of engineering. This is a plausible choice since the occupation of engineering in Canada is regulated by provincial

governments. From province to province, the empowerment of the profession to self-govern as associations differs (Adams, 2009). I have chosen Ontario as the province of investigation for a number of reasons. First, by electing to study only one province, the boundaries of the regulatory discursive formations have a natural limit. They also align with the boundaries of the school systems and applicable provincial legislation such as human rights codes. Second, although it is not the intent of this study to generalize results, the provincial association is an example and role model for self-governance in the engineering profession in this county. The association in this province has existed since 1922. Ontario has the largest group of registered engineers in the country (approximately 73,000 out of 160,000). The PEO also has been active in sponsoring and participating in all of the nation-wide studies of the working conditions of engineers. Third, I am personally familiar with the engineering association in Ontario. I graduated from an Ontario engineering school, experienced the provincial engineering certification process, and worked in a variety of Ontario engineering workplaces. I am a long-time member of Professional Engineers Ontario. After I explain more fully the discursive formations of the engineering association in Ontario, I then will proceed to introduce the more specific locations of the sexual harassment and sexual discrimination

articulations within these formations. I will also position the arguments for identifying the objects of investigation and elaborate on why these objects (as opposed to others) have been selected. This initial survey may involve reviewing association data that includes legislation, governance documents, committee reports, meeting minutes, research papers, published interviews, policy statements, as well as projects and event descriptions. It is somewhat of an advantage to be dealing with a self-regulated association. Transparency to the public is a guiding principle; the above documents are publically available. This is an important point regarding plausibility of data. Since the association's dealings must be public, the data is visible, available, and retrievable by anyone. These documents are also legal documents which can be used to audit the quality of self-governance in accordance with the requirements of self-regulation. However there are some disadvantages. At this point, I should note two specific limitations. Firstly, defining the boundaries of the discursive field can be troublesome (Phillips & Hardy, 2002). Due to a large volume of documents, it may be difficult for me to establish what to include and what to exclude and what constitutes sufficient survey of the discursive field. As I proceed, I will have to carefully argue a position on the setting of the discursive field boundaries and why I have selected some objects of

investigation and neglected others. As I gather knowledge content, there may be missing or unexplained information that will require returning to the discursive field. In addition, other sources of text may be needed to surface the historical and cultural discourses that emerge – sources which reflect the history of the discursive formations of the engineering association, for example, or evidence for identifying the dominant social discourses. This is normal, with the iterations required of discourse theory; there will be movement back and forth between theory and empirical data.

Structuring of the articulations and discursive formations will be organized using Laclau and Mouffe's general approach of mapping out discursive formations, articulations, nodal points, and competing floating signifiers. I will then to try to understand how the articulations and discursive formations relate and interact with each other. In this way, the dominant and competing discourses are plotted. In the third step of the investigation, the dominant and excluded meanings are interpreted, and the struggles for meaning are highlighted. Lastly, the dominant and excluded meanings are evaluated for their implications in power relations and balances in the context of the site of investigation. In the concluding section, I will bring together the major findings of the study as they apply to the study and suggest future actions.

Textual Data

Among the principles of self-regulation as practiced by the PEO is "transparency of process – procedures should be open to public scrutiny" (Professional Engineers Ontario, 2012a, p. 17). Bylaw 1 Section 15 (Professional Engineers Ontario, 2010a) requires that all meetings of the association be open to the public. As a corollary, all meeting minutes, reports, and other documentation must also be available to the public (Personal communication, A. Elliot, July 11, 2012). Thus, a substantial set of information is available including, but are not limited to, applicable provincial legislation, committee, task force, council, and executive council agendas, meeting minutes, and briefing notes, position statements, position papers, reports, *The Link* member newsletters, articles, letters to the editor, and presidential addresses in the PEO's journal *Engineering Dimensions,* advertisements, documentation of operating processes, and discipline tribunal hearings. This information is available at the PEO website (www.peo.org) or by contacting PEO staff. These documents differ in character, are dispersed across the organizing processes of the PEO and across time, and provide evidence and cross-checks on context. The transparency principle and the large amount of data in the public domain have some unexpected methodological benefits. The context of decision

making within the association is ostensibly discernible and theoretically undisturbed across boundaries to those outside of it. The data, contained within localized and naturally occurring language, permit study of specific and concrete actions while maintaining context. From a plausibility point of view, I must rely on these rules of self-regulation to ensure, both to myself and to my readers, that data has not been missed. This also creates a situation where a reader can verify that data has not been omitted. Due to the rigours of self-regulation, I am relying on the PEO to have provided all the data that is available and that governance by the Government of Ontario is in place and reliable. These points create positive prospects for building plausible representations of how discourse structures meanings of sexual harassment and sexual discrimination.

The boundaries established by the self-regulation legislation will be taken as the boundaries of the engineering association. The sexual harassment and sexual discrimination articulations of the professional association will be taken as those expressed within the boundaries formed by the discursive formations of the PEO. Data was collected at the meso-level in order to represent collective subject positions and to discuss meanings as determined by the PEO Council debates and votes. I will now look inside the established boundaries of the PEO to map and broadly

describe the sexual harassment and sexual discrimination articulations within. This representation of the set of articulations will then be used to discuss the structured reality, or the discourse of sexual harassment and sexual discrimination within the self-regulated engineering association of Ontario.

Site of Investigation

In Canada, each provincial government and territory is entitled to grant self-governance privileges to professions such as health care (doctors and nurses), engineering, architecture, law, or public chartered accountancy. Self-regulated professions in Canada are generally closed which means that only 'those who are registered or licensed have the right to practice' (Adams, 2009, p. 203). Self-governance empowers a regulatory body to certify, monitor, and discipline the labour of the specific profession. In Ontario, the engineering profession is privileged with self-regulation by the *Professional Engineers Act* statute (Government of Ontario, 2011a), as administered by the Ministry of the Attorney General. The primary purpose of the *Act* is to ensure the "safeguarding of life, health, property, economic interests, the public welfare, or the environment, or the managing of any such act" (Government of Ontario, 2011a, pp. c. 16, Sched. 12, s. 15(11).) that requires the application of

engineering principles and processes. The *Act* provides the structure for certification, monitoring, and disciplining of engineering labour. Specific legislated requirements that govern ongoing competence of engineering work and professional conduct are contained within the *Act* in Regulation 941 (Government of Ontario, 2011b) section 72 (Professional Conduct) and section 77 (Code of Ethics). The Code of Ethics (Professional Engineers Ontario, 2012d) largely addresses the duty for professional engineers to report physically unsafe situations and unethical engineering work practices. Section 72 of Regulation 941 defines professional misconduct in fourteen different ways, thirteen of which deal with negligence in engineering work. The fourteenth method of professional misconduct, harassment, was added in 2000 (Hiscocks & Hill, 2002). Harassment is defined in the regulation as "engaging in a course of vexatious comment or conduct that is known or ought reasonably to be known as unwelcome and that might reasonably be regarded as interfering in a professional engineering relationship" (Government of Ontario, 2011b). Harassment is thus a legal definition of one form of professional misconduct, thus subject to monitoring, complaint and disciplining. Allegations of harassment by engineering practitioners can be brought forward for investigation by any member of the public, including other engineering practitioners.

The provincial regulatory body charged with enforcement of the *Act* is known as Professional Engineers Ontario (PEO). The PEO is responsible for certifying competent engineering labour for individuals and engineering organizations. In the case of individuals, he or she is eligible to be hired into a position of professional engineer after graduating from an accredited engineering school, working for four years as an engineer-in-training, and taking provincial or territory licensing exams. Individuals and organizations who wish to offer engineering services directly to the public must undergo additional certification. Members of the engineering profession, individuals or organizations, are called *practitioners*. In addition to the certification of engineering labour, the PEO is responsible for administering complaints and quasi-judicial discipline processes regarding engineering competence and professional conduct. These processes are covered in sections 23, 24, 27 and 28 of the *Act*. The proceedings of the hearings and the disciplinary outcomes are publically available. Due to confidentiality issues, the PEO is not required to publish complaints, which are allegations of professional competence or misconduct (Personal communication, A. Elliot, July 11, 2012). In 2006, the PEO estimated that about 17 complaints (about 50% of the total) per year advance from the complaints process to the discipline hearing process (Mastromatteo,

2006a). The PEO governs the competence of engineering work and professional conduct of approximately 73,000 licensed individual members and 4,100 Certificate of Authorization (C of A) organizations (Professional Engineers Ontario, 2010b).

The *Act* also determines the organizing practices of the PEO. The PEO is governed by a elected Council (Professional Engineers Ontario, 2010b) and its operating procedures are set out in the Council Manual (Professional Engineers Ontario, 2012a). The Manual lays out the connections between the *Act* and the association in terms of regulatory functions and describes the structure of the administrative functions. The Council is made up of an administrative arm, committees and task forces (Professional Engineers Ontario, 2012b) that report to the Council. Committees are structures of ongoing and regular activities, while task forces take on specific mandates within a limited time frame. In the language of Laclau and Mouffe's discourse theory, the *Act* is a major discursive regulator of the profession. It is a privileged moment, fixing the meaning of important terms such as self-governance/self-regulation, engineering, professional (mis)conduct, harassment, and the rules of complaint and disciplining. I will designate the *Act* as a nodal point in the

discursive formation of the engineering association within the provincial boundaries of Ontario.

As empowered by the provincial government, the PEO is granted the privilege of self-regulation, subject to the oversight of the Ministry of the Attorney General and the public. The regulatory body must do what is legally required in order to maintain this privilege. Efforts to do so strongly figure in the localized articulations of the PEO, as well as in its publically available Council Manual (Professional Engineers Ontario, 2012a), Council minutes, publications, presidential addresses, and other PEO documents. There are many references in PEO publications to the privilege of self-regulation, the proof of ability to adequately self-regulate, the ongoing presence of self-regulating activities, the transparency to the public of such activities, the ever-present possibility of loss of this privilege, and difference between regulation and advocacy activities (Mastromatteo, 2006a, 2006b, 2006c). In an organizing sense, self-regulation, as created and influenced by the nodal point of the *Act*, encloses the profession. In the form of the Complaints and Discipline Committees, self-regulation renders engineers the judges of other engineers in matters relating to the competence of engineering work and of professional conduct. In the form of the PEO Council and its attendant committees, the practices of self-regulation mean

that the profession is represented by the association. Changes to self-regulation are controlled by the association, subject to the approval of the Ministry of the Attorney General of Ontario. I will treat self-regulation as a nodal point in the discursive formation of the engineering association within the provincial boundaries of Ontario.

Ontario Human Rights Legislation

The Ministry of the Attorney General of Ontario is responsible for ensuring that the regulatory bodies under its jurisdiction adhere to the Ontario Human Rights Code (1962), hereby referred to as the "Code". The *Code* proscribes equal treatment and prohibits discrimination and harassment in areas such as services, accommodations, places of employment, and vocational associations such as engineering. There are 15 different grounds for discrimination: "race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, gender identity, gender expression, age, marital status, family status or disability" ("Ontario Human Rights Code," 1962). Human rights in Ontario workplaces, as enshrined in the *Code* and its administration and coordination through the Ministry of the Attorney General will be designated as a nodal point. It is a privileged moment, fixing the legal meanings of terms such as gender, human rights, sexual harassment,

harassment, sexual discrimination, and discrimination in Ontario workplaces.

Chapter Five Articulations & Antagonisms

I can now take forward the understanding that the *Act,* the *Code,* and self-regulation act as important influencers in the discursive formations of the engineering association in Ontario. I will now look inside these boundaries to map and broadly describe the sexual harassment and sexual discrimination articulations. The purpose of this chapter is to prepare the building blocks for a plausible representation of the discursive formation of sexual harassment and sexual discrimination in the Ontario engineering association. This requires carefully constructed representations of the articulatory practices and the sites of struggle for meaning. To do this, I will observe sites of conflicts between articulations over several piercings of time (Ermarth, 2000), to see what is "included, excluded, regulated and maintained" (Howarth, 2000, p. 79). This will tell me what the association's discursive meanings of sexual harassment and sexual discrimination in engineering workplaces are and how they came to be. However, rather than description and origin of causes, what is of interest is the tensions and contradictions between articulatory practices (Laclau & Mouffe, 1985). Hence, to follow are PEO articulations in conflict, competing to influence how the issues of sexual harassment and sexual discrimination in engineering workplaces are to be defined by the association, replete with

antagonisms to unstable frontiers of dominant meanings. These are the specific objects of investigation. My representation of this set of articulations will then be used to discuss the structured reality, or the *discourse* of sexual harassment and sexual discrimination within the self-regulated professional engineering association of Ontario.

Professional Conduct & Sexual Harassment

The PEO's Women in Engineering Advisory Committee (WEAC) was established in the late eighties (Hamilton, 2002) to act as a forum for proposing measures leading to full participation of women in engineering as an occupation in Ontario (Hiscocks and Hill, 2002). In 1989, the PEO surveyed its member engineers for the first time. The results revealed that "female engineers felt they faced barriers in the workplace which were not experienced by their male colleagues" (Women in Engineering Advisory Committee, 1994, p. 13). In 1992, the Canadian Committee on Women in Engineering held six public forums across Canada to determine and measure the status of women in the profession. Its report "More than Just Numbers" (Canadian Committee on Women in Engineering, 1992), was based on dozens of briefs and private letters by female and male engineering students and practicing engineers. The Committee ascertained that although the female members surveyed did love and were

successful at engineering work, engineering was indeed a difficult profession for them. Harassment and discrimination regularly occurred in engineering places of work. The Committee recommended a systemic approach to improving the representation and experience of women in the profession, including changes across the home front, elementary, secondary and post-secondary education institutions, workplaces, and engineering associations. The recommendations for engineering schools, engineering workplaces, and professional associations all contained suggestions about initiating, implementing, and enforcing harassment and discrimination policies and procedures. Two years later the WEAC conducted the second National Survey of Working Conditions for Engineers. The purpose of WEAC's 1994 member survey was to study the engineering school and working experiences of male and female engineers across the country, and to measure the progress since the 1989 report. There were four primary areas of interest:

System Equity – the capability of internal human resource systems, such as selection, training, performance evaluation, promotion, etc., to function fairly and without gender bias.

Access to opportunities – is there equal access to human resource systems for women and men?

Work Culture – Informal networks, attitudes of superiors and co-workers, opportunities to establish contacts with influential stakeholders, etc.

Interface – The relationship between the workplace and the outside world; education, family and the community (Women in Engineering Advisory Committee, 1994, p. 14)

Male and female respondents agreed that attitudinal barriers of senior level management continued to exist for female engineers. Both male and female respondents felt that equity existed in the formal human resources systems. Access to equity was more problematic informally, within workplace cultures. Practices such as "internal networking, recognition of potential, and entry to the highest echelons" of organizations were seen to be barriers for both men and women (Women in Engineering Advisory Committee, 1994, p. 3). Fifty-two per cent of men and sixty-nine per cent of women respondents answered yes to the question "Do you believe that sexual harassment should be expressly listed as an infringement of the Code of Ethics?" (Hiscocks, 1995). There were more than 2,000 comments made by respondents on this question. The following summary of comments was deemed as representative by the WEAC. It is included here verbatim, in order to preserve the language as

produced by the WEAC. I introduce this data because it begins to inform us about the interactions about ranges of opinions regarding the existence of sexual harassment in engineering work places, the role of the PEO, and the boundaries of regulation.

Appendix A: Workplace Survey Comments

The responses to support "yes" and "no" answers to the question were generally quite passionate & some with very lengthy commentary.

Representative 'yes' comments were as follows:

- Sexual harassment is a crime, morally and ethically unacceptable.
- Should be included in an effort to further "define" the strong positive morals and integrity that should be associated with a P. Eng. As is with the medical profession.
- Treat all people equally.
- It is unacceptable. Enforcement must be fair. A clear definition of sexual harassment is required.
- An excellent opportunity to highlight the PEO is serious about women in engineering.
- Sexual harassment in addition to discrimination on race or religion should be included.

- Unprofessional behaviour and awareness is required.
- Make people consider their actions more closely and may make others more willing to come forward to complain about past/present problems.
- Code should define "acceptable vs not acceptable".
- Because it makes the lives of people involved miserable. Damaging to self esteem, loss of production.
- This problem is more prevalent with older management. This might focus attention on their own behaviours.
- It is more prevalent than admitted.
- Zero tolerance should be implemented.

Representative 'no' comments as were follows:

- It's a matter of law and should be covered by laws outside the Code of Ethics.
- Infringement of the Code of Ethics should be recognized only for those issues which deal with the practice of engineering.
- This belongs in the Ontario Human Rights Code, which already addresses this issue.

- Workplace issue only lends itself to misuse. "Code of Ethics should deal with engineering issues only".
- It is a moral not an ethical issue.
- No comment required.
- It is exaggerated already.
- It is unclear at this time how to properly regulate this as a PEO concern.
- Is sufficiently covered by the law. It's not male engineers who discriminate or harass it's others outside the profession.

(Women in Engineering Advisory Committee, 1995)

If I look at the representative 'Yes' comments, I can see that the respondents take the existence of sexual harassment in engineering workplaces as reality. The judgments made about the acceptability of sexual harassment in engineering places include words such as 'unacceptable' morally and ethically. The commentaries suggest acceptance of the notion that the PEO should express explicit lack of tolerance for harassment and discrimination in engineering workplaces. In contrast, the 'No' camp comments do not generally deny the existence of sexual harassment, other to suggest that the issue is 'exaggerated'. The majority of the 'No' comments suggest that the treatment of such issues

are already managed or should be managed outside of the PEO's Code of Ethics and the practice of engineering. The tensions that begin to surface in the 1994 survey do not revolve around denying that human rights violations take place in engineering workplaces. Rather they reflect discursive positioning around the location of the treatment of human rights practices as within or without the practice of engineering.

The 1989, 1992 and 1994 surveys of Canadian female and male engineers provided member associations across the country with local evidence and concrete examples of that sexual harassment and sexual discrimination was experienced by its female members. As written in their reports, it was fully expected and assumed by the members of the Canadian Committee on Women in Engineering and the WEAC that their findings and recommendations would be used as guides and frameworks for strategies to improve the experiences of females in the Canadian engineering profession (Canadian Committee on Women in Engineering, 1992; Women in Engineering Advisory Committee, 1994). At this point, I will denote the existence, content, and distribution of these reports as discursive elements.

According to an article written in the PEO journal *Engineering Dimensions* by WEAC members Peter Hiscocks and Nancy Hill (2002), in the

mid-1990s members of the WEAC began to ascribe meanings to the three nation-wide reports. In 1995, the WEAC produced a report called *Defining Harassment in the Professional Engineers Act* (Women in Engineering Advisory Committee, 1995). In the report, WEAC arranged the following discursive elements in relation to each other:

- evidence that female engineers were experiencing harassment and discrimination based on their sex, in the form of the three nation-wide reports;
- the belief that these issues were so prevalent and known in engineering workplaces that they were impediments to females' eventual full participation in the profession;
- the mandate of the WEAC to propose measures to bring women into full participation in the profession; and
- the belief that the existing PEO mechanisms for complaint by female engineers of sexual harassment and sexual discrimination were not effective;
- the belief that the WEAC had the mandate, via the 1994 Survey responses, to add sexual harassment to the Code of Ethics (Women in Engineering Advisory Committee, 1995).

By definition, the selection of these elements and their positioning in relation to each other is an *articulation*. The articulation stems from the *logic of difference* (Laclau & Mouffe, 1985) - the assembling of elements that gain their meaning because of the differential positions in relation to other elements. Similarly, the practice of regulation is an articulation. WEAC's articulation was an antagonism to the practice of regulation, hence these two articulatory practices were in confrontation and related *hegemonically*. Such a relation is political (Laclau & Mouffe, 1985), in that external antagonisms (floating signifier(s)) challenge ascribed meanings within a chain of articulated elements. In this site of struggle, the regulatory practices are antagonized by the WEAC's task – the challenge that sexual harassment should be raised as an issue within the PEO.

In October 1995, the WEAC deepened its antagonism by recommending to PEO Council that Regulation 941 of the *Professional Engineers Act* be amended to include a definition of sexual harassment and a clear statement that sexual harassment by a practitioner constitutes professional misconduct. If successful, sexual harassment would be legally named as conduct unbecoming of professional engineers. With its proposed location within the Regulation (and therefore the *Act),* a practitioner who was found guilty of sexual harassment by the PEO would

be subject to a range of disciplining actions, sanctioned by the *Act* and administered by the PEO. The antagonistic task of sexual harassment as floating signifier destabilized the organization's legalized and taken-for-granted meaning of professional misconduct, as defined in the Regulation.

As per the PEO's Council Manual (Professional Engineers Ontario, 2012a), the regulatory practices dictate that an amendment to the Regulation requires the approval of the PEO Council. The WEAC would need the support of other committees, in order to have a motion that was put before Council carried. The WEAC made presentations to the Complaints and Discipline Committees. Both these Committees rejected WEAC's proposal, and passed their own committee resolutions (Professional Engineers Ontario, 1996) stating that the existing wording of Regulation 941 was adequate to cover complaints of sexual harassment. The WEAC then obtained an outside legal opinion (Professional Engineers Ontario, 1996). Changes in PEO educational practices were suggested, but the legal opinion did not recommend policy changes as that was deemed out of scope by the legal service provider (Hiscocks & Hill, 2002). Despite this, the WEAC pursued the antagonism. At the November 26, 1996 Council meeting, the WEAC asked that Council approve adding sexual harassment to the Regulation, along with a motion to develop a clarifying

definition (Professional Engineers Ontario, 1999b). In order to have a discussion about the report by Council, it was necessary for the Councillors to have a motion to debate. The motion put forward significantly changed the intent of the WEAC. "It was moved by P. J. Quinn, seconded by P.M. DeVita that PEO include harassment explicitly in the definition of professional misconduct" (Professional Engineers Ontario, 1996). Note that the motion as proposed did not include the word "sexual". There is no explanation in the minutes, or other surrounding elements, as to why the change was suggested. In the ensuing debate about adding harassment as grounds for misconduct, the following comments by the PEO Councillors were recorded in the meeting minutes:

> If employers have a responsibility to act on harassment complaints under the Ontario Human Rights Code or any Ontario legislation, the resolution mechanism is already in place in law or quasi-law, and the employer must act first before PEO steps in.
>
> lt is not clear that Section 72(2) of the Act covers sexual harassment and that a member can be disciplined by PEO.

A ‘policy statement' that any type of harassment is professional misconduct would be more effective and could be publicized quickly to the membership.

A communication program should be implemented, and a pre-complaint mechanism developed. If these work well, together with the existing wording in the Act, it would not be necessary to make the changes to the Act.

A recent discipline hearing was successful in proving that Section 72(2)(j) does address harassment. It is not necessary to amend the Act at this time.

A policy statement by Council about what is covered in Section 72(2)(j) would not be binding. A discipline panel would have to make a factual finding on the evidence provided.

Concluding the discussion, N. Hill, Chair of WEAC, said that

the issues and problems WEAC hears would not be addressed with a communications program or by leaving the Act as it. (Professional Engineers Ontario, 1996)

The motion passed. The PEO had approved the addition of harassment as grounds for professional misconduct.

Professional Conduct & Harassment

The WEAC propositioned its second antagonistic task to the Council on February 19, 1999. A definition of harassment was brought to Council for approval, as an addition to the grounds for allegations of professional misconduct in Regulation 941. The proposed definition, as drafted by Legal Counsel, read "For the purposes of Section 72(2)(n), harassment means any comment, conduct or gesture that is known or ought reasonably to be known to cause offence or humiliation or that might reasonably be regarded as interfering in a professional engineering relationship. (Professional Engineers Ontario, 1999b, p. 121)

The points raised in the debate included:

Defining harassment explicitly in the definition of professional misconduct could lead to vexatious complaints, or be used to enact retribution.

> PEO should be cautious in defining harassment, in particular if choosing a definition that is different from the Human Rights Code definition.
>
> Problems of workplace harassment are better dealt with by the Human Rights Commission than by PEO's Complaints and Discipline Committees. (Professional Engineers Ontario, 1999b, p. 19)

The comments of the Councillors repeat two notions from the debates on the first antagonistic task: a concern that charges of harassment will be used inappropriately, and that complaint of harassment is best dealt with outside of the PEO. Subsequent debate included a history of the issue, and the point that unless harassment was specifically mentioned in the Regulation, the legality of charges of professional misconduct alleging harassment would be challenged by defendants. A motion to send the harassment definition back to committee for revision was then approved. At the April 9, 1999 Council meeting, revised wording for the proposed wording was once again on the agenda. The debate points included:

> ...whether the association ought to be dealing with issues surrounding harassment, or whether another venue was more appropriate. In particular, it was questioned whether engineers are capable of judging other engineers in areas other than engineering, and whether such judgments would be exposing PEO to additional risk.
>
> In response, Council was reminded that the members of the Ontario Human Rights Commission have no more expertise in judging in this area than do PEO members. It was pointed out that PEO's mandate of regulating the engineering profession requires that it make judgments regarding both an engineer's level of skill and adherence to a code of ethics. (Professional Engineers Ontario, 1999a)

When the vote was called, the motion barely carried: In Favour 8, Opposed 6, Abstaining 1. In October, 2000, the Council had to revise the wording to comply with a request from the Attorney General, in order to reflect the wording that was in the *Code*. For purposes of grounds for professional misconduct, "harassment" means engaging in a course of vexatious comment or conduct that is known or ought reasonably to be known to be unwelcome and that might reasonably be regarded as

interfering in a professional engineering relationship (Government of Ontario, 2011b). The change to Regulation 941 was enacted in the fall of 2000, as reported in the Registrar's report Council minutes January 11 and 12, 2001 (Professional Engineers Ontario, 2001).

Since the change was enacted in 1999, there have been two discipline hearings on allegations of professional misconduct relating to Section 72(2)(n) harassment, according to the tribunal data. Neither relate to nor concern sexual harassment. According to my review of the archives of the tribunal hearings, up to the end of 2010, one discipline hearing on sexual harassment has been held in the history of the PEO (PEO, 1998).

Education & Human Rights

In addition to protecting the public's interest through the certification of engineering labour, the *Act* obliges the PEO to:

> establish, maintain and develop standards of knowledge and skill; establish, maintain and develop standards of qualification and standards of practice for the practice of professional engineering; establish, maintain and develop standards of professional ethics; and promote public awareness of the role of PEO. (Government of Ontario, 2011a)

To this end, the PEO produces Practice Guidelines to educate practitioners and the public about what is considered to be good engineering practice. The guidelines are not enforceable, per se, located as they are outside of the *Act* and Regulation 941. Guidelines, in the association's parlance, are intended to provide suggestions for good practice for engineers. There were thirty-six PEO Guidelines to Practice on the PEO webpage as of May 2012 (Professional Engineers Ontario, 2012c), thirty-five of which relate to technical engineering standards. Pursuant to adding harassment and its definition as grounds for professional misconduct in Regulation 941, in February 2000, the WEAC brought its third antagonistic task to Council for approval. This task, embodied in the proposed Guideline to Human Rights in Professional Practice, is politically structured differently from the first two tasks. Firstly, the proposed addition to the existing Guidelines attempts to add meaning to a PEO articulation that is located outside the *Act* and Regulation 941. The first two tasks were located politically within the *Act*. Secondly, this task was a joint proposal between the WEAC, the Complaints and the Professional Practice Committees, whereas the previous proposed antagonistic tasks were propositioned to PEO Council by the WEAC alone.

The *Guideline to Human Rights in Professional Practice* (Professional Engineers Ontario, 2009) was developed as a standard to which practitioners would be held, in light of the addition of harassment as grounds for "complaints against members who are accused of employment-related harassment and discrimination as defined in the Ontario Human Rights Code or, as applicable, the Canadian Human Rights Act" (Braddock, 2002, p. 24). Based on my review of the Guideline, this document is structured to connect the *Code* to the responsibilities of engineers as employers and engineers as employees. It contains a PEO policy statement regarding harassment and discrimination in engineering workplaces. It provides information about what practitioner employers should do to reduce occurrences of harassment and discrimination in their workplaces, the responsibilities of employee engineers, how to make complaints, a full reprint of the Ontario Human Rights Code, a sample workplace policy, along with definitions and samples of vexatious comments.

In its first foray to PEO Council for approval February 17, 2000 the Guideline was sent back for revision to its sponsoring Committees because of the many questions posed by the Councillors. As per the Council Minutes, the discussion consisted of Councillors' questions:

> related to wording in the guideline, how the guideline relates to the definition of harassment as professional misconduct in the new section 72(2)(n) of Regulation 941, whether a simultaneous complaint against an engineer to PEO and the Ontario Human Rights Commission would be double jeopardy, whether the guideline would raise public expectations that PEO cannot meet, and whether the guideline is meant to apply to temporary, limited and provisional licence holders, in addition to P.Engs. (Professional Engineers Ontario, 2000a, p. 1)

At the next Council meeting, on March 24, 2000, the revised Guideline was again brought forward for approval. In introducing the agenda item, President-elect Peter DeVita stated that "although there is still some work that needs to be done on the draft *Guideline on Human Rights in Professional Practice*, Council needs to draw closure on this matter, which has been discussed for a number of years" (Professional Engineers Ontario, 2000b, p. 1). The original motion presented at the previous Council meeting was split and proposed as two motions at this meeting. The first motion asked Council to accept the Policy statement in the Guideline as Council policy. The second motion asked the Council to accept the Guideline for publication with the caveat that the PEO Registrar

(the PEO administration arm) take the Guideline under its wing and revise as required as applicable case law developed.

The PEO Policy Statement of the Guideline, which was accepted by the Council, as per the meeting minutes, is as follows

> All members of Professional Engineers Ontario have a professional responsibility to respect the human rights of others, and to: be proactive in understanding human rights issues; be familiar with applicable legislation; take action where appropriate to protect human rights; and be vigilant against discrimination and harassment. (Professional Engineers Ontario, 2000b)

There was much more debate on the motion for the Guideline than on the motion for the PEO policy statement. During the discussion as to whether to accept the guideline for publication, the following points were recorded in the minutes. They are reproduced here verbatim, as per the meeting minutes:

> Although there is sound advice within the document, it may need restructuring for clarity;
>
> The document may still require further editing to lessen any potential for misinterpretation;

The subcommittee believes the guideline should be published, since it has been in development for some time and the subject of three reviews by legal counsel;

The guideline is intended for the use of all PEO members as a source of general, but not exhaustive, advice relating to human rights in professional practice;

Because Common Law in the area of human rights is fast evolving, it is likely the guideline will require frequent revision, at least in the short term;

The change to Regulation 941 to include harassment within the definition of professional misconduct for discipline purposes is likely to be effective within a few months. (Professional Engineers Ontario, 2000b)

A straw vote called by the President-elect indicated that the majority of Councillors would be prepared to accept the guidelines for publication

with the directive that staff makes appropriate amendments. The subsequent motion passed.

It took five years, numerous trips to Council, and repetitive debates to achieve installing the meaning of (generalized) harassment within the Regulation, a policy statement, and a Practice guideline regarding human rights within the association.

PEO & WEAC

WEAC's struggles to add new meanings to sedimented articulations of regulatory practice were complemented in 2000 when the Committee began other initiatives aligned with its mandate. It participated in gender equity projects outside of the PEO. It began to work with engineering school Deans to add diversity and ethics training to engineering curriculum. It collaborated with the PEO's Professional Practice Committee to add diversity and ethics to the Professional Practice licensing Exam. It got involved in The Women into Engineering: Partners for Change Project (2000-2006). This project was initiated by a partnership of the Ontario Government Women's Directorate Branch, the Professional Engineers Ontario (represented by WEAC) and the NSERC/ Nortel Networks Joint Chair for Women in Science and Engineering in Ontario. The purpose of the Partnership was to sponsor a multi-stage investigation of "stagnating

levels of enrollment of women in undergraduate engineering education" in Ontario (Wharton, 2001) and to consider actions to reverse the trend. The first stage of the project, conducted in 2000-2001, consisted of surveying the engineering recruitment programs in Ontario, including those at post-secondary engineering schools and the PEO. The literature search conducted did not include academic studies relating to female graduate engineers in the workplace. The author of the 2001 report opined that recruitment programs were fragmented and uncoordinated interventions mostly targeted to recruit females into first year of engineering school. Programs were run largely by volunteers, and most leadership efforts emanated from individuals who had personal convictions rather than being driven by the respective organizations. In the second stage, a gender training kit was created to train engineering faculty on gender issues, in order to improve awareness of gender issues in the classroom. It was delivered to the deans of Engineering and deployed in two pilot workshops (Partners for Change, 2004). The Partnership's final report was issued in 2006 (Partners for Change, 2006b). In 2000, the WEAC began to sponsor annual Spring and Fall Forums for members of the PEO. Forum titles include E-commerce and Innovation in Space, Ethics, and a panel discussion of "The Nature of Engineering: Who We Are and Who We Want

to Be?". In addition, the WEAC began a tradition of sponsoring province-wide engineering summer camps targeted at female high school students. The WEAC reported its activities regularly to the PEO Council. It had a column in every issue of the PEO member newsletter *The Link* from April 2000 to April 2003. Its members often published information about the WEAC's activities in the PEO journal *Engineering Dimensions*.

In 2000, the members of the PEO agreed to split into two organizational formations, dividing along the lines of regulatory and non-regulatory requirements (Ontario Society of Professional Engineers, 2012). The PEO would maintain its licensing and regulatory functions. A sister organization, the Ontario Society of Professional Engineers (OSPE), was created to "advance the professional and economic interests of our members by advocating with governments, offering valued member services, and providing opportunities for ongoing professional development" (Ontario Society of Professional Engineers, 2011b). Services include insurance and travel club offerings, professional development courses such as preparatory courses for the Professional Practice (licensing) Exam, and advocating the engineering profession's interest in policy issues such as the Ontario Building Code, the environment, and increased representation by engineers in the provincial legislature. Licensing,

complaints, enforcement, education and tribunal requirements continue to be administered by the PEO. It is still necessary to be a member of the PEO in order to practice engineering in Ontario; membership in the OSPE is voluntary and is not required to maintain licensing rights to practice. The transition phase was to take three years, with the OSPE becoming fully functional and independent from the PEO as of January 2004.

From the information available, it appears that the WEAC's work had been slated as a non-regulatory program in the 2000 PEO-OSPE agreement, although its pending transfer to OSPE was still under consideration, according to the President's Message in November 2002 (Braddock, 2002). On January 31, 2003, Vera Straka, WEAC Chair, was surprised to learn that it had been agreed, at a PEO-OSPE negotiating meeting, that the WEAC would move to the OSPE (Professional Engineers Ontario, 2003c). Straka then requested that the WEAC be involved in the discussions at the upcoming Executive and Council meetings (Professional Engineers Ontario, 2003c), where motions to move the WEAC would be introduced. Her request was rejected (Professional Engineers Ontario, 2003c), with the rationale that there are champions of WEAC on both the Executive Committee and Council, who could talk knowledgeably to the issues.

The issue was placed on the February 2003 Executive Council meeting agenda. At the meeting, Councillor

N. E. Hill stated that she and a number of other PEO members do not support transferring the Women in Engineering Advisory Committee (WEAC) to OSPE. She said that WEAC has made a case that some of its activities are regulatory and has continued to point out the significant number of regulatory initiatives it is involved in. She pointed out that this committee has been proactive on women's issues for years.

The Chair advised that the transfer of the Women in Engineering Advisory Committee (WEAC) to OSPE has been on the agenda since the first PEO-OSPE Negotiating Team meeting. WEAC was clearly identified as a nonregulatory program for transfer to OSPE.

…After further deliberation, the following motion was presented:

Moved by N. E. Hill, seconded by A. K. Lucas:

That this Executive Committee does not support the transfer of the Women in Engineering Advisory Committee (WEAC) to the Ontario Society of Professional Engineers.

MOTION CARRIED (For: 4; Against: 1; Abstained: 1) (Professional Engineers Ontario, 2003c, p. 13).

The Executive Committee resolution was then placed on the March 31 PEO Council agenda, as a motion upon which the Council would debate and vote.

During the debate, the following points were raised:

Transferring WEAC to the Society implies that there are no gender issues relating to regulating the engineering profession.

There is a role for WEAC in advocacy for female engineers.

The PEO/Society Negotiating Team has been proceeding on the understanding that WEAC would transfer to the Society.

Although PEO has an interest in women's issues, the Society would provide better support for WEAC's activities and initiatives because they are a better fit with what the Society does.

Council made a decision to divest PEO's non-regulatory programs and signed a legal agreement with the Society on November 7, 2000. Section 8(b) of that agreement, determines what constitutes regulatory or non-regulatory functions or programs.

Invited to speak on behalf of the Society, C. Karakatsanis said that she had always understood that WEAC had been determined to be a non-regulatory program for transfer to the Society. She praised WEAC's work over the years, noting that most of it had been advocacy. She said she believes that if WEAC is transferred to the Society, it will be better able to address gender issues without the inherent restrictions of PEO's regulatory role.

C. Karakatsanis confirmed that the Society can guarantee a long-term home for WEAC.

MOTION DEFEATED

(For: 7; Against: 11). (Professional Engineers Ontario, 2003b)

PEO & Equity and Diversity Committee

At the next PEO Council meeting, the following motion was made

That Council create an Inclusiveness Committee that assesses issues of concern to women, aboriginal members, and other under-represented groups on regulatory PEO matters and makes recommendations to PEO on these matters [Briefing Note C-417-47(a)]. (Professional Engineers Ontario, 2003a, p. 12)

A motion to refer the motion to the Executive Committee was discussed and defeated.

Speaking to the main motion, the following points were made:

The issues that an Inclusiveness Committee would deal with are mainly advocacy. Because PEO is a regulator, the proposal should be referred to the Society for consideration by WEAC.

This is an issue of what is good for PEO, not just women engineers and minority groups. We need to look at our processes to ensure that they are not discriminatory."

Establishing a committee to look at advocacy issues may be in conflict with the PEO-OSPE Legal Agreement.

The Chair then called the vote on the main motion. There was a request for a recorded vote on this motion.

ORIGINAL MOTION CARRIED (For: 13; Against: 7)

For:		Against:
J.D. Adams	N.E. Hill	R.W. Braddock
M.A. Butt	N. Monsour	D. Dixon
C.S. Cantlie	C. Redden	R.K. Gupta
B.E. Clarida	S.H.L. Tsang	S.K. Gupta
R.A. Dunn	D.L. Wilson	E.P. Maka
J.S. Dunsmuir	D.E. Rees	G. Nawaz
M. Frize		D.J.D. Sims

(Professional Engineers Ontario, 2003a, p. 13)

The mandate of the Committee, which was eventually renamed the Equity and Diversity Committee, is to "recommend action plans to integrate equity and diversity values and principles into the general policy and business operations of PEO". (Professional Engineers Ontario, 2005, p. 32).

In practice, this committee is internal to the PEO governance structure. It is largely a staff function and does not have activities that reach into the PEO membership.

Conclusion

Within the boundaries formed by the *Professional Engineers Act*, the *Ontario Human Rights Code,* and the practice of self-regulation, I have observed, over time, several important sites of struggle within the association. The competing tensions and contradictions of the meanings of sexual harassment and sexual discrimination in engineering workplaces in the PEO have been identified, debated and decided through the decision making governance mechanisms of the self-regulated engineering association.

There is not much explicit rejection of the prevalence of sexual harassment in the profession. The debates have largely focused on the appropriate location of the treatment of human rights, with increasingly broader universality. The initial debates focused on where sexual harassment and then general harassment should be located within the enforceable Regulation, and narrow conversation about the legal mechanisms of the Regulation. The debate then broadened to focus on whether the PEO should be dealing with human rights or if human rights

was firstly outside the practice of regulation, and, secondly, outside the practice of engineering. This moving target shifted again when the last debate focused on the appropriate location of 'women's issues' as inside or outside the PEO. By carefully reviewing the debates, and by leaving the Council minutes intact, I have identified the frontiers of meaning and experienced their instabilities. In the end, I observe a WEAC whose mandate and therefore articulations are significantly different from its early days. I will now explore the frontiers in political terms, using Laclau and Mouffe's concept of hegemony.

Chapter Six Hegemony

Over several piercings of time, I have observed sets of articulations in conflict. I now have a representation of how the meanings came to be. The task now is to understand the logics of the constitutions and dissolutions of meanings (Laclau, 2000). Each instability and hence vulnerability of each frontier of meaning has different structure. One must look at the proximity of nodal points, the characteristics of the antagonistic tasks, and the specific meanings that are being disarticulated and re-constituted. I must explore whether the discursive space is hegemonic, rather than simply saying that it is obvious that it is. To this end I will deconstruct the logics of the conflicts by using the framework of the four conditions of hegemony. The following section will discuss some of the discursive effects of the practice of sexual harassment and sexual discrimination in the PEO.

Unevenness of Power

The first condition of hegemony is unevenness of power (Laclau, 2000). What is meant by unevenness of power? As discussed in Chapter Three, I take the Foucauldian sense of power; it is decentralized and circulating in systems of thought, presenting itself as sets of constituting forces for competing meanings, the maintenance of established meanings,

and the prevention of new alternative meanings from entering into conversation or being incorporated into discursive practices. If power is dispersed throughout systems of thought, I might also expect this to be true for instances of unevenness of power. Are there instances of uneven or asymmetrical power in the discourse? At first glance, I might jump to the knowledge that academic and association researchers have been reporting for years that females experience sexual harassment and sexual discrimination in engineering workplaces. This is one example of unevenness of power. However, the site of investigation, as per the research questions and as discussed in Chapter Five, is not engineering workplaces; it is the discursive formations of the PEO. Within the association, sexual harassment and sexual discrimination occurring in engineering workplaces were not visible issues prior to the creation of the WEAC. On the one hand, the PEO was keen to increase the representation of females in the profession, while on the other hand, issues arising in the workplace because females were entering the profession were not being discussed in the PEO association until the late 1980s. This is a second instance of unevenness of power for females in engineering workplaces - not only did females lack power in their workplaces; some of their workplace issues lacked visibility in their association. These instances of

unevenness of power are useful and provide us with the argumentative links between engineering workplaces and the association regarding the general issue. The creation of the WEA Committee was an important change. Females practicing engineering now had a designated association insider. The WEAC was a group mandated to increase representation of females in the profession. It is fine to have a WEAC, or something similar, in professional engineering associations. However, in this setting, the WEAC members took on locating issues for females in the profession within the boundaries of the articulations of self-regulation. It is fine for WEAC to have articulated its position on sexual harassment. The important step taken was the propositioning of WEAC's antagonism. Based on its readings of the 1989, 1992 and 1994 nation-wide reports, the WEAC first argued that gender-based abuses of power were taking place in engineering workplaces. It then juxtapositioned this knowledge with the information that, up to 1996, there had been no prosecuted cases of sexual harassment by the PEO. The WEAC therefore argued that the definition of misconduct in Regulation 941 and the complaints and disciplining processes were insufficient in dealing with sexual harassment and sexual discrimination occurring in Ontario engineering workplaces that were operating within the purview of the provincial professional engineering

association. It then argued that, through the nodal point of self-regulation, these abuses of power in engineering work places should be issues for the PEO. The position, mandate, and will of the WEAC brought the unevenness of power for females from engineering workplaces into the organizing processes of the PEO. It articulated the conditions under which female members in the profession were experiencing asymmetrical power, and positioned this as an issue for the PEO to deal with in light of WEAC's mandate to increase female representation in the profession. The WEAC has thereby increased the instability of the frontiers of dominant meanings within the association.

It is not until the WEAC propositions its first antagonistic task that I begin to see localized signs of unevenness of power in the specific site of investigation at hand. The WEAC, although an insider, is not in a position of power within the PEO. It must work hard to get the issue of sexual harassment onto the agenda at Committee and Council meetings. It must have some support at the Council in order to get a motion, of any form, tabled for debate. The PEO Council had the power to get the framing of the sexual harassment issue to be re-phrased as a framing of harassment. Even when the WEAC returns to Council in 1999 with a definition of harassment, the PEO Council did not necessarily start the debate of the

issue at the point of the approved 1996 motion, which was that the PEO would include harassment in the legal definition of professional misconduct in the Regulation. The arguments at the 1999 Council meetings on the definition of harassment were very similar to those at the 1996 Council meetings on sexual harassment. The WEAC was in the position where it had to re-start the arguments to get and maintain the issue of harassment on the agenda, after having been ostensibly defeated on legalizing sexual harassment as grounds for professional misconduct. This occurs as well in the debate on the Guideline for Human Rights in Professional Practice. In 2002, the controversy surrounding the motions to keep WEAC in the PEO formation is a significant reflection in the struggle for meanings of gender equity in the discursive formations of the regulatory body. It was a surprise to the WEAC to learn of having been traded to the OSPE during a PEO-OSPE negotiation meeting. The WEAC's request to directly address Executive Council or the PEO Council on the transfer issue was denied by the PEO President. The relatively poor power position of the WEAC is starkly reflected in the structuring and the content of the debate over whether the activities of the WEAC belonged in the OSPE (advocacy) or the PEO (regulatory).

Consequently, I see pockets of unevenness of power, in different contexts and in different forms, at each frontier of contested meaning. Thus, the first condition of hegemony is satisfied.

Prevention of the Hegemonized From Becoming Whole

The WEAC crystallized its findings and its beliefs into an articulation by identifying sexual harassment and sexual discrimination as critical workplace issues impeding the goal to achieve representational parity in the profession. The WEAC then acted to create a number of antagonistic tasks to position sexual harassment and sexual discrimination as floating signifiers in the discursive formations of the engineering association. First, the WEAC members interpreted the 59% agreement in the 1994 member survey as a mandate from the membership to include sexual harassment in the meanings of professional misconduct in Regulation 941 in the *Act*. Second, it voiced the doubt that the processes of complaint and disciplining were adequate in meeting the needs of the females in the profession, thereby contradicting two other powerful PEO Committees. It presented an alternative image of the engineering profession by publicly recognizing a dark side, an alternate reality in engineering workplaces. In short, the WEAC became an antagonistic force within the PEO, acting to increase the instability of frontiers of meaning of the articulation of

regulation. The antagonisms directly challenged specific sedimented meanings such as what is included and excluded in the legal definition of professional conduct, what is included and excluded in the Guidelines, and the content of the association policy on engineering employees' and employers' responsibilities for respecting human rights in professional practice. More indirectly, the antagonisms challenged dominant meanings such as what should be considered as issues in the association, issues for the profession, issues in the practice of engineering, and in the management of certified engineer labour. The antagonistic tasks thus served to destabilize the frontiers of numerous meanings, preventing the PEO from becoming (or staying) whole, intact, undisturbed and unthreatened. I have now met the second condition of hegemony.

Universalized Empty Signifiers

On the other side of the fence, in the 1994 member survey, some PEO members rejected sexual harassment altogether as an issue, stating "it is exaggerated already" or that "it is not male engineers who discriminate or harass, it is others outside the profession". This is not a theme that is sustained in the discussions that took place at PEO Council. Much more effort was made to position the treatment of sexual harassment as outside of the scope and reach of Regulation 941. Firstly, there had been outright

refusal by the PEO Complaints and Discipline Committees to recommend including sexual harassment inside the *Act*. Then, during the PEO Council debate, some Councillors concurred. They posited alternatives, such as creating a PEO policy statement, a communication program, and a pre-formal complaint mechanism. They stated that a recent discipline hearing had been successful in proving that the existing meanings of Regulation 941 adequately addressed accusations of sexual harassment. In reality, this is a silent contradiction: this does not open the conversation about why this was the one and only discipline hearing on sexual harassment in the history of the PEO. It was suggested that the responsibility that employers' obligations from employment law and the province's Human Rights Code were already in place, and that the employer should be acting first before the PEO steps in.

The WEAC's floating signifier of sexual harassment unsuccessfully antagonized the Regulation; the mandate of the PEO; and, indirectly, the profession. The WEAC's second antagonistic task attempted to disarticulate the meaning of 'professional conduct' with the floating signifier 'harassment'. The PEO Council debates, which occurred more than two years after the debate on sexual harassment, repeated themes from the first debate. Councillors suggested that "problems of workplace

harassment are better dealt with by the Human Rights Commission than by PEO's Complaints and Discipline Committees". They questioned whether the association should be dealing with issues surrounding harassment, or if another venue was more appropriate. They introduced new concerns about implementation. There were questions raised about whether the inclusion of harassment in the Regulation would encourage misuse or encourage retribution. The debates were once again clearly focused on what should and should not be included in Regulation 941. The harassment debate reflected more specific information as to why Councillors felt one way or another.

At first glance, neither of these debates reflect a grand appeal to what Laclau and Mouffe call the 'universal empty signifier', similar to the biased and ambiguous appeal to 'freedom' in the U.S. war on terror (Solomon, 2009). Perhaps this is because one frontier of meaning is clearly visible, unambiguous, and understood to the PEO Councillors – the legal text of Regulation 941 as included in the *Act*. There is, however, bias and ambiguity as to what should be included in the Regulation. The WEAC attempted to add consideration of workplace human rights issues such as (sexual) harassment and (sexual) discrimination. The opposing camp believed that the issue of human rights is/should/ought to be taken care of

by others and, as such, was already correctly positioned outside of the Regulation. Those opposed to change to the existing legal meaning of professional conduct argued that Regulation 941 was sufficient (universal) in its ability to address sexual harassment and harassment (particularities). This begins to suggest that the Regulation, which is typically a nodal point in terms of the legalities, is, on occasion, also used to signify the 'practice of regulation', a universal empty signifier. What is hinted at by 'the practice of regulation' is not specified but is more defined by what should be kept out. More abstractly, what is being contested is the PEO's practice of regulation. This notion surfaces more concretely, but under a different guise, in the site of the third struggle.

The nature of the motion put to the Councillors in the third site of struggle forced the debate to focus on deciding whether the WEAC's activities were regulatory (thereby belonging to the PEO) or advocacy (thereby belong to the OSPE). Clearly, the activities of the WEAC were both, but this option was not raised in the debate, according to the minutes. The motion's wording pinned the debate to force a decision of either/or, but not both. The legal agreement between the PEO and OSPE was also mentioned as a rationale for keeping activities that were regulatory within the PEO and giving activities that were advocacy based to

the OSPE. Rather than simply changing the meaning of professional conduct, as per the prior debates, at stake in this debate were meanings of gender equity within the regulatory body. As discussed, the practice of regulation encloses the profession. By moving the WEAC out of the PEO, it would no longer be an active PEO committee, at a peer level with other Committees, reporting to PEO Council. The move would weaken or eliminate the WEAC's ability to leverage action in engineering work places through the threat of regulatory sanctions. By implication, the motion's wording effectively asked whether gender equity discourse should be located within or without 'the practice of regulation'. The PEO Council debate and subsequent vote established that the PEO's perception of the role of the WEAC was that of advocacy. Through the use of the universal empty signifier 'the practice of regulation', the PEO Council successfully antagonized the WEAC gender equity articulations. Despite the opposition of the WEAC, the Executive Committee, and some Councillors, the WEAC was now outside of the PEO and therefore outside of 'the practice of regulation'. As such, the third condition of hegemony, the presence of universal empty signifiers, is satisfied.

Presumption of Common Sense

The fourth and last condition required to specify a space as hegemonic is that the universalized empty signifiers are taken as common sense, or the constitution of a social ordering. The universalized empty signifiers makes reality appear objective and natural (Jorgensen & Phillips, 2002).

The language in the debates around the home for the WEAC clearly shows the normalizing of the position that the 'practice of regulation' does not include issues of advocacy, a euphemism for issues relating to 'women engineers and minority groups'. The exclusion of the WEAC from 'the practice of regulation' constitutes a form of social ordering for the association and members of the profession. To a less obvious extent in the data, but with what may carry more universality is the common sense representation of the 'practice of engineering' as being separate from the practice of human rights. In that sense, the 'practice of engineering' is also revealed as a universal empty signifier. Consequently, since the treatment of sexual harassment and discrimination in engineering workplaces is an issue of human rights, and the issue of human rights is outside of the practice of engineering, it is common sense that the PEO should not be

dealing with these 'women's and minority groups' issues. The fourth condition of hegemony is thus satisfied.

Conclusion

At the outset of this investigation, the boundaries of the discursive formation of the engineering association of Ontario were traversed in order to examine the workings of sexual harassment and sexual discrimination discourse in the association. There were indeed struggles for meaning, with winners and losers as to the dominance of some meanings and the changing of others. From the expressed tensions, the frontiers of meanings that were destabilized were the practice of regulation, the practice of sexual harassment and sexual discrimination remedial action within the self-regulation association, and the practice of engineering. The four conditions of hegemony regarding the political relations within the discursive formation were satisfied. This leads me to conclude that the practices of regulation and engineering, as determined by the PEO Council, dominated and subsumed the meanings of sexual harassment and sexual discrimination in the association. I shall now look at the implications of the structuring and mechanisms of the established meanings.

Chapter Seven Impact of the Discourse

The interest of this work resides in providing an account of sexual harassment and sexual discrimination discourse enacted by the discursive formation of the PEO and an analysis of the implications of those discursive practices. The purpose of this chapter is to discuss the discursive effects produced. I will first present a summary of my representation by gathering the major findings across the last few chapters. As the face of gender equity both in PEO association and the profession, the WEAC activities will be summarized. I will then posit and explore effects of this discourse. This will include looking at whose interests do the meanings, values and power relations support; the mechanisms by which these meanings, values and power relations maintain dominance; and where the meanings, values and power relations are susceptible to specific pressure for change (Weedon, 1997).

From Chapter Four, where I discussed the site of investigation, I came to better understand some of the broader components of the discursive formations of the self-regulated profession, as represented by PEO. The *Professional Engineers Act* creates the legality of self-regulation for the engineering profession in Ontario. The PEO governance structure organizes the democratically elected PEO Council which then is

empowered with the ability to create, maintain, and change meanings relating to the regulation of the profession and the practice of engineering, subject to the oversight of the Ministry of the Attorney General. The nodal point of self-regulation creates and encloses the profession, thereby determining who is inside and who is outside. The outer circles of the gender inequality discourse in the association are formed by intersections between the nodal points of the *Ontario Human Rights Code,* the *Act*, self-regulation, and the discursive formations of the engineering profession. To a great extent, it is left to engineering practitioners to decide how human rights are defined within regulation and the practice of engineering. In Chapter Five, I observed conflicting sets of articulations as they were deployed to compete for dominance of various meanings of sexual harassment, harassment, sexual discrimination and discrimination in the association. Members of the PEO jointly and separately used the processes of language to fix or privilege meanings, thereby limiting or excluding considerations of other possibilities. More specifically, the WEAC articulated the *Code* as a distant antagonism, positioning human rights as a floating signifier within the discourse of self-regulation. Some of the PEO Council debate content thus revolves around the question of whether human rights considerations should be within or outside of the

considerations of the association and the profession, as represented by the deliberations of the PEO Council and committees.

Regulation 941 in the *Act* was modified to include harassment as grounds for professional misconduct. Harassment was placed, by the PEO, inside the definition of professional misconduct, subsuming sexual harassment. The use of the terms sexual harassment, discrimination, and sexual discrimination are placed outside of the regulatory definitions, within the PEO policy statement, the Guideline, and various activities relating to the education and license exams for incoming engineering practitioners. The WEAC's regulatory and practice achievements and its ouster from the PEO reinforced the power of the self-regulation nodal point and regulatory discourse to control the meanings of gender inequity related discourse in the association. In Chapter Six, I deconstructed the meso-level argumentative positionings by interrogating the texts of the sites of struggle for the conditions of hegemony. The universal empty signifier of harassment was assumed to subsume sexual harassment. The universal empty signifier of 'the practice of regulation' was assumed to subsume human rights, as being covered by others. The universal empty signifier of 'the practice of engineering' was assumed in order to exclude human rights as part of professional practice. The 'practice of engineering'

was used to argue that concerns about sexual discrimination and sexual harassment are not within the purview of the PEO. Workplace issues are not the concern of the PEO, according to the PEO Council.

The WEAC Legacy

The WEA Committee worked from 1989 to 2003 to articulate the workplace issues of females in the profession and to antagonize meanings within the purview of the PEO. Over time, these sites of struggle resulted in several important discursive outcomes. Firstly, although it took five years, and numerous trips to Council, harassment is placed inside the legal power to enforce penalties of professional misconduct. Outside of the *Act,* the PEO added a policy statement and a Guideline for Human Rights to Professional Practice. Sexual harassment, discrimination, and sexual discrimination are placed outside the legal meaning of professional misconduct. The WEAC also added activities that served to educate incoming professional engineers about the notion that human rights respect was considered by the PEO to be an integral part of the practice of engineering. The WEAC also managed to get human rights and ethics related content added to the Professional Practice licensing Exam. It was also active in recommending to engineering education bodies that human rights be added to engineering courses on engineering professionalism

and ethics. Community building activities such as networking, career development, and bi-annual meetings were designed and conducted in order to provide support for females in the profession. The WEAC participated in projects external to the PEO, such as the Partnerships for Change project. This project served to examine the recruitment efforts of post-secondary engineering educational institutions and instigated the creation of a gender-awareness kit for engineering faculty. The creation of the Inclusiveness Committee within the PEO was the last antagonistic task of the departing WEAC.

Discursive Effects

When local data is available and maintained in a suspension of context, the mechanisms of hegemony may appear clearer to observers. By viewing the PEO Council debates across several sets of time, I can see that hegemonizing actions are not limited to abrupt, heavy-handed shuttering of meanings to change. Maintenance of dominance of meanings (Weedon, 1997) includes subtle, disparate and almost imperceptible rhetorical distancing from antagonisms, including side-steps, omissions, and silences. The PEO Councillors almost never denied that sexual harassment and sexual discrimination were important engineering workplace issues. The PEO Council did deny that acknowledging and trying to deal with these

issues were within responsibilities of the PEO, especially within the embrace of regulation. At this meso-level, there is an omission of questioning as to why its complaints and discipline procedures were not being used by female engineers. Female members regularly reported gender-based discrimination and harassment, *but not to the PEO*. Inclusion of sexual harassment within Regulation 941 had the potential for many meanings and many outcomes. The WEAC's antagonistic task was an attempt to connect the reality of the workplace, as defined by female engineers in the three member survey reports, to the legal lever of disciplining for unprofessional conduct. It was also an attempt to bring the seriousness of the issue in the profession to the attention of the association and to hold the practitioners accountable. It would have been a tardy but necessary acknowledgement by the PEO that gender-based harassment existed in the profession. It would have been clearer to those in the profession that this behaviour, when executed or condoned by practitioners, would be considered as unbecoming to the profession of engineering. It would have strengthened and clarified for practitioners that an underlying principle of self-regulation is to form the meaning of professional conduct. It would have been taken much more seriously and carried more weight to have sexual harassment included in the Regulation, where it would be

enforceable and punishable by the PEO, rather than outside the Regulation, where it would be unenforceable and therefore not punishable. It would have given the PEO significant leverage in the strategies it could adopt with respect to this issue, in light of its regulatory control and its capacity for non-regulatory influence over the professional conduct of 73,000 individual and 4,100 organizational practitioners in Ontario.

A second form of distancing occurs with the difference between the language of the PEO regulation and that which is found in the *Code*. As mentioned before, the *Code* has 15 grounds for discrimination. The "Harassment in employment" section in the *Code* contains 14 grounds for freedom from harassment:

> Every person who is an employee has a right to freedom from harassment in the workplace by the employer or agent of the employer or by another employee because of race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sexual orientation, gender identity, gender expression, age, record of offences, marital status, family status or disability. ("Ontario Human Rights Code," 1962, pp. c. H.19, s. 15 (12); 1999, c. 1996, s. 1928 (1996); 2001, c. 1932, s. 1927 (1991); 2005, c. 1995, s. 1932 (1996); 2012, c. 1997, s. 1994 (1992).)

The fifteenth ground for freedom from discrimination, sex, is treated separately.

Harassment because of sex in workplaces

> Every person who is an employee has a right to freedom from harassment in the workplace because of sex, sexual orientation, gender identity or gender expression by his or her employer or agent of the employer or by another employee. ("Ontario Human Rights Code," 1962, pp. c. H.19, s. 17 (12); 2012, c. 2017, s. 2016 (2012).)

By removing the word 'sexual' from inclusion in the legalized meaning, thereby omitting regulatory reference to sex, sexual orientation, gender identity and gender expression, it neutralizes the femaleness of the issue, subordinating it to a gender neutral term within regulatory activities, which carry weight and penalty. With sexual harassment subsumed under harassment in the Regulation, the other sexual harassment and sexual discrimination remedial actions are deferred to the PEO policy statement about human rights, the *Code* information included in the Guideline, and the educational initiatives. The de-sexualizing of sexual harassment distanced the PEO from the accounts of female engineers in the three national reports and the position of its own WEA Committee. It may have

been the only political way to get a regulatory lever from Council at the time but it also freed the PEO from having regulation-based leveraged discussions about sexual harassment in engineering workplaces.

The distancing of the WEAC from the regulatory practices of the PEO was a less subtle manoeuvre of hegemony. Regulatory issues were no longer in the mandate of the WEAC. The WEAC lost its ability to lever self-regulation within the PEO, which it had been able to use effectively previously. It could no longer challenge meanings within the regulatory articulations. It could no longer leverage the scrutiny of the public, the Ministry of the Attorney General, or the *Act*. It would no longer be able to lever its presence in an organization with 73,000 members and 4,100 Certificate of Authorization holders. Its placement outside of the powerful discourse of regulation would reduce possibilities with respect to the discursive field available through the regulation route. By carving off the gender-neutral regulatory issues, past, present and future, the WEAC was left to execute activities designed to encourage and support female high school students and female practitioners. The PEO Council was also saying that regulatory power was not a lever to be used to increase representation of females in the profession. The Council was distancing itself from the opportunity for the association to improve gender balance in the

profession through its ability to certify, monitor, and discipline engineering labour. It defined that the status of the working conditions for its members was neither a regulatory issue nor one of the practice of engineering. It is ironic and a contradiction that when the leverage of regulation could have been used to keep the WEAC within the PEO, it was successfully played against the WEAC.

Since moving to the OSPE, the WEAC has focused on networking, mentoring and career development initiatives. As publicly stated in 2011 (Ontario Society of Professional Engineers, 2011a), in pursuit of its now specifically advocacy-based mandate, WEAC continues to sponsor the Spring and Fall Forums for female members of the PEO and university-based summer camps for high school girls. In the pure advocacy meaning that was forced upon it, the WEAC appears to have two major thrusts: education and support of females in the profession through mentoring, networking, and career development. The targeting of educational institutions has had two threads: the sponsoring of university-based engineering camps for female high school students, which is ongoing, and training engineering faculty on gender equity issues in the classroom (a one-time project of the Partnership For Change initiative). Both of these activities bypass male high school students who form the majority of

engineering school cohorts. Both of these activities bypass male and female university students, bypassing future practitioners. Lastly, both of these activities avoid direct gender equity work in engineering workplaces, bypassing practitioners. Emphasizing targets *outside* engineering workplaces ignores and avoids dealing with issues that academic research has reported for female practitioners *inside* engineering workplaces, such as sexual harassment and sexual discrimination. The absence of conversations about power relations with respect to the concept of gender equity in the association is striking. Even within the laudable idea of training engineering faculty on gender issues, the use of power relations as a topic was dropped because the concept was too difficult to present in within the constraints of the workshop time allotment (Partners for Change, 2004, 2006a). This absence is also present in the history of topics of the WEAC's fall and spring mentoring, networking, and professional forums. Academic theory, and feminist theory in particular, is notably absent in PEO association studies and member surveys. The current WEAC activities in contrast seem necessary yet narrow in scope.

In 2010, the third nation-wide Survey of Working Conditions for Engineers (Women in Engineering Advisory Committee, 2010a, 2010b) was conducted by OSPE-WEAC, PEO, Engineers Canada, and the Natural

Sciences and Engineering Research Council Chair for Women in Science & Engineering - Ontario region. There were no direct questions asked about sexual harassment or sexual discrimination in the 2010 PEO member survey. The authors conclude that there was evidence of modest improvement in the working conditions of engineers in the profession from 1994 to 2010, a sixteen year period. Frize (2010) and Cukier (2010) report regression and slide back in terms of the numbers of females studying and entering the engineering profession in Canada. They call for changes in public policy.

The current gender-parity related activities in the PEO/OSPE associations have a number of underlying assumptions. It is taken for granted by the Ontario professional engineering association that the lack of support and encouragement for female high school students interested in engineering is a root cause for low female representation in the profession. It is taken for granted that if female engineers receive more mentoring, networking and career development opportunities that more females will enter and stay in the profession. This approach to gender parity issues is compounded by the small number of females in the profession and limited volunteer labour available in the association. If female practitioners are designated as the designers and drivers of gender

equity articulations in the engineering association, this continues the pressure on female practitioners and educational institutions to feed more females into the profession. The burden of taking on discriminatory practices in engineering workplaces lies squarely on the shoulders of the female engineers in the profession. By implication, lack of improvement also lies on their shoulders. Female practitioners who are in engineering workplaces are the ones who must formally complain about the professional conduct of their fellow engineers, suppliers, customers or employers in the case of sexual harassment and sexual discrimination. It is ironic that female engineers talk (to academic researchers), are not being listened to (by their association), and yet are responsible for all of the organizational remedial work with respect to human rights. It is assumed by the association that the WEAC is the only place for women's issues to be addressed. There appears to be little concrete connection made by the association between the low numbers of women in the profession with professional conduct in the workplaces. Consequently, there is little action taken in engineering workplaces by the association; engineering workplaces are left alone and unaccountable by the PEO for the environments in which these females work and for the status of its members' working conditions.

The struggles of the WEAC during the 1990s to change the profession were the struggles for the meanings of sexual harassment, harassment, sexual discrimination and discrimination in the PEO. Gender equity itself is a floating signifier. The actions that the PEO has taken to address the issues that female practitioners face in engineering workplaces are necessary but insufficient. The current gender equity activities are not antagonistic. Consequently, the status quo is gently bobbing in place. The effects of the discursive practices contribute to the failure of the association to unilaterally and autonomously bring sufficient gender parity to the profession. The practice of engineering is perceived as including the successful management of the work place conditions of females in the profession. This is a complete contradiction to the reality of the continual privileging of one gender over another. It is an illusion that the engineering association is taking care of its own business with respect to fixing the problem of low representation of females in the profession

Chapter Eight Conclusion

This final chapter addresses the contributions, limitations, future directions of this research, and reflections on this journey. I will begin with the contribution of this work to the larger body of organizational analysis.

Jorgensen and Phillips (2002) talk about evaluating the scholarship of critical discourse analysis work in terms of whether the account is fruitful. I believe that I have established a position for plausibility of account and I argue that there are many instances where this account bears fruit. This work contributes empirical evidence for the implications of hegemonic actions in self-regulated professional associations. The analysis delivered against the promise of the research question in that the explanations provided a fuller, yet still incomplete, understanding of why gender change is so slow in this profession. This work delivered a view of organization that was contextually and locally relevant. This enabled me to expose structures and mechanisms of hegemony within a professional association setting, effectively crossing academic work with practice. This is a new and different route to empirical data for this body of literature.

With respect to methodology, and within the framework of plausibility provided in Chapter Three, I believe that the production of the knowledge was consistent and coherent with the proffered poststructuralist

theory and discourse theory methodology. The analysis was performed on a full range of discursive features. It provided adequate explanations of how, under what conditions, and for what reasons the hegemonic articulations of the sexual harassment and sexual discrimination discourse of the discursive formations of the engineering association are constructed, contested and undergo change. In my opinion, the questions that emanate from consideration of the data have been satisfactorily addressed in the analysis. I am pleased that I was able to add an empirical application of Laclau and Mouffe's discourse theory. These are not common. Although I struggled a great deal to master the theory, in the end, I feel that the methodology lent itself well to the problem at hand, the research question and the site of investigation. I think that it is helpful to have brought to light some specific examples of hegemony, not only by showing how meaning is created and maintained but also spotting concrete opportunities for change. The exercise of proving hegemony using its four conditions of existence was demanding but important. It is critical to this account, and to other accounts that claim hegemony exists. Researchers must not just declare that there is hegemony, Laclau and Mouffe wanted us to show *how* the hegemony works. Doing this adds new theoretical awareness about the political terrain of this self-regulated profession. This

was not easy, and again, it is not done often. I believe this can bring more alertness to the impedance to gender equity that is wrought through the legacies of institutions. It is important to have found that the cherished privilege of self-regulation has impeded gender change in this profession, and to pause and reflect on that irony.

This study also contributes to highlighting and creating some awareness around some of the contradictions of the problem – women and girls are choosing to avoid the profession, while other women are working hard to attract them to the profession. There is obviously some kind of negative feedback loop about the perception of engineering workplaces – female graduate engineers are telling their stories to academics, why wouldn't they be telling their stories to others?

Limitations of the Research

By choosing to define and treat my research question in a certain way, this work naturally has limitations. This section brings forth some of those limitations and also some of the challenges in the design and execution of the research.

- A self-regulated profession must be transparent and must answer to its stakeholders. However, many of the documents were reports of what was said at meetings, rather than actual transcripts. The PEO is

now recording its meetings in audio, and making those recordings available to the public.

- There is an absence of complete data of PEO committee meeting minutes. It would have been helpful to have read some of the WEAC meeting minutes, and minutes of those meetings that the WEAC had with other Committees.
- There are limitations due to the restrictions imposed in the literature search. There are interesting strands in educational pipeline data, such as research conducted with female engineering students, female engineering faculty, and other female scientists.
- Although the boundaries within the self-regulated engineering profession were important to maintain in support of plausibility claims, foraying into other areas of feminist research in disciplines such as science, mathematics, and technology would likely be beneficial to researchers in this area. One possibility for further research is to the gender equity research that has been done within the Canadian Coalition of Women in Engineering, Science, Trades and Technology and the National Science and Engineering Research Council.

- There are other reference points in Canadian engineering workplaces, associations, and engineering educational institutions that are not being considered here, even though they are parts, however distant, of the overall discursive formations.

Implications for Future Academic Research

Howarth (2000) echoes Jorgenson and Phillips' ideas around the fruitfulness of an account but also asks whether the new account opens different and related areas of further research.

Here are some disparate suggestions for future directions in research and some of the possibilities for others to contribute, beyond the question of what experiences females have in engineering workplaces:

- Even if self-regulation is an important boundary for this work, other self-regulated professions, such as the medical and the legal professions, have made greater although not perfect inroads into issues of gender equity. It would be worthwhile to look at other self-regulated professions, for instance comparing the sexual harassment and sexual discrimination remedial strategies with other provincial regulating bodies such as the College of Physicians and Surgeons and the Upper Canada Law Society.

- I was pleasantly surprised when I discovered that self-regulated professions must make their workings available to the public. This is a welcome and rich opportunity for organizational researchers, of any methodological convictions.
- It would be interesting to further explore why only one sexual harassment disciplining has arisen in the history of this engineering association during the period of 1998-2010. One could explore, for example, sexual harassment discipline hearings in other provincial engineering associations as well as other professional associations that are self-regulated.
- At this point, based on the database searches, there is no evidence in the academic body, peer reviewed journals of the study of sexual harassment and sexual discrimination discourse or remedial actions in engineering workplaces or within professional engineering associations. On the flip side, why is it that the academic studies' results are not used discussed in association research?
- Canadian engineering workplaces form a fragmented service sub-industry; there are 25,000 engineering workplaces in Canada, many of them with fewer than ten employees. One research question could be to investigate the impact of the fragmentation of engineering

workplaces with respect to human rights legislation, and the reach and the limits of that reach of regulatory bodies.

- What have professional engineering unions done with respect to sexual harassment and sexual discrimination? Is there a difference between unionized and non-unionized engineering workplaces with respect to gender climate?

Recommendations for Future Engineering Association Practices

There are important contributions that this work makes to practice. In a general sense, it adds to our understandings of professional regulation and professional discourse. This work and its findings also raise critical questions about the sexual harassment and sexual discrimination discourse of engineering associations. In that sense, this work contributes to questioning the role of engineering associations in improving known workplace conditions that are known to be poor for its members. I believe that the new information can be useful to those in the profession, and that the work challenges power relations in the association. A list of recommendations for changes in practices follows.

1. Why reach into engineering workplaces to discuss working conditions for PEO members is not discussed by the engineering association? The PEO has access and leverage over 4,100 Certificate

of Authorization holders. Why is it not a PEO strategy, and why is it not attached to actions?

2. The transcript of the lone sexual harassment discipline hearing (Professional Engineers Ontario, 1998) is a stunning, vivid blow-by-blow example of sexual discrimination in the workplace. I suggest its inclusion in all awareness and training kits about preventing sexual harassment and sexual discrimination in the engineering profession.
3. It has been of ongoing interest to me that Miller (2004) also found that female practitioners in this area (outside of academia) are keen to receive information about gender identity construction in organizations but are not getting the information in a form that is accessible to them. Are there ways that the association can improve its outreach into the graduate female engineer community?
4. Are the results of the National Survey of Working Conditions sent to Certificate of Authorization holders or simply published on association websites? This could be one method of improving reach into engineering workplaces.
5. Do senior engineering workplace managers receive communication about the academic findings regarding the paid work experience of

female engineers, or other findings about inclusive workplaces? Could it be part of the role of the PEO to communicate such findings?

6. What are the implications of there being only advocacy activities in the current-day WEAC? What are the implications of there being only a staff equity Committee in the PEO? What are the implications of not addressing engineering workplace issues that have only, in the words of the PEO, shown modest improvement over a sixteen year period?
7. The recent version of the National Survey on Working Conditions for Engineers omits questions and therefore bypasses opportunities for discussion of what engineering is like for females, and other groups who are considered to be minorities. See Brockman (2000) for example for different ways to ask questions of association members. Are Ontario engineering work places at risk of being found out of compliance with the Ontario Human Rights Code?

Epilogue

For me, this work was definitely about the process rather than the end result. To that end, I would like to share some personal observations about my journey. I started this research because I was disappointed with

my own work experience with the engineering profession and dismayed by the lack of awareness and acknowledgement for the work place experiences of female engineers. There is no doubt that this profession is resistant to change. However, this work has allowed me to see that there are many people in the profession and specifically within Professional Engineers Ontario who have dedicated much time over many years to improving gender friendliness in Ontario engineering work environments. There are also many people both inside and outside of the profession who are concerned about poor work experiences of people in this profession. They are taking action, in many diverse ways, to make this profession more inclusive and more generous to those who want to work as professional engineers in the province of Ontario. The signs of change, albeit incremental, are there. My respect for the profession has been refreshed and my enthusiasm has been renewed. Engineers work hard and do good work that is important to society. It is a worthy profession and I continue to be proud to be a member of this community.

Lastly, I have come to agree there are more important gender related issues in the world. As my son would say, this work focused on a middle-class first world problem. I would like to think that, in some small part, this work contributes overall to our understandings of the

mechanisms of change, and why movement towards emancipation can be so slow.

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