STEM-PROFESSIONAL WOMEN'S EXCLUSION IN THE CANADIAN SPACE INDUSTRY

CRITICAL MANAGEMENT STUDIES

Series Editor: Albert J. Mills

Praise for *STEM-Professional Women's Exclusion in the Canadian Space Industry*

> You probably haven't read many books about women scientists working in the space industry, perhaps because there are not many (in both senses). This book, *STEM-Professional Women's Exclusion in the Canadian Space Industry*, from a senior space scientist, formerly the only female mission manager in the Canadian Space Agency, examines in depth and in detail the identities, experiences, careers and career anchors, discourses and contexts of women, and some men, in the sector. By way of expert feminist intersectional poststructuralist analysis, it brings many insights, not just for STEM-professions and professionals, but the wider worlds of men's organizational domination and men's protected and excluding bastions.

> **Jeff Hearn**
> (Senior Professor, Gender Studies, Örebro University, Sweden;
> Professor Emeritus, Management and Organisation,
> Hanken School of Economics, Finland; Professor of Sociology,
> University of Huddersfield, UK; author of *Men of the World*)

> Women's exclusion has become visible in this highly novel book on the Canadian space industry. STEM-professional women's experiences, their agency and the ways in which they move beyond the positions assigned to them institutionally and professionally are analysed with care through theoretically rigorous debates surrounding identity, power and difference. As readers, we learn about remarkable women in a unique context, and thus teaches us about the ways in which history shapes the present lived experiences of women working in male dominated environments. Excitedly, this book enables us to think what future is possible for women as they continue to break through what would have historically been seen as impossible barriers. A must read.

> **Alison Pullen**
> (Professor of Management and Organization Studies,
> Macquarie University, Joint Editor-in-Chief,
> *Gender, Work and Organization*)

> This book is a beautifully written synthesis of intersectionality and critical sensemaking in one of the most exciting contexts of our time, space. Stefanie Ruel's unique voice and her insightful appropriation of a rich set of ideas to study the core question of her study, "how there were so few STEM-professional women managers in the Canadian space industry," has all the ingredients of a classic in the empirical study of identity and intersectionality. Her research marks a thorough understanding of the complex

relationships between context, knowledge and experience that is required to perform a detailed analysis of discourses and power-relations in such a way to reveal the exclusionary order prevailing in the space industry. Through the brilliant fusion of diverse theoretical and empirical ingredients, she has provided us a thought-provoking book that is a true adventure for the reader.

Päivi Eriksson
(Professor, University of Eastern Finland Business School)

Dr Stefanie Ruel is the only woman to fulfil the role of Life Sciences Mission Manager in the billion-dollar Canadian space industry, a sector which is dominated by White cismen. In this beautifully written and highly engaging book, Dr Ruel explores micro-level, everyday interactions in the industry to surface the discourses which make for the ongoing exclusion of women from scientific, technical, engineering and mathematical management positions. Her data is drawn from detailed interviews with men and women in the space industry and analysis of publicly available documents. The book provides a compelling lens on an industry which is under-researched in organization studies and a much-needed corrective to research which focuses only on 'who' and 'how many' questions about gendered, raced and classed exclusion and discrimination. It also makes a powerful case around the resistances that female STEM professionals can mount in the space industry as well as how their male colleagues can support them in enacting social change. Put simply, it is a must read for anyone interested in difference, identity, discrimination and exclusion, in organizations and elsewhere.

Jo Brewis
(Professor, Department of People and Organizations,
The Open University Business School)

It is impossible to read this book without being impelled to action in the academic and in the social fronts. The work is an extraordinary act of organizational scholarship, achieving theoretical and empirical richness via comingling of organizational and feminist theorizing, Foucault, and the voices of human protagonists in the context of the Canadian space industry. As importantly, doing this research guided the author toward courageous acts and realizations; a poignant personal story where the significance of academic achievement gives way to new spaces for action and commitments to social change. A "must read" if there was one in recent organization studies!

Marta Calás
(Professor, Isenberg School of Management,
University of Massachusetts, USA)

CRITICAL MANAGEMENT STUDIES

STEM-PROFESSIONAL WOMEN'S EXCLUSION IN THE CANADIAN SPACE INDUSTRY

Anchor Points and Intersectionality at The Margins of Space

BY

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INVESTOR IN PEOPLE

For my children and my husband − May you each rise above the attributed anchor points you will encounter on a day-to-day basis.

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List of Abbreviations

AI	Artificial Intelligence
CNES	*Centre national d'études spatiales*
CSA	Canadian Space Agency
CSM	Critical Sensemaking
CV	Curriculum Vitae
DLR	*Deutsches Zentrum für Luft- und Raumfahrt*
DND	Department of National Defence
DRB	Defence Research Board
DRDC	Defence Research and Development Canada
DRTE	Defence Research Telecommunications Establishment
EE	Employment Equity
ENG	Engineer (occupational designation)
ESA	European Space Agency
EX	Executive
G7	Group of 7
G20	Group of 20
GMRD	Guided Missile Range Division
ISS	International Space Station
JAXA	Japan Aerospace Exploration Agency
JPL	Jet Propulsion Laboratory
MDA	MacDonald Dettwiler and Associates
NASA	National Aeronautics and Space Administration
NRC	National Research Council
OECD	Organization for Economic Co-operation and Development
PC	Physical Scientist (occupational designation)
SSHRC	Social Sciences and Humanities Research Council
STEM	Science, Technology, Engineering, Mathematics
UKSA	United Kingdom Space Agency
USA	United States of America
USSR	Union of Soviet Socialist Republics
WFA	Work Force Availability

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About the Author

Stefanie Ruel − mother to four children, early career academic, former life scientist − received her Bachelor of Science (Major Mathematics) from McGill University. She also holds a Masters of Business Administration, from Athabasca University, Alberta, Canada. In late 2017, she successfully defended her dissertation and was awarded the degree of Doctor of Business Administration from Athabasca University. She also received Athabasca University's Convocation Scholarship for Academic Excellence, graduating top of her graduating cohort. She was awarded the Academy of Management Critical Management Studies Division's 2018 Best Dissertation Award for her work entitled "Multiplicity of 'I's': Women's exclusion from STEM-management in the Canadian space industry." She also won the Best Student Paper Award, at the Administrative Sciences Association of Canada (ASAC) 2017 conference, for her paper entitled "The 'silent killers' of a STEM-professional woman's career: A critical sensemaking study of discourses within the Canadian Space Industry."

Dr Ruel was, until recently, a Senior Mission Manager in Life Sciences at the Canadian Space Agency (CSA), leading more than ten life sciences missions into space. She was also the Increment Payload Manager for Canadian Commander Chris Hadfield's return to space, aboard the International Space Station, in 2013. Dr Ruel is currently an assistant professor at Concordia University, John Molson School of Business, Faculty of Management. Her research agenda includes a critical examination of gender and diversity in science, technology, engineering, and mathematics (STEM) contexts, framed within intersectionality scholarship. She focuses on both historical and contemporary concerns in these STEM contexts, putting forth social justice initiatives to move individuals and society away from systemic discriminatory practices.

Dr Ruel is the sole author of a number of academic papers including: "The 'silent killers' of a STEM-professional woman's career" in *Equality, Diversity and Inclusion*: An International Journal, and the forthcoming "An open letter to the Universe: A poststructural reflection on conducting 'good' research" in the *Qualitative Research in Organizations and Management Journal.* She has also collaborated on published academic papers including "Intersectionality at work: The case of Ruth Bates Harris and NASA," coauthored with Dr Albert J. Mills and Dr Janice L. Thomas, in the journal *Ephemera*.

Preface

One of the great pleasures of editing the Emerald Critical Management Studies book series is that I get early exposure to amazing work. Nowhere is this more evident than in the current book by Stefanie Ruel. How often do we get a peek, let alone an in-depth insight, into a major space agency – the Canadian Space Agency (CSA) – and space industry? On the surface, we are drawn to the glamour of the space industry, but Stefanie is quick to puncture that illusion. She does so by sharing her own attraction to the industry when, as a girl, she was seduced by the glamour and excitement of space as she watched the first of the Star Wars movies back in 1977 – alluding to the fact that it held out the promise of being the "coolest job ever." Yet, as she was later to discover, many of the challenges of space did not lay with the "Dark Side of the Force" but closer to earth – much closer to earth than she could have imagined. As she rose through the ranks to become the CSA's only woman Mission Manager, she encountered a number of discriminatory practices and attitudes that negatively affected those that didn't fit the masculine stereotype of "the right stuff." The label of the CSA's *only* woman Mission Manager speaks not only to her accomplishments but also to the discriminations that prevented other women from achieving the same level or professional standing within the space industry. In keeping with the Star Wars simile, Doctor Stefanie Ruel – to give her, her full academic title and one of her many anchor points – takes us through a journey of challenge and change as she encourages the reader "to consider what can be done to change the systemic exclusionary social reality of this industry." In her own words, she advises us to "hang on, [because] you too have embarked on a Star Destroyer!"

There is an old feminist saying that "the personal is political" and Professor Ruel takes this to heart, placing herself at the center of narratives but only to illuminate the situation that many women have expressed to her as she searched for answers to address discrimination in the Canadian space industry. As she explains her own process of "doing space," there is an important balance in the study between her own insights and those of the women she worked with, interviewed and otherwise talked to. As she puts it, the book is not about her but she is present in it. It is about who she is, who she is becoming and her varied emotions, which are imbedded at all levels of the text. She refers to this process as navigating "between objective and subjective discourses;" between the scientist that had once occupied a central part of her identity to the feminist poststructuralist researcher engaged in a study of the very discourses that were associating herself and other women with a sense of "Otherness" and marginalization.

As we begin to take this ride on the Star Destroyer, Dr Ruel cautions us that we are about to encounter a very complex situation, involving the use of various lenses to help make sense of what we are seeing. But, she assures us, we will

understand the complexity through an oscillating process involving breaking it down into its composite parts and then reassembling it back to the larger picture of "what it is to 'do space' as a STEM-professional woman." This, incidentally, is no mean feat. Researchers and practitioners alike are often awed by the complexity of any issue and resolve. The answer, especially with regard to research, is often to abandon complexity and focus on selected aspects of a given situation. Dr Ruel has chosen to take on the sheer sweep of complexity to allow us to understand and feel the different elements of a situation. To do this, along the way, we will encounter *anchor points* (experiential traces of identity/labels established through interactions with/and reflections on other people); *social psychological processes* (cognitive sensemaking); *formative contexts* (dominant practices and ideas that influence sensemaking); *micro-, meso-, and macrocontextual levels* (organizational rules and values); *discourses* (powerful ideas and interrelated practices that construct privileged, marginalized, and neglected identities); *intersectionality* (varying relational points of identity that influence sense of self); and several key theories, including identity theory, poststructuralism, intersectional feminism, and critical sensemaking – all deftly handled through Ruel's careful analysis and structuring.

Albert Mills
Series Editor

Acknowledgments

Whenever I think about space, I can't help but think about dimensions. The first three dimensions are, for the most part, known and accepted: moving up and down in space; moving front to back, or back to front; and, finally, moving across, left to right, or right to left. The final dimension, time, is for me the most fun to consider. It is, simply stated, the translation of an object through space over time. As we all move through space-time, we bump into each other, interacting and influencing each other. This is my opportunity to reflect on my journey through this fourth dimension, and how the interactions and influences of the past will continue to influence and interact with my future. I am embracing the earliest point that I remember, in my experience of space-time, with respect to my journey toward awareness, in such a way to reach out through the dimensions to acknowledge individuals who influenced and interacted with me.

I would first like to thank George Lucas and Carrie Fisher. Mr Lucas had the courage to share his vision of what space travel would be like, influencing a little girl in 1977 to believe that she could reach for the stars. Ms Fisher, the embodiment of the rebel Princess, led others into space in spite of her (cis)gender and her small stature. She will always be a Princess to me, one who can break out of any tight situation, including a trash compactor, in order to save the Universe.

To my MBA supervisor, Dr Mark Julien, Brock University, to whom I continue to be so very grateful for his support, guidance, and ongoing confidence in me. Without his gentle push, I never would have found the courage to reveal the systemic discriminatory social reality that I was a part of for so long.

A big thank you to my doctoral co-supervisors, Dr Janice Thomas, Athabasca University, and Dr Albert Mills, Saint Mary's University, who believed in me throughout my awkward first steps in writing this book. Their confidence in me never faltered, in spite of my producing such terrible first draft(s) that I cringe, even today, to even think about them. I believe, Dr Thomas, that I finally have a healthy relationship with commas. Dr Mills, two shy individuals, found each other at the International Doctoral Consortium in 2013. I can state, without hesitation, that my life changed tremendously since that first encounter with you. My state of being is free to embrace "who I becoming," thanks to you.

I would be remiss if I did not acknowledge also the support and guidance I received from my external committee member, Dr Gabrielle Durepos, Mount Saint Vincent University. Her excitement for my suggested research in the space industry, and her patient and detailed reading of the initial drafts of this work, were generous gifts that are reflected in this book. I must also acknowledge Dr Jeff Hearn, Örebro University, Sweden/Hanken School of Economics, Finland, and Dr Maddy Janssens, KU Leuven, external examiners for my proposal and dissertation defense, respectively. Dr Janssens kind and positive words of encouragement at the beginning of my defense will stay with me always. The

Prologue

As I sit in my room, staring up at bookcases full of my cherished *Star Wars* memorabilia, I consider (again) how to engage you, the reader, in my research on the Canadian space industry. I found, in the past years of study, writing and presenting at conferences, that engagement comes from talking about me and my experiences within this industry. While this book is not about me, I am present in it. I do acknowledge that 'who I am' and 'who I am becoming' along with my varied emotions – exhilaration, happiness, frustration, tears, discovery, etc. – were intertwined in every word, sentence, and paragraph of this work. I cared for, and nurtured, this work through the many drafts and revisions that eventually led to this book, that you will read and, hopefully, engage with.

I am often asked how I came to work in space. I, to this day, remember sitting in a movie theater with my sister, anxiously waiting for the movie *Star Wars* to come up on the screen. This was 1977, when things like Star Destroyers, Princess Leia, and Wookies did not exist within the realm of imagination, let alone in our discourses. When this aforementioned Star Destroyer came onto the screen, I knew, at that very moment, that I wanted to be on that ship.

Today, in contrast, I am not (yet) asked why I stopped working in space. I expect that this question may be framed within feelings of incredulity on the part of the person asking the question (i.e., How could you quit?! You had to have the coolest job ever!). This work seems to exist between these two states, of being on the inside, and then of being on the outside, of what I began to call my 'doing space.' As such, I navigate between objective and subjective discourses throughout this book. The former reflected my previous life of Space Shuttles and the International Space Station, as a Life Sciences Mission Manager, where 'I' did not exist as a participant/leader but as an objective deliverer of space knowledge. The latter reflected my newfound freedom, of being 'who I am' and 'who I am becoming' within undefined academic Foucauldian poststructural contexts. The irony of this last statement is that I only now feel my state of free-fall, which is what microgravity is all about, much more today than I ever did while 'doing space.'

I do hope by sharing a little bit of 'who I am' with you, the reader, at this time, that you will see me along with the other STEM-professional women who participated in this study. The complexity of the social sometimes requires that it be broken down into its composite parts, to be examined branch by branch.

I assure you that I will guide you from these individual branches, back to the larger picture of what it is to 'do space' as a STEM-professional woman, and encourage you to consider what can be done to change the systemic exclusionary social reality of this industry. So, hang on, you too have embarked on a Star Destroyer!

Chapter 1

The View from Earth

Humans have been fascinated with the idea of space and its exploration since we first looked up at the stars and wondered about them. The space industry, as we know it today, grew from this curiosity to attempts to control the heavens via such activities as the Cold War between the United States of America (USA) and the Union of Soviet Socialist Republics (USSR) (Hartt, Mills, Helm Mills, & Durepos, 2009). During these military attempts to control space, the Canadian space industry was brought to the attention of the global space community with the USA-provided launch of the Canadian-designed and built Alouette I satellite in 1962 (Canadian Space Agency, 2012a; DRTE, 1958; Godefroy, 2017), marking Canada as the third spacefaring nation after the USA and the USSR.

These global space military efforts would eventually lead to global capitalist concerns with respect to 'doing space.'[1] The contemporary Canadian space industry is now recognized for its strengths in such areas as satellite-based communications, earth observation, and space robotics (Aerospace Industries Association of Canada [AIAC], 2015) and generated, in 2012, revenues totaling CAN\$3.32B (Canadian Space Agency, 2013). A diversity of individuals worked together to achieve these capitalist goals, holding various professional occupational positions including scientific/technical/engineering and administrative/corporate roles. The problem that I set out to study was hidden in the statistics related to this diversity of individuals, and reflected some of my experiences in this industry, as the only Canadian woman to fulfill the role of Life Sciences Mission Manager. As I was completing my graduate degree, while working full time in this industry (and raising four children with my husband), I tentatively began to look around me to find that I was often the lone woman at the table in

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[1]The poststructuralist perspective I embraced in this work was founded on the notion of difference. Difference is a difficult term to control given the misappropriation in meaning that has historically occurred with this concept. The reader is cautioned to not confuse poststructural difference with implying that the opposite of difference is sameness. Difference is used here in the sense that we reproduce uncertainties, and a range of beliefs/meanings, that we don't necessarily aim to resolve (Belsey, 2002). As such, a poststructuralist examination of a social reality compels the researcher to no longer think about binary oppositions such as men versus women, White versus Black, as these collectivities invoke sameness and difference arguments that were not appropriate within this perspective. To this end, I use scare quotes throughout this work to signal to the reader that I am reproducing poststructural uncertainties.

technical/operational meetings in Canada.[2] I was surrounded by White,[3] military-trained, and/or engineering-trained men who predominantly occupied science, technology, engineering, and mathematics (STEM)-management positions. Delving deeper into these statistics, I found that STEM-professional women represented less than 20% of managers in 2012 across this Canadian industry (Catalyst, 2013; CSA, 2012b). I also found that Canadian STEM-professional women were, and continue to be, relegated into supporting technical and/or administrative corporate roles in spite of their ongoing efforts to try to climb the corporate ladder into STEM-management/executive positions. This social order, where White military-trained men were in senior management positions while women, White or ethnic/raced, were excluded and marginalized into supporting roles was, simply stated, unacceptable. Stating something as unacceptable does not address the problem, however. Such a statement also does not reveal[4] the social order, and the systemic exclusionary reproduction in that social reality.

To surface what it means to work in such an exclusionary social order, I decided to look into the day-to-day interactions among individuals in this industry. Specifically, I looked at mundane discourses among cisgender men and women, who were STEM-professionals, in such a way to undo the exclusionary practices in that social reality. Discourses, in this study, encompassed "everyday attitudes and behaviour, along with our perceptions of what we believe to be reality" (Grant, Keenoy, & Oswick, 1998, p. 2). They can be constructed as sets of statements and practices that bring an object/individual, or a set of objects/individuals, into being within a larger context of meanings (Parker, 1992). This notion of larger meanings, represented via stories and narratives, can play an important role in exposing limits and boundaries of day-to-day social interactions (Saleebey, 1994). Space exploration stories are extensive and reach back to the early Cold War efforts to conquer space, such as in Wolfe's *The Right Stuff* (1979), or more recently in Shetterly's *Hidden Figures* (2016). These stories, and others by industry insiders, endure within the global space industry; they are

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[2]I chose to identify this specific location, in Canada, because the first time I remember *not* being the only woman around the table was at a technical meeting in Houston, Texas, at NASA's Johnson Space Flight Center. In this particular meeting, it was all women, with one man. This meeting was the moment when I 'woke' to the reality I had been in for a 10+ years.

[3]I needed to recognize the socio-political characterizations of race, gender, class, etc., that were produced/reproduced through discourses in spite of Lykke's (2014) "passionate disidentification" (p. 30) efforts. To this end, I capitalized the White race but I left woman uncapitalized.

[4]As a poststructuralist/postmodern work, I was concerned with bringing to light an event, or an experience, not as 'truth' or 'fact' but as a plausible window into a social reality that was, up until now, best characterized as a wall. I chose to refer to this plausible window as revealing. The act of revealing was not premised on seeking out and believing in one 'truth'; it was about having a look inside, at a particular moment in time and in space, to 'see' what was happening.

also hallmarks of discriminatory practices that can be surfaced in such a way to address social orders that limit and bind (Sage, 2009).

Capturing a space story or narrative, and then reproducing it, does not necessarily convey the lived reality of an exclusionary order, however. There needs to be some 'object' (Foucault, 1978) that captures the creation and recreation of that order. Stories and narratives that were centered on an individual's intersecting identities (Crenshaw, 1989, 1991) can be that 'object,' showcasing the limits and boundaries that were (re)created in discourses. I set out to capture these intersecting identities within a reconstructed Glenn (2004) anchor point concept. This reconstructed anchor points concept embraced flowing power-relations (Foucault, 1980) and the making of sense processes that an individual experiences (Helms Mills, Thurlow, & Mills, 2010) in her social order.

I provide, in this chapter, a view from Earth with respect to the Canadian space industry and the STEM-professional women who worked in this industry, who were limited and bounded in their attempts to climb the hierarchical ladder into STEM-management positions. I present my main argument for this study, followed by an introduction to the research framework, broken into three branches based on context, knowledge, and experiences. I then consider the methodological approach, Helms Mills et al. (2010) critical sensemaking (CSM) framework. I follow this with an overview of the significance of this research along with a summary of this book's chapters.

1.1.   Purpose and Focus of This Study

I focused on the question of 'how' there were so few STEM-professional women[5] managers in the Canadian space industry. I specifically examined workplace discourses and power-relations (Foucault, 1980, 1982, 1983), and the impact of these discourses and power-relations on these professional women's identities (Anderson, 2016; Corlett & Mavin, 2014; Mead, 1932, 1934; Watson, 2008). I drew on, and reconstructed, Glenn's (2004) concept of identity anchor points, asking:

RQ1. What is the range of anchor points associated with, and available to, STEM-professional women within the Canadian space industry?

RQ2. What is the relationship between selected anchor points and structural (e.g., organizational rules and formative contexts), discursive (interrelated dominant ideas and practices), and socio-psychological (e.g., CSM) processes?

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[5]The terms 'women' and 'men' encompassed the cultural, feminine, and masculine (normative) cisgender experiences that was attributable to these social positions (Butler, 1990).

RQ3. How do these anchor points influence the exclusion of STEM-professional women from management/executive positions within this industry?

These three research questions provided me with a trajectory to follow in surfacing organizational discourses, as represented by narratives and stories as tangible examples of the larger context of meanings (Saleebey, 1994). These narratives and stories were found in a total of 10 interviews with 6 STEM-professional women, and 4 STEM-professional men who were these women's colleagues. Data consisted of unstructured interviews and select organizational documents that were publicly available.

I applied the CSM framework (Helms Mills et al., 2010) to these collected data. This CSM framework guided me in finding these complex individual's attributed anchor points, their context, represented by meta-rules, rules, and social values, their experiences of dominant ideas, and their CSM processes. The framework also guided me in my analysis of the relationship between anchor points and context, and experiences. By shining a light on these anchor points, contexts, and experiences, I was able to surface the 'how' of the exclusion of STEM-professional women from management/executive positions in this industry. I was also able to consider micro-political resistances (Davies & Thomas, 2004), developed retrospectively, for each STEM-professional woman. I also suggested alternative discourses for the STEM-professional men to embrace, as their own form of micro-political resistances.

1.2.   Main Argument: Discourses, Power-Relations, and Identities in Context

I chose to focus on discourses and power-relations with respect to STEM-professional women's identities, in an attempt to address the epistemological vacuum I found in the positivist and postpositivist empirical literature focused on engineering and science. Having defined discourses, I turn to the notion of power-relations which were influenced by Foucault's (1980, 1982, 1983) work. These were defined as existing locally in day-to-day social interactions. They were continuous, productive, and "capillary" (Fraser, 1989, p. 22). An individual's identities were represented by two theoretical branches, namely self-identity and social-identity. Self-identity was defined as the "notion of who he/she is becoming" (Corlett & Mavin, 2014, p. 262). Social-identity, however, consisted of 'inputs' into this self-identity (Watson, 2008). These inputs were socially constructed, and manifested, in discourses via interactions with others.

The vast majority of the positivist and postpositivist empirical literature on engineering and science, within the context of organizations, was, I found, focused on self-identity alone. Social-identity was hinted at, such as in Chu (2006), or directly addressed under another theory umbrella, such as in social-identity threat by Castro, Block, Ferraris, and Roberson (2013), but was otherwise silent on this issue. This study was positioned in such a way to add to the

theoretical and conceptual development of the temporary, discursive, "fluid and mobile nature of identities" (Rodriguez, Holvino, Fletcher, & Nkomo, 2016, p. 211) that were influenced by social interactions. The result was a study not on self-perception of 'who I am' (Mead, 1932, 1934); it was rather a study reflective of social interactions in such a way to focus on the outside impact on self-identity. In other words, the tales that others tell about, and the impact of, systems and processes were central to the question of 'who I am becoming,' along with 'who I am.'

I was drawn to this notion of ephemeral identities, in discourses, as I wondered about all my own possible identities, and how they interacted together, in the workplace. This idea of interaction was in line with the intersectionality scholarship. Intersectionality, coined by Crenshaw (1989, 1991), was created as a way to address identity categories (cisgender, race, class, and so on[6]) that were interdependent and that constituted each other. This notion of intersecting identities was constructed as being non-additive,[7] where these identities could change through time, context, and social interactions with others (Calás, Ou, & Smircich, 2013). Empirical research conducted by Crenshaw (1989) and Collins (2000), along with many others (e.g., Calás et al., 2013; Hearn, 2014; Torres, 2012; Van Laer & Janssens, 2014), demonstrated that complex identity intersections could position individuals in society, creating an order, often referred to as discrimination, segregation, marginalization, or exclusion. The exclusion of an individual, as I applied this concept in this work, involved power-relations as they were enacted in the everyday, and the effects of power as they marked an individual as the Other (Butler, 1990), resulting in an order that limited and bound this individual (Foucault, 1982, 1983; Yuval-Davis, 2006).

Calás, Smircich, and Holvino (2014) perhaps said it best, calling us to shift our attention:

> from the never-ending search and explanation of differences between men and women […] to tracing how privileged [cis]gendered subjects in organizational studies, i.e. men and women

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[6]Fourteen possible identity categories were identified by Lutz (2002): race or skin color, (cis)gender, sexuality, ethnicity, class, culture, religion, age, able-bodiness, migration or sedentariness, national belonging, geographical location, property ownership, and status in terms of tradition and development. To highlight that these categories are not the central issue but that power-relations were important (Cho, Crenshaw, & McCall, 2013), I chose to identify three categories with an 'etc.' at the end.

[7]There has been much debate in the (cis)gender and diversity literature as to whether multiple identity categories and the resultant discrimination based on these categories should be treated as additive or intersecting (e.g. Bowleg, 2008). In line with the intersectional literature, I maintained the argument that these categories did not 'add' as independent categories because this required a foundational assumption that each individual's experience of their identity was separate and independent.

managers, relate to other actors in interconnected systems of labour, which are also raced, classed, sexualized, and so on. (p. 39)

The challenge remained, however, as to how to surface these intersecting identities, and the attendant outcome of an exclusionary order, among men, women, and transgender individuals working in a particular context. Looking to narratives and stories of individuals in the workplace could become an exercise in 'she said/he said,' which did not reflect the manifestation of intersecting identities or an exclusionary order. Power-relations among individuals had to be part of this investigation, into the creation and recreation of an order. Foucault (1977), Weick, Sutcliffe, and Obstfeld (2005), and Mills and Helms Mills (2004) demonstrated in their own respective works that these power-relations in a particular context were important in framing their respective research. Weick et al. (2005), in particular, focused on sensemaking processes that worked hand-in-hand with power-relations. His sensemaking processes "unfold as a sequence in which people concerned with identity in the social context of other actors engage [in] ongoing circumstances from which they extract cues and make plausible sense retrospectively, while enacting more or less order into those ongoing circumstances" (Weick et al., 2005, p. 409). CSM, building on this Weickian sensemaking, addressed some key weaknesses of Weick's construction of sensemaking. Mills and Helms Mills (2004) folded "such issues as structure, power, [cis]gender, class, and race" (Kindle location 3302) into our understanding, and application, of socio-psychological processes when studying social interactions within a specific context. As for context, these could be represented via the notions of rules, meta-rules, and social values (Mills & Murgatroyd, 1991; Unger, 1987a, 1987b). My reasoning for embracing context in this way was founded on recreating subjective experiences, surfacing rules and social values in these individual's stories and narratives, and analyzing these stories and narratives as a way to open up a new space to effect change.

In addition to folding in discourses, power-relations, and CSM into the study of intersecting identities, the concept of identity anchor points (Glenn, 2004) was needed to address the challenge of applying intersectionality empirically. The term identity anchor point was reconstructed, from its original usage provided by Glenn (2004), where anchor points represented intersecting identity categories that were discursively created and recreated. Anchor points encompassed the act of their creation via discourses, the power-relations among individuals, and these individuals' CSM processes. For example, someone may identify a Black woman who was dependent financially on her partner as one possible anchor point. This anchor point highlighted the intersection of race, cisgender, and the socio-economic status of class. This same person for whom someone discursively created an anchor point – a financially dependent Black woman – has empirically been shown to be treated differently than a White woman or a Black man within a legislative context (Crenshaw, 1991). Anchor points can assist us in revealing the order that can be created and recreated, in a particular context, through these meaning-making processes.