The Gender of Renewable Energy
Theory on the politics of sustainable energy development in Iceland

BY JAMIE WOODWORTH
UNIVERSITY OF COLORADO, BOULDER

A THESIS SUBMITTED TO THE
UNIVERSITY OF COLORADO AT BOULDER
IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS TO RECEIVE
HONORS DESIGNATION IN
ENVIRONMENTAL STUDIES
MAY 2015

THESIS ADVISORS:
LIAM DOWNEY, DEPARTMENT OF SOCIOLOGY, COMMITTEE CHAIR
DALE MILLER, DEPARTMENT OF ENVIRONMENTAL STUDIES
LISA BARLOW, DEPARTMENT OF ENVIRONMENTAL STUDIES

Table of Contents

Abstract

The role of women in sustainable development has largely been marginalized within the worldwide political milieu. However, with increasing women's leadership in the policy realm, gender analysis takes on a new relevance. My research investigates how gender representation and feminine versus masculine modalities of governance impact the adoption and formation of renewable energy policy, and shape environmental discourses. Today, women, inside and outside of government, play an increasing role in global sustainability initiatives. Applying gender to political analysis can help elucidate how to advance the development of a sustainable energy future. I elaborate on the gender politics of sustainability through a feminist analysis of value systems, democracy and power, and environmental discourses. In particular, my research explores sustainable energy development in Iceland, and how their political successes are informed by gender representation and alternative geographies of power.

Preface

I began research on this topic because of a study abroad experience I had with SIT: World Learning that challenged me to apply my experiences in feminist studies to the context of renewable energy economics. I had no idea that the connections between women and natural resources would be so rich, so varied, and so unexplored. Identifying this gap in research motivated me to step onto the frontier, and develop the best theory I could, regarding the power of gender, words, and democracy in the politics of climate change.

Introduction

In this thesis, I examine the influence of gender in the politics of sustainable energy development in Iceland. I articulate and explore how masculinity and femininity are interpreted as distinct concepts, how they inform on gender, and how the representation of gender in and between individuals is key to knowledge formation in politics. In addition, understanding how gender underlies basic ideologies is an important dimension to analyzing how politics are navigated by individuals and why power is conferred to certain ideas over others. So, observing the consequence of masculine hegemony within certain political discourses is important to understanding why policy takes certain trajectories, and if that can be changed with more democratic balance of gender within legislative bodies. I contend that this holds particular relevance in the realm of environmental discourse and policy because environmental degradation is a salient issue that affects both men and women, often in disproportionate ways. Thus, allowing men and women, with balanced gendered perspectives, to have voice in the dialectics of their own issues is an important element to equalizing the political territory of sustainable development, and addressing environmental problems from the perspective all concerned parties. In particular, I have chosen to research sustainable energy development, because, on average, natural resource sectors are the most male dominated field of environmental governmentality. I explore how masculinity and femininity have affected the nature and direction of sustainability politics in energy, and how men and women express gender perspectives within these discourses.

Altogether my theoretical argument follows that: 1) Sex is not not the same as gender, 2) Gender is expressed through an amalgam of masculine and feminine traits,

which men and women are socialized into throughout time, 3) Gender underlies basic ideologies, like environmental world views, 4) Given that, gender is implicated in environmental politics, 5) If men and women may have different ideological perspectives on environmental politics by virtue of gender, then sustainable development be altered by sex inequality, 6) The effect of gender on sustainability politics can be explained through discourse analysis, and investigating how men and women talk differently about the environment.

I have chosen Iceland as my site of inquiry because of its strong structural efforts to both mainstream gender equality and develop renewable energy infrastructure. The balanced *sex* ratio between men and women in the Icelandic Energy Authority and Environmental Agency presents a unique opportunity to understand how gender equality is implicated in the rhetoric of sustainable energy development. For instance, over 70% of domestic energy in Iceland is sourced from geothermal and hydropower plants (United Nations Environment Programme, 2002); and, in 2011, the World Economic Forum reported Iceland to be the world's most gender equal nation (Centre for Gender Equality in Iceland 2013 p.7). Iceland's landmark achievements in gender equality span several purviews of both public and private life. Notably, Iceland has strong standards in government sectors for gender balance—there is a minimum quota of either 40% men or women within Parliament (Centre for Gender Equality in Iceland 2013 p.25). By October of 2009, the proportion of women and men in the Icelandic cabinet equalized. Gender mainstreaming in government, the economy, and private industry has become a central focus of modern Icelandic social policy. Thus, Iceland presents a unique opportunity to investigate how gender is grafted onto the language of

sustainability in a gender-equal nation, and how political actors influence such dialectics, but also how these dialectics recursively influence the actors. Further, my analysis evaluates how masculinity and femininity discursively texture resource-based sectors of environmental politics, as opposed to other purviews of environmental legislation (Filteau, 2014, p.398).

To conduct my analysis, I first construct a theoretical argument derived from feminist theory and environmental philosophy. I then conduct an ethnography of Icelandic perspectives on energy development through eight interviews with government sustainability representatives within the National Energy Authority and Environmental Agency. My case study analyzes gender in environmental discourse through a short survey and an in-depth interview that lasted one hour long each. I hypothesize that substantive balance between men and women fosters greater gender balance between masculine and feminine perspectives, which creates a political climate that adopts more holistic approaches to sustainability, also considering ecological, social, and economic interests in equal proportion, to the greater benefit of whole populations.

Background

Women comprise slightly above fifty percent of the world population, but only occupy twelve percent of jobs in renewable energy within the United States (Michelson, 2013). Women are also broadly underrepresented within energy development (Clancy, 2003, p. 45; Filteau, 2014, p.399). Men and women alike assert, "women not only have the right to equal benefit of energy, but also equal participation in the decision-making

about energy services" (Clancy, 2003, p.47). That is to say, women are equal consumers and beneficiaries of natural resources, and their voice in the energy sector should reflect their stake in energy development.

First off, it's important to contextualize modern energy development, in politics and practice, in order to frame the relevance of women's voices. In addition to global climate change, energy has significant consequence in light of an increasingly divided, globalized society, which has significantly stratified wealth, access to resources, and exposure to environmental hazards, on gendered and racial lines. 95% of the world lacks access to electricity, and 84% of these families live in rural poverty (UN Women 2013 p.5). Availability of energy resources is particularly reflective of both economic and social development. For instance, access to clean and affordable energy is an enabling factor for not only poverty reduction, but also gender equity, alongside many other Millennium Development Goals (UN Women 2013, p.8). It follows in saying that energy is implicated in a network of international objectives (UN Women 2013, p.8). In this way, "all goals against oppression are internally related" (Jaggar, p.116). Gender equity, poverty, and inequality are all critical lenses through which energy development can be observed.

Likewise, I argue that energy development cannot proceed sustainably, considering social, economic, and ecological concerns, until it is designed more democratically. Otherwise, one party will always be disadvantaged in comparison to another. Research shows climate change is likely to "magnify existing patterns of gender disadvantage" across the globe (Sustainable Energy for All: the Gender Dimensions, p.50)—this trend reaffirms the relevance of gender, and gender hierarchy,

into environmental policy spheres. If the politics of climate change differentially impact men and women, then an effective democracy needs to equitably represent both parties' interests and evaluate their needs, especially as their needs change temporally and spatially.

However, "the *patriarchal* structure of the welfare state is rarely named, nor is the very different way that men and women have been incorporated as citizens seen to be of significance to democracy" (Pateman, 1987, p.1). Pervasively, women are underrepresented bureaucratically and ministerially within energy development (UN Women 2013, p.10). Yet, women offer important contributions to the state equally as much as the state is important to women (Pateman, 1987, p.3). For instance, women's democratic participation in sustainability more often ensures the fulfillment of women's needs, and the investigation of social development within environmental issues (UN Women, 2013, p.11).

> "Women's leadership and participation in sustainable energy solutions are
> critical in the transition to sustainable energy for all and to reaching
> internationally agreed development goals" (UN Women, 2013, p.10).

Therefore, gender has substantive impact on environmental rhetoric, from the formulation to fulfillment of certain policy objectives.

Further, there is an urgent need to understand the "masculine advantage" in administrations (Broussine, 2003, p.29) as it relates to patriarchal sustainability, and how it informs on the well-being of nations, populations, and individuals. Gender equality is a democratic goal, an environmental goal, and a goal in and and of itself. Problematically, the quantitative lack of women within sustainable development

deepens their silence on environmental issues. Such foundational issues of inequality are propagated by silence and internal regimes of silencing. Patriarchal sustainability proffers a masculine bias, that reflexively pushes feminine perspectives and female participation out of political orbit. This works to the disadvantage of women's voices, and feminine perspectives, to the disadvantage of environmental discourses holistically. Moreover, women's leadership in the dialectic of their own issues and rights has more of a lasting institutional and symbolic impact on sustaining substantive equality, than implementing top-down female-inclusive legislation in hopes for meaningful equality to trickle *up* to institutional levels. Fulfilling the modern sustainable development agenda requires policymakers to recognize the gravity of gender in environmental discourses, both in democracy and on the ground; as well as recognize the importance of women's equal participation in conversations about energy, climate change, and justice. This is particularly salient in a political climate that must attend to different populations, with ever-growing differences and needs (UN Women, 2013, p.10).

My research investigates the complexities of gendered sustainability politics. The effect of women's participation in politics begs multiple questions, namely: how does gender have bearing on environmental perspectives, and how does gender proportion affect the rhetoric of sustainability? These are all important inquiries in addressing sustainable energy development as a democracy, and also as a vector of cultural power. To elaborate, this analysis observes how patriarchal sustainability informs on the function and interplay of masculinity and femininity in environmental dialectics, and in democracy more generally. Governments are translators and arbiters of power, and are built upon the collective perspectives and belief systems of the representatives that are

chosen (and sometimes not chosen) to underly it. I contend that masculine and feminine gender orientations confer different ideological perspectives, and generate different discourses on ecological and social values, and, thus, produce different sustainable development objectives. The balance of gender, therefore, predicates the flow of democracy: which values are given power, and pushed into fruition. So, gender has substantive effect on the deployment of democratic power, and the impact of communities on ecosystems, because gender confirms certain basic values that underly political action. This de-centers the primacy of *sex* equality in government to *gender* equality. In essence, "environmental policy affects the ecological world through the politicization of people's values, and different political actors [can] represent competing interests" (Stern, 1993, p.323).

Simply put, the presentation of environmental values is not homogenous, nor uniformly divided between men and women. Categories of masculinity and femininity, and categories of gender, transcend sex, and are observable in all individuals, depending on socialization, culture, and context. That is not to say that sex does not have bearing on the weighting of gender in democracies. Women's participation in government can have an observable impact on the way gender is incorporated into politics, and what values are conferred power, because men and women are often socialized into dichotomized gender roles. Moreover, the presence of feminine perspectives may shift and change masculine perspectives, in and between men and women. My research aims to disentangle and illuminate the connections between women's participation in sustainability and how their presence influences gender in decision making and environmental discourses. Namely, I will articulate how the

balanced integration of both masculine and feminine rhetorics creates more sustainable

democracies through *discursive equality*, and revaluation of alternative modalities of

power.

Literature Review

Gender and discursive power

I want to preface my argument by positing that women and men can contribute

differently to perspectives on the environment not by virtue of sex, but by virtue of

gender. Gender is built, fluid, and culturally diverse, so it is fostered in different ways

between and among individuals. To say that gender is fluid, I mean to say that gender is

a socially constructed identity, that is slowly socialized by cultures and institutions, and

internalized throughout one's lifetime. For the purposes of this paper, I define sex as a

confirmed biological fact, that operates independently from gender constructions. In

essence, sex and gender are not "mimetical" and do not have identities that are

contingent upon one another (Butler, 1986, p.35). However, sex and gender do inform

upon one another, though their relationship is not naturalized. That is to say, gender and

sex are related by virtue of social location and deployment of spatial power, rather than

innate affiliation. To elaborate, gender is a translation of imposed social and historical

power on sexed bodies (Butler, 1986, p.36). Men and women blend gender as they

grow and mature and respond to the world that shapes them. Thus, women's and men's

development is rarely, if ever, antithetical. Nor are their ideas antithetical. To analogize

this, imagine two ecosystems. One is the amazon rainforest in Brazil, the other is a

boreal forest in Siberia. These are two completely different environments, however, they

share very key commonalities: trees, mammals, and nutrient cycles, for example. Moreover, these two biomes evolve over time, and may even change their composition entirely with climatic and tectonic changes. Sex and Gender relationality can be similarly explained: masculine and feminine are not naturally opposing forces, they are simply their own distinct microcosms of power, habitation, and flow. Moreover, they grow, and change on different cultural timelines. Identity, sex, and gender, actively "appropriate, interpret, and reinterpret received cultural possibilities," in a fluid, self-sustaining system (Butler, 1986, p. 36). One could say that gender produces and receives—it evolves, and is, most importantly, interconnected with the world that made it. Essentially, the body is moved through referencing the world on the praxis of gender (Butler, 1986, p.38). The entities of body and mind are reflexive, and act upon one another not in a dualistic way, but through a cyclic power that navigates history and culture underlying it. In so saying, the body is "a mode of becoming" (Butler, 1986, p.38). Furthermore, politics absorb impressions of the vagaries of gender and power, as they become and redefine themselves throughout history. As Simone deBeauvoir famously said, "the personal is political" (de Beauvoire, 1952).

Furthermore, feminist literature has posited many, if not competing, viewpoints on the relationship between women and the environment. Theory has, historically, linked women's bodies to nature, and men's bodies to higher consciousness (Jaggar, 1989, p. 118). This is a strong theme pervading Ecofeminist literature. From this perspective, biologically determined difference is posited as grounds for equality. However, the woman-nature duality has been largely deployed to oppress women (Jaggar, 1989, p. 120). Ecofeminists advocate for an agenda that razes oppression by "freeing nature

from men rather than freeing women from nature" (Jaggar, 1989, p.118). From this viewpoint, women's voices and women's authority are the anodynes to the planet's environmental crises. De Beauvoirian feminists take issue with this mindset, because it takes at its foundation a natural and justified binarism between men and women, and a simplistic, if not reductive, understanding of gender. It also posits that women have greater interest in ameliorating environmental and social problems by nature.

> "Why should women be more in favor of peace than men; I should think it a matter of equal concern for both" — Simone de Beauvoir (in Jaggar, 1989 p. 122).

Most feminist scholars reject biologically determined environmentalism. Not only does it allocate blame to a single sex, by virtue of sex itself, but it also assumes the body to be a static object, chained to its social and physical environment, rather than an acculturated extrapolation of it. If women are bound to nature, then there is little room for redefining what it means to be a woman. And if men are separate from nature, then there is no room to discuss their relationship to the natural world. Both of these suppositions create insurmountable epistemic dilemmas. Rather, one could say that women and men hold equal and germane perspectives on the environment because they both source their knowledge from a shared humanity, which delivers gender to bodies in varied and diverse ways. Gender may shift the orientation of environmental values, but the latent human-ness of individuals, posits everyone as equal stakeholders in, and interpreters of the environment. Humans they share the same relationship to the environment, regardless of sex. The perspective that "people always have a physical

body, and are thus embedded in nature" (Littig, 2001 p.14) opens up more room for discussion on how sex and the environment overlap in discourse.

To continue, it's important to explore how the denaturalization gender in feminist theory can inform on environmental politics. How does the shared responsibility of environmental degradation get articulated by men and women? And, more specifically, do men and women employ different rhetorics in these discourses because of different epistemic, socio-cultural locations? On this note, I'll begin in detailing how gender is implicated in different socio-cultural epistemes, what this means, and to what political effect. To start, Foucault describes space as an element of cultural production and social meaning (Hook, 2007, p.178). Discourse, is therefore apparent in space through textuality of knowledge and representation (Hook, 2007, p.179). That is, representation of power is manifested in the spatial differentiation of discourse—what knowledges dominate certain spaces texture the polities and individuals within those spaces, and vice versa. Power determines which discourses occupy space, and how discourses change in space as power shifts between those that hold it. Because gender is a product of social force, as described previously, it is therefore a product of power as well. The discourse of gender is a deployment of power in the flow of sexual socialization. This operates in a back-and-forth fashion. Individuals contribute gender-knowledge to spaces equally as much as spaces imbue individuals with gender, and knowledge formation is thus embodied in discourse. Political spaces are important loci of power—the political is a manifestation of personal power relationships. Foucault describes discourse as a production of *epistemic power* that individuals are socialized into, and political spaces are "epistemes" that magnify these situated knowledges.

"The *episteme* is a space of dispersion, it is an open and doubtless indefinite

field of relationships" (Foucault, 1991, p. 55).

Furthermore, discourse is fluid, and pivots on ever-changing socio-cultural and

historical "thresholds" of knowledge formation, one of these thresholds being gender.

Essentially, politics are discursive extrapolations of power relationships, as they change

and subvert on another. For example, the evolution of patriarchy and its relationship

with the state informs on which political discourses are given power. If political spaces

are modalities through which knowledge and truth themselves derive, then politics are

engaged with *ideology,* because truth is a formative element of ideology. Moreover, the

rhetoric of ideology and power is subject to "constant displacement" throughout history

(Foucault, 1991, p. 55)—which calls into inquiry the role of gender, and patriarchy, in

contemporary environmental discourses.

The flow of politics informs on the power geographies in government. The

centralizing questions around politics, according to Foucault, are: "how to govern

oneself, how to be governed, how to govern others, by whom the people will accept

being governed, [and] how to become the best possible governor" (Rutherford, 2007, p.

293). In effect, governments draw their power from their knowledge production, first and

foremost, because knowledge production, and its resultative discourses, shape society

and policy with substantive effect (Rutherford, 2007, p.293). In essence, constructed

"regimes of truth" shape how governments apprehend issues of the state, and issues of

the environment (Rutherford, 2007, p.293). Further, bodies of government are built upon

several tiers of space: the subject, territory, the nation, the population, and the globe

(Rutherford, 2007, p.294). However, these echelons of representation and space aren't

necessarily equal in key compositional ways, namely, gender. Throughout history, men and women have been differentially stratified in positions of political power, in different tiers of space, which simultaneously privileges some gender ideologies over others. This creates specific epistemes of discursive power, that produce and sustain masculine bias. If different political environments foster different social rhetorics, then it's important to look at where women and men occupy space, and why this is so. Because resource-based environmental sectors, like energy development, are male dominated (Filteau 2014), how does predominating masculinity affect the rhetoric of sustainability, and what perspectives are occluded from discussion? Moreover, if epistemes of power are reflexive, that is, people create gender and in turn receive it, how does masculine sustainability masculinize political actors and their environmental ideologies? Analyzing gender prerogatives within sustainability politics has consequence in light of contemporary environmental crises. Masculine hegemony in environmental discourse may affect which problems worsen and which ones heal. Alison Jaggar makes the bold claim that "it is impossible to unravel matrices of oppression…without at the same time liberating nature" (Jaggar, 1987, p.117). If certain gender ideologies have been oppressed, in tandem with the oppression of the female sex within sustainability politics, then rebalancing power between masculine and feminine ideologies could have significant effect in governmental engagement in environmental stewardship. This leads me to my discussion of what masculinity and femininity, as distinct concepts, confer to basic ideologies and environmental discourse.

Psychology, theory, and gendered values

Under the assumption that women and men are socialized to possess divided gender characteristics, often individuals receive and produce gender ideologies along the axis of sex. In light of this, much of the analysis that examines masculinity and femininity conflate feminine biases to women, and masculine biases to men. Though gender constellates individuals more complexly than this, foundational research on women's femininity and men's masculinity informs on what masculine and feminine values mean as distinct concepts. Moreover, understanding cultural interpretations of gender through this lens can elucidate what role gender plays in forming environmental ideologies. That is to say, "if gender differences in value orientations exist with regard to humanistic or biospheric altruism, they are more likely to derive from shared experience rather than innate difference" (Stern, 1993, p.331), but, understanding shared experiences requires an understanding of the distinct gender ideologies that punctuate them, and *naming* the ideologies that are interpellated by individuals.

Carol Gilligan pioneered much of the original research on masculinity and femininity, and her analysis has served as the groundwork for most successive theory in the field. In her book, *In a Different Voice: Psychological Theory and Women's Development*, she advances the broad idea that masculinized morals emphasize justice, whereas feminized morals emphasize community (Gilligan, 1982, p.27). In her research, she unpacks a series of experiments conducted on adolescents in a rights and responsibilities case study. Gilligan contends that masculinized morality often "transposes hierarchies of power onto hierarchies of value." This can often translate into an impersonal conflict of interests, whereas feminine ethical approaches hinge on

personable interactions (Gilligan, 1982, p.24). She emphasizes the oppositional thinking inherent in masculine moral psychology—morality is drawn strictly between right and wrong, and is exercised through power differentials. In contrast, females develop morality through understandings of community, and how individual actions impact people relationally—that is to say, "morality is not a math equation but a narrative of relationships that extends over time" (Gilligan, 1982, p.26). To fully understand the foundation of Gilligan's argument, one has to understand where these naturalized "sex roles" originated in literature. Sandra Bem's Sex Role Inventory, published in 1974, constructed a framework for Gilligan to divide and assign psychologies between gender categories (*See chart below*). Bem's sex roles, as explained in Holt, largely became eclipsed by more nuanced theory on gender during second and third wave feminism, but her study still underpins many, if not most, contemporary conceptions of masculinity and femininity as distinct ideas (in Holt, 1998, p.936).

TABLE 1

Masculine Item	Feminine Item
Acts as a leader	Affectionate
Aggressive	Cheerful
Ambitious	Childlike
Analytical	**Compassionate**
Assertive	Does not use harsh language
Athletic	Eager to sooth hurt feelings
Competitive	Flatterable
Defends own beliefs	**Gentle**
Dominant	Gullible
Forceful	Love children
Has leadership abilities	Loyal

Masculine Item	Feminine Item
Independent	**Sensitive to the needs of others**
Individualistic	Shy
Makes decisions easily	Soft-spoken
Self reliant	**Sympathetic**
Self sufficient	Tender
Strong personality	**Understanding**
Willing to take a stand	Warm
Willing to take risks	**Yielding**

BSRI FROM HOLT, 1998, P.934

Gilligan's moralistic application of these "sex roles" has drawn out a set of themes: that the feminine is more socially inclined, and the masculine is more individualistic; the feminine is flexible, and the masculine is rigid; feminine ethics are sourced from relationship, and masculine ethics from the internal ego. Both Bem and Gilligan typify gender perspectives as distinct and complementary. These interpretations of masculine and feminine psychologies elucidate what gender expression *means* to human interaction and culture more broadly. That is, it reveals how gender underlies behavior, and how these behaviors are informants to gender bias in larger social processes.

Further, it also opens up the possibility for flexibility in gender. That is to say, it extracts "sex roles" from sex itself, and proffers up the ability for individuals to adopt sex roles regardless of their biological identity (Holt, 1998, p.930). In addition, this gender flexibility bends on historical, and cultural axes. Norms about how men and women should adopt masculine and feminine attributes are subject to constant change. In this

way, "masculine" and "feminine" are not items derived from the gender performances of men and women. Rather, consider the inverse: gender performances are built upon masculine and feminine attributes. Gender performances change across time and space, but masculinity and femininity as distinct concepts are more solid in their meaning.

I now turn my discussion to observing how masculinity and femininity, as they have been so defined, interplay with environmental discourses and values, and what impact that has in the politics of sustainability.

The discourse of gender and the environment

First off, environmental values are defined in social psychology as "primitive beliefs about the nature of earth and humanity's relationship to it" (Boev-de-paw, 2012, p.374). Understanding humanity's relationship to the environment is strongly evidenced in how society talks about the environment, and gender is deeply entrenched in language. Moreover, if discourse is an extrapolation of power, then language sheds light on who has power over the environment, how that power is gendered, and how this power is maintained. Dr. Dean Laplonge, in his paper "I'm Gonna Frack 'Ya: Gender and Language in the Extraction of Shale Natural Gas," describes the stronghold of masculinity in energy politics through an analysis of gender discourse. Laplonge posits that "hegemonic" masculine attitudes in hydraulic fracturing evoke strong compulsions towards dominance of the land, and control over the fruit of the land, by linguistically feminizing it, and weakening it to masculine control (Laplonge, 2013, p.3). These masculine attitudes, power, control, aggression, and forcefulness (Holt, 1998, p.394),

are central to modern definitions of "hegemonic masculinity," i.e. socially dominant forms of condoned masculine behavior. Moreover, this application of masculinity is derivative of Bem and Gilligan's earlier analysis of masculine and feminine psychologies that typify masculinity as forceful, motivated, and aggressive.

> "Men employed in male dominated natural resource based occupations have traditionally valued the image of a "rugged, self-sufficient, self-made man" (Filteau, 2014, p.399)

Laplonge goes on to assert that the masculinity present in the natural resource sector is sourced from a distinct kind of "anatamopolitics" of power (i.e. politics of the body), that functions to suppress femininity, and similarly feminized bodies (the bodies of women and the body of the planet), through displays of overpowering masculine control and rhetoric, that describes the process of fracking in derisive ways, that linguistically conflates violence against the planet with violence against women (Laplonge, 2013, p. 4). This not only creates a hostile environment for women, but also a hostile environment for feminine values and discourses more broadly, which are targeted as weak and nonfunctional in the these valences of "mens work" (Filteau, 2014, p.399).

REAL HOUSEWIVES OF THE OILFIELD ON "PINTEREST"

In addition, hegemonic masculinities in the language of energy politics are dangerous because of their cultural invisibility: "[t]he invisibility of masculinity reproduces gender inequality, both materially and ideologically" (Laplonge, 2013, p.6). Feminine perspectives cannot infiltrate environmental discourses until they are noticed as both *lacking* and *necessary*.

Matthew Filteau, in his paper, "Who Are Those Guys? Constructing the Oilfield's New Dominant Masculinity," discusses how the presence of women in energy sectors interplays with the rhetoric of oilfield masculinities. For instance, dominant masculinities that centralize around virtues like frontiersmanship, roughness, and muscle, have further highlighted "battling the natural environment" as a matter of having the necessary "physical strength and mental aptitudes to combat markets and organizational challenges" (Filteau, 2014, p.399). The presence of women in oilfield politics has inspired a gender backlash that has pushed the primacy of hegemonic masculinity even further, to diminish the input of feminine ideologies. The subordination of the feminine as a display of power has not only hampered women, but also men who would have otherwise supported more feminine approaches to energy politics (Filteau, 2014, p.400). One interesting development in the language of hegemonic masculinity in environmental politics is the introduction of more monetized frameworks for asserting dominance. This has shifted the rhetoric of power from brute force to financial control. Indeed, "combating markets" has become the new battleground for masculine survival.

"Recent evidence suggests that men have begun to redefine the dominant form of masculinity, as market transformations, technological innovations, and

environmental concerns have changed natural resource-based

industries" (Filteau, 2014, p. 399).

On the whole, the rhetoric of gender in energy politics is subject to constant

change. In modern contexts of energy politics, masculinity is characterized and

maintained in *financial power* as well as persisting norms of physical control. So, how

might femininity be characterized in the dialectics of resource extraction? Lynnette

Zelezny, in her article, "Elaborating on Gender Differences in Environmentalism," posits

that women express pro-environmental behavior contrastingly with men because of a

propensity to account for harmful consequences of poor environmental conditions for

their community, themselves, and the ecosystem, in congruence with one another

(Zelezny, 2000, 446). For example, "examination of gender differences in attitudes

toward nuclear power shows that women are more concerned [than men] about safety

issues of nuclear power" (Stern, 1993, p.330). Moreover, a 1990s Scandanavian study

on attitudes on nuclear power reveals that 60% of men showed support for nuclear

power because of its benefit to the economy. However, 80% of women showed

dissenting opinions because of long term health ramifications (Clancy, 2003, p.47).

Similarly, research in the U.S. reveals that the preponderance of women express

disapproval for nuclear power for its negative environmental externalities even in the

event of job losses (Clancy, 2003, p.47). This gendered discrepancy in value expression

hearkens to the three primary interests of sustainability: ecology, society, and economy.

Contemporary forms of hegemonic masculinities and femininities in environmental

discourse seem to broadly correlate with different legs of sustainable development.

Within the purview of natural resource politics, hegemonic masculinity often draws

power from economic dominance, where-as mainstream femininity draws on more social diligence.

However, I follow in saying that the presentation of environmental values, in language and activism, is not heterogenous (Schahn, 1990, 770). This holds true across several planes. For one, men and women don't consistently represent the same ideologies throughout their lifetimes, nor are these ideologies necessarily parceled out according to sex. Secondly, environmental values are extremely variant on both spatial and temporal levels: environmental values in Iceland, for instance, may differ greatly from the United States, especially in the context of natural resource masculinity, which is differently scripted in Iceland's overwhelming landscape of *renewable energy* technologies. Further, environmental values change on vectors of evolving environmental problems, as well as the dynamic social vistas in which they are placed. Despite the seeming incalculability of these constellating factors, dominant themes emerge across these planes that narrativize how masculinity and femininity discursively preside in contemporary sustainable energy development. Namely, that masculine traits: aggressiveness, dominance, competitiveness (Holt, 1998, p.394) are deployed through economic decision-making; and feminine traits: compassion, gentility, and sensitivity (Holt, 1998, p.394), are geared towards higher social consciousness in decision-making.

In light of this, I've focused my research on the politics of renewable energy in Iceland to examine how Iceland's environmental policy, as it relates to social and economic interests, has been sourced from gender, and also how the rhetoric of

renewable energy politics is distinct from discourses on other natural resources, like fossil fuels.

Methods

My analysis relates gender to perspectives on sustainable energy development within the Icelandic Energy Authority's advisory committee, Orkustofnun, and the Icelandic Energy Agency's Department of Sustainability, Umhverfisstofnun. I chose these two institutions because they are two central government bodies that both write and advise on all environmental legislation. Moreover, both agencies have a relatively balanced sex composition, with equal parts men and women altogether. Orkustofnun has 18 women and 22 men, while Umhverfisstofnun has 39 women and 27 men. In light of this relative sexual balance, I investigated if gender balance followed in consequence, and whether or not gender took on a more fluid quality between men and women, with both masculine and feminine perspectives present in their environmental values. I took a feminist, ethnographic approach to gathering data. I chose this methodology for several reasons: 1) to account for the importance of women's and men's lived experience in sustainability politics 2) to understand the situated knowledge of government representatives as men and women, and 3) qualify how masculinity and femininity are expressed in the context of an affluent, predominantly white, Northern European country. During my two week stay in Reykjavík, I spent my time interacting with eight Icelandic government representatives in hour-long interviews. I inquired about their values *outside and inside* their political duties. Evaluating the professional and

personal standpoints of men and women informed on what perspectives were conferred power in their work setting, why, and to what effect.

My interviews comprised two parts. The first part was a survey of 14 questions which participants filled out directly prior to the in-depth interview. These questions hybridized Bem's Sex Role Inventory with environmental values. Simply put, these survey questions inquired into masculine and feminine bias in the context of sustainable decision-making. (See below)

Please think about these questions in context of your work, and your work as it relates to the environment. Please check one box and answer as accurately as possible.

1. What sex were you born as?

☐ Female

☐ Male

☐ Transgender

☐ Intersex

☐ Unspecified

2. I yield in decision making processes

☐ Never

☐ Sometimes

☐ Neutral

☐ Often

☐ Always

---

3. I believe in taking risks

☐ Never

☐ Sometimes

☐ Neutral

☐ Often

☐ Always

4. I think about long term consequences

☐ Never

☐ Sometimes

☐ Neutral

☐ Often

☐ Always

5. My first priority in decision-making is determining impacts on others

☐ Never

☐ Sometimes

☐ Neutral

☐ Often

☐ Always

6. My first priority in decision-making is determining economic impacts

☐ Never

☐ Sometimes

☐ Neutral

☐ Often

☐ Always

7. I believe I have responsibilities to the environment

☐ Disagree

☐ Somewhat disagree

☐ Neutral

☐ Somewhat agree

☐ Agree

8. I believe there are right and wrong ways to solve environmental problems

☐ Disagree

☐ Somewhat disagree

☐ Neutral

☐ Somewhat agree

☐ Agree

9. I believe that communities should be considered a part of the ecological environment

☐ Disagree

☐ Somewhat disagree

☐ Neutral

☐ Somewhat agree

☐ Agree

10. I believe that solving environmental problems requires coercive measures

☐ Disagree

☐ Somewhat disagree

☐ Neutral

☐ Somewhat agree

☐ Agree

11. I believe there are multiple good ways to attack a problem

☐ Disagree

☐ Somewhat disagree

☐ Neutral

☐ Somewhat agree

☐ Agree

12. Environmental issues are a personal matter to me

☐ Disagree

☐ Somewhat disagree

☐ Neutral

☐ Somewhat agree

```
☐Agree

13. Solving environmental problems is a team effort

☐Never

☐Sometimes

☐Neutral

☐Often

☐Always

14. Solutions change

☐Never

☐Sometimes

☐Neutral

☐Often

☐Always
```

For example, the question, "I believe there are right and wrong ways to solve environmental problems," draws on Gilligan's proposition that masculine moral psychology is drawn between black and white options. Feminine psychologies, in contrast, understand morality with greater nuance. By checking "always," the respondent would show strong masculine bias in this regard. By checking "never," the respondent would show strong feminine bias. I scored the survey using a point system. Checking "always" on the masculine side of a question, the respondent was given two

masculinity points. The same is true for femininity points—by checking "always" on the feminine side of a question, the respondent was given two femininity points. Neutral was a score of zero, because it represents the most androgynous answer. The maximum amount of feminine and masculine points a respondent could score was 28 points (I decided to discard question 9, which did not have clear masculine or feminine bias), assuming they always chose the most extreme answers. I then calculated their "masculinity percentage" based on the ratio of masculinity points earned, to the total points they scored. I did not calculate a percentage based off of how many femininity points they scored. The Masculinity Percentage = ([total masculine points scored ÷ 28)*100]. I also tabulated an "androgyny percentage" which measures the strength of masculine or feminine bias. If respondents chose the answers "sometimes," "neutral," or "often," instead of "always," or "never," they leaned towards a more androgynous perspective. The Androgyny Percentage = 100 - [(total points scored ÷ 28)*100]. I measure how androgynous a respondent is in order to express that a feminine or masculine perspective could be strongly or flexibly expressed. I calculated the androgyny percentage by dividing the amount of points a respondent scored by the total number of points one could possibly score (28). A score of 28 means that a respondent was very strongly gendered in their opinions, in either masculine, feminine or both ways. Lower scores means they were more androgynous in their opinions. A percentage was calculated by dividing a respondent's total points by 28. I then took that percentage and subtracted it from 100 in order to get the androgyny percentage. A higher androgyny perspective means that the respondents evinced more neutrality in their answers. For example, Jane Doe scored 6 possible masculinity points, and 17 points total. So, her

Masculinity Percentage = [(6 ÷ 28)*100] = 21%. And, her Androgyny Percentage = 100 - [(17 ÷ 28)*100] = 40%.

Thus, I used this survey to be able to quantify masculine and feminine bias between and among the Energy Authority and the Environmental Agency, as well as between and among men and women, and to develop a baseline understanding of gender dynamics in Icelandic energy politics. I followed the survey by asking the respondents five semi-structured interview questions, which I used flexibly interview-to-interview. I chose the semi-structured interview process in order to hear my respondents' ideological and political positions in any way that they were most strongly felt, which often resided outside of the bounds of my set interview questions. Each interview lasted approximately one hour. My questions were as follows:

1) Please discuss what you consider "sustainability" to be.

2) Who is a part your community?

3) What are the best interests of your community?

4) What issues have you taken a strong stance on, why, and in what way?

5) Tell me about an ethical dilemma you faced in forming an opinion about an environmental issue, and how you resolved it.

During my interviews, I brought up consistent themes that had been drawn on in discussions I had with other professionals in the energy field, and locals of Reykjavík, during my stay in the city. Namely, I raised the issue of aluminum smelter development, oil excavation in the North, and the conflict of land management between conservationists and energy industries.

I want to include the caveat that because my sample size of interviewees was so small, I cannot make any definitive claims about the results of my research, especially quantitatively. However, these findings can frame questions and themes for further investigation, and also provide a grounding for the theory I have laid out.

Results

As discussed previously, my interviews took place in two different agencies, the Sustainability Department of the Environmental Agency (Umhverhisstofnun), and the Energy Authority (Orkustofnun). First, I will detail the perspectives and gender dynamics expressed in the Sustainability Department of the Icelandic Environmental Agency, starting with survey results.

The Environmental Agency

TABLE 2: ENVIRONMENTAL AGENCY SURVEY RESULTS

	Subject 1	Subject 2	Subject 3	Average
Masculinity Percentage	7%	17%	21%	**15%**
Androgyny percentage	54%	40%	50%	**48%**
Sex	Female	Female	Female	

To begin, I want to preface this data by explaining why the masculinity percentages are well below 50%. Gender expression is flexible, and changes depending on space. My data suggests that the space of bureaucratic sustainability, within renewable energy in particular, creates a specific episteme of discourse that is more feminized than other political realms. Renewable energy policy, in comparison to fossil fuel development, is geared more towards serving society and preventing

damage, which corresponds more generally to the BSRI's feminine inventory items of "sensitive," and "nurturing," as seen in Table 1. Although there are gender discrepancies within different environmental topics as I discuss in my literature review, my quantitative findings evidence that the space of sustainable, clean energy development is holistically more feminine than masculine (as articulated by the Bem Sex Role Inventory).

To continue, from Table 2, I observed that the masculinity percentages were low, and were accompanied by higher androgyny percentages. This means that these respondents did not answer on the extreme end of the survey results, from the options available: 'Never,' 'Sometimes,' 'Neutral,' 'Often,' or 'Always,' these subjects chose 'Sometimes,' 'Neutral' or 'Often' more frequently than not. So, although their masculinity is low, their feminine perspectives did not veer on the extreme end of the spectrum. Moreover, the respondents were quick to qualify their answers in the interview—replying that their values often are contingent on the topic at hand, and who's interests were at stake. Likewise, it should be noted that although the respondents expressed certain values on personal levels, these values could not always be brought into practice on professional levels. This point is consistently drawn on throughout the interviews following the surveys—their responsibilities as public servants can contest with their personal ideologies. The tendency towards gender neutrality was reflective of the respondent's flexibility in environmental perspectives, as they calibrate to changing social, economic, and ecological factors. It also reflects on how they have to reign in their personal visions in light of their professional priorities and constraints. Yet, moreover, it underscores the balance of their environmental perspectives, not being

weighted disproportionately in one direction or another. Their opinions and values have more broad appeal, and nuanced gender constitution.

These survey results are given more meaning in light of the in depth interviews that followed their completion. Subject 1 evinced strong ecological values, that guided the expression of her perspectives on sustainability. Her comments differentiated her from many of the other respondents within both agencies. This was evinced in her professional background as well: having spent three years living in Sólheimar, an Eco-Village in the South of Iceland, she had gathered a lot of experiential knowledge about what sustainability looks like up close, and how to situate communities into sustainable ways of life. This informs on her work for the Environmental Agency, where she drafts policy on a national scale. She stated, "environmental issues are a huge personal matter to me." More-so, she emphasized that, "we are a part of nature, and in the end, what happens will come down to us too." Her outlook on sustainability was thus framed by the perspective that humans have much to lose and gain from nature—being sustainable is necessary, not just another political agenda item. In addition, being sustainable requires substantial changes in how Iceland approaches environmental problems. She brought up the example of recycling:

"Recycling is just like brushing your teeth."

To her, reducing waste, being more radical in behavior, is what's important. The practice of recycling is just grazing the surface of greater possibilities. Moreover environmentalism shouldn't be just a surface-level engagement.

"We need to think more about resource efficiency, and making the most out of everything [more consistently]."

Instilling change, she argues should be a goal that operates on a deep personal level. People should reduce consumption, like using reusable bags, because it's good not because it's "hip." She said that going back to the "source" of these problems, and attacking environmental issues at their roots, makes the most sense in approaching sustainability.

This theme of moving beyond the surface arose again in discussing Icelandic energy politics. She expressed dismay on the matter:

"What are you going to use this energy for? …Dirty industry? Clean industry? There's a lack of vision."

She evoked that Icelanders need to break cycles of habit—that achieving energy sustainability will probably require structural change, and a degree of *risk taking*. Perhaps investing in industry isn't the only potentiality for Iceland's vast renewable energy resources.

Subject 2 responded to interview questions in a similar way, emphasizing the need for larger changes in environmental policy and sustainability efforts. She brought up a 2013 Nordic report that addressed ten myths about sustainability. It debunked the idea that may small changes will solve big problems. Subject 2 indicated that sustainability is about approaching problems more holistically, with deeper changes, rather than superficial small ones.

"If we do all of these things that are socially accepted as sustainable, we can calm our consciousness…You should buy eco-label, for example, but also try to reduce your consumption."

She discussed a dilemma of "complacency" in sustainability, that really holds back the change that is possible. This makes sustainability particularly "hard to reach." The theme of attacking problems at their roots resonated with the comments of Subject 1. She also mentions how people need to start mobilizing the concept of "resiliency" in discourses, because society is beyond the point of complete sustainability. More specifically, people need to work on coping with environmental changes, and part of that means "talking about environmental issues in a very *broad* way," to ameliorate damage and prevent further damage at the source. Furthermore, she talked about how too much responsibility is put on the individual, instead of institutions, which perpetuates cycles of small changes, instead of push for broader reform:

> "Of course the individual should be responsible…but, the government has the ability to make real change…If you want a sustainable society, you have to make a sustainable structure, so that it doesn't make it a significant sacrifice for somebody to take the bus instead of driving…but, it's not politically sexy to say these things…governments aren't doing their bit, not at all."

On the topic of energy, Subject 2 brought up its the relationship between energy production and industry in Iceland. Dam building initiatives for aluminum smelters has grown dangerously, in her opinion. Icelanders seldom ask the question, "why do we need this?" Consumption of energy in Iceland is wasteful, and it is also not questioned. Many jobs hinge on the aluminum industry, so industrial growth is encouraged at the expense of the ecological environment. She expressed the need to cut the link between prosperity and polluting industry. Much of the government's attitude towards energy legislation leans more towards economic growth rather than ecological preservation,

and there doesn't seem to be a middle ground that reconciles both options in mutuality. There should be a structural push to produce energy more conservatively, use it alternatively, and "empower communities in other ways."

Subject 3 expressed deeply felt sentiments about environmental issues in Iceland, particularly within the realm of energy. Her focus in energy also shaped her definition of sustainability: "never depleting faster than you can restore." This operates on personal and national levels—individuals should live sustainable lifestyles, and governments should ensure Iceland's own structural sustainability. She expanded to talk about her career in energy not only in light of Iceland, but in light of global, planetary issues. Reduction of carbon dioxide is the duty of every nation, and she emphasized how Iceland is doing its part in the international battle for climactic stability. However, she expressed dismay about energy on both micro and macro scales. Communities don't adopt ecological principles out of virtue, but out of social pressure.

> "There isn't a common vision among Icelanders; we usually don't do anything
> unless the neighbor is doing it, or if it has some financial incentives."

Nor do governments incentivize renewable power out of environmental concern, per se:

> "We have this great infrastructure of geothermal, but this was not done for
> environmental reasons, it was done for economic…which is very sad. We
> have a great system…but for the wrong reasons."

She then segued her commentary to the topic of aluminum smelters in Iceland and their relationship to Iceland's energy infrastructure: "it's just bad business that goes everywhere in politics…and it pollutes on a local and global level [despite the geothermal]." It is deeply problematic that the momentum of Iceland's renewable energy

sector is fiscally grounded by the partnership of the Aluminum industry. Smelting heavy metals leaves dioxins in the natural environment, and releases huge quantities of CO_2, which counterbalances the effect of renewable power used to power the stations. Expansion of renewable energy development pivots around the aluminum economy, not around environmental consciousness. Additionally, there are new discourses around the "depletability" of geothermal and hydropower resources. Aggressive expansion has demanded more energy than power sources can sustainably provide—many geothermal wells may be decommissioned in consequence. This hearkens back to Subject 3's original definition of sustainability: "never depleting faster than you can restore." Iceland is veering off the track, despite its broad renewable energy sector.

For Subject 3, sustainability is a personal endeavor. She rides her bike, for example, because she wants to be ecologically conscious, not just because it saves her money.

> "I'm passionate about the environment, and I want to make it better. I mean, I see all of these numbers from the IPCC, and, you know, I want to do some good. Of course I want my community to have economic stability, but I don't think it's that much connected."

Her comments about the sustainability of Iceland's renewable energy model highlight congruent points with her co-workers: that the structures supporting energy are flawed in two key ways: 1) lack of vision into deeper systemic change for industries and communities and 2) flawed incentive systems that overvalue economic principles at the expense of more holistic sustainable development. These two points illuminate a couple of different gender perspectives. For instance, point number one, emphasizing a lack of

vision, draws linkages to three different masculine characteristics, as detailed by the BSRI (see Table 1): "ambition," "willingness to take risks," and "leadership." All three subjects expressed a strong desire to level existing structures, and push Iceland into a more radical framework for sustainability. In this way, the subjects of the Energy Agency had a masculine grounding in their values on that subject. However, the confinement of their governmental position delimited the possibility to exercise the change they envisioned. The second point they converged on, overemphasis on economic enablement of renewable energy development, drew on more feminine items from the BSRI (see Table 1): "sympathetic," and "sensitive to the needs of others." These subjects expressed a need to decenter Iceland's economic fascination with energy, and encourage more environmental consciousness—in particular, an ethic of resource conservation for the global community (most strongly expressed by Subject 3) and for the good of future generations. These three women regularly mentioned throughout the interview that current political myopia is counter to their vision of sustainability. Subject 1 began her commentary in saying:

> "Sustainability is about having a view to the future. We should aim to have our children and grandchildren have the same options as we have."

Subjects 2 and 3 echoed this opinion repeatedly. There was a sense of urgency in their concern over consumption, public apathy, and industrial growth.

Next, I will transition to an analysis of the Icelandic Energy Authority, starting with survey results.

The Energy Authority

TABLE 3: ENERGY AUTHORITY SURVEY RESULTS

	Subject 4	Subject 5	Subject 6	Subject 7	Subject 8	Average	Male average	Female average
Masculinity Percentage	21%	23%	18%	16%	7%	**17%**	**21%**	**12%**
Androgyny Percentage	36%	40%	22%	36%	50%	**36.8%**	**33%**	**43%**
Sex	Male	Male	Male	Female	Female			

On the whole, the men in the Energy Authority expressed greater masculine bias than the females (in both agencies), but had similar androgyny scores. Subject 6, who had outlying results from the male other subjects, was much younger (estimated 20 years), which may correlate with his deviating perspectives from them. In addition, all three men were placed in higher leadership positions than the women, which may affect their perspectives on energy, due to the scope of their governmental responsibilities, and greater public accountability In comparison to the Environmental Agency, there are no significant differences. Though the men show slightly more masculine bias, the women are comparable in both masculinity and androgyny percentages, respectively. Moreover, the differences between men and women are marginal. This is consistent with my assertion that gender balance can result from a balanced sex ratio between men and women. I want to qualify my empirical findings with the caveat that because I had so few subjects, the significance of any numerical data is questionable. However, even though these data cannot prove any definite points, it can lay ground for further investigation.

Subject 4 had the longest experience working within the Energy Authority. He talked about energy sustainability in the original Norwegian minting of the term: an application of social, economic, and ecological principles. He discussed how this was

applied in the administration of natural resources. Sustainability depends on how you use resources. Hydropower, for example, can be used sustainably, but it can also be used unsustainably. The concept of sustainability also operates on several levels: many people look at the small picture of sustainability, but not the "big picture."

> "You have to ask about the whole scope of problems in order to do good work."

Without talking about all three legs of sustainability in unison, on a broad scale, "ethics can become mismatched" when you think about how to best manage natural resources. He brought up an example of a problem he had to navigate earlier in his career:

> "Some years ago we had to initiate exploration for oil on the Icelandic continental shelf, and I was involved in the initial steps for this. And of course, there was concern on whether this was sustainable or not, to extract oil…If we did it like Norway, I felt more sure that it could be sustainable, we had not in place laws about this yet, like whether the [oil] taxes should go to a special fund…There was also the matter of a study from the International Energy Agency that looked at how we can transform the energy market from using coal and oil and gas towards other energy sources, that would not impact the environment and the temperature of the Earth. You can see that while we are transforming the energy sector, we have to use some carbon in this phase. And then you think, which is better: oil or coal? …Oil is bad but coal is the worst. If you can use oil instead of coal in this transition period, you win something. Of course if you use gas, that is the best. My thought was that, for this project, it is not so bad to look for oil in the Icelandic shelf. Of course, in

the start, it was not so very attractive to work with this company when you are administrating resources like hydropower and geothermal."

In this story, Subject 4 explicates how sustainability is best considered through a broad perspective of costs and benefits. Oil is considered an unsustainable resource, but the sustainable economic shift over to renewable power could only be accomplished with transitory fossil fuel use. Viewing the situation through a more macroscopic lens was the only way Subject 4 could make a decision that would weigh on the three principles of sustainability in mutuality, over a greater time scale. His decision earlier on led to more successful development of renewables in 2015.

Subject 4 then went on to talk about negotiating politics in sustainable decision making.

"Making these choices are always political decisions."

The Energy Authority's responsibility as an institution is to ensure energy security. This leaves its administrators publicly accountable to creating development plans that meet the needs of communities and industries alike. Many Icelandic environmental regulations are also tied to European law. Thus, these decisions about energy development concern the broader international community. Subject 4 pointed out that it's a matter of whether or not you want to look at just your own backyard.

We may have to impact our environment if we are producing more renewable energy. We may impact our environment locally; but, by doing so, we may be doing very much positive for the environment in the world as a whole."

He strongly expressed how he wants to administrate Iceland's environmental policy in a way that has a more encompassing line of sight, that builds bridges between nations. Community is more than just the nation, community is the world at large.

Subject 5 repeatedly emphasized the primacy of renewability as a central principle in all dimensions of sustainability. That, in order for economic, social, and environmental goals to converge, governments need to optimize the use of resources, and ensure their use for future generations. He brought up the idea of "strong sustainability," that all decision making must keep in mind the renewability, and *reusability* of assets so that they may be kept in tact. He pointed out that there is too much myopia in Iceland's energy development: hydropower and geothermal resources are falling prey to over extraction in order to serve the interests of current economic and societal stakeholders. But this turns a blind eye to those generations that will inherit the land and the responsibilities of their forebears.

In addition, he pointed out how insecure Iceland's energy economy is—in particular, how energy investments are poured solely into the aluminum industry. This is unsettling for the safety of the current economy, and the future Icelandic economy.

"This is very old wisdom, that you should try to diversify."

This point segued into discussion on the new "master plan" that the Energy Authority is engineering, to set a foundation for all new energy development in the nation. The goal of the master plan is to 1) gather together and compare all possible avenues for industrial energy development in Iceland 2) make the most sustainable decisions given all the information, 3) keep the power of investors (like aluminum smelters) marginal to the power of the government and 4) script a future for Icelandic

energy that takes into account current and future generations. This master plan was prompted in order to consider and weigh everybody's needs, business and communities, through a sustainable framework, that is able to prioritize demands with a broader vision of Icelandic society.

He commented on how it's hard to initiate sustainability, and how to make sustainable decisions that fulfill his professional responsibilities.

"I've been trying to train myself to work with the overall sustainability concept…I try not to hook up on strong feelings. I cannot let personal opinions…I have to have a working method to fulfill my general obligations."

There's a strong degree of public accountability that he must hold himself to. Being a good leader often means making ideological sacrifices. However, the sustainability framework pushes individuals in the Energy Authority to make decisions that are beneficial holistically, to the best of their ability, even if it means making smaller sacrifices. The goal of the master plan is to accomplish "strong sustainability." Subject 5 converged on the point that sustainability isn't about fulfilling a current ideal, it's about ensuring security for greatest amount of people as possible, for the greatest amount of time—and that's the obligation he has to respond to in his work. The issue of energy in particular, in comparison to other environmental topics, requires a broad line of sight, and a more *utilitarian* approach to environmental decision-making.

Similar to previous subjects, Subject 5 also brought up the topic of international accountability as well.

"When we look at global issues, most of what we do is right. Even if locally it can be…the situation can worsen. For example, when we provide energy to a new aluminum smelter, the carbon dioxide level in Iceland will increase. But, if this power plant would be built in Algeria or Qatar, where we are using gas as a fuel, then the carbon dioxide generation will be 10 times bigger. So of course, we are polluting here, but in the global sense, we are doing enormous good things for the planet. It's great to have a job like this in a renewable energy system; really, it's a privilege."

Subject 5 talked passionately about the responsibility of Iceland to the planet, and how decisions about sustainability have to be considered on a global scope as well. This consistent in the point he drew about not letting the personal affect the political— that there are ideological sacrifices that must be made to do their job for the country, for their stakeholders, and for the world at large, even. Sustainability, in this way, is not a *value*, it's a *practice*. There's a strong difference.

Subject 6 came from a slightly different perspective, in that his work with the Energy Authority centered within smaller municipalities of Iceland, outside of Reykjavík. He was also about two decades younger than the other male subjects working in the capitol city. But, he similarly discussed the complexity of sustainability. Within an energy context, sustainability means providing efficient, and accessible power to all communities. Most pointedly, suastainability means transitioning over from non-renewable to renewable resources. This transition requires a strong structural shift.

"There needs to be an effort to push sustainability into the mainstream."

That, in particular, sustainability isn't a fringe idea, it's a way of life. He brought up the example of recycling in the town of Akureyri, in the North of Iceland. There are strong structural successes in mainstreaming recycling among these communities because of stringent environmental laws within the municipality. He emphasized the idea of systemic "norming" of sustainable practices. Often times, it isn't a matter of education, it's a matter of enforcement.

Norming sustainable lifestyles, moreover, takes a transition period—it has to be accomplished through small successive steps. Any abrupt changes may unnecessarily burden a community. In addition, "Icelanders feel community very strongly." This sentiment plays into his role as a leader; it is his responsibility to find solutions that encompass everybody, and all of their needs. Having to answer to so many people requires a broad vision for sustainability.

"You have to look at sustainability in terms of systems. It's risky to simplify problems."

Like the other subjects, Subject 6 also brought up the point that a sustainable future means compromising some local priorities in order to maximize the good of the larger society, and also the global community.

"Aluminum is a great example. There are no easy choices in sustainability. It's not about choosing good versus bad, and it's never black and white… I'm glad I'm not a salesman of ideas, but I do want to share ideas when I can!"

He communicated a very *nuanced* understanding of sustainability, and professional sensitivity to the politics of Iceland's sustainable energy development agenda in relation to the needs of the people.

Subject 7 opened by saying that she defines sustainability "by the books"— sustainability is the responsible use of resources that does not compromise the needs of future generations. This brought up the topic of the Energy Authority's master plan, which I explained previously. She spoke of the master plan as a solid framework for executing sustainable policy—specifically, the master plan ensure that there is no resource exploitation that is not grounded in "thorough research," that broadly considers all costs and benefits to energy development now and in the future. She also pointed out that it's key to reconcile the health of all communities, and also ensure that no resources go to waste.

> "Keeping exploitation within reason ensures sustainability, I think… Our role is always being the center between the people exploiting the resources, and the community."

Formulating some kind of "middle ground" is the most prominent part of her job,

> "We're always trying to find this golden middle, it's very hard, you can never just take a stand. That's the downside of working for the government, you can never have a personal opinion. You have to make sure everyone is fulfilling their obligations."

This harked to one of the survey questions ('environmental issues a personal matter to me'), which she elaborated on:

"Environmental issues are totally a personal matter to me…[but] it's not really up to me, I have to follow all these rules and legislation."

She described tension that she commonly encountered in her job: she consistently has to make decisions on how much money the Energy Authority can allocate to the aluminum industry. 80% of the Energy Authority's clients are aluminum smelters, and there are only three of them. Only 20% of power goes to municipal power distributers. It's hard to negotiate these numbers year to year, especially when there are strong incentives to grow the aluminum industry in the nation.

Subject 7 also talked about energy through a global lens. When you evaluate the issue of energy holistically, Iceland is making the most sustainable decisions for everybody.

"I was talking at a conference in Perú, about geothermal infrastructure, and they were talking to me like I was a rockstar!"

On the whole, having 99% renewable energy is better than most countries can imagine. Iceland, truly, is doing "great work." Subject 7 voiced that Iceland is doing it's part in the international struggle against climate change—this larger issue is what frames most rhetoric about sustainability in government. There will always be tension between local and global interests, but,

"If you don't have controversy, you will never find the middle way."

The collision between competing interests, in essence, is a fruitful happenstance. Controversy grows solutions, it keeps legislation in motion, and up to date.

Subject 8 also introduced sustainability as a concept that ensures the security of future generations. She brought up how the master plan is invested in this idea,

corporations now have to submit reports about the sustainability of their enterprises up to the point of 100 years.

"The master plan is all about having oversight of the future."

But, she also added that sustainability to her, on a personal level, means "not ruining nature." Preserving nature is a strong personal issue, but serving all members of the community takes primacy in her job. It is necessary to reconcile that when she has governmental accountability.

"Everyone is a part of the community, even if important sides are differing. Some want smelters, others want to preserve the environment. I can see both sides, so it's best to meet somewhere in the middle."

On the whole, having a nuanced stance on the environment is part and parcel to legislating it. Still, she expressed reservation about the trajectory of Iceland's energy development in an ecological sense. She brought up the hydropower plant that was installed next to Vatnajökull, a glacier near the interior of the island,

"I didn't agree with [building] in the highlands. The environmental effect was way too much to warrant development. It was a political decision, not even an environmental or an economic one…many people were against it. The gains were a few hundred jobs. It's huge, 750 megawatts for only one smelter. But, in my opinion, the effects on nature need to be considered."

There's a rising problem of the monetization of nature in Iceland. The government is a moderator in reconciling a lot of different sacrifices, and comparing entities that are hard to compare—nature versus the economy. It forces people to quantify what the value of

nature is. Especially in light of the Icelandic eco-tourism industry. Iceland can actually put price tags on most of its natural treasures.

She also followed in talking about Iceland's potential abroad. One of her personal projects in Orkustofnun centers around funding geothermal technological development, and international partnership with European countries. Spreading Iceland's technical knowledge of renewable energy development is a meaningful part of what she does. Being able to partner with other nations is a new project for the Icelandic government.

Altogether, the respondents from the Energy Authority, male and female, converged on a few consistent points: sustainable energy is all about renewability, sustainability needs to viewed macrocosmically (locally and globally, over long time scales), and energy sustainability cannot be accomplished without sacrifice.

Discussion

The Energy Authority Versus the Environmental Agency

Guided by the premise that gender *does* have an effect on environmental discourses, I broadly observed patterns and themes within my interviews in order to capture the potential diversity in how this might be so. On the whole, I deduced two prominent relationships between Icelandic sustainability politics and gender: 1) the responsibilities of different environmental institutions, and the nature of different environmental problems (e.g. recycling versus energy), create epistemes of masculine and feminine bias that differ between agencies, and, relatedly, 2) women and men have to negotiate masculine and feminine values in the context of these problems and

responsibilities. In other words, I discovered that masculine and feminine perspectives are given primacy depending on different environmental goals different agencies need to achieve. Moreover, in these agencies, social goals related to sustainability appear to be territorialized by feminine perspectives and economic goals by masculine perspectives. For instance, while the Energy Authority had to reconcile more economic responsibility, and energy stability for the nation, the Environmental Agency had to exercise more social responsibility in corporate production standards. As a result, the environmental paradigms of these two institutions gendered the staff more-so than the staff were able to gender the institution. The gender bias of the institutions is also reflected in the slight sex imbalance between the the two departments. The Energy Authority comprises 10% more men than women, and the Environmental Agency comprises 18% more women than men. Because of the masculinized nature of work in the energy field, more men than women may have been attracted to the sector overall. However, this effect is most likely reflexive as well, in that the higher ratio of men may have masculinized the sector more than it would have been otherwise. Overall, the distinct governmental responsibilities of the Energy Authority navigate more masculine territory than the allotted responsibilities of the Environmental Agency, such that the epistemes of these two institutional arenas are conducive to different gendered perspectives, and attract differently gendered individuals. So, what is the character of Iceland's renewable energy discourse, and how is it expressed?

Masculinity in the Energy Authority

I will begin on the note of masculinity in energy, because of the pervasively masculinize rhetoric within natural resource politics, and discuss how the masculinity presented in the Iceland Energy Authority may differ. There are manifold reasons why I contend that the energy sector is a masculinized environmental sector, and how it is uniquely masculinized in the Icelandic sustainability paradigm. As mentioned in literature review, natural resource extraction has historically been dominated by men, and communicated in a language that is deeply entrenched in hegemonic masculinity. This masculine territorialization of natural resource sectors functions to subordinate the feminine, subordinate others through feminization, and deter female involvement in natural resource management. This typification of hegemonic, dominating masculinity is present in the extraction of fossil fuels, in particular. In contrast, all of my interviewees voiced that sustainable energy is about renewability, and provision for future generations. Therefore, it follows in saying that within renewable energy development a different constellation of masculinities preside in discourse. Moreover, these masculinities do not exclude nor marginalize women, nor feminine perspectives. In fact, they live and thrive within feminine value systems. These "renewable energy masculinities" are not premised on physical domination, but instead on:

1) Pragmatism

2) Economization

3) Utilitarian logic

First off, the survey results preface this observation. My data and interview results intimate that sustainable energy is more feminine, holistically. This could be

because of sustainability's association with an environmental care-ethic. The backdrop of feminine moralistic thinking creates an episteme of fertile ground that masculinity must grow in. In addition, in my interviews, respondents expressed 3 key goals of renewable energy development. Renewable energy is designed, implemented, and legislated in Iceland with the shared goal to:

1) Reduce global impact on climate change,

2) Provide a clean power source for industry (that would otherwise be powered by polluting fuel sources),

3) Galvanize the economy.

All three of these reasons are grounded in a fundamental goal to serve the community, both on a regional and worldwide level. The feminine anchor point, a strong community care-ethic, textures how masculinity functions inside of feminine territory. Instead of expressing masculinity as a modality to dominate the land through aggressive physical extraction, it is instead expressed in a drive to *pragmatically capitalize off of it*. The respondents within the Energy Authority, particularly Subjects 4 and 5, emphasized the primacy of the "master plan" as an ideal for responsible land management, that maximizes the amount of energy Iceland is able to produce. There is an incentive to produce *as much energy as possible* to galvanize industry, and bolster the Icelandic economy through job creation, and tax accumulation. The master plan is a way of maximizing profit and supporting the community, without incurring unnecessary environmental damage. The language of the master plan is very pragmatically scripted —it negotiates energy profitability, and within what environmental margins profit can be ascertained. For example, Subject 4 brought up his decision to drill for oil on Iceland's

Northern coast. This decision was made to ensure economic energy security for all citizens, and provide a smooth transition between fossil fuels and renewables. An environmental goal was eventually accomplished through a rationalized economic judgement call that prioritized energy stability. In sum, the Energy Authority's main responsibility: to protect energy stability, and economic security therein, is executed through masculine proclivities (pragmatism and capital accumulation) which are enmeshed in a feminine value system (community care-ethics). This results in the production of decisions that are masculinized within a feminine framework, e.g. "this power plant created jobs, and was thus good for the community."

Moreover, there is a strong utilitarian logic that predominates in the execution of energy development. All subjects in the Energy Authority (regardless of sex) expressed that despite local sacrifices, Iceland is doing a great service to the planet. Iceland is providing clean energy to an energy intensive industry, and it is also reducing its carbon footprint by nearly 99%. This is another example of a masculine proclivity enmeshed in a feminine care-ethic. The emphasis on holding a responsibility to the global community is executed through a masculine, utilitarian logic system that dictates that local destruction is permissible, if a greater good is accomplished for the world.

To explain this phenomena, I therefore propose the idea of *concentric gender,* in which masculinity and femininity can be located within each other. In other words, masculinity and femininity do not have to interact through polar relationality, but through mutual constitution. Feminine perspectives can inform on how masculinity is deployed, and masculine perspectives can inform on how femininity is deployed. Icelandic renewable energy politics are a prime example of this. The pro-environmental,

community-oriented context of renewable energy lays a foundation of feminine,

planetary care-ethic, and development goals are arbitrated through logical, masculine

economizing. Further, these two deployments of gender are not in competition, rather,

they function in partnership. Within the case of the Icelandic Energy Authority,

masculinity takes a more agentic role in political decision making. In this case, femininity

takes on a non-active, contextualizing role in defining the terms of the politics. This

causes more masculine dominance within the Energy Authority in comparison to the

Environmental Agency, because the *actions* it arbitrates are more masculine. The

overall effect of this is *subordination* of feminine perspectives relative to masculine
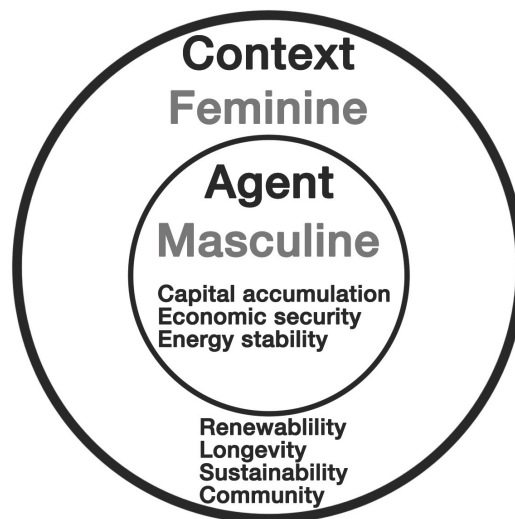
ones. (See Figure 2 below)

Icelandic Energy Authority

Context
Feminine

Agent
Masculine

Capital accumulation
Economic security
Energy stability

Renewablility
Longevity
Sustainability
Community

FIGURE 2

Importantly, the roles of "agent" and "context" are not fixed. They can reverse

placement. There can be masculine contexts and feminine actions. This was just the

dynamic I observed in Iceland's Renewable Energy Politics. So how does the Environmental Agency compare?

Femininity in the Environmental Agency

The Sustainability Department of the Environmental Agency had a different layout of concentric gender, which emphasized feminine perspectives more than masculine ones. For one, the context of their work (similar to the Energy Authority) was feminine. Their arena of environmental policy and legislation mostly centered around ensuring corporate accountability in fulfilling "Swan" standards—environmental guidelines in business practice and production. Holistically, they focused on reducing the ecological footprint and impact of industry, business, and government. The objective of their work was protecting the community, and ameliorating ecological damage across a wide array of Icelandic society. This ideological foundation of sustainability pivots on a grounding of feminine care-ethic, to provide for future generations, as I discussed previously in my analysis of the Energy Authority. However, unlike the Energy Authority, their environmental responsibilities were not in *providing a service* (e.g. electricity), but rather, *controlling existing services*. This creates a different rhetorical paradigm regarding how they evaluate their work, and what values they can bring to the table. In consequence, the commentary of these women in interviews not only differed from the commentary of the Energy Authority as a whole, but from the women of the Energy Authority in particular. For example, women of the Environmental Agency talked about the necessity of personal, emotional investment in sustainability as a stepping stone for deeper structural change.

Subject 2: "We do things that are socially accepted as sustainable…to calm our consciousness…You should buy eco-label, but also, try to reduce your consumption."

All three subjects within the Environmental Agency consistently admonished the complacency present in Iceland's attitude about the environment, highlighting a move away from a bystander mentality, to a mentality of personal *connection* to environmental issues. Moreover, it is the government's job to bridge this gap. That is to say, they believed that the government should provide a structure that sets sustainability as the default, rather than destruction as the default, with environmental clean up later. These subjects thus evoked the need to sever the linkage between polluting industry and societal prosperity. The community should be able to find different ways to vivify and sustain itself. This reformulation of government priorities de-centers the economy as the pivoting point for legislation, and shifts focus to the community's needs and strengths. Inverting government structures in this way would 1) integrate sustainability into the lived experiences of the Icelandic people 2) connect people to production, consumption, and the planet from which resources and waste come from and return to, and 3) instill greater environmental consciousness in society.

So, gender in the Environmental Agency can be mapped as follows (in Figure 3):

Icelandic Environmental Agency

Context
Feminine

Agent
Feminine

Accountability
Connection
Responsive to the
needs of others

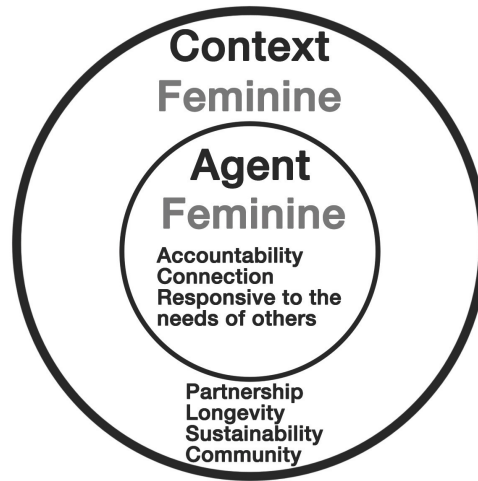Partnership
Longevity
Sustainability
Community

FIGURE 3

In comparison to the Energy Authority, the Agent as well as the Context are

feminine, which creates an episteme of feminine bias in the department's foundation as

well as the work it executes. As discussed previously, the goals of renewability and

longevity contextualizes the realm of sustainability. This feminine episteme frames the

agentic roles of the agency: corporate accountability and responsiveness to the needs

of the community.

Conclusions

Concisely, given my evaluations of gender within the Energy Authority and the

Environmental Agency, I have developed seven conclusions about the dynamic of

gender within Icelandic energy development.

1) The institution of the Energy Authority, and energy development more

broadly, masculinizes the professionals within it, because the

responsibilities of this sector (economic security and energy stability) captures more masculine proclivities.

2) The institution of the Environmental Agency feminizes the individuals within it because of the responsibilities of the sector, to regulate pollution and waste.

3) Both the Environmental Agency and Energy Authority are contextualized by the feminine care-ethic of longevity, renewability, and provision, within the larger paradigm of sustainability.

4) Women and men negotiate gender according to their specific responsibilities within the *concentric gender framework*.

5) Feminine and masculine perspectives are both presented within Icelandic energy politics, they just serve different purposes in decision making processes.

6) Depending on how masculine or feminine values are located, one gender perspective may subordinate the another.

7) The primacy and subordination of one gender perspective over the other is *not* necessarily contingent upon the sex ratio. Gender hierarchy is more closely related to the proclivities of the institution individuals work within.

Altogether, these findings suggest that gender is a mediating force that presides in individuals and institutions in complex ways. Gender can layer on top of itself, and create epistemes of masculinity and femininity that serve different purposes, and create different perspectives. These varying gender environments are not necessarily antithetical, they are just different. For example, the Energy Authority and Environmental

Agency do not oppose one another in their gender expressions. They have important linkages: sustainable thinking and an eye towards national prosperity. They just encapsulate gender differently in order to realize these goals. In addition, the balance of masculinity and femininity in their gender frameworks is not necessarily contingent on the relative numbers of men and women. Though men and women contribute gender perspectives to the discourse of energy politics, gender also appears to be a force that exists outside of men and women. In this way, it is hard to draw any conclusions on how Iceland's institutional sex equality relates to its environmental politics, which was the original inquiry of my research. However, this research can inform on the consequence of gender democracy in environmental policy, even though it cannot concretely illuminate the consequence of sex equality. I have discussed how masculinity and femininity function differently in the context of natural resource extraction. Evaluating the different proclivities of masculine and feminine perspectives can give insight into how environmental issues can be negotiated and resolved. Balancing and switching "gender lenses" in problem solving can equip leaders with the tools to not only to embody sustainable practice holistically, but how to reconceive what problems are to begin with.

In explanation, this research suggests that egalitarian valuation of gender is important to holistically manifesting sustainable development. The issue of energy strongly exemplifies this. The masculine dominance in energy politics, in renewable and non-renewable fields, can shed light on issues of climate change, and the political actors that are strategizing on how to best combat it. In the Icelandic example, industry is entitled to a massive allocation of energy production, to the benefit and detriment of the national community. The prevalence of masculinity in these discourses defines

sustainability to be a *practice of cost-benefit analysis.* In contrast, feminine rhetorics would define it as a *way of life that connects people to the environment*. I would suggest that this proposition needs to be evaluated critically if governments want to develop an energy agenda that is not only logical and fiscally responsible, but also sensitive to the needs of their community on a foundational level. It is key that leaders in environmental politics bridge these objectives, and create a partnership between masculinity and femininity in discourse and action.

On the whole, the purpose of this research was not to prove theory, merely to frame it, and set a stage for further research. That being said, my experiment design has scientific limitations. For one, my sample size is too small, and specific, to draw any definite conclusions, especially quantitatively. Second, I did not have a control group to compare my sample to. Because there is no comparison to back up my argument, many of the gender dynamics I observed could be due to the episteme of Icelandic culture, more-so than other macroscopic gender patterns. Third, I could not measure gender within each individual respondent, which limits my ability to formulate any theory on the relationship between sex parity and gender parity. I propose a more expansive experiment for future research: namely a larger participant sample, a more diverse array of environmental institutions, and multiple countries (Scandanavian or otherwise) to cross-compare with.

References

Borchost, A., & Siim, B. (2008). Woman-friendly policies and state feminism: Theorizing

Scandinavian gender equality. Sage Publications, 9, 207–224.

Broussine, M., & Fox, P. (2003). The Politics of Researching Gender in Organisations.

Management Research News, 26(8), 27–37.

Butler, Judith. "Sex and Gender in Simone De Beauvoir's Second Sex." Yale French

Studies 72 (1986): 35-49. Print.

Cecelski, E. (2000). The Role of Women in Sustainable Energy Development. National

Renewable Energy Laboratory Subcontractor Report, (550), 1–54.

Centre for Gender Equality, in Iceland. (2012). *Gender equality in iceland.* (No. 1).

Akureyri, Iceland:

Clancy, J., & Roehr, U. (2003). Gender and Energy: is there a Northern perspective?

Energy for Sustainable Development, 7(3), 44–50.

de Beauvoir, S. (1952). *The Second Sex.* New York: Knopf.

Dunlap, R., Van Liere, K., Mertig, A., & Jones, R. (2000). Measuring Endorsement of the

New Ecological Paradigm: A Revised NEP Scale. Journal of Social Issues, 56(3),

425–442.

Filteau, M. (2014). Who are those guys? Constructing the oil field's new dominant

masculinity. *Men and Masculinities, 17*(4), 396-416.

Foucault, M. (1991). Politics and the study of discourse. In *The Foucault Effect: Studies

in Governmentality* (pp. 53–86). Chicago: University of Chicago Press.

Gilligan, C. (1982). *In A different voice: Psychological theory and women's development* Harvard University Press.

Hook, Derek. Foucault, Psychology and the Analytics of Power. New York: Palgrave Macmillan, 2007. Print.

Jaggar, A., & Bordo, S. (1989). G*ender/Body/Knowledge* Rutgers University Press.

Laplonge, D. (2013, 29 December 2013). I'm gonna frack ya: Gender and language in the extraction method of natural gas. *Factive.*

Littig, Beate. Feminist Perspectives on Environment and Society. Eds. Pamela Abbot and Claire Wallace. Essex, England: Prentice Hall, 2001. Print.

Michelson, J. (2013, April 27). What will it take to get more women in green-energy jobs? *The Atlantic.*

Pateman, C. (1987). The Patriarchal Welfare State. Cambridge, Massachusetts: Harvard University Press.

Roughnecks do it deeper. (n.d.). [Web]. Retrieved from https://www.pinterest.com/lovebugey/real-housewives-of-the-oilfield-alaska-slope-wife/

Rutherford, Stephanie. "Green Governmentality: Insights and Opportunities in the Study of Nature's Rule." Progress in Human Geography 31.3 (2007): 291. Print.

Stern, P., Dietz, T., & Kalof, L. (1993). Value Orientations, Gender, and Environmental Concern. *Environment and Behavior, 25*, 322–348.

Sustainable Energy for All: the Gender Dimensions. (n.d.). United Nations Industrial Development Organization.

United Nations. (1995). Report of the Fourth World Conference on Women (No. 177) (p. 223). Beijing.

United Nations Environment Programme. (2002). Agenda 21: Global Action for Women Towards Sustainable and Equitable Development. United Nations.

Zelezny, L., Chua, P.-P., & Aldrich, C. (2000). Elaborating on Gender Differences in Environmentalism. Journal of Social Issues, 56(3), 443–457.