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The Greater Unconformity

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Abstract

In recent light of sexual harassment cases going unaddressed at Grand Canyon National Park and other public lands, there is a need to call out the persistent social, political, and economic structures that allow such acts to occur and go undocumented and unaddressed. A thorough explanation of geologic unconformities, especially the Great Unconformity in the Grand Canyon, is used as a seamless metaphor for a lack of space for women in the outdoors. This graduate capstone presentation includes an exploration of the gender binary, feminism, the geology of the Grand Canyon, the nature of unconformities, intersectionality, and ecofeminism. In conclusion, there are three dimensions of time and space – mental, physical, and verbal – shared as starting points to empower women in a variety of outdoor pursuits. This presentation concludes with tangible steps to empower and diversify participants in outdoor recreation and how to address the large-scale systemic structures that dominate our society and outdoor culture.

Keywords: feminism, space, unconformity, Grand Canyon, sexual harassment, outdoor recreation, accessibility, ecofeminism, personal narrative

Introduction

Before we begin, I’d like to acknowledge the people that came before us. We do not often give enough awareness to the complex histories of the places we inhabit and call home. These places have also been home to Native American tribes for time immemorial, yet these peoples are not receiving the rights and recognition they need. I hope this moment of recognition can encourage our support for healing and empowering these historically manipulated and disenfranchised groups of people. All over our continent, the story of colonialization, manipulation and violence is pertinent. We must retell this story.

Today, I will be talking about empowering women in the outdoors. This includes field scientists, guides, and others who have been sexually harassed on the job, with no structures in place or the proper support to speak out. This includes recreationalists of all abilities who are stereotyped on a daily basis. This includes professional athletes, role models, and teachers, who deal with
sexism everyday and still embody the strength and confidence to inspire and support others. This includes all of these women and more.

I believe in identifying, mitigating, and contesting sexism and violence against women with feminism. Some stories or imagery I share today have the potential to be a trigger, and if that is the case, I encourage you to take a break and serve your needs.

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**FXminism**

I am giving this presentation because I believe that Feminism is talked about ineffectively and not enough. The fact that many of us in this cohort - who are receiving higher education in the cutting edge developments of our field - chose to speak about environmental and social justice is testimony to continuing this conversation and initiating change. However, none of us are experts. I feel insecure about addressing this topic, because there is still so much I do not know, and I could comb through my script for months and still not address all of my assumptions. I am also a very bubbly, playful person, and I feel vulnerable about spending this time talking about such a staggering topic. We might be in different points of our understanding of feminism, and approach it from various perspectives, but we must practice it, in community, to contribute to change. In my recent Wilderness First Responder Recertification Course (which never fails to increase my daily experiences of frustration over gender awareness) my teacher taught us not to rise to the occasion, but to fall back on our training. And thus, we must practice. And maybe we will be able to save some lives.

Feminism has been defined in a variety of ways, and has been accused of validating the same violence and ignorance that it criticizes. That is not the feminism of which I speak. Martha Ramptom (2015), a social historian, claims that post-2008 feminism “speaks in terms of intersectionality whereby women’s suppression can only fully be understood in a context of the marginalization of other groups and genders—feminism is part of a larger consciousness of oppression along with racism, ageism, classism, abelism, and sexual orientation. [...] The beauty of the fourth wave [of feminism] is that there is a place in it for all—together. The academic and theoretical apparatus is extensive [...] ready to support a new broad-based activism in the home, in the workplace, and in the streets.” (Four Waves of Feminism, para. 19) Feminism is alive and well, as recently shown by one of the largest marches in U.S. history. I am giving this presentation from the perspective that societal, economic, and governmental structures are designed by and for middle and upper class white males, disadvantaging all who do not fit that mold. I am not going to spend time explaining the history of this phenomenon, but would happily meet once a week over the next year to discuss it with anyone who would like to see beyond our basic history textbooks.

The “X” in FXminism is meant to acknowledge the larger context of marginalization of which Rampton speaks. Gender is complicated, and that complexity must be embraced for all to feel welcome. Many of us grew up considering the world to be binary, and many
people do not fit one side of that line. Feminism can easily propagate this binary in its critiques of male and female experiences. But even male and female identities can have complications; some women also have male qualities, and vise versa. Charlotte Austin (2015), a mountaineer and author who captured the stories of Mount Rainier’s women guides said, “I cannot generalize these women, because each of their stories is unique.” (p. 37) The performance of who we are cannot be quantified on one side or another, especially when we take intersectionality into consideration. Intersectionality is the concept that social categories such as race, class, and gender are overlapping and interdependent systems of discrimination or disadvantage. For example, a white woman has more privilege than a black woman. Talking about these complexities may challenge your assumptions, your patience, and even your sense of identity, but I challenge you to feel uncomfortable, challenge your assumptions, and to hold others’ truths gently.

Unconformities

When addressing the sensitive language and complex critical thinking of Feminism, geology is not the first thing to come to most people’s minds. However, metaphors can be a powerful tool for navigating topics such as sexual harassment. Figurative thoughts and images can act as a new lens to help us reach new perspectives and understandings. Ever since I was a young girl, enamored with pebbles on the Lake Michigan shoreline, geology has shaped the way I come to understand the world around me. Perhaps I can offer this lens to you as well, as we traverse this terrain together.

An unconformity is a gap in the rock record where time has passed, but there are no deposits preserved from that time. Sometimes, they can be hard to see because younger rocks show up in the cross section directly on top of rocks that may have been deposited millions of years before them, and only subtle clues remain to tell us time has gone unrecorded between the two layers. There are three classic situations for an unconformity:

1. A disconformity occurs when you have sedimentary layers being deposited. For example, some pebbles from a stream’s delta become covered by some flat sand and mud layers from the tides. After some time, these deposits are covered by deep water, or sit high on a mountain where not much is deposited on top of them. In fact, some of the layers of rock are actually eroded. This goes on for a while (‘a while’ in geologic terms usually means a couple million years) until a new flat layer is deposited on top of the eroded layer. As a geologist looking at this cross section 20 million years later, one could find a 5 million year gap in time between the early and more recent layers during which material was eroded instead of recorded in the cross section. However, a disconformity can be hard to see without advanced dating techniques, because all of the layers are flat.

2. An angular unconformity happens in a similar way, except there is an added step. You have the first few flat, sedimentary deposits, then they are tectonically tilted.
Next, you have some erosion, buzz cutting the top off of the jagged, tilted layers and eventually, more deposits laid flat on top of them. Your curious geologist can then interpret that time has passed between the tilted layers and the next, flat deposition on top.

3. Lastly, there is a non conformity, when a big blob of relatively less-dense granite floats its way up through a stretching landscape. It can grow into massive mountain ranges like the North Cascades or the Sierras, and remain exposed for millions of years. The granite experiences an extensive period of erosion, which will go unrecorded when the next layer of sediments are deposited, and remain there until they are cemented into new rocks.

So there is a very famous unconformity, one that is so dramatic that it is called “The Great Unconformity.” You can see it for yourself in the Grand Canyon, more specifically, in Blacktail Canyon¹. In order to understand the Great Unconformity, we have to try to understand the (still debated) formation of the Grand Canyon, and, consequently, most of our Earth’s 4.2 billion year history.

If Earth’s history was on a 24 hour timeline:

- 12AM - Earth Formed as a swirling mass
- 1-3AM - Stay in bed. Earth is still a mass of molten lava and it’s being bombarded by meteors. There is no atmosphere or life.
- 4AM - Stromatolites (mats of bacteria) grow in the hot vent areas to create the first life.
- 6AM-1PM - Earth starts looking more like we recognize it today with large land masses
- 2PM - The North American continent looks roughly like this (see below)

¹ See Photos 1 and 2 in Appendix
2PM Continued - If you look closely, you can see thin lines that represent where present day California, Nevada, Utah, and Arizona are. Over a billion years ago, the U.S. looked more like present day Indonesia, and the arc of southeast volcanic islands is moving towards the mainland on tectonic plates. The sediments that will eventually become the Vishnu Schist (the first layer of the Grand Canyon layer-cake of rocks) are deposited in the deep trench (represented by the dark blue line) as deep sea muds and volcanic rock. As you can see, one trench is positioned right where the Grand Canyon is today (just northwest of the word ‘juvenile’). Once these deposits collide with the mainland, they are metamorphosed by heat and pressure. Big veins of granite also weave their way up into this highly deformed rock.

8:48 -10PM – 530 million years ago, Earth is mostly covered in ocean, while the metamorphosed Vishnu schist is crinkled up high into mountains. Nothing new is deposited on them and they are eroded for a long, long time. Meanwhile, our oldest known ancestor, the deuterostome makes its first appearance as the blooming of life in our oceans continues. Finally, the mountains are worn all the way down to sea level, and the Tapeats sandstone,
followed by 10 other sedimentary layers, are deposited on top, burying the schist. The immense amount of time that the schist underwent erosion will be invisibly recorded in between rock layers. By now, we are missing 1.2 billion years in the geologic record, or about a quarter of earth’s history between the Vishnu schist and the Tapeats sandstone, although they lay next to one another in the stratigraphic section.

- 11PM – Dinosaurs rule the world.

- 11:59 and 48 seconds - 6 million years ago, a sliver of time at the end of our day, the Colorado river begins carving the Grand Canyon, and our earliest human ancestors live in Africa. And now that the Colorado river has eroded so deeply (with a little help from tectonic uplift) we can put our fragile human hands between the very ancient Vishnu Schist and very recent (in geologic terms) Tapeats Sandstone. It is known as the Great Unconformity.

The Greater Unconformity

The geologic unconformity we discussed parallels an even greater unconformity. If President Trump spent more time in our National Parks, he would probably call it the “great, great unconformity.” But he is too focused on something else in Arizona, which he calls his “great, great wall” trying to reference its superiority over the Great Wall of China: A project that took 2,000 years and failed at its purpose. Even if human resistance cannot block his plan, geology will, with thousands of different types of soils to survey, unpredictable river channels, and earthquakes.

Although the Great Unconformity was visible during my rafting trip down the Grand Canyon this past December, the Greater Unconformity was more apparent. Before the trip, I read Ellen Meloy’s *Eating Stone: Imagination and the Loss of the Wild* (2005), which explores the natural history of desert bighorn sheep. She writes, “Compared to their sport-celebrity hulky northern cousin, the Rocky Mountain bighorn […] desert bighorns are smaller, paler, and longer in ear. They are more isolated and fewer in number. In some places they face extinction on their native range. […] Strict regulations prohibit the hunting of desert bighorns.” (p. 4) On many of my previous river trips in Utah, the park service even asks us to document observation sheets when we see this rare canyon wildlife.

On December 21st, while rafting through the Grand Canyon, we got into camp early. I spent some time journaling. I watched five female bighorn sheep and one lamb browse up and across the canyon like a sundial as the brief daylight hours waned into a winter solstice night. After dinner, I retreated into my tent as it began to mist. A nearby

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2 See Image 2 in Appendix B
3 See Photo 3 in Appendix A
conversation caught my attention. It reminded me of articles in the High Country News and other media outlets who investigated the lengthy and sickening history of sexual harassment of female Grand Canyon National Park guides. The High Country News article by Lyndsey Gilpin (2016) read: “In January 2016, the Department of the Interior released a report revealing that female employees of the River District of the Grand Canyon had been sexually harassed for years, and that park and regional administrators had known and failed to stop it. Since then, women working in parks, monuments and historic sites across the country have come forward alleging on-the-job sexual harassment, assault and gender discrimination.” (How the National Park Service is failing women, para. 7)

Reflecting on all of this as the conversation outside of my tent continued, I journaled:

Suddenly, it feels like there is a river cobbble stuck in my throat, brewing a thunderstorm in my suffocating lungs. From my tent I can hear the men swaying, leaning drunkenly on the shadows beyond the fire. They hold themselves up by their shallow tongues, unraveling brittle perversions at the female bighorn sheep high above us on the ledge. Females, who evolved to survive this harsh terrain with an ancient intuition. Their tawny hind legs glow in the moonlight, a target against blood red walls. These walls stained with black varnish have seen the chiseling appetite of humans before. They chide “Hereee girly” and “common over.” Meanwhile, the goddesses of the river silently browse up and out of the canyon along hidden ledges. So the men’s tongues become weaker yet and they yearn for their guns. They spit profanities at the regulations that “deny their right to this meat.” It’s almost as if their brain matter swirls in an eddy of carbonated PBR comfort, contained only by a thin skull once soft in her womb. Yet, they sputter and spit as if they know no creation. Thick bubbles churn back up stream trying to fill that empty hole dug long ago.

I feel the force of an imaginary flood thundering down the canyon towards me, the kind that helped carve the Grand Canyon. What started as a silent trickle of runoff in the mountains, is now pulsing downstream with violent momentum, forcing tree roots open, and scouring up into the lifeblood of the overturned trunk. The relentless current rubs rocks to dust and deposits it in the ocean, where it settles, in the dark, under the eternal pressure of the water above, the same water that brought it here, constantly reminding it of its fate. Maybe someday, the dust will turn to stone, become a desert, and be engraved again and again. Must I spell out this metaphor? The formation of Grand Canyon, is our horrifying culture of normalized sexual harassment and discrimination. Not so pleasant when something sacred is violated, even if it is just with words. A woman’s body sacred, and anybody’s life can be violated - even if it’s just by words.

Over 4 million people visit the grand canyon every year, but less than 1% ever see it from the river, a river run by boatmen. A river run by boatmen. Boatmen who sit in the shadows just beyond the fire.

4 See Photo 4 in Appendix A
This is the Greater Unconformity. A silence. Time going unseen. We may have carved down far enough to see this lack of space, but it is still weighed down by a mile of rock. It will not be a quick feat to lift up those repetitive histories. We have more listening to do. We have more work ahead of us.

Comparing the Great Unconformity and ignored sexual violence is pretty intense, some might even say it’s unnecessary. Any other canyon traveler may simply pass by the formation without a sideways glance. They might pass it by in the same way that people downplay the state of racism today because they no longer see blatant acts of violence and racism, such as lynching and murdering. If they happen, we might hear about it, and we will be so overwhelmed by the atrocity of it that we fail to do anything about it, and then we will eventually forget. But the structures that allow that type of discrimination are still in place. And what is happening more often are microaggressions. Microaggressions are comments or behavior that devalues a person’s gender, race, religious beliefs, and essentially the right that a human has to simply be. Microaggressions are the mosquito of our society. It hurts, but it probably won’t kill you. If you complain about it, Human Resources might, at best, give you a little bug spray. Or maybe you do not complain, because you feel like it is silly, and later you come to find out, lots of people were getting bitten, and so you ended up staying in the same swamp and getting bitten even more. Tolerance for microaggressions can also normalize and propagate larger forms of violence and discrimination – most recently seen in our national political system, and the sexual harassment cases in the National Parks.

Sexism and discrimination in the outdoors – a place vital to human health – reflects a great deal of irony.

Irony: We talk about the great, wide outdoors, especially in the desert, but we do not make space, mentally, verbally, or physically for everyone. Ellen Meloy (2005) writes, “Desert space is space that is felt, completely and with certainty […] The sky and open desert are so enormous around us, who would know if we were out here anyway?” (p. 11). This space and those who do not fit within - or are even subject to - its dominant, toxic masculine rhetoric are taken advantage of via ignorance, extraction and exploitation. If women were rivers, the desecration would be no different. No space left to be unconquered, untapped. Like building a dam, someone would reconfigure her notion of beauty, exploit her work and steal her power, deny her the choice of direction or a safe return to home.

Irony: We seek out these profoundly grandiose places, places that should remind us of our family-hood, and the necessary respect for all places and beings to which we are connected. Yet I can sit on a beach in the Grand Canyon and be certain that blatant acts of dehumanization have occurred here. If not in sexual harassment, then in disrespect to the river that carries us through, or the clean water that keeps us all alive. If women were rivers, everyone would be water, from ancestral clouds, to little rain babies, or cousin tributaries and lakes. You would hope that someday, everyone could return to the ocean.
Irony: We seek these experiences to feel alive, to feel human, yet others heartlessly steal that right from us, in the very places that we witness our creation. Although the events during the gap in the rock record are still debated, there is a theory that the long term exposure and erosion of the Vishnu schist released elements into our oceans that eventually catalyzed the proper recipe for life. The Magnesium, Iron and other elements in the rock initiated the Cambrian explosion – the explosion of life on our planet from which we evolved. We are literally rafting through the creation of life. Yet, women are losing their right to life and giving life right there. If women were rivers, someone would corner her until her waters lie still, and force poison into her, destroying her human right to have life, and give life. Someone would leave her out to evaporate until all that remains is the heavy contamination.

Irony: We protect these wild places, these environments whose beauty and success is thriving due to diversity; and we are not reinforcing our own diversity in these places. We are right here, we are even a part of these ecosystems, yet we do not respect different ways of knowing and experiencing life. We say we will protect these wild places, but we ignore the diversity that makes it a healthier, stronger, system. If women are not welcome in this diversity, people of many different races, religions, and economic status certainly are not either. If women were rivers, and they were ignored for the vital role they play in humanity, each facet of the ecosystem, and every ecosystem along the way would be harmed: those who are mountains, plains and deserts, estuaries and oceans. Our whole planet. Everyone.

So, when I get to this point in my thinking, I am tied up in knots. I have begun to funnel my attention into three conceptual starting points: mental, verbal, and physical space. I will share about each with some of my preliminary ideas about how they can be used to empower women in the outdoors. With intersectionality in mind, I have a responsibility to feel uncomfortable, to ask and receive feedback, to listen, to seek stories outside of our dominant narrative, and to support people marginalized by this system far more than I. So, none of my ideas are perfect, or complete, or useful in every context. They are just starting points - or as I like to say - touchstones. As I learned in geology, you might have 8 geologists looking at a confusing outcrop and somehow you will get 10 opinions. It is similar to having people touch an elephant with their eyes closed, one describing its tail, one touching its leg, another on the ear and one with the muddy end of its trunk. We all have different interpretations based on our lifetime of unique experiences, even though we are all touching the same elephant. Although I have written these touchstones with an audience of women in mind, I think we can all learn from these ideas and integrate them into conversation. Growing awareness for mental, verbal, and physical space can be mutually reinforcing, and range from simple steps towards making someone, or yourself, feel more confident in the outdoors, to big steps towards creating change at the systematic level. I also hope that you will see the ability to adapt such practices beyond our discussion of feminism. We need to revisit this unrecognized space in our record of time.
Mental Space

Everything starts here and circles back to this. Our personal mental space is bombarded with images and notions of what we are supposed to be and believe. Even women can propagate stereotypes and structures of oppression. I know that I have, even upon myself. We are social creatures raised to adhere to social norms and pressures, even those that devalue an entire gender, even those that devalue ourselves. We need to find a space for our personal mental health.

Practice is the fundamental key to cultivating mental space.

1. Be aware of your internal dialogue and how it is shaped by your surroundings.

How do you perceive your appearance, validity, and competence? How much of that is due to the way others think you should look and behave? Women’s confidence is constantly shut down – or more subtly – distorted. I grew up seeing pictures of my aunt mountaineering in Bolivia and Mount Everest, paragliding, climbing, and skiing in Chamonix, South America, and Utah. I recently realized that I did not know the whole stories behind many of these pictures I have aspired to re-create. In a recent phone conversation, she told me a story:

There was a Chamonix photographer who wanted to photograph me, and told me to turn around and walk down hall. He said ‘perfect, perfect skiers ass.’ I did not know whether to be flattered or to turn around and punch him in the throat. My insecure self decided it was something of value that I had. But really, I just had low self esteem, no self-awareness of power. To me, my appearance felt empowering (M. Brown, personal communication, December 6, 2016).

We need to reconsider where we root our confidence. Appearance and other social expectations should not dictate our internal dialogue and our confidence. Charlotte Austin, in her featured Alpinist article “Freedom in the Hills” (2015) investigates how long-entrenched ideas about gender characteristics become self-fulfilling prophecies. She explains:

In 1984 Rosie Andrews wrote that most male climbers raised in traditional Western culture have “generally been encouraged to perform physically, problem-solve, take risks.... Girls are usually more sheltered and protected.... Rather than being prepared for independence, we learn to expect to play a supporting role, which hinges upon reliance on others.” Recent gender studies expand on this idea. In a widely read 2014 Atlantic article “The Confidence Gap,” Katty Kay and Claire Shipman concluded, after reviewing the research: “Do men doubt themselves? Of course. But not with such exacting and repetitive zeal [as women], and they don’t let their doubts stop them as often as women do” (Nonetheless common preconceptions section, para. 2).

2. Acknowledge your grief
Joanna Macy (2017), an environmental activist, author, and scholar of Buddhism, has said, “The heart that breaks open can contain the whole universe.” (Breathing Through section, para. 11) And nature poet Mary Oliver (2005) also writes, “I tell you this to break your heart, by which I mean only that it break open and never close again to the rest of the world” (p. 54). We must be present in the grief of the world in order to heal it. I shared a glimpse of my grief to you through that journal entry, in the hopes that it would open your heart to the necessity of healing, and inspire you to acknowledge your own depth of grief. What is your entry point to confronting grief for human inequality and everything to which it is inextricably tied? In your pursuit of this challenging practice, do you honor your true emotions? Do you engage in self-care such as eating well and exercising, or surrounding yourself with supportive influences? Do you pace yourself with protest and political action?

3. Learn

Research typical sexist phenomena such as victim blaming, gas lighting, and stereotype threat. Understand the history of patriarchal structures of oppression. Talk with a diverse variety of people to get a larger perspective. Listen. As we have seen in geologic unconformities, and in research about the cosmos, we find that there is an interesting relationship between space and time. I have reverted to talking about creating space specifically, but this can mean the same thing as taking time. Just be patient, and decide to focus on a couple, or maybe even just one of the things I mention. Perhaps others will follow with time.

**Physical space**

Girls grow up learning to take up less physical space, from crossing legs in a seat, to eating disorders. The outdoors can be a very physically focused environment. Women tend to make up the majority of environmental educators, but reflect a marginal presence in guiding and recreation. Although numbers are increasing, women still take up far less space in outdoor industry news, film making, and outdoor places, period. Even when women do make appearances in these spaces, people make assumptions about their physical strength, and even feel comfortable making comments about their bodies’ appearances.

Even a well-intentioned comment can be a microaggression. Comments like “you look like you could crack a walnut with your thighs” attempts to be supportive, but often end up having the opposite effect. I generally avoid commenting on someone else’s physical appearance. I do not know what they think about themselves, what they are struggling with, and its not my privilege to comment anyway. And although I generally enjoy a

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5 Gaslighting: a strategy in which someone makes a victim question their reality through slow, subtle manipulations, in order to gain more power.
“you go girl!”, how silly would “you go boy!” sound towards one of my male co-workers, and what makes me in need of the extra encouragement?

1. **Show up**

Do what you love and strive to be competent. Take up space to prove that you can be there, in your own way, whether you are grunting up a rock face or quietly fishing. One of my friends and NCI co-workers recently started a network called WildStreak. Here are the opening words on the website (2018): “We’re six women who like being outside. We’re not professional adventurers. We’re not especially hardcore. But we’ve all been shaped by our experiences in the northern wilderness, and by the female role models who have given us the skills and confidence to get out there. We have two goals: to set aside time in our own lives for empowering, all-female adventures, and raise money for organizations that give teenage girls the opportunity to do the same.” (About section, para. 1-2) Getting out there, and empowering others to do so, no matter your level or background, is important to showing young girls, and everyone, that women take up space. When young kids visit a national park and only see men on the walls, or go rafting and only have men on the oars, things will not be much different in their future. Charlotte Austin (2015), learns from British climber Kath Pyke, who offers “one of many possible answers: ‘Typically, climbing media portray women with beautiful bodies achieving at sport climbing.’ For aspiring female alpinists, ‘there are few images, role models, or real people out there to talk to’” (Back in 2005 section, para. 1). We need more women role models, and we need to support them and each other. The boy I nanny always asks if we can leave for school early so we can sit in the parking lot and look at the pictures in a book that is often in my back pack or on my front seat - a book about female climbers. I was proud that he learned the difference between bouldering and top roping while using the pronoun “she.”

There are numerous programs around the world that are starting to get girls outdoors. For example, Pretty Faces is a women’s skiing and filming initiative that also runs women-taught outdoor skill camps for girls. Their presence on social media draws a lot of attention, as they replace fake machismo attitudes with goofiness and humbly badass skills. There are also a great deal of peeing shots, squatting behind car doors on the side of a highway, or hanging onto a tree branch over yellow snow. They show us what it is like to be an outdoorswoman, and that we do not have to act like the guys to be as good as them. Austin (2015) interviews Szu-ting Yi, an alpinist from Taiwan, who reflects, “I like what Yvon Chouinard said: ‘If you can’t win, create your own game.’ I think there’s a huge, blank canvas out there for women to demonstrate their strengths and creativity” (Some climbers suggest section, para. 2).

2. **Empower yourself and others with physical movement**

We are used to having to prove ourselves before people acknowledge our skills, or even out-perform the guys before people call us ‘good’. And we certainly should not have to take on a male persona to receive more credit. From a young age, people stop teaching
girls how to use their physical body. I’ve had 5th graders who are awkward and clumsy in the outdoors, but the second you focus their attention on the strength and technique of their body movements, they take off. Boys are often instantly comfortable going off trail, climbing on things, and ripping green ferns mindlessly out of the ground as they walk. I will invite a girl to teach a ballet lesson, and then we will use it to sneak quietly through the forest. This does a lot of things: empowers the girl to speak, teach, and use her physical body, teaches everyone to value and respect her physical abilities, and it encourages people to feel safe breaking gender norms and dance lightly and quietly through the forest. And best of all, it is so much fun. Physical movement is an instantly empowering tool, for women who often repress it unconsciously. But we still have grown women who do not feel empowered or comfortable using their physical body. I want to start a new line of bumper stickers or magnets or something that plays off the saying ‘Let the kids play,’ but instead say things like ‘Let the girl reel in the fish,’ or ‘Let the girl carry the rope.’ People sometimes think it is wrong to give a female a physical role - carrying the climbing rope into a site, for example. When people pass us, they will ask me, “Why are they making you carry that?” In my perfect world, one of my male climbing partners would turn to me and say, “Why are you making me carry this?” Flipping gender expectations is a great way to help people see how their assumptions and actions reflect a difference of treatment. Assumptions of gendered physical abilities need to end. People should do what is physically healthy and enjoyable for them, not whatever expectations are assigned to their gender.

3. Shift our rampant appearance awareness to holistic health awareness.

I, like all women, find myself susceptible to the classic appearance woes and ‘if onlys’. A friend of mine recently wrote an article about her physical empowerment learning to be a packer for the Appalachian Trail Club, someone who hikes heavy loads up the mountain. Grace (2017) shares a story from her first summer:

‘I can’t do this, I can’t do this,’ I thought, all the way up to the summit. And then suddenly I had done it. Over the course of the summer I grew more comfortable, loading up more weight, loving the strong muscle and sinew stretching under my skin. I am not an athlete, and I am certainly not a dancer. I like to joke that I am the least aptly-named person on this earth, more likely to bang my hip against the edge of a table than move with anything resembling ease. When I pack, though, I love my body. I love the way my legs rise to the occasion, how my back straightens out against the frame’s dirty canvas, that I move efficiently and effectively. On these resupply trips, all of the nagging insecurities dictated by a society seeking perfection melt away, and it’s just me, moving through the mountains, twirling intoxicated on the very edge of my strength. In short, I learned to like myself (para. 3).

In physical activities, there is often a comment made about the physical differences between men and women. But Charlotte Austin (2015) believes that,
One question seems to be resolving itself: whether women are physically able to keep up with men in the hills. [...] Rosie Andrews predicted that ‘specific features of body type can be as much an advantage as a disadvantage [at upper-level rock climbing].... Thus a natural balancing [between men and women] exists which is lacking in many sports which emphasize traits such as large size, where men have the obvious advantage.’ [...] The core of alpinism has always been about psychological endurance, imagination, good judgment, leadership and teamwork – areas in which all genders can excel. Lise Billon, a young French alpinist, has trekked with mixed-gender teams across storm-swept icefields to climb giant new lines. ‘The physical difference is not that great’ she tells me, ‘[...]Social and cultural conventions are the limiting factor.” (One question seems section, para. 3)

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**Verbal Space**

My other new bumper sticker idea will read: “Sing, howl, teach, burp, tell stories, giggle, and grunt.” When I started brainstorming what to say about verbal space, I was overwhelmed with the examples I had to share, and ideas I had for tools and empowerment for all genders. Verbal space brings in new complexity because we begin to deal with interaction with others. We are no longer investigating our own minds and getting outdoors, but we are meeting people out there and confronting their assumptions with our own. I am totally known for the passive-aggressive, fuming responses to many comments I hear. Sometimes I wish I could be more graceful, responding in ways that do not continue to propagate violence or add validity to a lack of listening and respect. These are also prime situations to teach and inform, rather than be discredited for the dreaded – and disrespectful - label of being an ‘overreacting’ or ‘overly emotional’ woman.

1. **Be aware of how you speak and respond, and the language you use.**

   “Sorry” is something I hear unnecessarily often by women. You do not owe anyone an apology for being the last one to make it to the summit or flipping in a rapid. A real reason to apologize is dropping the last roll of toilet paper into a pit toilet.

2. **Know some phrases to counter classic sexist comments and behaviors.**

   Some of my staples are calmly asking: “Would you say that to a man?” “Can you repeat that?” and “Let me finish,” – the latter is an important one for a gender that is used to being cut off from speaking. On the Grand Canyon trip I spoke of, we arrived at Crystal Rapid, one of the most notorious rapids on the river. I began to row the correct path through the technical rapid, when I saw the next raft, all 1,000 pounds of it, behind me flip with its two passengers in a twelve foot wave. When the guy in the lead boat, who was waiting in a small pocket of calm water in the middle of the rapid to help in such incidences - did nothing, I set up for a rescue while still rowing myself down the advanced rapid. The bottom of the rapid presented a big challenge, getting far enough right to miss a boulder sieve – a place where water goes through but a boat or a body will not. I kept my oars in the water, but waited to row, as the flipped raft flew closer, and we
both headed towards the sieve. We were finally close enough so I yelled to my passenger “Now!” as he tossed out a throw rope. I pulled on the oars and grunted louder than the Willam’s sisters put together as I pulled my heavy boat, and one dragging flipped boat, to the right. Perpendicular to the current, our 30-foot boat train missed the sieve. I shouted more instructions, got one swimmer in my boat and one to shore where they could walk down and meet us. Once out of the strong current, and into a calm pool, I could hardly unclasp my fingers from the oars and my forearms screamed. I was glad everyone was okay. I felt extremely competent. Shaking, I joined 8 others to flip the boat back over, and check in with the swimmers. I told the guy in the lead boat that I was going to run the debrief and he said, “yeah cool.” Everyone got settled on shore and the lead boat guide started talking. Thanks to other strong womanly support in our group I felt confident enough to reiterate, “I am actually going to run this debrief,” and continued to do so. In this case, I was interrupted before I even began!

3. Share Stories

This is my favourite way to take up space. So far, history is written by men. In 1987, my aunt was part of an expedition to get the first American woman on top of Everest. The Snowbird Expedition team was thwarted by one of the worst storms in the mountain’s history - no one summited that year – no one wrote their name into history. But Pete Whittaker still managed to leave a legacy in the Chicago Tribune (1987). It reads:

Pete Whittaker frequently complained that there was too much emphasis ‘on this whole woman thing. Too many women climbers spend too much time drawing attention to their equalness’ he said. ‘Maybe they should work a little harder at just doing it instead of making such an issue out of it. On this climb, the whole ascent is on the women. It’s not a team, it’s a woman’s thing. It gets old.’ (p. 13)

This was on an expedition to get the first American woman on Everest! We must do more to acknowledge a rich history of women in the outdoors recreating, nature writing, guiding, exploring, teaching and more. The stories exist, they are just not told enough. So tell your own! As Grace (2017), the Appalachian Trail Club packer says,

Be proud of ourselves, be proud of other women. And create the narrative we want left behind–take the selfie, write the blog post, be unflinching and honest about the difficulties and small elations inherent to time in the outdoors. Tell your stories until they become extraordinary for their content instead of their protagonist. We know who we are, we know what we do. Hello world, the women are here. (para. 11)

Conclusion

So, our geologic timeline continues. We have learned about the first 24 hours, what is happening now? Or tomorrow? Our basement rock, our Vishnu Schist has been
deposited - a narrative of inequality, sexual harassment, and dehumanization. Maybe, with time and effort, we can reach an explosion of diverse perspectives and behaviors, all respected for their own value. Maybe, we can reach a time where there is space for everyone, and even space for the sake of having space. So what are we going to do here? Our narrative must not go unseen or undocumented. The Greater Unconformity must be our call to action to empower women and other marginalized groups. We must speak truth to power and be allies and witnesses to each other’s sought-out stories, rather than conforming to the one-sided repetition of our dominant history. And maybe someday, someone will look back on our timeline, through this historical narrative, and see - perhaps not the geologic record – but at least in our social narrative – when we created The Greatest Unconformity of all.
References


Appendix A

Photo 1: The great unconformity between the metamorphosed Vishnu Schist (dark/pink bottom layer) and flat sedimentary layers on top. A human for scale. (Photo by Emily Ford)
Photo 2: The great unconformity up close. Notice a clear erosional boundary between the tilted Vishnu Schist and the flat sedimentary layers. (Photo by Emily Ford)

Photo 3: A desert bighorn browses up the canyon (Photo by Emily Ford)
Photo 4: Collage of news articles regarding sexual harassment in the Park Service
Appendix B

Image 2: Stratigraphy of the Grand Canyon (image from the National Parks)