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Morgan A. Chester

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MY WORLD'S ON FIRE, HOW 'BOUT YOURS? AN INVESTIGATION OF HOW  
PRIVILEGE FOSTERS AND MAINTAINS CLIMATE DENIAL

A Dissertation

Presented to the Faculty of  
Antioch University Seattle

In partial fulfillment for the degree of

DOCTOR OF PSYCHOLOGY

by

Morgan A. Chester

ORCID Scholar No. 0009-0001-8339-5305

June 2024

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PRIVILEGE FOSTERS AND MAINTAINS CLIMATE DENIAL

This dissertation, by Morgan A. Chester has  
been approved by the committee members signed below  
who recommend that it be accepted by the faculty of  
Antioch University Seattle  
in partial fulfillment of requirements for the degree of

DOCTOR OF PSYCHOLOGY

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## **ABSTRACT**

### **MY WORLD'S ON FIRE, HOW 'BOUT YOURS? AN INVESTIGATION OF HOW PRIVILEGE FOSTERS AND MAINTAINS CLIMATE DENIAL**

Morgan A. Chester

Antioch University Seattle

Seattle, WA

The present study investigates the phenomenon of climate denial through a new theoretical framework of privilege. The analysis utilizes a feminist orientation that builds on a historical interpretation through the lens of colonialism. Through the dissection of current multidisciplinary understandings of climate denial and new concepts discovered in the review of academic literature and popular media, a compilation of theory, relationship, and connection is made. Systems of power and privilege are examined and connected to the mechanisms and maintenance of climate denial. The resulting analysis illuminates that settler colonialism, supported by connected ideologies of White supremacy, ableism, and patriarchy inform the creation and perpetuation of climate denialism. Privileges grant invisibility, insulation from climate change and discomfort, and innocence in the maintenance of climate denial and subsequent power structures. Implications of communication and dismantling climate denial and systems of power are discussed. This dissertation is available in open access at AURA (<https://aura.antioch.edu>) and OhioLINK ETD Center (<https://etd.ohiolink.edu>).

*Keywords:* climate denial, climate change, privilege, settler colonialism

## **Dedication**

Ursula Le Guin said, “We live in capitalism. Its power seems inescapable. So did the divine right of kings. Any human power can be resisted and changed by human beings. Resistance and change often begin in art, and very often in our art, the art of words” (National Book, 2014, 4:10).

In the tumultuous struggle against climate change and social injustice, there exists communities of (oft marginalized) individuals and groups who embody the spirit of rebellion, resistance, and unwavering courage. They stand as beacons of hope amidst the chaos, challenging the status quo and confronting institutional exploitation and inequality. I dedicate this dissertation to the fellow rebels who refuse to accept a world plagued by systemic oppression and exploitation of people and land. To those who rally against injustice with defiance and tenacity, driven by a deep-seated conviction that another world is not only possible, but imperative. To persistence and resolve in the face of unfavorable odds. We will persevere.

I would also like to dedicate this dissertation to our Earth. Amidst the profound challenges of climate change, I pay homage to the resilient spirit of our planet. May this dissertation serve as a testament to our collective responsibility to safeguard and nurture our home and to inspire meaningful action for an equitable world.

## Acknowledgement

I am a settler, and my entire life has been spent on Indigenous land. Through the course of my education for my doctoral degree, I have lived on the ancestral lands of multiple tribes and I have written the entirety of my dissertation while occupying these lands. While in Seattle, I occupied the historical lands of the Coastal Salish people, specifically the Dx̣ẉəẉʔaḅš (Duwamish) Tribe, whose rights for hunting, fishing, and reservations were signed for in the Treaty of Point Elliot of 1855 and were subsequently violated by settler colonists. While living in Pullman, WA for my internship, I resided on lands for the nímípuu (Nez Perce), Cayuse, Umatilla, and Walla Walla People, and the Confederated Tribes of the Colville Reservation. While there is ongoing occupation of Native Land and violence against Indigenous Peoples, Indigenous histories and stories are ones of resilience, strength, thriving.

I would like to acknowledge the support, guidance, and wisdom that brought me to this stage in my life and professional career. To my partner Erik and my two cats, Lulu and Taliyah—the reasons I survived a pandemic and graduate school. I am endlessly grateful to my dissertation committee, Dr. Waters, Dr. Kennedy, and Dr. Martin, who have supported, encouraged, and challenged me to be a better student. I give thanks to my family who are, ironically, the reason why I’m writing this dissertation. I recognize my Grandma Leslie, who has so frequently been the North Star to my dark and cloudy nights. I extend gratitude to Larian Studios, whose storytelling both distracted me from my work and provided a much needed escape, as well as reminded me that there is freedom in healing, and that it is never too late.

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## **CHAPTER I: THE EMERGENCY OF CLIMATE CHANGE**

In the summer of 2020, while many privileged, quarantined individuals watched the news from their homes, footage of the Western United States revealed an eerie scene: crimson skies, empty streets, and stray individuals donning gas masks. Amid unprecedented high temperatures and droughts, forest fires were once again raging in the West. Smoke and ash clouded the skies, turning the familiar sky-blue hue to an apocalyptic red and hazy orange for weeks. Human-made climate change, or anthropogenic climate change, was and remains to be the sole cause of environmental destruction (Intergovernmental Panel on Climate Change; Pachauri & Meyer, 2014; United States Global Change Research Program [USGCRP], 2017).

Indeed, researchers identified that climate change is estimated to have doubled the rate of large forest fires in the Western U.S. between the years 1984 and 2015 (Abatzoglou & Williams, 2016) with extreme wildfires increasing across the globe (Hanan et al., 2021). Leading experts released statements informing citizens to anticipate and prepare for increased forest fires in the future due to climate change. Holistically, the planet Earth is experiencing unprecedented environmental disasters on a massive scale not yet seen in human history. However, the politically and emotionally charged counter-movement of climate change denial, also referred to as climate denial, has consistently disrupted and reversed attempts to rectify climate change through meaningful and effective environmental policies (Schiffman, 2021; Waldman, 2020).

Despite warnings from climate experts and the exponential rise in global environmental disasters, for some individuals and groups of people, climate change is non-existent. Climate change denial can be attributed to conspiratorial belief; one may purport that climate change is a myth perpetuated by the political left or is propaganda sewn by the Chinese government in a claim for economic and political power. Conspiratorial beliefs surrounding climate change are

most often present within political conservatism and libertarianism (Collomb, 2014) and can be rooted in xenophobia (e.g., climate change is a “Chinese hoax” and ploy to dominate the economy). Additionally, climate change denial can be attributed to misunderstanding of available information, which may appear superficially scientific, such as claiming the Earth is going through a natural climate shift—of which, the Earth does but is untrue for current climate change (Masson-Delmotte et al., 2021). However, the short-sighted internalization of scientific information ultimately lacks understanding of environmental processes. In the hurried and often blocked attempts to course-correct climate change within the U.S., the safety and future of global life depends upon unified effort and action. Yet, obstruction to combating climate change is prevalent among groups and individuals who deny the existence of climate change, the imminence of threat, and the severity of threat.

### **The Burden of Climate Change**

The climate change crisis threatens all life on Earth. However, among people, individuals and groups with less privilege are more affected by climate change than those who hold more privilege. Marginalized groups such as targets in racial, Indigenous, and socioeconomic identities are more at-risk and are most impacted by the effects of climate change (Islam & Winkel, 2017). These target groups tend to hold less economic and political power with less access to life-saving or life-maintaining resources, such as access to clean water, food supplies, or the financial and structural mobility to move to a geographic area that is less impacted by climate change. Additionally, the burden of climate change initiatives falls on those most impacted by climate change. For example, Indigenous communities in the Southwest have teamed up to recultivate an ancient potato which has the ability to live in harsh, water-stricken environments (Bitsóí, 2021). The small potatoes are nutrient-dense and may be a solution to providing nutrition to future

generations of humans. Although climate change is a threat to life globally, threat, impact, and response are experienced within marginalized groups with less privilege more than non-marginalized groups with more privilege. Climate change response and advocacy are more than environmental justice—they encapsulate social justice, racial justice, and other forms of justice.

### **Privilege Discrepancies in Climate Change**

The benefits reaped and harm enacted through privilege can be seen in climate change research in geographic region, country, and within dominant groups. As of 2015, the Global North was responsible for 92% of excess global CO<sub>2</sub> emissions (Hickel, 2020), denoting a large discrepancy in responsibility for climate change. Hickel's (2020) data was calculated using national fair shares of a safe global carbon budget which were subtracted from countries' emissions from 1850 to 2015—the resulting number would indicate whether a country was in excess of their fair share or under their fair share. The U.S. alone was responsible for 40% of excess global CO<sub>2</sub> emissions (Hickel, 2020). Similar discrepancies can be found among the scope of race.

Within the U.S., researchers discovered that White Americans disproportionately impact the environment through consumption of diets that demand more water while releasing more greenhouse gas emissions than Black and Latinx populations (Bozeman et al., 2020). Further, a separate study found that, per capita, White neighborhoods emissions are higher than emissions from Black neighborhoods, despite White housing being more energy-efficient than Black housing (Goldstein et al., 2022). The discrepancies showcased through research demonstrate geographical, countries,' and groups' privileges to consume and contribute in greater quantities to climate change at the expense of marginalized regions, countries, and groups.

## **The Privilege of Climate Denial**

While the burden of climate change and the reality of its acceptance falls to marginalized groups, climate change and climate denial are assigned to and proliferated by privileged groups and individuals. One example is White privilege, which describes the unearned advantages through whiteness, such as better access to and more profitable careers, housing, and education. In terms of climate change, privileged individuals contribute most to climate change while reaping the most financial benefit and experiencing the least harm from climate change (Bozeman et al., 2020; Goldstein et al., 2022; Hickel, 2020). Privilege also masks personal and collective accountability for climate change (Norgaard, 2012). Furthermore, climate denial among the privileged can produce more effect than climate denial among marginalized groups; those who deny climate change often hold positions of power through their privilege, whether that be political, social, economic power, or a combination of the three. Climate denialism harnesses the power of privilege to perpetuate climate denial and exacerbate climate change through political, social, and economic means. Therefore, privilege is a leading proponent and predictor of climate denial, and as such, privilege is a valuable construct to study for climate denial.

Despite prevalence of climate denial among privileged groups, acceptance of climate change exists within privileged groups as well. Because privilege captures a broad range of multiple identities, it would be beneficial to understand the mechanisms of privilege and how the mechanisms can create and sustain climate denialism. White racial identity and conservatism are likely a common dual-presenting identity among climate denialism, especially in considering the privilege attached to whiteness in America. Though, political ideology based on preserving tradition and rejecting change is already predisposed to climate denial because climate denial



insists no change need be made, signifying a “business as usual” mindset. Bell et al. (2021) captured a discrepancy in willingness to adjust lifestyle between the ideological left, right, and center across ten countries, highlighting that the gap between ideologies was steepest in the U.S., with a difference of 49% difference between the ideological right and left (45% of conservatives willing and 94% of liberals willing to adjust lifestyle). In comparison, Canada’s discrepancy was second highest at 26 percentage points with 98% of liberals and 72% of conservatives willing to make lifestyle changes, while the Netherlands had the third highest discrepancy at 25 percentage points and the second lowest rating of conservatives willing to make lifestyle changes (59%) (Bell et al., 2021). The difference between acceptance and climate denial among privileged groups is also related to how individuals think about and interpret climate change ideas and effects (Grušovnik, 2012; Norgaard, 2006, 2012), such as general environmental awareness, beliefs regarding personal responsibility and government regulation (Lo, 2014), or emotional responses to climate disasters.

### **Dearth of Climate Denial Literature**

The majority of literature addressing climate change explores and understands climate change through the lens of environmental science, political science, economics, sociology, and sometimes, psychology. Climate denial literature largely lies in the purview of social sciences and philosophy, producing a variety of explanations for individual and collective climate denial (Björnberg et al., 2017). The research analyzes denialism through psychological constructs of psychological defensiveness or cognitive dissonance, sociological factors of dominant group deviancy or lack of scientific literacy, individual worldviews and values, and through propaganda and lobbying sewn by political, industrial, and religious think-tanks. The historical review of climate change propaganda and lobbying offers a glimpse into the inception of the

climate denial movement. Yet, each postulation grants an insightful perspective to understanding how climate denial exists as it does today. However, there exists a wide gap in the literature: the lens of privilege.

Interestingly, psychological defensiveness, information accessibility, identity-protection, and even the machine of denial as run by political, religious, and industrial beneficiaries, are inextricably connected to privilege. Alas, climate denial through the lens of privilege is heavily understudied; there is scant research on the topic, particularly among privileged groups. The exception to the absence of privilege in climate denial literature is sociologist Dr. Kari Norgaard's (2003, 2006, 2012) invaluable work. Norgaard (2003, 2006, 2012) examined the Norwegian citizens' perceptions of normalization of climate change, wherein residents assented to the science of climate change and expressed concern but endorsed or engaged in personal and collective inaction.

For her research, Norgaard (2003) implemented a qualitative ethnographic study that focused on residents in a rural town in Norway called Bygdaby. Her selected population minimized factors that could cloud her qualitative analysis, such as economic means and scientific literature availability, which might otherwise explain participants' non-response to climate change (Norgaard, 2003, 2006). The subsequent, indispensable findings offer localized understanding and wider interpretation of the mechanisms of inaction, interpretation, and protective defenses for privileged Norwegians who accept climate change. In contrast to Norgaard's examination of privilege for those who have already accepted climate change, the current literature has not yet applied the lens of privilege to privileged groups who reject climate change. Furthermore, privilege, as it is represented in the U.S., has not been studied in the realm

of climate denial. Although climate denial is a hot topic, climate denial through the lens of privilege is a woefully underserved topic.

## CHAPTER II: LITERATURE REVIEW

### Key Definitions

#### Defining Privilege

Peggy McIntosh's (1988) self-reflection on White and male privilege was one of the earliest and perhaps one of the most notable academic uses of the term privilege. McIntosh (1988) described White and male privilege as advantages and power created through the systems of racism and sexism; White or male privilege is inherent on the basis of White or male identity. McIntosh (1988) described privilege as invisible benefits driven by hierarchies of dominant groups that included a myriad of social advantages, such as belongingness. Additionally, she noted racism and sexism are primarily discussed only in terms of the disadvantaged and not the advantaged group, and she noted the need to examine other forms of identity-based advantage, such as physical ability or sexual orientation (McIntosh, 1988). The term *privilege* has since evolved to contain a more expanded and exact definition, yet, there is variability across definitions.

For example, based on McIntosh's (1988) work, Phillips and Lowery (2018) defined privilege as "unearned advantage derived from one's group membership" (p. 156) and K. A. Case et al. (2012) defined privilege as "unearned benefits afforded to powerful social groups within systems of oppression" (p. 3), emphasizing privilege's relational nature and macro-level systems perspective. K. A. Case et al. (2012) also linked privilege and discrimination, describing them as inseparable and as "divergent outcomes created by each form of ... institutionalized oppression" (p. 4). The compilation of definitions reference the collective or group aspect of privilege which reflect unequal advantage. However, a deeper understanding of privilege in terms of advantage, group membership, and the relationship between the two is required to

understand privilege both holistically and with nuance in privilege's many iterations (e.g., White privilege, class privilege, etc.).

According to Twine and Gardener (2013), privilege is a plastic theoretical concept and tool to analyze power relationships but consists of five core components across definitions: power, invisibility, multifaceted context, duality, and flexibility. First, privilege is synonymous with power and the existence of privilege denotes that one group holds power over another group. Additionally, privilege consists of unearned benefits that yield psychological, economic, or material advantages, such as psychological wellness and security of not belonging to the disadvantaged group. Second, privilege is often made invisible to those who hold privilege, leading to normalizing and to the entitlement of privilege by privilege-holding groups. Third, privilege is multifaceted in that privilege relies on multiple contexts of social, local, national, and regional levels rather than solely through a single binary, such as White versus Black identity. Fourth, privilege carries duality in that the privileged group gains advantage that is paid for by the disadvantaged group. Lastly, privilege's flexibility is dynamic where the relationships between privileged and oppressed groups change over time.

Essentially, privilege means an individual's group identity is a benefit granted at the expense or discrimination of another group, and although privilege is seen at the individual-level, it is made possible through power dynamics seen at the larger system level. For the purpose of this dissertation, the definition provided by K. Case (2013) will be used as a "definition umbrella," with the aim to provide a foundation that encapsulates the basic ideas of privilege. *Privilege* refers to "automatic unearned benefits bestowed upon perceived members of dominant groups based on social identity" (K. Case, 2013, p. 2). The definition emphasizes the automatic or inherent nature of privilege, identifies the need for *perception* of dominant group membership

to access benefits, and reflects privilege as a component of social identity. However, the concept of privilege is multi-layered and complex, and no one definition can encapsulate its complexity and flexible nature. Therefore, privilege will be explored further in Chapter IV to include a wide array of conceptualizations, iterations, and mechanisms with depth and breadth.

### **Defining Climate Change**

The term *climate change* has become mainstream in its use and diluted in its meaning, as it is often bandied about in political discourse by politicians, political followers, and others without climate knowledge or expertise. The extent of the intentional muddling of meaning is difficult to discern, but climate change awareness and understanding has been suppressed and distorted by political actors and corporate entities from the beginning, a history that is explored in the section on the history of the climate denial movement.

Because climate and weather are often mistakenly used interchangeably, the differentiation between climate and weather is a key factor to understanding the term climate change. Weather refers to local atmospheric conditions such as rain, pressure, temperature, winds, or thunderstorms that occur over short periods of time, ranging from minutes to days or weeks (Australian Academy of Science, n.d.; National Aeronautics and Space Administration [NASA], 2024, March 18; National Geographic Society, n.d.). Climate, however, is viewed in the long-term and can be used to describe local, regional, or even global features (Australian Academy of Science, n.d.; NASA, 2024, March 18). Ranging from months to thousands or millions of years, climate refers to the average weather and its relevant variables, but its data is often averaged at a minimum of 30 years (Masson-Delmotte et al., 2021). In short, akin to the relationship between emotion and mood in psychology, weather is subsumed under climate;

weather is brief or acute local atmospheric phenomena whereas climate is the average long-term weather for local, regional, or global locations.

Because weather is localized and brief relative to the descriptor of climate, the definition for climate change captures the regionally expansive and longer-term aspects of the definition of climate. As such, climate change is defined as the following:

A change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings such as modulations of the solar cycles, volcanic eruptions and persistent anthropogenic changes in the composition of the atmosphere or in land use. (Masson-Delmotte et al., 2021, p. 2222)

Essentially, this definition of climate change describes long-term shifts in weather patterns and variables and can be natural in origin or can be caused by human activities (United Nations, n.d.). However, some international organizations specifically define climate change in man-made terms (Masson-Delmotte et al., 2021), such as at the United Nations Framework Convention on Climate Change (UNFCCC), describing climate change as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods” (United Nations [UN], 1992, p. 3). The UNFCCC distinguishes between man-made climate change, also known as anthropogenic climate change, and climate change caused by natural phenomena, which the UNFCCC labels as climate variability (Masson-Delmotte et al., 2021; UNFCCC, 1992).

Due to its general accessibility along with its presence, recognition, and saliency in political discourse, the UN's (1992) definition of climate change established at the UNFCCC, "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere" (p. 3), will be used for the present research.

Consequently, any reference to climate change therein refers to man-made climate change, either through humankind's direct or indirect activities; the usage of climate change will *not* address natural, non-anthropogenic etiology. Furthermore, the term climate variability will be used to describe changes to the climate that are natural in origin (UNFCCC, 1992), such as by volcanic activity (Masson-Delmotte et al., 2021). In other words, climate *variability* is not anthropogenic, while climate *change* is anthropogenic.

In addition to conflation between weather and climate and anthropogenic versus natural origins, global warming and climate are also often (mistakenly) used interchangeably. Scientists have been tracking the phenomenon of warming temperatures since the pre-industrial period (approximately 1850–1900), capturing growing temperatures caused by human activities through the proliferation of greenhouse gases (Masson-Delmotte et al., 2021; NASA, 2024, March 18). Masson-Delmotte et al. (2021) define global warming as "the increase in global surface temperature relative to a baseline reference period, averaging over a period sufficient to remove interannual variations (e.g., 20 or 30 years)" (p. 2232). Global warming describes the increased measure of one weather variable, temperature, while climate change describes changes in measures across multiple weather variables and patterns, such as droughts or heavier rainstorms (Kennedy & Lindsey, 2015; NASA, 2024); global warming is a symptom of climate change.



## Defining Climate Denial

Assigning an appropriate term for the countermovement of climate change is necessary to understand what the countermovement is, why it operates, and how it operates. Of words that can be used to describe the climate change countermovement, such as skeptic, contrarian, and denier, Jacques (2012) justifies the use of the term climate denial for three primary reasons: firstly, there is overwhelming evidence of climate change; secondly, climate denial is a politically-charged counter-movement; and finally, climate denialism deflects accountability in defense of an ideology. Furthermore, Jacques argues the term *skeptic* does not capture the intensity and willfulness of climate denial, and in fact, skepticism is desirous in the field of science. Climate denial is not skeptical of science as whole, and instead fervently believes and utilizes scientific advancements, ideas, and technologies. *Contrarian*, however, is an applicable term for the rare outspoken climate scientists who, spurred by political and ideological reasons, use their credentialed “authority” to challenge climate science. The “skepticism” of climate has since become a more populist position, with Jacques (2012) noting:

‘contrarian’ has a flavor of heroic daring, a David versus Goliath connotation of debunking myths from a repressive mainstream through courage and intelligence the rest of us lack. Indeed, some of the aforementioned leaders see themselves in the context of scientific history in which heroic contrarians face Copernican opposition but expect to be vindicated. (p. 10)

Indeed, the decrying of mainstream media as “fake news” supports the notion that the climate countermovement is based in a self-perception as courageous truth-seekers who can see what those who follow mainstream views or histories cannot. The word *denial* is appropriate to describe the countermovement because it encapsulates the beliefs through politicization of the

movement, the willful deviance from valid climate science, and the attack on climate science in defense of its own ideology.

In addition to the nuance required to establish appropriate terms for the climate counter-movement, further nuance is required when examining the totality of climate beliefs. Jacques (2012) noted danger in presenting the binary of acknowledgment and denial as the only options to an oversimplified dichotomy. A binary of belief lends rigidity in belief and does not allow for the evolution of methods, ideas, and perspectives, as is encouraged in the field of science and is often experienced by humans. Instead, there are more experiences and perceptions which exist outside of the binary of acceptance and denial of climate change, such as a spiritual or religious understanding of the observance of climate change, or an acknowledgment of climate change without acknowledgment of its severity. A lack of an orthodox scientific understanding of climate change is *not* automatically subsumed under climate denial, nor is a lack of conviction or understanding of severity.

The perspectives that exist outside of the binary cannot be dismissed; their complexity are reflective of the complex nature of humans. Jacques (2012) emphasizes that despite a multitude of perspectives that exist outside the binary, denialism does not become more defensible or ethical because of the existence of the spectrum of beliefs. However, it is imperative to distinguish the in-between beliefs from the polar end of denial. Climate denial is a counter-movement with power and purpose, and as such, the mechanisms of the counter-movement's mobility through collective attack and defense must be emphasized.

Climate denial includes (a) an unwillingness to accept the existing scientific evidence or dismissing scientific consensus (Austgulen & Stø, 2013; Björnberg et al., 2017; Diethelm & McKee, 2009; Dunlap, 2013; Ferkany, 2015; Goldsby & Koolage, 2015; Liu, 2012); (b) the

intentional dissemination of doubt or misrepresentation of facts regarding scientific validity (Björnberg et al., 2017; Dunlap & Jacques, 2013; Oreskes & Conway, 2011; Rosenau, 2012); and (c) deflection of accountability in defense of an ideology (Björnberg et al., 2017; Jacques, 2012; Norgaard, 2006). Essentially, climate denial encompasses the following beliefs: denial of climate change and climate variability (i.e., no change is occurring in the climate); and denial of climate change and acceptance of climate variability (i.e., change is occurring in the climate, but it is not caused by human activity). To be considered climate denial, the two scopes of belief must be grounded in opposition to scientific evidence and consensus, willful attacks on science, and defense of ideology.

### **The History of Climate Change**

As required of any scientific endeavor, repeated testing and challenging of results were undertaken with two steps in identifying climate change across centuries: (a) scientists first identifying a reliably validated increase in global temperatures that account for climate variability and (b) then attributing the temperature changes to anthropogenic activity through the proliferation of greenhouse gases by way of computer projection models (Pachauri & Meyer, 2014). Since the inception of accurate, dependable instruments and historical record-keeping, scientists have reliably recorded temperatures from the pre-industrial period (approximately 1850–1900), capturing growing temperatures (NASA, 2024, March 18). In the late 19th century, scientists were unsure whether industrialization would cause the global climate to predominately experience more cooling caused by pollution's reflection of sunlight or more warming from greenhouse gases (Kennedy & Lindsey, 2015). However, evidence of projected increased temperatures in the 1970s led to a scientific consensus that global temperatures were indeed increasing, thus hatching the phrase *global warming* (Kennedy & Lindsey, 2015). The

terminology shifted to *climate change* to encompass and describe the additional climatic variables that present with change to climate, as discussed in the terminology section on climate change (Masson-Delmotte et al., 2021; NASA, 2024).

### **Early Responses to Climate Change**

During the centuries-long scientific process of collecting, retesting, and sharing climate measurements, climate concern and response held a decades-long history among the government and public. The UN Scientific Conference convened in New York in 1949 to discuss the depletion of the Earth's natural resources and improved resource-management, but the resource concern was not based in conservation and instead was focused on economic and social development (P. Jackson, 2007). Environmental concerns were not addressed by any UN bodies until the 1968 Economic and Social Council's proposal to convene the first United Nations Conference on the Human Environment (UNCHE), which was subsequently held in 1972 (Handl, 2012; P. Jackson, 2007). The UN Conference on the Human Environment produced proclamations, principles, recommendations, and coordination of international collective action to preserve and enhance the environment, warning of the impact of human activity on the environment:

*Having considered* the need for a common outlook and for common principles to inspire and guide the peoples of the world in the preservation and enhancement of the human environment, proclaims that ... Man is both creature and moulder of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth. In the long and tortuous evolution of the human race on this planet a stage has been reached when, through the rapid acceleration of science and technology, man has acquired the power to transform his environment in countless

ways and on an unprecedented scale. Both aspects of man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights-even the right to life itself. (UNCHE, 1972, p. 3)

Understanding the potential hazard of the human relationship with the environment, the issue of "climatic changes" was first introduced, recommending the continued tracking of the atmosphere and the need to identify whether changes were "natural or the result of man's activities" (UNCHE, 1972, p. 21). In addition to discussing a collective understanding and action plan for environmental concerns, the conference resulted in the creation of the United Nations Environment Programme (P. Jackson, 2007; UN, 2015; UNCHE, 1972).

In the US, the National Oceanic and Atmospheric Administration (NOAA) and the Environmental Protection Agency (EPA) were established two years prior in 1970 at the behest of President Nixon and Congress (Fredrickson et al., 2018; Lewis, 1985; NOAA, 2020). Due to the tandem crisis of the lead contamination epidemic (Ross et al., 2012), the Clean Air Act (1970) was also passed, essentially authorizing federal and state regulations of industrial and mobile emissions. Despite being at the forefront of advocating for environmental reform, President Nixon attempted to scale back the actions undertaken by his administration by centralizing the power for regulation and requesting budgets that were sometimes half the projected amount (Layzer, 2012).

The centralization and regulatory process put in place for the EPA caused delays in EPA's regulations, but Congress fought to defend the EPA and the implementation of the Clean Air Act (1970; Layzer, 2012). The establishment of the NOAA, EPA, and other similar environmental organizations and actions were the result of public and nonpartisan support for environmental reforms in the late 1960s, but the popularity of environmental action in President

Nixon's administration was one of political opportunity rather than conviction (Buttel & Flinn, 1978; Fredrickson et al., 2018; Layzer, 2012).

Buttel and Flinn (1978) in their study conducted in 1974 found that, at that point in time, political party preference had no significant relationship with environmental concern, instead demonstrating political ideology and education as significantly correlated with environmental concern. However, Buttel and Flinn's (1978) study viewed environmental concern in terms of pollution and the government regulation of pollution. Environmental concern appeared as more than public discourse and political action in varying spectrums of intensity and breadth. One such example is Meadows et al.'s (1972) published book, *The Limits to Growth*, which posited the unsustainability of unlimited economic growth; the Earth's growing population and growing consumption needs would outpace the Earth's natural resources too much for human society to exist.

In the same year as *Limits of Growth* (Meadows et al., 1972), climate researcher Reid Bryson voiced concerns of pollution-induced global cooling effects at the American Association for the Advancement of Science, despite the domination of anthropogenic warming in the scientific literature (Peterson et al., 2008). Global cooling received extensive recognition in media by comparison. Indeed, Peterson et al.'s (2008) citation analysis found that from the time period between 1968 and 1983, only seven scientific articles were cited next to 44 describing global warming. The analysis indicates that the scientific consensus at the time did not give remotely equal attention to both global cooling and global warming:

In this case, the primary use of the [global cooling] myth is in the context of attempting to undermine public belief in and support for the contemporary scientific consensus about

anthropogenic climate change by appeal to a past “consensus” on a closely related topic that is alleged to have been wrong. (Peterson et al., 2008)

The UN charged the World Meteorological Organization (WMO) with conducting a study on climate change in 1974, resulting in a final report largely dismissing global cooling, reconfirming global warming, and emphasizing the need to live with the natural variability of the climate (Gibbs et al., 1978; Zillman, 2009). Despite the academic pursuit and consensus of global warming, the myth of global cooling persisted in the 1970s and led to further divisiveness of the validity of climate change among the political and public discourse decades later, citing the erroneously claimed scientific consensus of global cooling (Peterson et al., 2008; United States of America, 2003).

In 1979, the First World Climate Conference was held in Geneva and communicated three key messages to the global community: (a) be aware of the present scientific knowledge of climate, (b) take action to improve base of scientific knowledge of climate, and (c) to project, plan, and prevent potential anthropogenic changes in climate to protect the well-being of humanity (WMO, 1979; Zillman, 2009). The First World Climate Conference urged for support of the World Climate Programme (WCP) in tackling the awareness, improvement, and action upon climate knowledge:

The [WCP] will seek to attack the problems of climate science. Through this effort we will seek to improve our understanding of climate change and variability and improve our ability to predict the natural variations in climate and the consequences of man's effects ... The second stream of activity of the World Climate Programme will provide a new level of climate data and applications throughout the world ... The third stream of activity addresses the need to understand the impacts of climate variability and change

upon society. We all appreciate the direct effects of drought upon crops, or cold winters upon energy demand. What we do not understand clearly, and what governments are concerned about, is the question of the integrated impact of climatic change and variability upon society ... Our task is to identify not just what it is that science should do, but what it is that governments should know. (White, 1979, pp. 8–9)

Of several presentations and contributions by speakers, the Conference emphasized the disastrous effects already observed by climate change and the knowledge that the future consequences' severity and reach are beyond the scope of current understanding, but will be more wide-reaching and severe than anticipated (WMO, 1979).

### **Early History of Suppression of Environmental Science**

During the implementation and planning of international projects and organizations, the US faced environmental gutting and deregulation during President Reagan's administration. US organizations and actions such as the EPA and the Clean Air Act (1970) became cause for complaint due to their abilities to enforce national standards against private interests (Fredrickson et al., 2018). President Reagan's administration utilized its time in power by appointing anti-environmental members to run environmental agencies, slashing budgets, and reorganizing agencies to sow confusion and instability (Fredrickson et al., 2018; Layzer, 2012). Despite President George H. W. Bush's later term installing an environmentalist to run the EPA, the EPA's independence was set on a track to dissolution (Fredrickson et al., 2018). In response to climate change, President Reagan's administration repeatedly blocked funding to EPA and undermined the EPA's report of the urgency and severity of climate change, labelling the EPA's words as unwarranted and alarmist (Layzer, 2012).



### *Climate Change Countermovement Coalitions*

In 1987 the Global Climate Protection Act (1987) was sponsored by then-Senator Joseph R. Biden, and later signed by President Reagan in 1988 (Layzer, 2012), giving the President the power to establish a Global Climate Task Force. The UN's creation of the Intergovernmental Panel on Climate Change was heralded in 1988, signaling climate change as serious public issue (Pachauri & Meyer, 2014). In 1989, the innocuously-named Global Climate Coalition (GCC) was formed. The GCC was created as a countermovement to climate change, banding together fossil fuel interests and corporations to oppose regulation for reduced carbon emissions (Brulle, 2022; Dunlap & McCright, 2015). Although numerous organizations sprung from opposition to climate reform, the GCC is one of the most, if not *the most* prominent and impactful coalition to have been borne from the climate countermovement (Brulle, 2022). The multiple climate change countermovement coalitions spawned from the 1980s onward include international organizations that exert their control over public policy and thought today (Brulle, 2022; Dunlap et al., 2016). The GCC paved the way and became a model for other climate change countermovement coalitions to stall or prevent climate reform.

GCC membership was comprised of more than oil interests. In fact, the majority of GCC membership belonged to utility organizations (23%) with coal/steel/rail (22%) taking up the second largest membership and gas and oil (16%) with the third largest membership representation (Brulle, 2022). The GCC attacked the IPCC's credibility when the IPCC produced its first report in 1990, showing evidence of anthropogenic warming (Franta, 2022). The GCC spent its income to prepare for and prevent environmental news or actions that may hinder their corporate interests, which the GCC accomplished by monitoring the IPCC's research, investing in economic research for climate reform, and providing testimony for proposed or renewal of

climate change reform and climate agencies (Brulle, 2022). The GCC and numerous coalitions like it took an economy-first stand, underlining the immediate cost of climate change reform to appear as an unnecessary and costly risk. “Despite the scientific consensus, the Changing Climate report demonstrated how economic rhetoric could be used to delay policy action, reflecting a broader trend since the 1970s of industries deploying economic arguments against regulatory efforts” (Franta, 2022, p. 557). By investing in economic research and using a near-future economic perspective, the GCC, and other climate change countermovement coalitions created a position to attack climate change science and climate change reform and create doubt of the validity of climate change itself.

The GCC functioned by repeating the same three-step attack against attempts for climate change reform: (a) the GCC repeatedly claimed that climate change’s evidence of supposedly adverse effects was both inflated and inconclusive, making inaction the best course of action, and (b) only implementing and serving environmental action and interests would be unwarranted and would not produce results, and (c) industry scientists and representatives should be participating in the climate change research (Brulle, 2022). The United Nations Framework Convention on Climate Change took two years to negotiate the most extensive and ambitious climate reform for decades, resulting in signatures from 155 countries in 1992, agreeing to stabilize atmospheric greenhouse gases to prevent dangerous anthropogenic changes to the climate (P. Jackson, 2007; UNFCCC, 1992; Zillman, 2009).

During the UNFCCC two-year long negotiations, the GCC spent the time preparing for and enacting counterattacks. The GCC argued for a voluntary approach of climate reform while highlighting the high price climate action, even planning a press conference with two climate contrarians denying any evidence for global warming the day before the IPCC presented results

from their 1992 report (Brulle, 2022). The GCC navigated the UNFCCC negotiations further by stipulating that developing countries had to reduce their carbon emissions alongside industrialized countries, thus terminating binding emission reductions due to developing countries' inability to do so (Brulle, 2022). Due to the pressure of US demands, as maneuvered by the GCC, the UNFCCC treaty did not include binding carbon emission reductions (Brulle, 2022; P. Jackson, 2007; UNFCCC, 1992). The UNFCCC treaty did, however, directly address one of the three-step attacks the GCC regularly implemented in one of its five principles:

Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost. (UNFCCC, 1992, p. 4)

Scientific certainty was not considered an acceptable barrier to environmental reform in the case of *serious* or *irreversible* situations, as the GCC continually testified for with the inclusion of corporate interests in the research. Yet, the UNFCCC's reorientation to focus on the cost of environmental reform held the same flavor of the GCC's "economy-first" counterpoints. The GCC lobbied heavily for the subsequent US National Action Plan for carbon emission regulation to solely be on a volunteer basis, ultimately succeeding in their endeavor (Brulle, 2022).

President Bill Clinton's administration beginning in 1993 continued efforts for environmental reform that slowed when conservative Republicans, backed by fossil fuel corporations, won Congress in 1994, cutting funding to the EPA and creating deadlines for enactment of regulations (Dunlap et al., 2016; Fredrickson et al., 2018). Similar to the GCC, Republicans attacked climate change and discredited mainstream climate scientists and their

peer-reviewed work while simultaneously promoting the baseless findings of climate denialists that lacked peer-review (Dunlap et al., 2016).

The guise of “balanced” information created mobility to be represented mainstream in media, contrary to the actual amount of scientific literature of their claims—which is not dissimilar from the media sensationalism of global cooling and the perceived lack of scientific consensus in the 1970s (Dunlap et al., 2016; Peterson et al., 2018). Further, the GCC dumped funding into multimillion public relations (PR) campaign that was effective in mobilizing public opinion against international climate accord by saying mandatory emission regulations would increase fuel prices, be ineffective, and harm the economy (Brulle, 2022).

One of the GCC’s communication strategies and communications objectives were specific in their targeting of stoking both personal (financial) insecurity and scientific uncertainty:

[Strategy is to] Personalize and localize grassroots concern about the potentially serious economic consequences for the nation and her people—for communities and for families—if certain proposals for post-2000 climate change mitigation are mandated ... [and the objective is] Continued appreciation of the absence of scientific consensus on the existence of dangerous global warming, or its possible causes and effects. (GCC, 1995, pp. 3–4)

Despite efforts in Congress and by the GCC, the monumental adoption of the Kyoto Protocol fashioned by the UNFCCC took place in 1997, resulting in the international effort to reduce emissions from baseline by five percent (Brulle, 2022; Franta, 2022; United Nations, 1997). Yet, political maneuvering of climate change countermovement coalitions by way of PR and conservative mouthpieces killed the treaty in 2001 by refusing to ratify the treaty in the Senate

(Brulle, 2022; Franta, 2022). Following the demise of the Kyoto Protocol for the US, the GCC fulfilled its purpose and was dissolved in 2001 (Brulle, 2022), but the climate denial machine was still navigating national climate policy and public perception.

### **Climate Denial and Science Suppression in the New Millennium**

Entering into the 2000s, climate change had already spent a decade becoming increasingly politicized and became a topic at the forefront of the American public through use of tactful PR and aggressive lobbying. The Union of Concerned Scientists (2004, 2005, 2017), a non-profit organization composed of scientists, analysts, and policy experts, began compiling and exposing thousands of instances of censorship, manipulated research, and subverted government science including but not exclusive to climate science—a mission that the organization continues today.

In 2004, The Union of Concerned Scientists submitted a report investigating and addressing the Bush administration’s abuse of science. President George W. Bush and his Vice-President, Dick Cheney’s administration sought to delay EPA actions as a means of attacking environmental policy (M. J. Cohen, 2004; Fredrickson et al., 2018). Despite President Bush’s campaign promises to regulate emissions, he denied climate change and used his administration to substantiate climate denial: climate change websites remained out-of-date, EPA employees were required to hold an oath of silence on the topic of climate change, and reports were required to include the scientific uncertainty of climate change (M. J. Cohen, 2004; Fredrickson et al., 2018). Vice-President Cheney, who was previously an oil executive, coordinated Bush’s energy and environmental policies, pushing for promotion of coal, oil, and gas, and exempting fracking from safety regulations (Fredrickson et al., 2018). When the US Department of State (2002) released its climate action report stating “Greenhouse gases are

accumulating in Earth's atmosphere as a result of human activities, causing global mean surface air temperature and subsurface ocean temperature to rise" (p. 4), the Bush administration continued to argue that environmental reform was not necessary and that the Kyoto Protocol was incredibly flawed, instead proposing US adaptation to the inevitable (M. J. Cohen, 2004).

The visceral effects of climate denialism were prominent within the public sphere and political platform. "Wake up, America. With all the hysteria, all the fear, all the phony science, could it be that manmade global warming is the greatest hoax ever perpetrated on the American people? I believe it is" (United States of America, 2003, S10022). Senator James Inhofe's remarks on the Senate floor argued against climate change, citing reports from fossil-fuel organizations and the supposed lack of consensus in the scientific community during the 1970s due to global cooling (United States of America, 2003). His words were similarly echoed across American conservatives.

Dunlap et al. (2016) found that between the years of 2001–2010, self-identified conservatives were significantly less likely than liberals to endorse climate change beliefs and express personal concern about global warming. Conservatives who self-reported a great understanding of global warming believed global warming had begun less so (36%) than conservatives whose self-reported understanding of global warming was less than great (46%) (Dunlap et al., 2016). Further, the discrepancy between beliefs that global warming had already begun jumped from 2001 to 2010 with conservatives decreasing from 49.4% to 30.2% and liberals increasing from 67.1% to 74.8%, increasing the discrepancy between the political parties from 18% to 45% (Dunlap et al., 2016). Climate denialism was also proposed in the education system. Texas and Louisiana introduced education standards requiring the instruction and presentation of climate denial as a valid scientific perspective (Banerjee, 2012).

Despite transition to a Democrat-held Whitehouse, President Barack Obama did not address his promise for climate change policy until 2013, when President Obama announced his Climate Action Plan to reduce emissions, prepare for climate the impacts of climate change, and lead international efforts to confront and prepare for the challenges of climate change (Bookbinder, 2017; Leggett, 2014). The Climate Action Plan, however, was reversed by President Donald Trump (Exec. Order No. 13,783, 2017). Similarly, following his withdrawal from the Paris Agreement, which Obama had signed in 2016 (UN, 2015; Somander, 2016), Trump made the following announcement:

One by one, we are keeping the promises I made to the American people during my campaign for President—whether it’s cutting job-killing regulations ... or bringing jobs, plants, and factories back into the United States at numbers which no one until this point thought even possible. ... Therefore, in order to fulfill my solemn duty to protect America and its citizens, the United States will withdraw from the Paris Climate Accord—(applause)—thank you, thank you—but begin negotiations to reenter either the Paris Accord or a really entirely new transaction on terms that are fair to the United States, its businesses, its workers, its people, its taxpayers. So we’re getting out. But we will start to negotiate, and we will see if we can make a deal that’s fair. And if we can, that’s great. And if we can’t, that’s fine. As President, I can put no other consideration before the wellbeing of American citizens. The Paris Climate Accord is simply the latest example of Washington entering into an agreement that disadvantages the United States to the exclusive benefit of other countries, leaving American workers—who I love— and taxpayers to absorb the cost in terms of lost jobs, lower wages, shuttered factories, and vastly diminished economic production. ... Compliance with the terms of the Paris

Accord and the onerous energy restrictions it has placed on the United States could cost America as much as 2.7 million lost jobs by 2025 according to the National Economic Research Associates. (para. 5–8)

Trump's citation of evidence of massive financial loss originated from misleading and unrealistic research implemented by the National Economic Research Associates, a consulting and risk management also known for its research supporting the oil and coal industry (Franta, 2022; Kaufman & Krause, 2017). Trump's presidency marked an unprecedented and effective attack on climate science and climate reform that had not been remotely attained in previous presidential administrations.

Trump's presidency was characterized by climate deniers overseeing environmental roles, the removing climate science information, the rolling back emission regulations, the blocking EPA-funded scientists from advisor roles, and vetting EPA grants through political aides (Daley, 2020; Eilperin, 2017; Fredrickson et al., 2018; Pitt et al., 2020). To lead the NOAA, Trump nominated Barry Myers, the CEO of AccuWeather, a for-profit weather service that previously attested to the implausibility of climate change for the GCC in 1995 (Brulle, 2022; Green, 2017; Samenow & Freedman, 2019). Several officials questioned the nomination due to conflict of interest because AccuWeather pushed for the privatization of weather data, which AccuWeather receives from the government, whilst the NOAA is viewed as a competitor due to its provision of free weather data (Green, 2017). Trump demonstrated economic priority by approving the Keystone XL pipeline to begin moving forward, which President Obama declined in his presidency.

In a harrowing statistic, Pitt et al. (2020) estimated that "Trump's major climate policy rollbacks have the potential to add 1.8 gigatons of CO<sub>2</sub>-equivalent to the atmosphere by 2035.



This cumulative impact is equivalent to nearly one-third of all US emissions in 2019” (para. 1). Despite Trump’s regulation rollbacks and promotion of oil and gas, emissions temporarily decreased during COVID-19 confinement in 2020 (Le Quéré et al., 2020). On his inauguration day, President Joe Biden (2021) rejoined the Paris Agreement, committing to an administration with a goal of emissions reduction.

During President Biden’s term, a historic piece of legislation, the Inflation Reduction Act (2022) was signed into law. The Inflation Reduction Act (2022) aims to cut emissions by 30 to 40% from previous emissions levels in 2005 by the year 2030. Furthermore, the Act allocates \$370 billion to clean energy and climate investments (Inflation Reduction Act, 2022). Despite this monumental achievement, the future for upcoming climate change legislation is uncertain due to possible political shifts in Congress; additional legislation for climate change may be gutted, stalled, or terminated due to potential shifting of bipartisan power from the mid-term elections in November of 2022.

Currently, the 117<sup>th</sup> Congress consists of 139 climate deniers: 109 representatives and 30 senators (Drennen & Hardin, 2021). The number of climate deniers shrunk from 150 to 139 between the 116<sup>th</sup> to the 117<sup>th</sup> Congress, but their representation still makes up a significant portion of Congress; climate deniers constitute more than 25% of Congress, with 52% of House Republicans and 60% of Senate Republicans (Drennen & Hardin, 2021). All 139 members have been financed by coal, oil, and gas—they have all received more than \$61 million in contributions (Drennen & Hardin, 2021). The representation of climate denial in Congress is not dissimilar from that of the American public.

### *Climate Denial in the American Public*

Marlon et al. (2023) examined climate change perceptions among the American public and polled Americans utilizing the language of “global warming” instead of climate change, which is reflected below. Marlon et al. (2023) identified that 72% of Americans think global warming is happening, but that only 58% percent believe global warming is caused mostly by human activities. Nearly a quarter of Americans believed there is a lot of disagreement among scientists that global is happening (Marlon et al., 2023). Despite 72% of respondents who believe global warming is happening and 64% who are worried about global warming, 64% of respondents reported they rarely or never discuss global warming and reported hearing about global warming in the media once a month or less often (Marlon et al., 2023).

Along political party lines, Mildemberger et al. (2017) found that 91% of Democrats think global warming is happening compared to 52% of Republicans with 79% Democrats and 35% Republicans who think global warming is caused by human activities (Mildemberger et al., 2017). An estimated 76% of Democrats believe scientific consensus of global warming compared to 35% Republicans, noting that 46% of Republicans endorsed that there is a lot of disagreement among scientists that global is happening. (Mildemberger et al., 2017). Roughly a quarter to a half of Americans endorse climate denialism (Marlon et al., 2023; Mildemberger et al., 2017) through the definition of climate denial representing both people who believe change is not happening and people who believe change is occurring but is not from human activity.

Leiserowitz and Akerlof’s (2010) research from over a decade ago suggested that people of color are more concerned about climate change than White people. More recent research demonstrates that the Hispanic/Latino and Black populations are more likely to be alarmed or concerned about climate change than the White population (Ballew et al., 2020). In a similar

vein, White people are more likely to endorse doubtful or dismissive stances about climate change (Ballew et al., 2020). Ballew et al. (2020) also discovered that the Hispanic/Latino and Black populations are more willing than the White population to participate in activism targeted at reducing climate change. Another study found that perception of climate change risk increased with certain physical vulnerability factors, such as living by the coast or in low elevation (Brody et al., 2008).

Additionally, the Hispanic/Latino population ranked global warming as a very important issue in deciding who they vote for, with 57% of Hispanic/Latino voters ranking global warming 6<sup>th</sup> in list of importance, 53% of Black voters listing it as 16<sup>th</sup> in importance, and 35% of White voters marking it as 17<sup>th</sup> in importance (Ballew et al., 2020). Overall, climate deniers are more likely to be Republican and White (Ballew et al., 2020; Brody et al., 2008; Leiserowitz & Akerlof, 2010; Marlon et al., 2023; Mildemberger et al., 2017)

### **Summary**

In review, climate change took centuries to capture, compare, and challenge data that eventually led to scientific consensus in the 1970s, despite media sensationalism of global cooling. Leading to the 1980s, the 1970s was a time period of public-approved environmental reform and creation of environmental agencies, such as the EPA. Internal attempts to disempower the EPA occurred in the 1970s but greatly increased in the 1980s with Reagan's administration. The polarization of climate change began to emerge in the 1980s as international efforts to study, combat, and prepare for climate change increased in priority, such as the formation of the WCP and the IPCC, signaling the creation of climate change countermovement coalitions like the GCC. The GCC and other coalitions and corporate interests like it aggressively lobbied, created false non-consensus, and used PR to turn government and political

opinion against adoption of climate regulations. Clinton's signing of the Kyoto Protocol, which was an international agreement to reduce emissions was gutted by the GCC's economy-first and volunteer-basis rhetoric.

Bush's administration built on Reagan's by silencing EPA employees, removing climate change information, and requiring the inclusion of the "uncertainty" of climate change in reports while bolstering oil and gas initiatives. Obama addressed climate reform late in his presidency when he created a Climate Action Plan and signed the Paris Agreement, only to have both terminated during Trump's presidency. Trump rolled back emission and safety regulations and climate reforms on an unprecedented scale, placing experienced corporate veterans in positions with environmental oversight. In his presidency, Biden reinstated the Paris Agreement and signed the Inflation Reduction Act (2022) into public law, aiming to decrease emissions by 30–40% below 2005 levels.

However, mid-terms are approaching and Congress still consists of more than a quarter of climate deniers, constituting a vast majority of House and Senate Republicans. Climate denialism is similarly represented in the public, with Republicans being far more likely to endorse climate denial and White people being far more likely to report climate denial. The Black and Hispanic/Latino populations are far more likely than White populations to endorse climate change beliefs and to be concerned or alarmed by climate change. Of the White, Black, and Hispanic/Latino populations, the Hispanic/Latino population overwhelmingly ranked global warming as a very important issue that would inform their vote.

## **CHAPTER III: METHODOLOGY**

### **Purpose and Implications of the Study**

This study seeks to understand the mechanisms of privilege for climate denial. America's extensive and ongoing history with corporate and political anti-science agenda is a threat to the safety, health, and livelihood of American and global populations. Opposition and exploration through research is crucial in mitigating past, current, and future damage to American domestic and foreign policy targeting climate reform. Privileged populations and America as a country contribute more to climate change than marginalized populations and both developing nations and developed nations. Additionally, privileged populations such as White Republican men endorse climate denial and engage in anti-climate practices while remaining the most unconcerned or dismissive of the harms. Privileged groups hold the most power but carry the least responsibility in doing so. If climate denial is understood in the lens of privilege, it may illuminate how to adopt climate change as a reality, inform the messaging of climate change on a personal or group level, and provide implications for understanding other denial countermovements in privileged groups, such as the COVID-19 pandemic or "Stop the Steal" for fraudulent elections.

Due to the severity and pervasiveness of the climate change crisis, efforts made therein to create a unified front against the threat are inherently valuable to effective climate change response. The intersection of environmental science and psychology can be a powerful tool to understand the phenomenon of climate denial, and as such, the continued excavation of psychological theory can prove to be useful for its complex, nuanced comprehension. Additionally, because climate denial through the lens of privilege is rarely researched in the literature, the specific targeting of privilege can accomplish two tasks: (a) shine a light on those

who hold power, even when those who hold power are often those of us who are writing the literature and (b) engage in social justice by highlighting and analyzing power structure held by individual and group privilege identity.

Investigating how privilege creates and maintains climate change denial requires the joining of two fields of study, psychology and environmentalism, in addition to interpretation of other fields, such as sociology and political science. The present study will examine and analyze the literature regarding current understandings of climate denial across multiple disciplines and will also examine the mechanisms and characteristics of alternative denial movements. Additionally, in staunch opposition of research that selectively focuses on marginalized groups, this study seeks to critically examine the privileged and their role in perpetuating climate denial; specific domains of privilege including race, religion, gender, socioeconomic status (SES), and ability will be explored and literature regarding the mechanisms of privilege will be examined. Further, coloniality, hegemonic masculinity, and Adlerian social interests will be explored.

The study will also dissect regular media, popular media consumption, and significance of media for the interplay between privilege and climate denial. Lastly, the study will analyze the internal processing and external processing and behaviors associated with climate denial by exploring climate denial, conspiratorial thought, and the discrepancy between public and private display of beliefs. The combined investigation of climate denial frameworks, privilege topics, media, power structures, and individual processing creates a multifaceted understanding of a multifaceted construct. Filling in the literature gap caused by the absence of privilege application to climate denial may provide a framework for researchers to better understand the inception and maintenance of climate denial.

The intention of this study is for environmental advocates and advocacy groups to better understand how privilege blinds and attacks both individual and collective understanding and response. The ultimate goal of the present study is to identify information or alternative means of understanding climate denial which will aid in the attempt to unify individuals and groups against the threat of climate change.

### **Methods Rationale**

Originally, quantitative, qualitative, and mixed methodologies were explored as potential avenues for answering how privilege creates and maintains climate denial. Quantitative research had the potential to capture swathes of information directly linking certain individual privilege identities to endorsement of climate denial beliefs. A large benefit was the anonymity that a quantitative methodology provides. The drawback of a quantitative methodology lied in the focus on the individual level of privilege, inability to assess for transient privilege (e.g., SES, which can change drastically in one's lifetime), capturing privilege that is difficult to quantify (e.g., environmental privilege; exposure to climate events; accessibility of green spaces), and the requirement of certain assumptions to draft a survey. As a construct, privilege is difficult to quantify. This difficulty is exacerbated tenfold with the understanding of privilege as intersectional but not measurable; as a combination of privilege identities, one plus one would not equal two. In addition to the difficulties capturing the nuance of individuals' privilege identities, the quantitative methodology lacked the ability to capture the lived experiences and perspectives of the very people I sought to learn more about. As such, qualitative methodology was subsequently assessed for fit.

Qualitative methodology is often a more social-justice-oriented approach to research than a quantitative approach. Qualitative research often accounts for researchers' personal biases

while identifying and interpreting meaning given by participants in their own words. When investigating the topic of climate denial among participants, there is an opportunity for feelings of superiority. Qualitative methodology may have been an appropriate approach for combatting superiority; the value of a qualitative approach lies in its humility: de-centering the researcher as the expert and centering the participant as the expert. However, the qualitative approach begets novel difficulties and limitations not seen in a quantitative approach.

The small number of participants typically attributed to a qualitative study may not have provided enough breadth to capture the wide scope of privilege. Further, with the absence of anonymity, participants may have had difficulty divulging perspectives or voicing thoughts that are contrary to those expressed in a public forum or among other group members. Climate change is a hotly debated and politicized issue. Even with the assumption that participants would have been forthright when disclosing thoughts, beliefs, and behaviors, approaching the topic of climate change can cause defensiveness. Additionally, as is found in the literature, participants may not have trusted the researcher, who may have been seen as a representative of science and an extension of the scientific institutions they do not trust, which is not untrue. Despite the promise of richness of information, the pitfalls of defensiveness and non-disclosure made a qualitative approach an inappropriate exchange. For similar reasoning, the applicability of a mixed methods design, wherein participants are seen for qualitative interviews and then provided with surveys of privilege demographics, was deemed unsuitable.

The potential of a theoretical analysis was explored. Due to scant research on the intersection of privilege and climate denial, a theoretical analysis offered a means to explore and challenge current knowledge and frameworks and the opportunity to build new knowledge and frameworks. Further, the lack of research would make the construction of a quantitative or



qualitative study more difficult, whereas a theoretical analysis could utilize the deficit and make new connections or generalizations of observed phenomena across multiple disciplines. A theoretical analysis could focus on a key factor of privilege that quantitative and qualitative approaches could not: the group as a whole. Privilege can be observed on the individual level because it exists on a group or systems level. One of the most important features of a denial movement is the understanding of the *collective* as a force, rather than just the *individual*; the individual is a cog in a much, much larger machine (Jacques, 2012). Ergo, the theoretical analysis could examine the group construct where the other methodologies could not.

However, the theoretical analysis also held limitations, such as not holding the prized benefits of practical application in capturing perspectives in a survey or lived experiences from a quantitative or qualitative methodology, respectively. Despite the absence of real-life application, the theoretical analysis approach's promise of current knowledge exploration, connection of new ideas, and examination of the privilege group made the methodology the most applicable choice for the present study.

### **Research Phase**

The research phase of the literature review entailed a search for government reports and academic, peer-reviewed articles from the Antioch University Library website and from alternative online resources for both electronic and paper formats. Published articles, chapters, and books written by experts and prominent authors in the field were also reviewed. Completed dissertations were searched using the ProQuest Dissertations and Theses Global and the Antioch University Repository and Archive databases. Searches included keywords related to privilege, climate denial, and related concepts from existing theoretical bases and disciplines. When formative or influential research is identified, a subsequent search for more recent literature

referencing the earlier research aided the identification of modern developments in theory and understanding.

In addition to classic academic literature sources, the consumption of media was also crucial to the research process. News, film, and TV was explored in conceptualizing how privilege, climate change, and climate denial are presented and digested, weaving narrative fictional story-telling with morale, purpose, or theory. Popular social media platform TikTok was intentionally reviewed for investigation of climate denial and privilege, but were also passively reviewed for theories, frameworks, and ideas outside of climate change and privilege, such as watching disability advocate, Imani Barbarin, @crutches\_and\_spice, who utilizes her degree in global communications to dissect messaging, perception, and laws for disability, or food content creator @soogial, who identifies and dissects anti-Asian racism among other food content creators. Research also took place in the past, where previous impressions made by information spurs the present pursuit of knowledge and formation of conceptualization.

The study was approached using a framework of feminism and investigated through the lens of coloniality and a historical interpretation. The feminist framework is valuable because of its intersectional nature; intersectional feminism explores privilege and marginalized identities as multifaceted and interwoven, and further, it separates itself from White feminism, which understands feminism while being based in whiteness and informed by White supremacy. Intersectional feminism can highlight and deconstruct the implications of holding multiple privilege identities and privilege overall. A colonial and historical interpretation aided the understanding of prevailing ideas, sentiment, and systems of power across time. The intellect and cultural landscape of history and coloniality paired with feminism in its tracking of power, privilege, and oppression systems.

The purpose of the passive perception of wide array of media is to become saturated in data. The submersion of data saturation allows for the connecting ideas and theories outside of the academic literature, to uncover what has not been connected yet to the informing of privilege and climate denial. If the source was electronic and viewed through a computer, memoing was written in the margins of the dissertation document or thoughts captured and points of interest was researched using an internet browser and left as a placeholder for later pursuit. If the source was not electronic, thoughts were written on sticky notes and stray pages and pieces of desk paper and were placed on the “conspiracy corkboard” or remained on the vicinity of the desk. If the source was electronically accessed but not through a computer, such as a TV or phone, the same method of thought capturing used for non-electronic sources was implemented. Further, for salient information viewed on TikTok, the video was bookmarked in the “Dissertation” subfolder on TikTok for future reference and use.

### **Writing Phase**

Upon the identification of a large body of relevant literature, a thorough review of all relevant literature, including government reports, books, quantitative, qualitative, mixed, and theoretical studies, film, news, TV, and social media was conducted. Notes made were incorporated in the dissertation document in bullet points and organized. Analysis and relationship was created of the multidisciplinary theorized and known connections between the mechanisms of climate change, privilege, and ideologies which influence climate denialism. Where appropriate, postulation of previously unknown relationships were made to further explain the nuance and complexity of interplay between key factors. Synthesis of findings were then aggregated with the key features and relationships therein, resulting in the proposal of an integrated theoretical framework of privilege as basis of understanding the phenomenon of

climate denial. Lastly, recommendations were made for future study of climate denial and transitive generalizations for other denialism-based phenomena.

### **Researcher Privilege Acknowledgment**

As a researcher, I hold a unique position of authority and power. Despite the requirement of revision and review by accredited members of a dissertation committee, research explored, connections made, and conclusions communicated hold meaning and significance for the populations discussed and the populations which are not. The process of research itself is one of inclusion and exclusion, and thus, carries the consequence for both empowerment and disempowerment. Not only does the dissertation topic warrant introspection of personal privilege in pursuit of social justice, I believe researchers and the field of psychology need to engage in social justice by acknowledging and dissecting social location and its potential harms. Therefore, although self-disclosure of bias and its subsequent limitations on research is typically observed in qualitative work, it is imperative that I, as the researcher, address my own social location and acknowledge potential biases and harms.

The ADDRESSING model (Hays, 2008, 2016), which considers complex cultural influences in describing ten identities to create a unique framework of privilege identity, was utilized in the disclosure of my own social location. A target rank indicates a disadvantaged group whereas an agent rank indicates the privileged group that wields social power. Of Hays' ten identity domains, I hold social privilege (agent rank) in all domains except for the domains of sexual orientation and sex/gender. However, my sexual orientation label of bisexual/pansexual must be considered alongside my relationship with my current partner, who is a cisgender, heterosexual male. The relationship between myself and my partner can be perceived as

*straight-presenting* or heterosexual, which can grant me privileged status and power, access to certain spaces, and a measure of safety among certain groups.

In addition to sexual orientation, I hold target rank in the domain of sex/gender but am privy to presenting as an agent rank. As someone who was assigned female at birth and who considers myself to be what is best described as *woman-adjacent* or gender fluid; I am considered to be in the target group due to historical oppression of women, intersex, and transgender and gender diverse people. However, I tend to be perceived as having a cisgender identity to match my female sex. When I share that my pronouns are she/they, people frequently only hear the she/her portion of my pronouns and will selectively refer to me using she/her cisgender pronouns, which can reinforce the perception of me as a cisgender individual. Similar to sexual orientation, despite my target status as someone who was assigned female at birth (AFAB), the cisgender-presenting aspect of my gender identity offers me privileged access to social spaces, safety, and medical care (with exception to reproductive health), among other benefits.

For all other identity domains, I hold agent rank. I am a White, able-bodied adult who comes from a middle-class background with access and investment in higher education. In addition to providing unearned advantages, privilege normalized the benefits offered from my White identity to be seen as the standard (DiAngelo, 2011). My White identity granted me education and employment opportunities and informed other aspects of my privilege identities, such as socioeconomic status. Because of my middle-class status, I have readily available access to healthcare and education, career opportunities, and the means to a successful and stable life, which carries generational benefit. Additionally, my financial privilege afforded me my position as a student, creating research and dispersing my own ideas and experiences as a privileged

person. Although I myself am not Christian, I have knowledge of Christian culture and can navigate the practices, and I can thus present myself as part of the dominant religious power. I was born in America and am not Indigenous. I do not carry the generational trauma of genocide, boarding schools, and forced removal from sacred homeland, as Indigenous nations had. My access to water, food, and means to living has not been secured in treaty and then broken, time and time again (A. Brown, 2020; Wilkins, 2023); instead, my presence in America is encouraged and seen as natural, even necessary.

Due to my individual and collective privilege identities, I have access to several tangible and intangible benefits. I can expect others to assume I am not a threat, or that systems and branches of power will protect me, or that my race will be represented and my culture celebrated because I am White. I can secure gainful employment, create generational wealth, and rest knowing that the judicial system serves to protect me and my interests because of my American citizenship on stolen land. I experience welcoming, acceptance, assumption of good intent, and belonging amongst other citizens with power and in social spaces, particularly academia, which work for me and not against me. The society I exist in was built for people like me who are White, have access to capital, are not disabled, and do not hold an Indigenous identity. These advantages provide me, by way of my agent rank, power in the form of social and economic capital, a life of relative safety and security, and the blissful unawareness of not looking too closely.

My privilege carries implications for my research. As a privileged person, I am more likely to experience a “blindness” when analyzing privilege identities that I personally share due to a false sense of normalization (DiAngelo, 2011; Fors, 2018). The majority of privilege identities I explore are the same privilege identities I, too, carry. Caution and careful analysis

must be kept for due diligence in examining privilege identities. Additionally, due to holding several privilege identities, I may impart recommendations that ignore privilege-biased norms, such as recommending education with my middle class bias (Fors, 2018). Beliefs and values tend to be synonymous with lived experiences, and thus, these favored biases have the potential to present in the research with an innocuous appearance. As such, I am acknowledging the privileges that helped create who I am, where I am, and the perspectives I hold. My responsibility to the research, those it would benefit, and to my field, lies in my ongoing introspection, exploration, and critical analysis of my identity as an agent and the impact my privilege and biases have on my research.

### **Researcher Disclosure and Considerations**

Entwined with my privilege background, I believe it is important to disclose my history and relationship to the dissertation topic, as it relates to my interest, approach, and understanding of the present study.

I was raised in the suburbs of Dallas, Texas. We were a conservative family within a conservative state—a state that professed its love to God, America, football, and of course, the Lone Star state itself. As an individual brought up in the milieu of conservative culture, I held many of the same beliefs, attitudes, and perspectives of those around me. Similar to many families with children, my family struggled financially for a large portion of my childhood. When my family gained financial stability, it became a success story built by struggle, hard work, sacrifice, and persistence. In all fairness, my family's financial gain was built by all four tenets, however, I also failed to recognize how our success was simultaneously propped up by our privileges and were not barriers to our success. Furthermore, when I perceived other families' poor financial wellbeing, I attributed their status to poor luck and ours to good luck,

failing to recognize how privilege negatively impacted marginalized groups while serving privileged groups. My privilege was invisible to me, and by the same mechanisms of blindness and naturalization, others were invisible in their privileges or marginalized identities to me, too.

Like those in my family and community, I denied climate change, instead, espousing climate variability and emphasizing that climatic change was a natural process. I was essentially saying, “sure, change might be happening, but it’s not our fault.” Yet, while holding these views I would have fervently described myself as a science-loving individual because I was (and still am). I lacked privilege awareness at this time. Alas, the hypocrisy persisted until I attended university.

My attitudes, beliefs, and perspective underwent an abrupt 180 degree turn and I found myself dumbfounded and ashamed at having held and defended such ideas, with climate change denial being but one of many. Perhaps my adherence to my ideas was the folly of youth and the self-assuredness of a teenager’s logical cognitive process, or maybe it was the perceived infallibility of my parents’ ideas that I reflected during my development in their nest, and while both likely hold some truth, I believe there are more prominent mechanisms at work.

Part of my encouragement to study climate denialism and privilege is my personal connection to the subjects. I carry the unique position of having lived the experience that I am actively researching while also being removed from the experience of climate denialism in the present day. I want to understand how those beliefs formed, why they stayed, and how and why they left. Now, I have moved from the shame I once felt about my track record for my beliefs to appreciating how my lived experience uniquely prepared me to navigate this dissertation. For this beautiful planet that I have the pleasure to exist in and be a part of, I aim to aid in its protection through my academic and lived expertise.



## CHAPTER IV: THEORETICAL EXAMINATION: *OUR WORLD IS ON FIRE*

Ilana Cohen (2021) reported that climate change is a challenging topic due to the psychological distance people have from climate change. This begs the question: psychological distance for whom? And if this is the case, why is climate denialism not more evenly distributed among the population? One of the hallmarks of privilege is its benefit of distance from awareness of privilege and inequities. The invisibility of privilege to not see the marginalization of others and the advantages brought to one's self/group through the same marginalization. Conversely, marginalized populations do not exist in a reality where power and oppression acting on them are invisible; awareness of oppression is necessary for survival as well as building safety and community.

This chapter will explore iterations of privilege across identities and multiple frameworks as the backdrop to understanding historical systems of oppression and privilege. As large psychological concepts, both cognitive dissonance and social interest are dissected for understanding climate denialism and limitations therein. Lastly, colonialism is used to buttress the analysis of systems of power on climate denialism with intentional explorations into ableism, White supremacy, and patriarchy and hegemonic masculinity.

### **Privilege**

The very idea of privilege is often a contentious pressure point in multiple levels of sociopolitical and cultural spheres, such as within families, schools, and political parties (it is not exclusive to conservative politics). Particularly when discussing White privilege, a *person with privilege* is frequently (and incorrectly) interpreted as a life without strife or difficulty, almost as if it were simply an individual characteristic rather than a reflection on systemic infrastructure. Rejection of privilege typically orients around the defensiveness of the person whose privileged

status or identity is being discussed, whose advantaged status operates on pervasive invisibility.

As discussed in the second chapter, privilege, at its core, consists of:

1. automatic assignment to perceived dominant group members (K. Case, 2013; McIntosh, 1988; Phillips & Lowery, 2018)
2. unearned benefits to the dominant group at the cost (institutionalized oppression) of the marginalized group (K. Case, 2013; K. A. Case et al., 2012; McIntosh, 1988; Phillips & Lowery, 2018; Twine & Gardener, 2013)
3. crafted invisibility to the dominant, advantaged group (McIntosh, 1988; Twine & Gardener, 2013)
4. structure that is contextual and multifaceted; complex and plastic (K. Case, 2013; K. A. Case et al., 2012; Twine & Gardener, 2013)

In a similar disposition to the fourth tenet of privilege, privilege also needs to be understood as intersectional. Intersectionality is contextual, multifaceted, complex, and plastic, however, intersectionality also focuses on the interplay between these characteristics.

### **Intersectionality**

Intersectional theory was established in the late 1980s by legal scholar and critical race theorist, Kimberlé Crenshaw, who created the theory (Mohdin, 2020). Using discrimination cases of Black women pursuing justice as real-life examples, Crenshaw identified the limitations of traditional feminist theory and anti-racist policy in the legal system: examining oppression and acknowledging discrimination exclusively through mono-identities (Crenshaw, 1989). Crenshaw (1989) explained that an example court case ruled that neither individual identity of the client was sufficient to establish discrimination, but furthermore, the court denied to examine the case using the combination of both identities to assess for discrimination.

[P]laintiffs have failed to cite any decisions which have stated that Black women are a special class to be protected from discrimination ... this lawsuit must be examined to see if it states a cause of action for race discrimination, sex discrimination, or alternatively either, but not a combination of both. (*DeGraffenreid v. General Motors*, 1976)

Crenshaw (1989) argued that the legal system's refusal to recognize Black women as a valid combined subclass to be protected from discrimination set up Black women to only be defined through the experiences of White women and Black men; Black women could only be legally protected in cases where Black women's experiences overlapped with White women and Black men.

Crenshaw (1989) countered this legal precedent in agreement with what Black women had claimed in the example discriminatory court cases; Black women's unique combined identity of Black and woman created its own class for unique discrimination that was not adequately addressed by either single or combined identity of race or sex. "the intersectional experience is greater than the sum of racism and sexism, any analysis that does not take intersectionality into account cannot sufficiently address the particular manner in which Black women are subordinated" (Crenshaw, 1989, p. 140). Thus, the term *intersectionality* was born of Crenshaw's critique and continues to be highly utilized outside of the realm of the legal justice system.

Privilege is more than a summation of multiple, changing pieces. Intersectionality can describe privilege's compounding and dual nature, as its compounding effects are reflected both for marginalized identity groups who experience unique oppression and for those who hold power in dominant identity groups, whose compounded benefits are afforded at the oppression and discrimination of the marginalized groups. As Crenshaw describes it:

Intersectionality is a lens through which you can see where power comes and collides, where it interlocks and intersects. It's not simply that there's a race problem here, a gender problem here, and a class or LGBTQ problem there. Many times that framework erases what happens to people who are subject to all of these things. (Columbia Law School, 2017, para. 4)

Furthermore, the effects of intersecting identities are not equal or numerically stacked. That is, each identity does not equal one and does not merely get added to another identity of one to equal two on the discrimination scale. For example, for a Black woman, the identity of being a Black person does not equal one and the identity of being a woman does not also equal one, despite both being marginalized identities. This also means that the combined identity of being a Black woman does *not* equal two, and instead, the interlocked identity of being a Black woman emerges.

Overall, intersectionality is complex, interactive, and a compounding reflection of power. As Crenshaw (1989) brilliantly outlined, there is significant harm on the institutional level when viewing people through multiple, distinct singular identities. "The other issue is that intersectionality can get used as a blanket term to mean, 'Well, it's complicated.' Sometimes, 'It's complicated' is an excuse not to do anything" (Columbia Law School, 2017, para. 6). Just as the judges in the example cases had rationalized denying Black women the recognition of unique discrimination because it was complex and insinuated further complexity, "The prospect of the creation of new classes of protected minorities, governed only by the mathematical principles of permutation and combination, clearly raises the prospect of opening the hackneyed Pandora's box" (*DeGraffenreid v. General Motors*, 1976, p. 145), intersectionality can be dismissed entirely because the complexity involved in understanding its uniqueness.

Intersectionality *is* complex and *is* nuanced and *is* dynamic, but it is absolutely indispensable. Intersectionality is a necessary and crucial component of privilege because intersectionality substantiates privilege to be seen as more than singular or multiple disparate, singular identities, and instead, speaks to a network of several interlocking identities; the human experience is multiplex, tangled, and sometimes labyrinthine, and intersectionality attempts to capture this complex uniqueness.

### **Models and Frameworks**

In addition to the primary qualifiers for privilege, a dearth of broad and focused manifestations exist to serve as simple frameworks and niche descriptions which are detailed below.

#### ***ADDRESSING Framework***

Pamela Hays created the ADDRESSING framework to outline nine major cultural influences and label which groups hold social dominant and nondominant status (Hays, 2001, 2013, 2016). Nieto et al. (2010) took the ADDRESSING model one step further by including terminology of “Rank,” denoting the dominant group as “agent rank” and the nondominant group the “target rank” to highlight the noting that these Rank memberships are assigned by society and not selected by the individual who holds them (Nieto et al., 2010). Furthermore, the authors replaced Hays’ “Cultural Influences” category with “Social Rank Category,” to demonstrate a “Rank” system of privilege and oppression that values certain memberships (Hays, 2001, 2013, 2016; Nieto et al., 2010).

Utilizing a combination of Hays (2001, 2013, 2016), Nieto et al. (2010), and my own contributions, my use of the ADDRESSING framework in the present study identifies the nine social rank categories as the following: Age and generational influence; developmental or other

disability or divergence; religion and spirituality; ethnic and racial identity; socioeconomic status; sexual orientation; Indigenous heritage; national origin; and gender. Those who hold dominant group/agent rank are those who are aged between 18 and 64, are able-bodied, neurotypical, Christian or familiar with Christian rites (e.g., raised Christian but may no longer self-identify as Christian), European American, upper and middle class, heterosexual or monogamous, not Indigenous, born in the US, or are cisgender or male. Conversely, those who are part of the oppressed groups, described as the nondominant group or holding target rank, are mirrored from the dominant group, such as children and older adults (aged 0–17; 65+) under the social category of age and disabled or neurodivergent under the category of developmental or other disability or divergence.

Of note, I included neurodivergence in the “Developmental or other Disability or Divergence” social rank category, which is originally labelled as “Developmental or other Disability,” per Hays (2016). I categorized neurodivergence in this way with the intention to recognize how neurodivergence is pathologized and viewed as disability both broadly and within the field of psychology. Societies are crafted to work for neurotypical groups while working against and pathologizing autistic or attention-deficit/hyperactive groups (among others). The neurodiversity movement aims to undo the disorder and deficit-focused thinking through depathologizing by recognizing and celebrating diversity. There are some within the neurodivergent community who do self-identify as disabled through neurodivergence, and it is necessary to adhere to someone’s self-identification.

The ADDRESSING model is not an exhaustive list of privilege, but contains several key factors that speak to how ubiquitous privilege is. Additionally, the ADDRESSING framework highlights how, for some privilege identity categories, one can shift from agent (dominant) rank

to target (nondominant) rank and vice versa. For example, those who are blessed to live a longer life will initially hold target rank for their age as they grow from child to adult, then will hold agent rank in their early and middle adulthood, and then they will revert back to target rank as an older adult. Some privilege identities are more static, such as ethnic and racial identity. However, the ADDRESSING model speaks to the power dynamic of society's valuing and devaluing in America—it does not account for how someone's target rank in America could be shifted to agent rank in another part of the world by being perceived differently. For instance, if an individual was Black in America, they would hold target rank in America but may be perceived as White and hold agent rank outside of America. Despite its limitations, there is nuance in the ADDRESSING framework that aids in its ability to present the complexity and modulation of privilege.

### ***Environmental Privilege***

Lucía Argüelles' (2021) work on environmental privilege noted that environmental justice has been thoroughly explored in academic research by using a deficit-focused approach and has not turned its eye to the environmentally privileged. Argüelles indicated that environmental privilege is a crucial perspective to environmental justice and emphasizes the significance of comprehending environmental inequality beyond marginalized areas by extending the focus to regions characterized by racial and economic advantages (privileges). Further, Argüelles accentuated the need for scholars to look inward when analyzing privilege, despite discomfort:

One of the reasons for such oversight might be that privilege is something that scholars often enjoy (and if not us, our supervisors or deans), which can make the critical analysis of privilege uncomfortable ... but that does not mean that scholars should avoid

confronting or analyzing it. Only by following privilege can we understand the dynamics that configure our world. (p. 651)

To engage in critical analysis of privilege, Argüelles defined and encapsulated environmental privilege by highlighting themes.

According to Argüelles (2021), *environmental privilege* is “form of privilege linked to other types of inequalities such as race and class that confers to certain populations socially constructed advantages in relation to environmental access, management, and control” (p. 651). In this sense, environmental privileges includes several of the privilege identities listed in the ADDRESSING model (Hays, 2001, 2013, 2016) but instead narrows down how these power factors play into one’s relationship to, between, and within the physical environment. From this definition of environmental privilege, Argüelles (2021) identified three core themes: access to environmental amenities, issues of environmental identity and representation, and the sociopsychological mechanisms of naturalization of privilege.

The first dimension of environmental privilege is access to environmental amenities (Argüelles, 2021). Environmental privilege grants (unearned) exclusive access to environmental amenities, such as access to quality foods, greenspaces, sustainability practices, and healthier air quality, to those with economic, political, and social power (privilege). Further, access to environmental amenities involves the externalization of social and ecological costs; resource extraction/manufacturing and subsequent environmental impacts often occur far from the major consumers, wherein the ecological disparities between the Global North and South as well as urban and rural areas are starkly contrasted. Green gentrification, seen in urban green interventions, contributes to the displacement of marginalized populations and increased housing prices. The luxuries that are accessible to the privileged classes and spaces are afforded at the



exploitation of migrant workers. Overall, benefits are granted to the privilege through the displacement, infirmity, and exploitation of the marginalized and are also not accessible to the same hands that produce them.

Environmental identity and representation is the second dimension of environmental privilege (Argüelles, 2021). Whiteness has held a long relationship with mainstream environmentalism, which signifies what mainstream environmentalism is, who participates, and how people can engage in mainstream environmentalism. The *who* of mainstream environmentalism falsely props up White people as the caretakers of the environment, even when opposition to environmental protections comes from White people. Because of its embeddedness in whiteness, mainstream environmentalism is conceived of as a form of purity where the absence of humans marks its innocence—this is the *what* of mainstream environmentalism. The *how* of mainstream environmentalism is the mirage of a global-oriented movement that relies on the responsibility of individuals for change through consumerism: “green” products. Further, the purchase of said products acts as a “checked box” to absolve one’s self from further commitment or responsibility, at least until the next product needs to be purchased, that is.

The third and final dimension of environmental privilege is the sociopsychological mechanisms of naturalization of privilege (Argüelles, 2021). The persistence and normalization of mainstream environmentalism subsequently produces the normalization and naturalization of inequities and environmental privilege. The interplay between denial, guilt, and dislocation grant privileged people to engage in “green living” to dissuade accountability and justify non-environmental behaviors. Further, Argüelles described *selective entitlement* wherein individuals with SES privilege claim the “right” to environmental privileges and can assume the role of victim. Because of this dynamic between dominant/privileged and self-inflicted “victim,”

the creation, identification, and analysis of environmental problems and solutions is self-contained by the privileged. Due to the normalization of these benefits, backed by economic and political interests and structures, environmental privilege is considered to be justifiable. “The environmentalist ethos provides an identity of innocence, resistance to power, and solving the world’s problems” (p. 655). Environmental privilege is invisible, self-serving, and self-congratulating. Its power is captured within an ouroboros, its existence is contained within itself, oblivious to its meal, both devourer and devoured.

Argüelles’ (2021) work on environmental privilege is both a beautiful analysis and inwardly-reflective. Through the weaving of multiple privileged identities, Argüelles identified three dimensions of environmental privilege that work to uphold access to environmental amenities, extrication from accountability through consumerism, and normalization and innocence of privilege. Argüelles does not account for other privilege identities outside of race and class, but does a great service in identifying concepts of whiteness and capitalism and how they are entrenched within mainstream environmentalism and the study of environmentalism. Argüelles’ definition will be used in the dissertation to capture the depth and intertwining of privilege’s role in climate denial.

**Transnational Privilege.** *Transnational privilege* is an extension of environmental privilege in that the same privilege vectors of race, gender, class, and SES of environmental privilege are reproduced across nations (Norgaard, 2012). The definition, therefore, can also capture the power dynamic between privileged and oppressed of the Global North (privileged) and the Global South (oppressed). All members of the Global North, that is, America, Canada, Europe, Japan, Israel, South Korea, Australia, and New Zealand, hold transnational privilege. These nations are granted environmental benefits of access to the labors and literal fruits of said

labors of those in the Global South; produce from South America, coltan for electronic devices mined from the Democratic Republic of Congo (DRC), and manufactured and natural goods from Asia. Further, the production of these goods and the subsequent costs (physical, material, environmental) are experienced by the laborers and producing regions/countries and not the consumers.

Coltan is a hazardous material, and in the quest to mine coltan, miners come into daily contact with radon (a radioactive substance) with no protective gear (Ojewale, 2021). It is estimated that 40,000 children extract coltan from the DRC (Ojewale, 2021). The very apparatus I use to write these words harbors coltan, and there is a reasonably good chance that small hands plucked it from the earth so that, I, a White-bodied American academic, can gain social, academic, and financial capital from its use. If you're reading this, then it's likely that you do, too. My access to education and endeavors within the field of academia are partially paid for through child labor, which is financial and physical/health exploitation that utilizes privilege from age, SES, and disability identities, which is made possible through the exploitation of the Global South in this particular instance (i.e., child labor occurs in the Global North as well) with the support of American intervention in the DRC (Gibbs, 1996). Through continued intervention, exploitation, and plundering of resources of the Global South by the Global North, myself and other inhabitants of the Global North hold transnational privilege that uphold and normalize current power structures.

### ***Privilege in the Analysis of Space***

Twine and Gardener's (2013) work on the geographies of privilege highlights the need to analyze space when dissecting privilege. As pointed out with different social rank categories of the ADDRESSING model (Hays, 2013, 2016), Twine and Gardener (2013) indicate that

privilege is dynamic because of its relationship to space. Space is not fixed in time; it blooms, recedes, transforms, acts upon, and is acted upon—it is a shifting symbiosis with and between people and communities in multiple “nesting dolls” of expansive physical and metaphysical locations. Space is an accultured place to visibly and tangibly divide privilege in an active and ongoing manner.

Analyzing space for privilege creates a framework to view how “power operates, is negotiated, and transferred intergenerationally as well as how it is resisted, reconfigured, and recast as economic systems are transformed” (Twine & Gardener, 2013, p. 8). Within this statement, Twine and Gardener identified the themes of domination, resistance, and justice, and emphasized that spatial analysis is the necessary formula for navigating these themes. The authors note that there are three ways in which spatial analysis breaks down privilege: conceptualization of relationship between social inequality, justice, and materiality of space; globalization of privilege through combination of local, regional, and state policies and practices; global capital movements via labor migration and multinational corporations that operate outside of nation-states (Twine & Gardener, 2013). The first tenet of spatial analysis, identifying relationships between inequality, justice, and quality of space, is reflective of Argüelles’ (2021) capturing of environmental privilege while the latter two tenets of spatial analysis that focus on sociopolitical and economic oppressive powers across national borders are explained by Norgaard’s (2012) transnational privilege.

Twine and Gardener’s (2013) spatial analysis of privilege are represented in both Argüelles’ (2021) and Norgaard’s (2012) definitions of environmental privilege and transnational privilege, respectively. However, Twine and Gardener’s (2013) emphasis on the physicality of space to demark privilege sets their analysis of privilege using space apart:

The use of space to establish zones of privilege (racial, ethnic, class, national, colonial) and to construct boundaries between the impoverished, conquered, enslaved, and migrant, and those who belong to the ruling and elite classes is not new. This has been central to nation building before the modern concept of White supremacy. (p. 8)

Space is both tool and host to tangibly divide and reinforce power structures and status at multiple levels (e.g., local, national, etc.).

Of note, Twine and Gardener's (2013) concept implies and assumes that nation building has only ever been implemented using domination, even before White supremacy. This is a very Western, colonial conceptualization because it selectively examines Western histories of nation-building while ignoring a dearth of nation building outside of the West. Power is not vacuum that pulls in and incorporates any available oppressive ideology to exert itself further. That may be colonial Western tradition but it is not every tradition. Coloniality distorts interpretation of the past and present and limits conceptualizations of the future.

Twine and Gardener's (2013) exploration of the geographies of privilege underscores the importance of spatial analysis in understanding and dissecting privilege. Their work illuminates how space is not static but dynamic, shaping and being shaped by power dynamics, resistance, and justice. By examining the relationship between social inequality, justice, and the materiality of space, Twine and Gardener provide a framework for understanding how privilege operates across different scales, from local to global. Their emphasis on the physicality of space as a tool for delineating and reinforcing power structures adds depth to discussions on privilege and its manifestations. Albeit, it's essential to recognize that their analysis, while valuable, still reflects a Western-centric perspective that overlooks alternative traditions of nation-building and power dynamics. Overall, their work contributes to a broader understanding of privilege and its spatial

dimensions, inviting critical reflection on historical and contemporary power dynamics that can be utilized for the present dissertation.

### **Climate Denialism Rooted in Psychology**

This section explores concepts within my own field of psychology that are both novel and well-researched in their relationship to climate denialism and privilege. Through the employment of psychological frameworks of cognitive dissonance and Adlerian social interest, climate denialism's nuanced and complex motivations and psychological underpinnings are examined. The psychological approach is required to not only understand the phenomenon of climate denialism but is necessary to craft effective response and action toward collective mitigation of climate change.

Cognitive dissonance, a well-established psychological concept, provides a framework to explore how individuals grapple with conflicting beliefs, psychological discomfort, and resist accepting information or changing behavior that challenges their existing worldview. Alfred Adler's theory of social interest is a concept rooted in the understanding of individuals as inherently social beings with a fundamental drive to contribute positively to society. By applying Adlerian social interest to the context of climate denialism and privilege, I aim to illuminate the social and power dynamics that shape individual and collective attitudes and beliefs towards climate change.

### **Cognitive Dissonance**

Cognitive dissonance is a term that is frequently thrown about in the public sphere with oft flagrant misinterpretation or lack of understanding, understandably. Cognitive dissonance has several “moving parts” and has thus been (incorrectly) used to only represent a few of those parts, such as cognitive dissonance being interpreted as an individual who holds two opposing

ideas or cognitive dissonance is only seen as synonymous with blanket-term rationalization. Neither of these are wholly wrong, but they are also not correct. There is far more that occurs within cognitive dissonance. Given that multiple researchers both within and outside of the field of psychology have utilized the theory to analyze climate denialism (Grušovnik, 2012; Norgaard, 2012; Stoknes, 2014; Stoll-Kleemann et al., 2001), it is imperative to comprehensively understand the theory so that both its virtues and shortcomings in comprehending climate denialism can be identified and subsequently explored.

Leon Festinger (1957) founded the theory of cognitive dissonance in its eponymous book, *A Theory of Cognitive Dissonance*. Festinger's theory is contingent upon the belief that all humans innately harbor the inner drive toward harmony between held ideas, values, and beliefs. Essentially, when two cognitions are inconsistent with one another, or are dissonant, psychological discomfort from the dissonance will occur, which will then motivate the individual to reduce the discomfort or dissonance by avoiding information that will increase dissonance or by adding, removing, or altering one of the attitudes, beliefs, or behaviors to restore harmony and cognitive consistency.

For example, someone who values environmentalism and privately drives a vehicle may read an article detailing how personal car use negatively impacts the environment, and this will cause dissonance. Dissonance occurs because the value of environmentalism is at odds with the behavior of private vehicle use which is harmful for the environment, resulting in psychological discomfort. The individual has five strategies to consciously or subconsciously engage in to reduce the psychological discomfort of internal conflict (Festinger, 1957).

Per Festinger (1957), the individual can (a) remove dissonant cognitions by not believing that private vehicle use has a harmful effect on the environment. This is essentially dismissal or

denial of evidence that originally produced the dissonance. The individual can (b) add new consonant thoughts by looking at positive aspects of “environmentally-friendly” features of the car, such as it being an electric or hybrid vehicle. This strategy produces more thoughts that align with the value and self-identity of environmentalism. Additionally, the driver can (c) minimize the importance of dissonant thoughts by focusing on how the environmental damage done by their vehicle use is negligible next to industrial producers and polluters. For this strategy, the individual could adopt an “it’s not me, it’s them” mindset, but they could also simply minimize their own behavior without external comparison. For (d), the individual could increase the importance of consonant thoughts by considering that their vehicle use is an enjoyable and necessary part of their life, and perhaps is even one that helps them engage in environmentalism, such as driving to local farmers markets. And lastly, (e) the driver could mitigate dissonance by changing a behavior through using alternative means of environmentally-friendly transportation, such as public transportation. This final strategy eliminates dissonance by changing behavior to be in accordance with their thoughts, values, and other behaviors.

The five strategies are a simplification of the tail-end process of cognitive dissonance in that humans are incredibly complex and are full of multiple intermingling dissonant and consonant thoughts, values, and behaviors; there is no one-to-one equation that discretely explains the internal process and (potential) external yield from cognitive dissonance. Cognitive dissonance is not a transient occurrence, but is a more pervasive experience with ebbs and flows that increase and decrease in the awareness and acuity of cognitive dissonance. When someone experiences cognitive dissonance, the individual will very likely experience multiple values, beliefs, and behaviors being challenged simultaneously and to varying degrees of dissonance due to how entrenched or important the set of thoughts, values, and behaviors are or are not



(Harmon-Jones & Mills, 2019). This is especially true when examining how climate denialism could be borne of competing dissonant information from values, firm identities through political affiliation, thoughts, and behaviors.

### ***Application***

Cognitive dissonance theory is an excellent tool for practical applications of hypothetical experiences that occur in the real world. A fictional person named Korrilla will serve as the basis for a practical application:

Korrilla is an individual who works in the fossil fuel industry and is exposed to scientific reports that substantiate climate change as a real and impending threat, stating that fossil fuels are a primary driver of climate change. Korrilla's financial wellness is dependent upon her employment and stakes within the fossil fuel industry and her company; she is both financially and personally invested in the industry, as she has already committed time, energy, and life in service to this particular job and industry. Korrilla experiences cognitive dissonance due to the conflict between her financial interests within the fossil fuel industry and the knowledge that fossil fuel consumption results in climate change and its harmful effects. Further, by proxy, Korrilla herself is a stand-in for the fossil fuel industry due to her position within it, so she may be tied to the actions of the industry than solely her individual actions. To reduce dissonance, Korrilla can adopt one or more of the five strategies, and she may choose to focus on strategy one: removing dissonance by refuting the fossil fuels are causing climate change or by denying that climate change is occurring in the first place. This would allow her relief from psychological comfort to continue to work within the fossil fuel industry and make dividends in a manner of "business as usual."

However, this application does not produce an understanding as to why some strategies are weighted more heavily or less heavily and why they are utilized over other strategies. It cannot explain the potential predilection toward climate denialism that researchers seek to understand; it can only identify the potential or terminus of decision. Additionally, for the strategy of denial, it is necessary to connect denial to the countermovement of climate denialism, but the application cannot address the conditions under which denialism exists: Further, the insertion of privilege would alter the analysis in arbitrary and over-simplified ways that cannot capture the duality of privilege (i.e., privilege and oppression), or the systemic and compounding nature of privilege. If Korrilla is a White woman of middle-class background, she may defend her right to work within her industry through denialism and center her privilege identity of whiteness and SES, which could be done through denial and minimization of dissonant thoughts. This framework starts to become rather complicated rather quickly without the ability to offset complexity with practical predictability; the view is too myopic and we cannot assess for how climate denialism is informed by privileged/oppressing identities from such a close viewpoint. A different approach is warranted here.

The ubiquitous view that the decrease in climate change interest and the presence of climate denial is due to continued distance from the issues of climate change is a nearsighted one, as it does not address the “who” of those who experience distance from the issue or the “who” of those engage in climate denialism (I. Cohen, 2021). Further, the mechanisms of cognitive dissonance described in explaining climate denialism do not identify the structures of power at play and the subsequent defense of those structures. From the concept of denialism, one of the key components is that denialism must exist in defense of an ideology, and the values,

behaviors, and thoughts, described in cognitive dissonance cannot and do not capture the massive, interlocking pieces of ideology and their defense thereof.

One of the climate denialism tactics seen is a superficial dealing in scientific reasoning or scientific presentation by leaning into other “scientific” processes of climate change to lend themselves the appearance of scientific validity (Dunlap & Jacques, 2013; Jacques, 2012; Oreskes & Conway, 2011). An example of this would be refuting and denying climate change by explaining that solar cycles, which describe the sun’s natural fluctuation in activity across a period of time, are the driver of perceived climate change and not anthropogenic causes. White conservative males are more likely than other Americans to endorse climate denial, and in fact, denialism is even greater for conservative White males who self-report understanding climate change “very well” (McCright & Dunlap, 2011). Authors McCright and Dunlap (2011) also found that White conservative males self-reported a greater personal understanding of climate change than any other group. Cognitive dissonance falls short of explaining this phenomenon.

Overall, cognitive dissonance is a compelling theory that helps provide a simple framework to understand how an individual can inhabit the psychological discomfort of dissonance and mitigate dissonance by engaging in one or more of the five strategies. Its application to understanding climate denialism is useful in that the theory can identify how individuals’ strive for consistency can drive climate denialism. This approach may be helpful on the individual level of intervention by reducing climate denialism by addressing potential and experienced dissonance. Further, cognitive dissonance theory is a step in the right direction away from the information-deficit model and into how information is interpreted, compartmentalized, and informs subsequent action or inaction. While Festinger’s (1957) theory holds value and

insight, it carries inherent limitations as a sole applicator to the understanding of climate denialism, or even denialism as a broader subject.

The limitations of cognitive dissonance theory lie encapsulated within its strengths. While the theory excels in its ability to explain an individual's responses to conflicting beliefs and behaviors, the theory is not set up to tackle how individuals within a group respond to conflicting beliefs and behaviors or the group itself. Denialism is a group movement, meaning it is (a) comprised of huge swathes of people and (b) is an entity of its own that defends its ideologies. Cognitive dissonance cannot contain the scope of people involved, and further, how people behave within a group is different from how an individual behaves alone (Festinger et al., 1956; Harmon-Jones & Mills, 2019). When considering the group context, there may be different pre-supposed beliefs among individuals in the group that do not create a synchronous cognitive attitude, value, belief that is then opposed by the reality of climate change (i.e., individual cognitions and behaviors may not be reflective of the group). Essentially, the group is more than the sum of its individual parts and cognitive dissonance theory cannot be systematically applied to individuals within the group to be representative of the whole.

Another limitation of cognitive dissonance theory is in its simplicity. A chief tenant of a movement of denialism is the defense of one or more ideologies. Climate denialism describes a loose collective of people who defend multiple ideologies. Similar to groups amounting to more than a summation of its individual parts, ideologies are more than the totality of subsumed thoughts and values. Even so, individual ideas are too innumerable to and complex to dissect using the five strategies of cognitive dissonance. Therefore, the introduction of privilege within cognitive dissonance theory will always shortchange the temporality, systems of power, and

implications attached to conceptualizations of privilege, which are already complex and simplified.

Cognitive dissonance theory also struggles to account for climate denialists' resistance to change, and cannot explain why climate denialists actively reject contradictory evidence despite experiencing cognitive dissonance. Essentially, cognitive dissonance theory cannot answer why climate denialists move further toward rejection and denialism rather than alternative reframing. In summation, cognitive dissonance's focus on individual-level processes overlooks the collective and societal dimensions of climate denialism, limiting its power in understanding the social and ideological complexity of the phenomenon. However, the psychological concept of social interest may provide a wider, more system-based view that can illuminate climate denialism.

### **Adlerian Social Interest**

While cognitive dissonance is a psychological concept focused on an individual's motivations, thoughts, and behaviors by relating internally with one's competing and contradictory cognitions and behaviors, social interest widens the scope by examining the individual in terms of relating to encompass self, others, and society at large.

Gemeinschaftsgefühl is a German word that combines two separate concepts to capture the spirit of something even more intangible and abstract. *Gemeinschaft*, meaning community, precedes and intertwines with *gefühl*, meaning feeling, and represents "community feeling" ("Wiktionary," 2023).

Alfred Adler's paramount concept of gemeinschaftsgefühl in 1918 was intended to capture the metaphysical sense of unity and striving toward unity of the world and others around us. There is a sense of both togetherness and belongingness, and perhaps a dedication or duty to

this entity that we are, exist in, and are a part of. Adler described it as, “Community feeling is actually a cosmic feeling, a reflection of the coherence of everything cosmic that lives in us ... and which gives us the ability to empathize with things which lies outside our body” (Adler & Radin, 1959, p. 60). Community feeling represents a sense of solidarity and harmony, and what is more, community feeling is also movement toward serving community (Ansbacher, 1992).

The term *social interest* was coined by Adler (1929) 11 years later, depicting the activating behavior and engagement of *gemeinschaftsgefühl* limited to interactions with humans (Ansbacher, 1992). According to a translator of Adler’s works, Ansbacher (1992), the terms *gemeinschaftsgefühl*, or community feeling, and social interest are erroneously used interchangeably; social interest has been used as a stand-in for *gemeinschaftsgefühl*. Ansbacher (1992) noted that *gemeinschaftsgefühl* is the only term that exists in German literature whereas English literature has identified *community feeling* as social interest, saying that the transition to “social” from “community” and “interest” from “feeling” was more accepted because it was more scientific and tangible in the era of behaviorism growing in popularity.

The lapse in translation was palatable for English-speakers but it does not fully serve my purpose for research. However, because it is commonly used synonymously within the field of psychology from which myself and fellow clinicians, researchers, and teachers operate in, the use of *social interest* herein will utilize the definition of *gemeinschaftsgefühl*, effectively becoming synonymous. Henceforth, when the term social interest is used, it is (a) done with the acknowledgement that the phrase does not fully capture *gemeinschaftsgefühl*, or community feeling, and (b) meant to encapsulate the wider, more abstract definition of community feeling, “a feeling of cooperation with people, the sense of belonging to and participating in the common good” (Carlson & Englar-Carlson, 2017, p. 6).

Social interest is expansive; it is empathy, connection, an esprit de corps with humanity and the universe we are nested in, it is “both the food a nursing mother consumes and the milk with which she nurses her child” (Harris, 2023, p. 15), and it is “to see with the eyes of another, to hear with the ears of another, to feel with the heart of another” (Adler, 1958, p. 135, as cited in Kopp, 1989). Community is essential to social interest, whether it be community from humanity, fellow life on Earth, or cosmic community. Social interest includes investment in both the present and in the future of community (Ansbacher, 1992).

Climate change jeopardizes the present and future of multiple communities, and as such, climate action is as much identified as social interest as climate denialism is the absence of social interest. Denial of the climate crisis requires (a) denial and/or dismissal of the experiences of those who are most impacted by climate change and/or those who will be impacted by climate change (i.e., future generations and stewards of the Earth); (b) disconnection or separation from immediate and global community; (c) investment in individual or collective self-interest through the divestment of community’s present and future wellbeing. The antithesis of social interest is disconnection, apathy, disunity, self-interest, and short-sightedness, all of which are ingredients for the recipe of climate denialism and are often gift-wrapped in privilege.

One cannot be empathetic and connected to community while simultaneously harming the collective through climate denialism. This is doubly true for those whose self-interest supersedes any community by way of never having community in the first place. On the matter of race and White supremacy, Imani Barbarin (2022) shared that the White race is not rooted in community despite proclamations among White people of ‘we need to preserve the White race.’ Barbarin goes on to note that whiteness is about dominating and oppressing others and not cultivating or investing in leaving something behind for other White people in the future, saying

“the minute that they get what they want, they will oppress whomever they need to, including people that look like them” (Barbarin, 2022, 0:53). The name of the game is domination and whiteness or White privilege is both the tool and the permission to unlock it.

Through whiteness and White supremacy: there can be no community through domination; there can be no sense of belonging in local or broad spaces; there can be no participation in the “common good.” there can be no investment for future generations; there can be no social interest. However, privilege granted through whiteness is not the only privilege identity or power structure that can lay claim to oppression. All privilege identities and groups are manufactured through oppression of the disadvantaged or marginalized identities and groups. All “-isms,” by nature of their power granted by oppression, cannot build or partake in community. “All it takes is for somebody to imply that your ‘otherness’ is a disability for you to be stripped of all autonomy” (Barbarin, 2023a, 0:49). One cannot be engaged in community with another if the doctrine of power requires their subjugation or one’s supremacy. The privilege afforded in this non-communal relationship is the blindness and invisibility to this power dynamic.

Marginalization and oppression are illnesses of society created, imposed, and maintained by the ruling and privileged classes. On a broader spectrum of conceptualization, social interest, or lack thereof, includes the absence of privilege awareness. “All institutions, our traditional attitudes, our laws, our morals, our customs, give evidence of the fact that they are determined and maintained by privileged males for the glory of male domination” (Adler, 1927, p. 123). Adler’s words address how entrenched male privilege is in society through the tool of patriarchy, but his words also illuminate how the foundations of society structured to serve male power make their visibility all the more difficult to identify. The adage is that there are no red flags to



be seen when wearing rose-colored glasses—they are simply just flags. There is no oppression, there are no inequalities, and there certainly are no unearned benefits unjustly granted to those with power—they are simply just differences.

### ***Dysconsciousness***

Joyce King, a scholar renowned for her work in sociology in education, is responsible for explaining just how rose-colored glasses can miss the red flags viewed within their frames. She coined the term *dysconsciousness*, which means “an uncritical habit of mind (including perceptions, attitudes, assumptions, and beliefs) that justifies inequity and exploitation by accepting the existing order of things as given” (J. E. King, 1991, p. 135). Essentially, dysconsciousness is how a mind rationalizes inequity and justifies power structures and the advantages afforded by privilege therein. This cognitive approach works by undermining or avoiding confrontation of the dual reality of oppression and inequality, in which privileged groups and identities exist at the cost of oppression, discrimination, and exploitation of marginalized groups.

Someone engaging in dysconscious racism may be able to recognize how enslavement was harmful to enslaved Black people and how it can impact Black people today, but may ignore or not perceive how a history of enslavement and current systems of power operate to marginalize Black people and uplift the White race. This approach will either blame Black people (either directly or indirectly) or victimize Black people without identifying the role with which White people historically held and currently hold in the victimization and oppression of Black people. While J. E. King’s use of the term dysconsciousness refers broadly to the subject of dysconsciousness, wherein dysconsciousness could refer to and explain isolated phenomena and/or collective phenomena, a clear pattern emerges: dysconsciousness is reflected in the eyes

of those whose racial identities grant them privilege. The privilege therein is the metaphorical wool being pulled over one's eyes and the fallacy of a just world that begets innocence to those in power.

While J. E. King explores dysconscious racism in her 1991 publication, she explicitly noted that dysconsciousness and its underpinnings can be applied to a variety of isms to explain how perception becomes distorted among privileged individuals and groups to protect the normalization of and advantages awarded to privileged identities and groups. Further, J. E. King (1991) identified how a facts-based approach was ineffective in prompting critical analysis of beliefs and inequities. J. E. King's conclusion substantiates the decades-long research on climate denialism that demonstrated information-deficiency was and is *not* the driver for climate denialism (Fessman, 2019). People in power have access to information, and in fact, there is a plethora of information that has never been more readily available in the dawn of the digital age. Instead, J. E. King's (1991) work on dysconsciousness suggests something more complex and insidious at hand, defense of privilege and current power structures through distortion of the story, absence of critical examination, and a reweaving of narrative.

As J. E. King (1991) identified, those who endorsed dysconscious racism through their justified oppression and inequity also condemned racism and discrimination. Through dysconsciousness, climate denialism can be interpreted through the two different presentations of climate denial discussed in the key definitions section of Chapter II: denial of climate change and climate variability (i.e., no change is occurring in the climate); and denial of climate change and acceptance of climate variability (i.e., change is occurring in the climate, but it is not caused by human activity). Both definitions include groups of individuals who are collectively defending the status quo of continued permission and access to domination and benefits via privileged

identities and ideologies while claiming innocence, such as White privilege with White supremacy and SES with capitalism nestled in the proclamation that humans (i.e., those who hold current and historical power and privilege, the primary polluters and drivers of climate change) are not responsible for climate change.

Furthermore, within climate denialism and speaking to intersectionality, separate privilege identities and ideologies are not individually or just simultaneously being defended, the compounding and intersection of privilege identities are being defended. For example, dysconsciousness of climate denialism protects and defends the interests and power structures of White cisgender hetero men with capital in the global North. Of note, dysconsciousness of climate denialism is not limited to these intersecting privileged identities.

The fact remains that dysconsciousness, propelled by a disengagement or inability to partake in social interest, is necessary to distort the truth for climate denialism to protect the vested interests of those in power. Without dysconsciousness and subsequent recognition of inequity, an individual or group would need to acknowledge or recognize the need for systemic, collective (and perhaps personal) change and disruption of current power structures. Consequentially, those who deny climate change and those who admit change is occurring but deny human activity as the cause, continue the legacy of oppression and subjugation of the other and the Earth through their individual climate denial and through the collective movement of climate denialism.

In following Adler's social interest, any oppression and inequity is harmful to both individual and collective wellbeing (Carlson & Englar-Carlson, 2017) because social interest is both the individual and the environment, society, and context with which the individual exists. Therefore, movement toward social interest that encourages a compassionate focus on

community and self-in-community is essential to honest, critical self-and-collective-reflection required in the identification and challenging of the norms, biases, privileges, and power structures. Social interest is based in equity and disallows and does not include oppressive powers. Similarly, dysconsciousness disallows social interest and a critical consciousness is needed to be nested in and move towards an equitable community. Movement away from climate denialism would require these tenets as well. However, for an individual, the path is likely a far more difficult one due to the challenging of multiple, intersecting privilege identities and ideologies as opposed to a single one.

### **Not in My Backyard**

*NIMBY* is a widely used acronym standing for Not in My Backyard. The term was born in the US to describe groups or individuals opposing development in their living spaces and communities (Hubbard, 2005). Authors Ferwerda et al. (2017) described NIMBY syndrome, or NIMBYism, as occurring when “people oppose developments in their vicinity despite accepting the necessity for such developments elsewhere” (p. 1). While academic research has sought to identify nuance between “good” and “bad” participation so as to not devalue and discredit justified disruption of and community involvement in development (McClymont & O’hare, 2008), NIMBY carries a negative skew. This negative perception is due to research highlighting a frequent theme: NIMBYism’s opposition to new development is propelled by White residents’ push to exclude non-white groups through the upholding and preserving of White spaces (Hubbard, 2005). Further, NIMBYism is reaction against the possibility of perceived “pollution sources” (Murphy, 2004), and the aforementioned “pollution” is an umbrella term that includes actual pollutants, noise, and visual pollution, but I propose NIMBYism’s perceived “pollution” also includes non-white persons, groups, and associated cultures. NIMBYism is integral to and

upholds White supremacy, later discussed in the section on colonialism, through purity culture and perceived pollutants of the other.

White spaces are not solely perceived through the eyes of its residents, that is, White spaces do not just functionally exist because a White person belongs to a living space and it would therefore be deemed a White space. No, White spaces have a long history of intentional cultivation through racism (Blount, 2023). Levert Blount, whose TikTok user profile is @LevertTheBassman, explains that streets named after Dr. Martin Luther King Jr. (MLK) are used to demark the White sides of town from the Black sides of town. Congruent to the mechanism of privilege in which unearned benefits are bestowed to the dominant group through the oppression of marginalized groups, White spaces were beautified, prioritized, and protected at the expense of Black, Indigenous, and other People of Color (BIPOC) communities and living spaces (Audirac, 2018; Blount, 2023; Rothstein, 2017; Tiwari & Ambinakudige, 2022).

### **Structural Racism: The Aftermath of Reconstruction**

Following the emancipation of formerly enslaved Black persons, many Black and White communities were integrated and segregation was not the de facto standard. The South utilized *Plessy v. Ferguson* and Jim Crow laws for explicit segregation, but across America, other covert means were used to not only perpetuate segregation, but to create segregation where it had not previously existed (Rothstein, 2017). *Structural racism* describes how the infrastructure of multiple systems, such as political, economic, social, and legal systems, are imbued with racial discrimination that cause racial inequities and uphold and reinforce the benefits and norms of racial dominant (White) privilege (Lynch et al., 2021). Housing is one of many systems under the umbrella of structural racism, and its history has implications for the climate crisis and prevalence of climate denial.

To circumvent anti-discrimination laws, zoning codes and other discriminatory practices were created to dispossess and disenfranchise Black people while seemingly and technically not infringing upon the legality of those anti-discrimination laws. Redlining and expulsive zoning are prime examples of state-sponsored segregation efforts. Redlining refers to the federal government's specially-crafted color-coded metropolitan maps that designated where mortgages could be insured (Locke et al., 2021; Rothstein, 2017). Areas where Black people lived were colored red, an explicit indication deeming red areas (Black people) were too risky to insure mortgages and would legally allow for segregated areas through this financial gatekeeping (Locke et al., 2021; Rothstein, 2017).

Exclusionary zoning was upheld by the Supreme Court in *Village of Euclid v. Ambler Realty Co.* (1926) and required neighborhoods consist of single-family homes or meet certain minimum square footage or lot size to prevent the “degradation” of an area by disallowing apartments and multi-family homes: “very often the apartment house is a mere parasite, constructed in order to take advantage of the open spaces and attractive surroundings created by the residential character of the district” (*Village of Euclid v. Ambler Realty Co.*, 1926, p. 394). Before the term NIMBY had arisen, parallel language was used to justify the protection and sequestering of White spaces through the term by referring to potential pollution sources. In the case of *Village of Euclid v. Ambler Realty Co* (1926), the Supreme Court opinion mentions noise, spatial, and visual pollution:

Moreover, the coming of one apartment house is followed by others, interfering by their height and bulk with the free circulation of air and monopolizing the rays of the sun which otherwise would fall upon the smaller homes, and bringing, as their necessary accompaniments, the disturbing noises incident to increased traffic and business, and the

occupation, by means of moving and parked automobiles, of larger portions of the streets, thus detracting from their safety and depriving children of the privilege of quiet and open spaces for play, enjoyed by those in more favored localities, until, finally, the residential character of the neighborhood and its desirability as a place of detached residences are utterly destroyed. Under these circumstances, apartment houses, which in a different environment would be not only entirely unobjectionable but highly desirable, come very near to being nuisances. (pp. 394–395)

The statement claims apartments “interfere” with airflow and “monopolize” the sun, but specifically, apartments “monopolize” the sun against “smaller” homes, which depicts a large, looming threat or blight that is imposed upon unassuming and innocent homeowners, leading to the demise of the neighborhood’s character. The opinion reiterates its supposedly objective stance by stating that apartments are, in fact, “unobjectionable” and “highly desirable” in a *different* environment. This is unequivocally ‘Not in my Backyard’ decades before the phrase had entered into the everyday lexicon. And while the passage is explicitly identifying apartment buildings as the problematic source of pollution, it is a stand-in and euphemism for alluding to the undesirable groups that typically reside within apartments, Black and Brown People of Color, immigrants, and those in a lower SES bracket (Hubbard, 2005). People belonging to these groups were viewed as pollutants, and were what privileged groups hosted within their neighborhoods needed to protect against, not unlike today. Furthermore, the Supreme Court utilized children to rationalize their argument by claiming protection or prioritization of children, a strategy that is still used in modern development. The opinion makes use of unambiguous verbs and nouns to paint a specific picture of an innocent (White) space in danger with a legal and justified right to defend itself against the outward threat.

A modern example of utilizing children as a defense for the dispossession and destruction of marginalized spaces takes place in Seattle. Avant Gossip (2023) noted that Seattle Parks and Recreation revealed plans to build a children's playground in Denny Blaine Park, which is one of the few nude beaches in Seattle and is a nexus and highly utilized space for the queer community. Nudity is legal except when done with "harmful intent" which is difficult to disprove, especially paired with the LGBTQ+ community's long history of being wrongfully accused of pedophilia to delegitimize and malign non-cishet identities and communities (Avant Gossip, 2023). Children are highly prioritized with their needs weaponized for exclusion. In the case of Denny Blaine Park, it exists in an affluent area with no lack of access to parks. The children's park is being funded by an anonymous private donor, and whether the proposed funding is done with intent for exclusion or not, the result will exclude LGBTQ+ people from one of the few safe and welcoming spaces for body diversity within the community. Infrastructure has a long history of being used as a tool to further marginalize marginalized communities, remove them from White spaces, visibly and tangibly divide privilege in an active and ongoing manner, and further stratify the hierarchies of power and privilege of environment and space, with the current day being no exception (Twine & Gardener, 2013).

In addition to using zoning, redlining, and the judicial system to carve out and keep White spaces, federal policies, such as the Housing Act of 1949 (1949) from the Urban Renewal Act, were large offenders of displacement and dispossession of Black people and communities. Outdated (low-income) housing and (predominantly Black) communities were identified as the cause of White flight. Both Acts sought to revitalize cities by reclaiming urban housing for redevelopment, that is, federal funds were given to cities to clear out and destroy what was determined by the city to be "obsolete" neighborhoods or "slums" (Audirac, 2018). While the



creation of more affordable housing was a goal of the Housing Act of 1949, this was done through the destruction of “blighted” areas. Taxpayer dollars were being thrown at inviting White people back into cities through the removal of “slums” and non-white communities, redevelopment, and the restructuring of urban spaces (Audirac, 2018).

Furthermore, it is imperative to remember that racial segregation was still in effect during renewal: “urban renewal intensified segregation by destroying integrated communities and creating segregated ones” (Fullilove, 2001, p. 74). One source identified that, while only constituting ten percent of the population in the US in 1961, Black residents made up two thirds of areas that were marked for urban renewal (Bellush & Hausknecht, 1967, as cited in Fullilove, 2001). This meant that Black residents were displaced and forced to move out from areas slated for renewal but could only move into other “ghetto” areas, where there often were no housing vacancies, leading to overcrowding and living in substandard housing (Fullilove, 2001). Consequentially, the bustling neighborhoods, comprised of immigrants and working-class Black and Brown people, were condemned and rebuilt with the aim of generating commerce, pulling in business, and growing the tax base by attracting White middle-class voters and their shopping dollars (Audirac, 2018).

When condemning and rebuilding were not effective enough in removing what were seen as “blights” and constraints on city budget, planned shrinkage through dereliction and neglect was implemented. The strategy was Nixon’s policy of “benign neglect” and it targeted working-class and racial minority communities (Tiwari & Ambinakudige, 2022). New York City implemented benign neglect by cutting essential services, such as firefighting services, and letting buildings and communities fall into disrepair, which exacerbated landlord abandonment (Wallace & Wallace, 2011). This path was extremely effective while reducing cost; roughly

250,000 to 300,000 housing units were destroyed or abandoned and two million New Yorkers were displaced (Wallace & Wallace, 2011).

Funding allotted for public projects once again replicated targeted discrimination. For example, infamous urban planner Robert Moses used his power and influence to form New York's metropolitan infrastructure into a monolith of racism and classism. In addition to using urban renewal and the development of public housing to displace low-income and POC communities, Moses constructed hundreds of miles of highways which frequently ran through these same communities, causing further displacement and disruption of communities. Moses emphasized the individual's automobile, a symbol of the White middle-class family, and created access to public lands and parks that could be reached using automobiles. However, Caro (1974) claimed from an interview with Moses' close associate, Sidney Shapiro, that Robert Moses limited access to those same amenities by lowering the height of bridges to be too low for buses to pass through, requiring permits for buses (which Black people had a more difficult time obtaining), and by stationing Black lifeguards far away from the White beaches (in the least developed beaches). Black communities and schools were neglected and purposely degraded at the cost of improving White communities and schools, and the effects of these efforts are still felt today (Rothstein, 2017). Infrastructure was historically used to discriminate and marginalize Black communities while safeguarding and beautifying White neighborhoods.

Instead of solely viewing these practices as targeted to disadvantage Black people, it is crucial to also frame these practices as targeted specifically to benefit White people and protect White spaces, and that this was accomplished through targeting and discriminating against Black people. It is not just the attempt to stamp down on marginalized groups, it is the attempt to elevate groups in power by pushing down marginalized groups.

Similar practices were used nationwide, exacerbating segregation and creating segregation where none had previously existed, creating unwalkable neighborhoods, and leading to adverse health outcomes and vulnerability to climate change for racial minorities (Hoffman et al., 2020; Locke et al., 2021; McKoy, 2023; Rothstein, 2017; Shahid, 2022; S. Wong et al., 2023; Yang et al., 2023). Redlining created visually tangible barriers to quality education and nature and impeded the building of wealth across generations (Locke et al., 2021; Rothstein, 2017). An examination of redlining reveals vast differences in the modern ecological landscape. The urban tree canopy, which improves health in the urban landscape and saves lives by reducing temperatures, is unequally distributed and is congruent with redlining segregation; an analysis showed that White US-born residents in redlined “A-graded” areas had nearly double the urban tree canopy of “D-graded” areas, which were home to primarily racial and ethnic minorities (Locke et al., 2021). The D-graded areas measured 23% tree canopy cover and A-graded areas measured 43% canopy cover, “The ranking system used by Home Owners’ Loan Corporation to assess loan risk in the 1930s parallels the rank order of average percent tree canopy cover today” (Locke et al., 2021, p. 1). Nearly 100 years later from the inception of redlining and the color never faded; it’s contrasted by verdant green.

### **Implications for Climate Change**

Greenery is incredibly important for human health and comfort. As heat waves increase in frequency, intensity, and duration with the ongoing climate crisis (Hoffman et al., 2020), any heat-mitigation source can save lives. Greenery alleviates the effects of pollution and cools the air in three primary ways: provision of shade, transpiration of moisture, and evaporation of surface water (EPA, 2023a, August 28). According to Hoffman et al. (2020), previous redlined areas are recorded to be up to seven degrees Celsius warmer when compared to non-redlined

areas. I would like to rephrase this fact to present this statistic from a privilege-emphasized perspective, rather than a disadvantaged-emphasized perspective; non-redlined areas are up to seven degrees cooler than redlined areas. Time, money, effort, and deliberate attention went into constructing the non-redlined areas to make them more habitable, and more to the point, survivable.

Nature and greenspaces are still largely inaccessible. Even in cities like Seattle, which scored in ParkScore's top 10 cities for ranking based on multiple factors like park access, equity, and investment, residents in high-income neighborhoods had 36% more access to park space per person than residents in low-income neighborhoods (Trust for Public Land, 2023). One Seattle resident named Eya timed their journey to Seahurst Park, a local beach in Burien, WA using public transportation, and documented that their roundtrip journey took over three hours to complete (The Wilderness Society, 2021). Additionally, Eya noted that public transportation closest to the beach still required a mile walk to reach the beach, with Eya needing to navigate steep hills while being approached by men (The Wilderness Society, 2021). Transportation does not merely describe movement from one location to another, but it can denote or provide safety in doing so. A mile walk, with or without hills, is not accessible to the disability community. Eya is able-bodied but femme-bodied and exists as a person of color, which means a mile walk is more dangerous for them. Per Google Maps (n.d.), the same roundtrip journey by car would take about fifty minutes, would arrive right at the park, and no additional walk would be required.

Extreme heat is the number one cause of fatalities among hazardous weather events (e.g., flooding, tornadoes, hurricanes, etc.; K. V. Wong et al., 2013). Vulnerability to extreme heat can be caused by a variety of frequently-stacking factors (EPA, 2023b), as seen in Table 4.1.

**Table 4.1***Vulnerabilities to Extreme Heat by Factor and Group*

<b>Factor</b>	<b>Group</b>	<b>Vulnerabilities</b>
Age	Children/older adults	Exposure to pollutants, development or aggravation of respiratory diseases, heat regulation difficulties/ sensitivity to heat, isolation, lower SES, mobile impairments, poor health
Socioeconomic status	Low income or unhoused	Inadequate shelter, no air conditioning, available resources cannot secure alternative shelter, unable to take off work in hazardous conditions
Occupation	Working outdoors	Exposure to pollutants, heat stroke, heat exhaustion, compelled to work for fear of termination or undocumented status being reported
Health and disability	In poor health, chronic conditions, disabled, mobility-restriction	Heat regulation difficulties, lack of access or resources for alternative shelter, isolation

Based off of this information, those who are most insulated and protected from the dangers of extreme heat can be identified with the opposite or missing variables, which mostly align with Hays' (2013) ADDRESSING framework, see Table 4.2.

**Table 4.2***Privileged Groups Most Insulated from Extreme Heat*

<b>Identity Domain/Factor</b>	<b>Privileged Group</b>
Age	Young to middle-aged adults
Socioeconomic Status	Middle class SES or above
Occupation	Work is not exposed to the outdoors; citizen or VISA-approved work
Health and Disability	In good health, able-bodied, mobile, access to healthcare

Many of the factors that protect or endanger against extreme heat and its effects converge with one another. However, the impacts of climate change are vast, and extreme heat is just one fatal and hazardous impact out of many more that are not explored in this dissertation. Yet, factors such as race/ethnicity, national origin, and Indigenous identity capture an insightfully poignant Venn diagram of risk/protective factors for climate change impacts.

***Overburdened Communities***

The COVID-19 mortality rates increased with long-term exposure to air pollution (Wu et al., 2020), and air pollution often increases with heat, particularly in urban areas (Hoffman et al., 2020). The Washington State Department of Ecology (WSDE, 2023) released a report identifying areas and communities “overburdened” by air pollution. Across Washington State, the report identified that as of 2021, 49 facilities that report their greenhouse gas emissions are in or near overburdened communities highly impacted by air pollution. People in these communities face higher health burdens and increased risk due to environmental hazards and socioeconomic vulnerabilities, including membership with people of color, low-income SES, and

linguistically-isolated populations. That is, overburdened communities that are comprised of historically marginalized populations, experience higher rates of impact and risk from air pollution and lack of access to mitigation measures (e.g., greenspaces).

One region that demonstrates this health inequity lies in South Seattle (WSDE, 2023), home to nearly 200,000 residents, and the same area in which Eya began her three-hour journey to a local beach using public transportation (The Wilderness Society, 2021). South Seattle's overburdened communities experience elevated rates of asthma, lower life expectancy, and higher rates of chronic conditions. Both long-term and short-term exposure to air pollution are associated with harmful outcomes; long-term exposure linked to development of asthma among children and chronic cardiovascular conditions among adults and short-term exposure is linked to aggravation of these diseases, increasing risk of a heart attack or stroke. Further, the report identified areas of vulnerability among those who are most vulnerable: "The community has a high density of locations where occupants may be more vulnerable to the adverse effects of pollution exposure, such as childcare facilities, schools, and healthcare facilities" (WSDE, 2023, p. 150). Mortality vis-à-vis air pollution is a multi-limbed beast in that it can transform and kill across a multitude of settings and factors. Deaths from cardiovascular disease are higher, and life expectancy is shorter in these communities.

The WSDE report (2023) included a map of South Seattle with a large highlighted portion spanning along Interstate-5, indicating the area as overburdened and highly impacted by air pollution. The western-facing portion of the South Seattle map was not highlighted (WSDE, 2023). The City of Seattle Office of Planning and Community Development (Seattle OPCD, n.d.) has an interactive map that displays the Racial and Social Equity Index of Seattle and its neighborhoods, utilizing combined factors that determine the density of priority populations

(e.g., race/ethnicity, language, SES). When comparing both maps, a trend appears: the highlighted portion signaling overburdened and high impact by air pollution is filled with neighborhoods that are marked as highest or second highest equity priority.

One such neighborhood that exists in this overlap, census tract 110.02, includes a portion of Interstate 5 (I-5) and lies near the King County International Airport (Seattle OPCD, n.d.). This neighborhood includes roughly 5,000 people, and falls within the highest 20% of equity priority (i.e., the highest equity priority) across Seattle. Related to the rest of Seattle, nearly half of this population is foreign born (98<sup>th</sup> percentile), over 50% are below 200% poverty (97<sup>th</sup> percentile), over one third are English Language Learners (99<sup>th</sup> percentile), nearly one in ten adults have asthma (84<sup>th</sup> percentile), have one or more disability (41<sup>st</sup> percentile), or are diagnosed with diabetes (99<sup>th</sup> percentile), and nearly 90% are people of color (100<sup>th</sup> percentile).

Conversely, several neighborhoods on the Western side of Seattle fall outside of the map overlap of overburdened/high impact and high equity priority. Per Seattle OPCD (n.d.), census tract 96 is a neighborhood that hugs Elliott Bay and Puget Sound and falls within the lowest 20% of equity priority (i.e., the lowest equity priority). Compared to the rest of Seattle, nearly 10% are foreign born (15<sup>h</sup> percentile), under 7% are below 200% poverty (8<sup>th</sup> percentile), less than 1% are English Language Learners (7<sup>th</sup> percentile), under 9% of adults have asthma (19<sup>th</sup> percentile), 7% of adults have one or more disability (20<sup>th</sup> percentile), 7% of adults are diagnosed with diabetes (70<sup>th</sup> percentile), and roughly 20% are people of color (5<sup>th</sup> percentile). More to the point, this neighborhood also lies in South Seattle, but it is not considered overburdened and highly impacted by air pollution, nor is it considered a priority in terms of racial and social equity. What is starkly contrasted are the demographics of race, national origin, socioeconomic status, and



health/disability between two neighborhoods that are in the same region of South Seattle and are less than four miles apart.

These example neighborhoods are not necessarily the pinnacle of inequity that can be sampled across the US. Instead, they are data that describe two neighborhoods nested in South Seattle near my home program at Antioch University Seattle, where the university lies outside of the area considered overburdened and highly impacted by air pollution. This *is* our backyard, or rather, just outside it.

### ***Not in Our Backyard***

Through an extensive history of racist policies and judicial rulings, such as urban renewal, exclusionary zoning, and redlining, America enacted racial segregation and “technically” legal racial discrimination: Black Americans could not obtain mortgages to purchase single-family homes; White communities were kept White by disallowing public housing; homes in “ghettos” were demolished; and new infrastructure was dedicated to accessibility and amenities for White communities. It was government-led and sponsored NIMBYism before the term existed, with the government and White communities viewing Black people and communities as “blights” to White America and prosperity. Structural racism was both the tool and product that allowed for and reproduced White spaces through the displacement and dispossession of Black and other marginalized communities.

While the segregation and impacts of these practices are both visible and felt today, they are experienced in new, alarming ways. In the wake of climate change, accessibility to adequate housing, air conditioning, greenspaces, and other forms safety and comfort through temperature regulation, are still divvied up through previously segregated areas. Urban areas previously marked by redlining are hotter due to less tree canopy and greenspaces, more concrete, and

increased air pollution through proxy to roadway and factories. Conversely, areas that were not redlined are better insulated and protected against heat, and are cooler than the previously redlined areas. Mortality rates and risk are greater for those who hold one or multiple identities as an older adult/child, low SES, or person with disability. Again, marginalized communities suffer the most at the comfort and safety of privileged communities, which are predominantly White.

Privilege is a unique mechanism in that it can be so starkly visible while being invisible to those who hold it, where themes of positive self-regard and maintenance of perceived normalcy persist among privileged groups. In 2003, Norgaard sought to understand how privileged populations in race, gender, and class contribute most to anthropogenic climate change yet hold a *laissez faire* attitude of non-urgency of climate change. Norgaard stipulated that climate perceptions are politically charged social constructions and she examined the how and why globally privileged people resist fully acknowledging climate change severity and accountability. Norgaard answered two questions: how privileged people recreate safety amidst the climate crisis and the significance of the constructions in reproducing transnational power relations of race, gender, and class, in what she described as the terms *tools of order* and *tools of innocence*. Tools of order reaffirmed denial of outcome severity and tools of innocence separated one's self from climate change implication. Climate change threatens cultural homogeneity, which creates security and order. Essentially, in response to threat, those in the privileged dominant group utilize privilege to create positive self-regard and maintain stability and dominant status through the construction of innocence and tools of order.

Similarly to Norgaard's (2003, 2012) conclusions of innocence and order as tools for the privileged in Norway, Phillips and Lowery (2018) noted that privileged members will engage in

masking privilege to preserve positive self-regard or privileges obtained from dominant group status. The researchers investigated racial privilege and referred to maintenance of positive self-regard as the *innocence motive* and the maintenance of privileges of their dominant group's status as the *maintenance motive* (Phillips & Lowery, 2018). The researchers noted that privilege is perceived as invisible by those who have privilege, yet, the invisibility is caused by compensatory strategies to remove discomfort associated with exposed privilege (Phillips & Lowery, 2018). Further, Phillips and Lowery (2018) identified that individuals masking their privilege leads to the emanation of invisibility on the societal level, producing what the researchers call a *herd invisibility*. Herd invisibility protects both the privileged individual and the dominant group without necessarily needing the individual engaging in maintenance of innocence or privileges (Phillips & Lowery, 2018). Both Norgaard's (2012) and Phillips and Lowery's (2018) studies demonstrate that privilege is both maintained and used to preserve innocence and the privileges of the dominant group. Therefore, it is beneficial for privileged groups to be unaware of privilege, minimize privilege, or find means to maintain privilege afforded by the lifestyle and power structures that created climate change.

In terms of climate change and climate denial, I propose a duality of visibility and blindness. *Not in My Backyard* is more than a declarative; it's a descriptor. On one hand, those who carry privilege, namely, White residents who also tend have compounding, intersecting privileged identities, are incredibly aware of perceived threats to their White spaces and will mobilize and seek to maintain their privilege and White spaces by preventing non-white and "otherness" encroachment. Concurrently, the same privileged groups experience the invisibility of their privileges as found by Norgaard (2003, 2012) and Phillips and Lowery (2018). This is done without the acknowledgement of racial motivation as that would undermine self and group

identity of while maintaining the illusion of innocence (Phillips & Lowery, 2018; Norgaard, 2003, 2012).

On the other hand, White spaces are just that, White spaces. They have been engineered to keep up the gated façade of White superiority while keeping its racial division and demarcation unspoken and unseen. White people in White spaces experience weather patterns and climate differently through the beautification and upkeep of White spaces via environmental and structural racism. Climate denialism is anecdotally more feasible when one is insulated from climate change due to privilege and its invisibility, and more so when one can look into their neighbor's yard and see no difference, no historical injustice continuing to be paved by ongoing oppression. Climate denialism is a means of protecting power hierarchy and subsequently, the way of life paved by the violence and exploitation of the power hierarchy.

### **Colonialism**

The following sections explore “-isms” and the power structures nested within them that foster climate denialism. Colonialism is the overarching umbrella used to analyze power hierarchies, perspectives, and impacts of interconnected ideologies and power structures of ableism, White supremacy, and hegemonic masculinity through patriarchy. While colonialism encompasses multiple dimensions of power dynamics, the interplay between ableism, White supremacy, and hegemonic masculinity within the colonial framework offers poignancy into the phenomenon of climate denialism. The examination of the intersection of ableism, White supremacy, and hegemonic masculinity under the domain of colonialism illuminates how systems of privilege contribute not only to the development of, but the perpetuation of environmental and social injustice and resistance to climate action. These structures of power, though capable of operating independently and outside of colonialism, hold unique,

compounding meaning when viewed through a colonial lens, serving as vehicles to enact and justify colonization. Moreover, they play a crucial role in framing beliefs and attitudes toward climate change, highlighting the profound legacy of colonialism on climate change beliefs, discourse, and action. Colonialism and climate denialism are essential for developing holistic approaches to address the root causes of environmental degradation and inequity, and is required to dismantle the structures of power that perpetuate environmental injustice and pave the way for a more equitable and sustainable future.

Isms are both the operating vehicle and creator of privileges (reflecting the duality of oppression and privileged) that also depict the hierarchical flow of power through marginalization. An ism, such as racism, sexism, ableism, or capitalism, encapsulates a marginalized group whose group/identity membership denotes perception and treatment as a second-class citizens or as subhuman at the benefit of the dominant group (Blume, 2022). For example, capitalism utilizes and justifies the labor of low SES classes (marginalized group), who face systemic barriers in financial, housing, and health security and wellness and are marked as “lazy” and amoralistic to fatten the wallets of and esteem those who hold capital; the ism denotes who gets “paid” and at whose expense is payment funded, be it financial, physical, emotional, or other forms of costs.

In the case of colonialism, it “is a practice of domination” (Kohn & Reddy, 2023, p. 1). *Colonialism* is power created through the conquest and exploitation of a people, territories, and resources, resulting in the generation of political, cultural, and economic wealth for the colonizing nation and peoples. Colonialism is a larger reflection of external power and dominant status. An old English proverb goes “The Irish will never be tamed while there are leaves on the trees” (IrishEVs, n.d., para. 21), which iterated that the destruction of the land the Irish had a

profound connection with and integration with Irish culture was necessary to unmake what tethers the people to their land, to one another, and to themselves. Destruction and “taming” of land was seen as a way to tame the people whose land was to be colonized and demonstrate superiority (Shokouhi, 2019).

When migrants move to another region, they do not hold privilege from their migrant status, and in fact, are considered part of the marginalized group (Veracini, 2011). Conversely, colonialism enables the movement of people (of a colonizing empire) to a new region and establishment of their dominancy. Broadly, colonialism is an exertion of control through subjugation, exploitation, and proclamation of the colonizing nation’s supremacy.

Colonialism can be refined further into what is called *settler colonialism*, which is a form of colonialism “in which people come to a land inhabited by (Indigenous) people and declare that land to be their new home. Settler colonialism is about the pursuit of land, not just labor or resources ... [and] is a persistent societal structure” (Rowe & Tuck, 2017, p. 4). Settler colonialism focuses on permanent occupation and operates on both the belief and supposed right to remove Indigenous Peoples, be it through displacement, genocide, assimilation, appropriation, or outright annihilation of culture. “Whereas colonialism reinforces the distinction between colony and metropole, settler colonialism erases it” (Veracini, 2011, p. 3). Settler colonialism justifies and operates through the erasure of the Indigenous population, be it through physical or metaphysical means, or both (Veracini, 2011).

The US is a prominent example of settler colonialism. The legacy of settler colonialism built the empire of the US through the historical and ongoing violence, displacement, and “diplomatic” deceit of the Indigenous people. “Settler colonialism licenses the disappearance of Indigenous[sic] peoples, the expropriation of Indigenous[sic] spaces, and makes others infinitely

exploitable and/or expendable (e.g., slaves, immigrant labor, prisoners)” (Bonds & Inwood, 2016, p. 721). In line with the ideals of settler colonialism, land became private property, Indigenous people were murdered en masse and displaced from ancestral homes, and Africans were enslaved and brought over the Atlantic Ocean as property to work on property. Forced removal, violence, and chattel slavery were born of settler colonialism to pave the way for the industrial revolution to then pave the way for the fossil fuel industry. Climate change is inseparable from colonialism, particularly settler colonialism. It does not appear to be a coincidence that the US is (a) the leading offender for climate change across countries (b) leader in climate denialism among rich countries, and (c) is nested in the legacy of settler colonialism (Hickel, 2020).

Capitalism channeled through colonialism, particularly settler colonialism, yielded concepts of morality of property and pollution. On colonialism’s morality of property, John Locke, a colonial favorite, had rationalized and encouraged that land must be “put to use” or it is otherwise of little use or an outright waste, describing that “using a resource to its maximum potential is good; to squander is bad” (Liboiron, 2021, p. 70). The privatization of land allowed for this and subsisted on the idea there was an inherent, natural-born economic right to maximally extract and produce from land. Production above all else. Further, this moral foundational perspective also became the rationale for the superiority of Europeans and the inferiority of Indigenous peoples. Failure to turn land into property by not laboring the land then failed to become proper human subjects (T. L. King, 2019). The use of land is then a moral one, and European colonial settlers self-identified as the ones, the saviors, who would put the currently wasted land to “good” use, and “rightfully and “justifiably” dispossess Indigenous peoples (Liboiron, 2021).

If a land's maximum use was considered to be best used as a sink for pollution, then it was both morally justifiable and encouraged to utilize it as such. "Pollution is about maintaining differentiation through appropriation and access to land, about keeping it reserved for settler goals and unavailable for other Land relations" (Liboiron, 2021, pp. 76–77). Even in John Gast's (1872) painting *American Progress*, the depiction of manifest destiny, the land is transformed from its "primitive" state where Indigenous people are seen fleeing in darkness from the enlightenment brought by the dawn of civilization (colonialism) to the "optimal" and "proper" use of the land, transfigured by railroads, electricity, ports, and animal husbandry. Liboiron (2021) noted, "allowing settlers to think of their uses of land, for pollution or otherwise, as proper and right because it belongs to them and their goals and their future, whether individual or collective" (p. 68). Not only is this seen as progress, it is seen as *American* progress, and a very righteous and patriotic progress at that.

Climate change is the ramification of the aforementioned morally righteous and patriotic "progress." Permissiveness to pollute from the morality of property legally allows for a level of "acceptability" of pollutants, on an individual and corporate level. The EPA has a table detailing pollutants and their maximum pollution threshold, such as not exceeding exposure to carbon monoxide 9ppm by eight hours more than once per year (EPA, 2024). Capitalism under colonialism denotes that there is a certain threshold between suboptimal use of pollutable land and "too much" pollution, with subsequent spills are permissible risks despite their high frequency (Liboiron, 2021). Furthermore, as described in environmental privilege and through the effects of structural and environmental racism, pollutant sources are consistently placed in areas populated by marginalized communities while White residential areas are kept safer from pollution sources. "‘But that’s the great contradiction of colonialism.’ Cathy uttered this like a



simple matter of fact. ‘It’s built to destroy that which it prizes most.’” (Kuang, 2022, p. 384).

Ultimately, colonialism prizes profit through extraction and production by any means necessary, even when it causes climate cataclysm.

The inevitability that “human nature” results in the unsustainability and resulting collapse of environmental and economic structures and viabilities is an assumption rooted in colonial thinking (McEwan, 2021). This kind of belief is oblivious and dismissive to the people and practices of land-relations that have spanned thousands of years in cultures outside of Europe, which, additionally, have been and continue to be repeatedly undermined and destroyed through colonialism (A. Brown, 2020; McEwan, 2021; Varanasi, 2022; Wilkins, 2023). Indigenous voices are continuously excluded from climate change resolutions but are consistently most impacted and vulnerable to climate change impacts (Pörtner et al., 2022). Furthermore, such thinking assumes power hierarchies as they exist today are inevitable and thus require no internal reflection as to why and how social and power structures operate as they do. This reflects the “it’s just the way things are” mindset of dysconsciousness, which is a key thought pattern of privilege—the justification and invisibility of power hierarchies as an innate trait of existence (J. E. King, 1991).

Colonialism was recently inserted into the IPCC’s (Pörtner et al., 2022) sixth assessment report on climate change and was cited as a primary driver for historical and ongoing disparities in climate change vulnerabilities across regions and peoples (Varanasi, 2022). Colonialism has been absent from the IPCC’s previous reports (Carmona et al., 2023). While the sixth report identifies colonialism as a historical and ongoing impacting factor of marginalization and vulnerability, the report fails to identify how colonialism created the climate crisis and the multitude of varied ways that colonialism affects climate change impacts experienced by

Indigenous Peoples as well as proposed and executed mitigation actions (Carmona et al., 2023; Masson-Delmotte et al., 2021; Pörtner et al., 2022). What colonialism demonstrates is the devouring of self and others to sustain one's self, and in the case of oil spills in Mill Creek, the Keystone pipeline, the Flint, Michigan water crisis, is the poisoning of homeland for profit. Colonialism is inextricable from climate change, and as such, is core to the mechanisms and sustainment of climate denialism.

### **Ableism**

I would be remiss in not mentioning that my conceptualization of ableism as a foundational underpinning of climate denialism is due to the incredible wisdom and lessons from Imani Barbarin. Imani Barbarin is a Black, queer, disabled activist with a Masters in Global Communications. She uses her TikTok platform (Barbarin, n.d.) to engage, educate, and encourage critical analyses on issues of communications and its intersection with other fields of study, concepts, and world events. Her continued contribution of expertise, which is free to access through TikTok, yielded a shift in my perspective in viewing how ableism is centered in power structures and is itself a tool for marginalization. “Every form—every single form of marginalization, globally, leads to disability” (Barbarin, 2023c, 0:17). Marginalization anywhere leads to disability everywhere. Disability is created through “the violence we experience, structural barriers we experience, the food deserts, the lack of resources, the discrimination, the racism, the sexism, the homophobia, the transphobia ... every single one of them—leads to disability in some way” (Barbarin, 2023c, 0:34). Disability among marginalized groups (that were not previously disabled) can occur in a myriad of ways, but they occur, nonetheless.

Because *marginalization leads to disability* (Barbarin, 2023c), this section on ableism will highlight will detail how intersecting privileged and oppressed identities can overlap with

one another, either increasing or decreasing an individual's or group's chances of health, financial stability, and status. While no one is immune to disability, privileged identities protect and safeguard against disability. Power dynamics serve as the nucleus of this section from which all connections are made, examining how eugenics, born of ableism, centers beliefs of supremacy, domination, and climate denialism. This exploration serves as a vital foundation for understanding climate denialism from a nuanced, inclusive perspective that does not shy away from turning the focus inward and toward identities, groups, and systems that hold power and utilize power for continued oppression and self-benefit.

Fundamentally, ableism is the notion of perceived superiority combined with the marginalization of disabled individuals and privileging of able-bodied individuals and groups. Ableism is further reproduced and compounded by eugenics, the principles of which hold certain traits as “desirable” or “superior,” and are thus to be more valued and protected, while other traits are “undesirable” or “inferior” and are devalued and destroyed (e.g., forced sterilization, expendability). Both ableism and eugenics rely on hierarchies of human value, perpetuating the marginalization and dehumanization of those deemed inferior, a prominent theme used to justify the dispossession and genocide of Indigenous Peoples.

Eugenics and ableism are deeply intertwined with colonialism because they served as the justification and God-granted “right” to dominate other groups by promoting notions of racial and biological superiority (i.e., White supremacy and ableism), such as with the killing of Indigenous Peoples and the enslavement of African Peoples (Blume, 2022). “Disabling these groups of people has always been grounds for extermination, institutionalization, and harm” (Barbarin, 2023b, 0:29). Dehumanizing and othering marginalized groups reinforces the hierarchy of human value and superiority/inferiority while demonstrating the righteousness of

the dominating system of superiority and inferiority. Colonial (Western) ideals of civilization and progress reinforced notions of superiority, with those who were to be colonized portrayed as primitive and inferior and a necessary expense for the sake of Western progress and growth.

Colonialism's legacy of eugenics and ableism is very much alive and well today and is still perpetuating systems of oppression and power relations of domination through marginalization and exclusion of disability. The perceived superiority of able-bodied individuals is deeply ingrained in societal attitudes towards disability, perpetuating systems of oppression and marginalization. As Barbarin (2023a; 2023b; 2023c) described, disability is present everywhere marginalization exists, and those who benefit from able-bodied and other forms of privilege benefit from the continued marginalization and disabling of others.

### ***Representation across Identities***

Disability is highly represented among marginalized groups and far less represented among privileged groups. Approximately one in four adults are identified as having some type of disability (Centers for Disease Control and Prevention [CDC], 2023). According to Courtney-Long et al. (2017), disability status among adults in the US varies by race and ethnicity and the following represents those who have disability, as differentiated by race and ethnicity and Indigenous identity in Figure 4.1.

**Figure 4.1***Self-identified Disability across Race, Ethnicity, and Indigenous Identity*

Asian-identified populations in the US were most likely to not identify as disabled with White people being the second most populous group to not identify as disabled. Long et al. (2017) did not distinguish between groups of White, non-Hispanic and White and Hispanic, so it is possible this statistic could be further differentiated to reflect the protective ethnic and racial privilege of European whiteness. Further, Indigenous populations experience disability far more frequently than any other group, as Long et al. (2017) captured, demonstrating how marginalization through Indigenous identity perpetuates marginalization in ability status. While the statistics capture a singular facet of disability, either the presence or absence of disability, the data does not display how disability is created (e.g., lack of healthcare, physical labor, violence, or other structural inequities created through colonialism) nor its implications (e.g., further disability, job loss, mortality, healthcare treatment). So while disparity can be seen through the data across racial, ethnic, and Indigenous identities, the disparities are only superficially visible.

Disability also has a profound intersection with SES. When assessing for poverty levels among the population, the US government utilizes two tools, the official poverty measure (OPM) and the Supplemental Poverty Measure (SPM). The SPM is a more expansive measure than the OPM by way of its accounting for illuminating factors such as changes in tax policies, necessary expenses (e.g., healthcare, work), and noncash resources (Shrider & Creamer, 2023). Of note, in identifying poverty levels across differing variables, the SPM rates are not always greater than the rates produced by the OPM. The U.S. Census Bureau's 2023 report on poverty in 2022, authors Shrider and Creamer's SPM identified that 12.4% of Americans were recorded to be living in poverty in 2022, an increase from the official poverty rate of 11.5% of 2022, and an increase from 7.8% in 2022. Instead of the official poverty rate capturing 37.9 million people, the SPM identifies an estimated additional three million living in poverty in 2022 in the US, bringing the total to about 40.9 million residents of a near estimation of 330,000,000 people living in America. Using SPM to capture adults aged from 18 to 64 in 2022, 10.9% of those living in poverty had no disability while 23.0% of individuals with a disability were below the poverty line (Shrider & Creamer, 2023). Of note, these disability statistics stacked with poverty level do not encompass the total sum of the population due to disability status not being defined for members in the US armed forces (Shrider & Creamer, 2023).

In terms of race, ethnicity, and Hispanic origin, SPM rates for 2022 (Shrider & Creamer, 2023) are labelled in Table 4.3.

**Table 4.3***Supplemental Poverty Measure (SPM) Rate across Demographics of Race and Ethnicity*

<b>Race, Hispanic Origin, Indigenous Identity</b>	<b>Supplemental Poverty Measure Rate</b>
White, non-Hispanic	9.1
White	11.4
Black	17.2
Asian	11.6
Indigenous or Alaska Native	23.2
Hispanic (any race)	19.3

The data once again demonstrates that Indigenous identities have the highest percentage of additional marginalization via SES while the White population (non-Hispanic) is the most protected from marginalization via poverty. When examining national origin, another of the major forms of privilege, sharp differences can be observed between those who hold privilege in national origin whilst holding marginalization in SES (i.e., poverty level as determined by SPM) and those whose identities in national origin and SES are both marginalized. Per Shrider and Creamer's report (2023), 11.2% of native-born residents live in poverty and this number is almost doubled for those who are foreign-born and residing in the US at 19.0%, yet, this statistic is over doubled for those 24.4% who are not citizens and are living in poverty. Perhaps unsurprisingly, those whose housing is based on rent are identified an SPM rate of 22.2% in 2022 (Shrider & Creamer, 2023).

### ***COVID-19, Capitalism, and Climate Denial***

It perhaps also comes as no surprise that the COVID-19 pandemic, a mass disabling event, had hit Indigenous communities the hardest, globally (Yellowhorse, 2022). "Disability as

a social and political construct is deeply rooted in histories of Indigenous death and dispossession” (Yellowhorse, 2022, p. 607). A legacy of ableism through colonialism has justified the deaths and discrimination against disabled people and communities, many of which, held multiple marginalized identities. The pandemic brought these unspoken values and attitudes to the forefront with calls to save the economy while millions died or were disabled from the virus, with disabled people facing treatment and triage protocol discrimination and bias and dying at a disproportionately higher rate (Baksh et al., 2021; H. K. Brown et al., 2022; Felt et al., 2022; García-Azorín et al., 2020; Scully, 2020).

While capitalism operates outside of colonialism, it is frequently intertwined with colonialism. Capitalism is a power relation that, in addition to funneling power from the proletariat to the owning class, imposes value through ability to produce. Capitalism categorizes people and environment through a deficit model (Yellowhorse, 2018). Productivity denotes value, and non-productivity denotes burden to society. Productivity is lauded and celebrated, and individuals who are “productive” are held in high esteem. Similarly, colonialism is once again justified through this capitalist principle of productivity through the morality of property (i.e., land that is not “used” to its “maximum potential” is wasted land). In terms of people, colonialism was justified not only because land was not used “optimally” but because the Indigenous people residing on the land were inferior for not doing so (Liboiron, 2021). Capitalist-colonialism decreed that Indigenous people were not and could not be “productive” members of society.

Disability is similarly viewed as a burden to society, as unproductive and wasteful, and ultimately, expendable (Yellowhorse, 2022). The pandemic highlighted just how expendable disabled people were/are in the attempts to return to the social and economic “normal” with



capitalism heralding productivity and economy above all else. This connection can be made to climate change and climate denialism. The same communities vulnerable to the immediate and ongoing effects of the pandemic are the same who are most vulnerable to climate change (I. Cohen, 2021). While researchers will likely be investigating the impacts of the pandemic for years to come, one study quickly identified a positive correlation with COVID-19 mortality and living in areas with more air pollution (Wu et al., 2020).

On the opposite end of the spectrum, when examining privilege, those who are most insulated from COVID-19 and climate change are most likely to engage in denialism and behaviors related to climate change and COVID-19 (Hamilton, 2024; Latkin et al., 2021). Latkin et al. (2021) identified that social distancing, mask wearing, and vaccination, all of which are preventative measures that aid the disability community in creating safety from the virus, were inversely related to climate denialism. As denial of climate change increased, COVID-19 denial increased, and mitigating countermeasures were decreased. Further, a study found that the umbrella of Trumpism, which is itself predicted by older age, White race, evangelical religion, and conservative ideology (i.e., privileged identities across multiple domains), increased denialism across both domains (Hamilton, 2024).

Again, the cost of “normal” under the banner of capitalism, was and remains to be (Black, brown, Indigenous) disabled bodies. In fact, it is seen as a “necessary” expense; per Trump, “we cannot let the cure be worse than the problem itself” (Haberman & Sanger, 2020, para. 2). Disabled bodies have always been expendable, othered, and seen as less-than, while the same privileged groups among climate and COVID-19 denialists benefited and contributed to the expenditure of disabled bodies through denialism and absence of mitigation measures. It is worth mentioning that able-bodied and other privileged groups historically have benefited from

capitalism, and the emphasis, denialism, and external behaviors associated with pursuing and prioritizing capitalism in the face of a global pandemic and climate change is indicative of its colonial roots and the benefits and protections bestowed to those who deny and defend their right to continue to marginalize oppressed groups.

### **White Supremacy**

A justifier and propagator of settler colonialism is White supremacy. White supremacy is a historical and institutional ideology that purports and perpetuates that whiteness is superior to non-whiteness and supports cultural, political, and economic domination of these “inferior” groups. White supremacy created “imaginings [that] valorized whiteness and sanctioned the violence of White domination, enslavement, and genocide while bolstering Eurocentric understandings of land use, private property, and wealth accumulation” (Bonds & Inwood, 2016, p. 720). During his interview on the Daily Show (Amira & Meyer, 2021), Nick Offerman reflected on the genocide of the Indigenous people in America by the Europeans: “We were always brought up to believe that to conquer something was positive, like, we’re the victors—that makes us heroes.” As such, characterizations of whiteness through warrior or pioneer identities illustrate the narrative that whiteness and White violence is heroic. White supremacy ordained whiteness to be conqueror and savior through colonialism, upholding domination of other through racial superiority.

As Kivel (1996) described it, “whiteness is a constantly shifting boundary separating those who are entitled to have certain privileges from those whose exploitation and vulnerability to violence is justified by their not being White” (p.19). In Britain’s colonization of Ireland, the Irish were viewed as inferior to the British. The British utilized White supremacy in its colonization of America. While the circumstances of colonization of these two regions are vastly

different, they utilized the same tactic of innate superiority of the colonizers over those who lived on the land they desired to be colonized. The utilization of White supremacy in the colonization of America, however, required the genocide of the Indigenous people and created lasting hierarchal structures that systemically reproduce White supremacy today.

White supremacy operates through the oppression of those who are considered to be inferior due to race, whether the oppression be through violence, exploitation, or other form of harm. White supremacy was a necessary tool for settler colonialism to enable and justify White violence, settlement, and spread of culture, with the composition of White supremacy still asserting and justifying power and control over marginalized groups today (Blume, 2022). In the wake of climate change caused by centuries of colonialism, White supremacy continues to dominate both domestic and foreign politics and economies as well as the other. Marginalized communities are not only disproportionately affected by climate change, but their oppression continues to purchase the safety and interests of privileged groups from climate change. Thus, addressing climate change requires confronting and dismantling systems of White supremacy that perpetuate injustice. Similar to patriarchy, under the looming threat of climate change, White supremacy demands the protection of current power structures, “superior” status, and “owed” privileges, which is accomplished through violence on an individual, group, institutional, and national level (Bonds & Inwood, 2016). In the intersection of identities, White supremacy informs the notion that White, able-bodied, cisgender men are at top of the social hierarchy at the cost of others’ subordination (Bonds & Inwood, 2016).

### ***White Supremacy in Communities, in Colonialism***

Pullman is a little university town in eastern Washington. Here, the population triples when the Washington State University (WSU) students return. WSU is nestled amongst the

Pullman hills, a locus of academia amongst the vast expanse of wheat and canola fields. It is, by its very nature, a rural area dedicated to agricultural production. Pullman is also incredibly White. About 70% of its residents identify as White (U.S. Census Bureau, 2020), with myself now being one among them. Despite Pullman housing the more liberal epicenters of WSU and the neighboring University of Idaho, the city lies in an overall conservative part of Washington State. I am most viscerally reminded of this fact on my morning commute to work.

My mornings consist of parking off-campus, grabbing a coffee from a local joint if I am feeling particularly luxurious or in need of a jolt, and a 15 minute walk to reach my destination in WSU. During the bipedal portion of my trek, I cross a long winded pedestrian walkway on a bridge which harbors the shredded remains of White supremacist stickers. These “decorations” were not shredded previously, as it had been mine own hands that had desperately clawed away their messages, hoping to undo the damage that they had caused and wondering how many eyes had seen and considered their words, or how many had read them and moved on with indifference.

Whenever I pass the tattered vestiges stubbornly plastered on the railings and lampposts, I remember their words and the rage they invoked: A picture of the lower 48 US with the caption: “Not Stolen, Conquered;” “Better Dead than Red;” and “Reject Poison” with a general prohibition slashing through a needle, cigarette, pills, and a cannabis leaf. Interconnected with one another, settler colonialism, White nationalism, and White supremacy were the dominant themes. Figure 4.2 is one of the many stickers and flyers I scraped away, and it encapsulated all three themes.

**Figure 4.2***White Supremacist Propaganda in Pullman, WA*

*Note.* While I am reminded of the distribution of White supremacy propaganda with every workday commute, I also have the immense pleasure to see new works of art, declarations, and community installed in the same area: I pass by an ‘End White Supremacy’ sticker that had cropped up a month after the White supremacy propaganda had; a smile crinkles my eyes as I read “Defend Drag” drawn boldly in sharpie; I admire the bold typeface of “FREE PALESTINE”; I whisper “hell yeah” while reading a flyer calling for democratic socialists to convene at WSU. Oppression is a story that cannot be told without also proclaiming the indisputable narrative of resistance, resilience, strength, beauty, and courage.

The flyer pictured in Figure 4.2 evokes several themes akin to Gast's (1872) painting of *American Progress*. "Forward" is both a command and a signifier of "progress," a mantle taken up by three White people who appear to be men:

When our pre-Columbian forefathers left their European homes, they found a savage continent. They held a variety of purpose, yet against the harsh life on the frontier and the common enemy in the strange and unexplored reaches of America yet to be touched by civilization, they found a common cause and a common identity as Americans. (Patriot Front, n.d., para. 2)

Whiteness was a savior, a gift of civilization to "savage" yet pristine lands—the same lands that were very much already under the stewardship of the Indigenous Peoples and a part of rich civilizations and cultures, having been so for thousands of years. What Figure 4.2 has conveyed is a righteousness, a justification, and a call-to-arms by invoking White nationalism. The image alludes to the need for action, that something, be it a future, ideal, or the very spirit of America must be taken. In Gast's (1872) work, the forward march and transformation of land through manifest destiny was also viewed as patriotic and American. "To be an American is to be a descendant of conquerors, pioneers, visionaries, and explorers. This unique identity was given to us by our ancestors, and this national spirit remains firmly rooted in our blood" (Patriot Front, n.d., para. 2). Both Figure 4.2 and *American Progress* (Gast, 1872) view the White represented persons as worthy, morally-compelled conquerors and (cis male) heroes on a holy quest for a new, better America, a quest granted through the virtue of (unpolluted) whiteness.

White supremacy is inseparable from ableism, eugenics, and colonialism. Eugenicist policies have historically targeted People of Color, immigrants, Indigenous Peoples, disabled individuals, and other marginalized groups through forced sterilization and attempts to preserve

whiteness (Schuller, 2021). Per White supremacy, these marginalized groups hold innate inferiority through biological (and thus, hereditary) flaws that “pollute” the race of humankind and had required their eradication through processes like forced sterilization. White supremacy demands violence and stipulates superiority through destruction of people, places, and ideas that are not incorporated in whiteness. White supremacy necessitated the genocide of the Indigenous people for settler colonial goals, White supremacy dictated that Africans were meant to be enslaved due to supposed inferiority of Blackness to supposed superiority of whiteness. Moreover, White supremacy views presence of the other as contamination of whiteness, be it disability, queer identity, or being BIPOC; they are seen as pollutants (Zimring, 2016).

In the aforementioned sticker of “Reject Poison” (unpictured), the message similarly alludes to a concept of internal purity, free of any pollutants like cigarettes or medication. It further denotes that the White body is something holy, something to be kept pure. The same notion bleeds into the living spaces, such as the neighborhoods staunchly defended by NIMBYism and legal precedent (*Village of Euclid v. Ambler Realty Co.*, 1926; Hubbard, 2005). The idea remains consistent across White supremacy: pollutants are acceptable so long as they are kept away from White bodies, and in fact, are encouraged if they bring about profit through exploitation of land and people. White supremacy draws on eugenics’ notions of racial purity and genetic superiority to justify oppressive practices, perceived superiority, and continued unmaking of the other to uphold dominant power structures. Climate change is a product of colonialism and all of its transitive ideologies, such as ableism and White supremacy. Climate denialism inevitability has its origins in the yoke of White supremacy fashioned through nationalist rhetoric and ableism (Krange et al., 2019; Kulin et al., 2021).

In 2022, the Anti-Defamation League Center on Extremism (ADL COE, 2023) identified a significant increase of 38% from 2021's cases of White supremacist propaganda being distributed across America. Nearly seven thousand incidents were reported in 2022, which is the highest number ever captured by the ADL COE (2023). According to the center's data, Patriot Front, the authors of the many stickers and flyers I sought to turn into ribbons, was responsible for a whopping 80% of these distribution efforts in 2022. There are several possibilities as to why propaganda numbers exploded in 2022, but the fact remains that White supremacist efforts have visibly increased in their attempts to disseminate White supremacist beliefs and recruit new members. White supremacy is alive and well in America, and although Neo-Nazi groups like Patriot Front are prime examples of White supremacy operating in the US, White supremacy is imbedded in the institutions and structures of American democracy and government as well as within the people who do not identify with extremist beliefs.

### ***White Privilege***

White supremacy yields White privilege, and does so in a far more subtle fashion than the extremism used as a limiting defining example of White supremacy; White privilege granted by White supremacy is made to be quiet and invisible. Subsequently, White privilege then becomes a self-perpetuating tool for the continued existence of White supremacy, thus reinforcing White privilege indefinitely. To aid in self-propagation, White privilege denotes multiple benefits and characteristics to the challenge of benefits and privilege overall. Burch (2023) identified a non-exhaustive list of five privileges and reactions based in communication granted to White people through White privilege: right to comfort; right to access; defensiveness; borrowed outrage; and dismissiveness.



The right to comfort is the right to emotional and psychological comfort of feelings and thoughts; right to comfort is antithetical to being challenged, and when being challenged, it must be done “gently” so as to not make one *too* uncomfortable. Right to access entails the entitlement to a marginalized person’s time, energy, resources, knowledge, and body, such as expectation of unpaid labor through education or permission to touch a Black person’s hair. Defensiveness is the justified reaction to any perceived challenge to these privileges, whether it be through utilizing “logic” to defend against a challenge or defending one’s self by decrying not to be racist or causing harm. Challenge to privilege is seen as a personal attack and defensiveness encapsulates the defense of the person against perceived threats to the self or one’s character.

Borrowed outrage is used to distance one’s self from the dominant group in power and is frequently paired with “not all White people” or “not all White women.” Borrowed outrage is a unique privilege in that, in terms of White supremacy, will show up frequently among White women because there is a pivotal shift in using the marginalized status of womanhood as a defense against being lumped into “white people” while centering whiteness. Lastly, dismissiveness is the outright rejection, denial, or willful ignorance to rebuff or not examine a direct challenge or not attend to power structures in the environs. There is immense privilege in not having to examine an issue closely, being able to switch off the news, or dismissing someone’s lived experience.

White privilege functions as a self-sustaining mechanism within the framework of White supremacy through five privileges granted to White people through White privilege: the right to comfort, right to access, defensiveness, borrowed outrage, and dismissiveness (Burch, 2023). These privileges serve to maintain the status quo by providing benefits and characteristics that shield White individuals from accountability and perpetuate systemic inequality and White

supremacy. There are likely many White people who do not endorse White supremacy on a scale of those in neo-Nazi groups like Patriot Front, but can still defend internalized White supremacy and may present through one of the White privileges, such as right to comfort or right to access. Again, while these privileges may appear minor in comparison to mention of genocide, slavery, and White purity rhetoric, they can be dangerous; there is cleverness in the secrecy and its seemingly benign nature, as it is far easier to ignore or defend.

Curtis Cook (2023) is a Black stand-up comedian whose routine demonstrated the protective features of privilege as well as the flexible nature of racial privilege. Cook described a recent vacation to Sierra Leone with his partner as a Black couple. Cook narrated that, due to being light-skinned, both he and his partner were seen as and considered to be White, saying, “nobody ever warned me that being White goes straight to your head” (Cook, 2023, 0:53). Cook chronicled his experience to the audience, sharing that his trip to Sierra Leone was the best vacation he ever had due to be treated as if he were White:

I’ve been Black in America the whole time, and frequently I’m frustrated, like, ‘yo, why don’t these motherfuckers do more when they know their complicity is the root of the problem?’ I was White in Africa for three days before I was like, ‘Why would I change a perfect system?’ (Cook, 2023, 0:57)

Cook’s humorous story-telling emphasizes that complicity of the privileged is necessary to maintain the benefits of the privileged and to dismiss, ignore, or reject the harms bought by privilege. Furthermore, Cook explains that through White privilege, White people are incentivized not to disrupt or alter “a perfect system.”

The implications of climate change are clear: caused by centuries of “a perfect system,” the current way of life for millions of people is untenable and collective action, both among

governments and individuals, must be taken to prevent further devastation of our Earth. Further, recognition of climate change requires the concurrent recognition that BIPOC and other marginalized groups are disproportionately affected by climate change due to systemic injustice caused by systems of oppression, such as colonialism and White supremacy. Climate change is a direct challenge to multiple privileges through its challenge of the current status quo. White supremacy reinforces climate denialism by prioritizing the preservation of privilege and current power structures over the needs of vulnerable marginalized populations. In fact, under White supremacy, continued domination and exploitation of marginalized groups through climate denialism (e.g., polluted communities, NIMBYism, treaty violations) is justified for the sake of “modernity” and American “progress.”

White supremacy dictates that when confronted with information that challenges White privileges (and the inherent structures they reside in), as climate change inevitably does, certain themes among White people can be observed (Burch, 2023). The right to access demands the continued access to Black and Brown bodies to labor for White comforts, or demands their suffering as bodies of pollutable sites and communities, and demands access to exploit and pollute Indigenous land. Defensiveness justifies the righteousness of the counter-movement of denial, with superficially scientific explanations that “debunk” climate change or defending environmental inequities experienced by marginalized groups to be normal (i.e., not based in historical legacies or racism and colonialism). Borrowed outrage decrees perceived threats to privilege, be it through proposed taxes or limits on fossil fuels, as persecution and oppression of American freedom (i.e., “I’m the one being oppressed”). Lastly, both right to comfort and dismissiveness serve to quiet their privileges by demanding personal and collective accountability not be challenged while living in a relatively pollutant-free neighborhood or

vacationing in Cancún while millions of Texans were stranded without heat and basic supplies (McCarthy, 2021).

White supremacy demands the continued domination of the other and proliferation of the power hierarchy through both unspoken and spoken virtues, values, and goals, such as calls to nationalism and ableism through historically sanctioned violence and exploitation while promoting colonial concepts of (private and pollutable) land use and wealth accumulation. Climate denialism demands the perpetuation of White supremacy and White privileges because climate change developed from White supremacy under colonialism. Denying climate change serves to also deny the reality of the isms that procured its existence, to contraindicate the past and current White right to displacement of Indigenous Peoples, spreading of superior culture through conquest, and exploitation of land and marginalized or “inferior” people. However, White supremacy is only one facet bequeathed by the behemoth of colonialism, and it works in tandem with capitalism, ableism, and patriarchy to both create the crisis of climate change and the conditions of its denial.

### **Patriarchy and Hegemonic Masculinity**

Hegemonic masculinity represents the exalted form of masculinity within a culture that idealizes masculinity proclaiming that men should hold high power, status, and toughness (physical, emotional, mental), while distancing from femininity or other perceived “unmanly” (i.e., feminine and queer) traits (Vescio & Schermerhorn, 2021). Hegemonic masculinity is not selectively glued to men, and can be endorsed at any point across the gender spectrum, justifying dominance of certain groups over others. Power is connected to men, and particularly men who hold other forms of dominant privilege (e.g., White, straight, able-bodied, wealthy), that is then held over (perceived) non-men (e.g., cis women and transgender and gender-diverse [TGD])

people) and men who hold marginalized identities (e.g., BIPOC, queer, disabled, trans, and poor men). Hegemonic masculinity endorsement perpetuates gender binaries and reinforces other forms of discrimination through to value and perspective of justified, even “natural” superiority. Akin to White supremacy and colonialism, hegemonic masculinity maintains male dominance and dominant group supremacy.

Hegemonic masculinity is related to and possible through patriarchy, but they are distinct concepts. The structure of patriarchy is fed and valued as power *over* (anything); power is created through domination and the emphasis is on the individual over the group or community, once again highlighting how Adler’s social interest (1929) is impossible within the web of power hierarchies (Ansbacher, 1992). There is no community in whiteness (Barbarin, 2022); there is no community in patriarchy. Conversely, (intersectional) feminism is relational and power is derived from solidarity with others and the centering of marginalized voices in a manner that demonstrates an equity-focused and community-driven ideology and approach. Patriarchy is power *over* (anything) and feminism is power *with* (others). If patriarchy is a map, hegemonic masculinity is the key assigning meaning to symbols.

Shyminsky (2022) described how, throughout history, it was and remains a common occurrence for men to decry that present-day men are less masculine compared to their historical predecessors while yearning for the return to masculinity of men in the past. The common theme of hegemonic masculinity is that men are never as masculine as they once were (Shyminsky, 2022). Through this design of hegemonic masculinity, masculinity itself is a self-perpetuating policing and yearning of the nostalgic masculinity of the past. “[Masculinity] is every bit as illusory and elusive...in all iterations of masculinity, it is never achievable—it is only ever aspirational” (Shyminsky, 2022, 2:30). This can be done through the reverence of “golden ages”

of manliness, as defined by hegemonic masculinity, such as romanticization of the Roman Empire or of WWII because it glorifies men as conquerors, warriors, or defenders against outside threats to physicality and pervasive ideas tied with identity, such as freedom and nationalism. Hegemonic masculinity is also perpetuated through White supremacy with the idea that whiteness, particularly White men, are saviors to wherever violence was deemed necessary in terms of conquest or protection, which sets up men and whiteness to be heroes and portents of modernity and civilization.

### ***Manliness of Climate Denialism***

As previously mentioned, hegemonic masculinity endorsement is not exclusive to men. Despite only gathering data within the gender binary, which is itself a colonial construct that dismisses and others the complex spectrum of gender, endorsement of hegemonic masculinity was the biggest predictor of voting for American presidential candidates in 2016 and 2020. Indeed, hegemonic masculinity vastly outperformed prediction over other variables like party affiliation, gender, race, and education (Vescio & Schermerhorn, 2021). Fifty-three and 55% of White women voted for Trump in the 2016 and 2020 presidential election, respectively (J. M. Jackson, 2020), and marginalization through gender identity of womanhood does not preclude engaging in oppressive systems like White supremacy or patriarchy. “It’s time to stop coddling White women when they bolster White supremacy, and to push for concrete acts of solidarity” (J. M. Jackson, 2020, para. 1). White women have a long, entrenched history of marginalizing and harming oppressed groups through their concurrent feigning of innocence through marginalized identity and sustainment of harm through White supremacy (J. M. Jackson, 2020; Schuller, 2021), as it is also true for patriarchy.

With the implied changes that would occur in recognizing climate change, it perhaps is no surprise that groups who hold privilege through structures of power not only endorse climate denialism but reject through attacking threats to said power and privilege: “given the amount of money and privilege at stake, the tragic ethos demanded by global environmental justice is being resisted” (Daggett, 2018, p. 27). Utilizing McCright and Dunlap’s (2011) work which identified White, conservative men as having the highest rates of climate denialism, Daggett (2018) made an additional connection, linking this population to being the largest proponents of fossil fuels, which Daggett explains through the concept of petro-masculinity. Fossil fuel use is inseparable from White masculinity; the patriotic American way of life consists of a nostalgia of the golden age of hegemonic masculinity, when White patriarchal rule subsisted off of fossil fuel systems and fossil fuel consumption and driven by racial oppression, resulting in the stereotypical White nuclear family. Further, through gender binary thinking produced by hegemonic masculinity, whereas untrammelled exploitation and pollution of land through personal and corporate use is viewed as masculine and righteous, the stewardship, conservation, and protection of land is viewed as inherently feminine and thus, un-manly.

Trump’s presidential campaign hinged on the nostalgia of the past and the drive to recreate it, where coal was big, White men were in charge of their (house)wives and children, and the fallacy of the American dream was alive and well through the reproduction of systemic injustice (Daggett, 2018). The extraction and use of fossil fuels are tied to ideas of power, dominance, and control, which are perfectly reflected in the values and assigned meanings of hegemonic masculinity. The very concept of climate change details that fossil fuels are the primary cause of climate change and thus require a drastic change and cessation in fossil fuel use, directly challenging the use of fossil fuel as a demonstration of masculinity through power

and status. Trump's denial of climate change and history of undermining and completely removing environmental information and protections (Daley, 2020; Eilperin, 2017; Fredrickson et al., 2018; Pitt et al., 2020) illustrates the congruency of climate denialism with hegemonic masculinity.

Inevitably, hegemonic masculinity's reproduction of power and status through determination to use fossil fuels is tied to settler colonialism. The domination over land and display thereof is sewn in the permissiveness to pollute (Liboiron, 2021). What is superficially diametrically opposed is climate deniers' staunch commitment to fossil fuel use (and other pollutants) with environmental privilege's NIMBYism; there is a call for free, unfettered use of pollutants, so long as it does not encroach on one's own backyard. In other words, it is permissiveness to pollute at the expense of marginalized communities with a dual value of display of domination against those same marginalized groups. Per Liboiron (2021), pollution is derived from the natural-born economic right to maximally extract and produce from land while differentiating land to continue to be used for settler goals and prohibit Indigenous relations with land.

Again, because hegemonic masculinity is not limited to cis men, continued attacks against climate reform through protection of the status quo of domination over environment can explain why those who endorse hegemonic masculinity, which is not just White men, also endorse climate denialism. Regarding hegemonic masculinity and its ties to fossil fuels, climate denialism is not the lack of rationale or scientific communication, it is "an attachment to the righteousness of fossil fuel lifestyles, and to all the hierarchies that depend upon fossil fuel, produces a desire to not just deny, but to refuse climate change ... refusal is active. Angry. It demands struggle" (Daggett, 2018, p. 41). One Canadian man who denied climate change and



claimed the government lit wildfires to provide evidence of climate change pleaded guilty in 2024 to starting 14 wildfires, with officials suspecting a higher number (Paddison & Newton, 2024). Hegemonic masculinity is blowing exhaust on to symbols of green consumerism (e.g., hybrid cars), protesters, Asian-made cars, and “babes” (Daggett, 2018). These actions recreate power structures through physically and symbolically attacking the other using fossil fuels, be it marginalization or affiliation with gender, race, or seeking meaningful change from the status quo; it is a display of superiority to show, uphold, and raise one’s status through disparaging of other.

Hegemonic masculinity may also explain why some individuals might publicly deny climate change while privately endorsing climate change or hold uncertainty about climate change. Climate change challenges patriarchy and hegemonic masculinity’s ties to dominance, exploitation, and control over the environment. Admitting the reality of climate change requires the admittance of both the need for sustainable practices and the need to suspend current unsustainable practices that are considered masculine, such as coal use or large diesel trucks, which is likely and aptly perceived as emasculating and threatening to one’s sense of power and status. Particularly within hegemonic masculinity norms, the competitiveness and inner-policing to demonstrate and prove one’s masculinity drives one’s outward behavior, which may include adopting climate denialism and resisting climate action. However, research suggests that this is a small percentage of people, given that the majority of climate deniers are conservative White cis men and climate denialism increased when the same population self-reported that they understood climate change “very well” (McCright & Dunlap, 2011).

In a world where climate change is a concern, the continued and increased use of fossil fuels serves as a means to subvert and demonstrate domination and *power over* (structure of

patriarchy) those who seek to change it through environmental reform, political action, and regulation. Hand in hand with hegemonic masculinity, which assigns power and status to use of pollutants, as attributed by settler colonialism, (Daggett, 2018; Liboiron, 2021), the continued use of fossil fuels and denial of climate change is a necessary and never-ending chase to aspire to (and never achieve) masculinity. As informed by hegemonic masculinity through the structure of patriarchy, climate denialism is not just opposition to scientific evidence and consensus, it is the willful attacks on science and symbols of resistance through retaliatory use of pollutants or starting forest fires to blame on the government, all in defense of its own ideology, that maintains male dominance and dominant group supremacy.

### **A Cornucopia of Colonialism**

The golden child of settler colonialism, the United States, constructed its empiric brand of American culture and values through a history of violence, displacement, and diplomatic deception perpetrated against Indigenous Peoples. Settler colonialism licensed and claimed a holy right to the erasure of Indigenous Peoples, the expropriation of their lands, and the exploitation or disposability of other marginalized groups like enslaved persons, immigrants, and disabled (“unproductive”) people. The legacy of settler colonialism called for the privatization of land, mass violence against Indigenous populations, and the enslavement of Africans, all of which laid the groundwork for the industrial revolution, subsequent fossil fuel industry, and the current climate crisis. Climate change is inseparable from its settler colonial roots, as evidenced by the United States’ leading role in global emissions and climate denialism through the continued solicitation and defense of (white) American freedoms to exploit, pollute, and harm the ‘other.’

Settler colonialism created concepts of morality of property and permissiveness to pollute, with figures like John Locke justifying the maximization of land use and the exploitation of Indigenous peoples. Land privatization underpinned the moral justification for settler colonization and exploitation, while pollution was framed as permissible if it served settler goals. This mindset permeates American progress narratives—the “for the sake of modernity and progress,” wherein environmental exploitation and pollution are portrayed as righteous and patriotic endeavors. Climate change is the consequence of this morally righteous progress, perpetuated by colonial capitalism's prioritization of profit over environment and people. Despite recent recognition of colonialism's role in climate vulnerabilities, its root causes and impacts on Indigenous communities remain inadequately addressed, reflecting entrenched power structures and privileging of colonial perspectives within climate discourse.

Tied together under the umbrella of settler colonialism, ableism, White supremacy, and patriarchy create interlocking systems and privileged identities of domination. Within the Matryoshka dolls of institutional power systems, privilege provides the appearance of singular experience, comfort and innocence, and assumed knowledge; multiple, compounding privilege identities create the experience of being a sort of “main character” wherein individualism and short-term gains are prioritized, a heroic or “morally righteous” person identity is assumed, and the individual has a Dunning-Kruger level of false confidence for knowledge in subjects outside of their lived experience and expertise, which allows the individuals to dismiss and reject marginalized voices and calls for collective action. “The moral attitudes of dominant and privileged groups are characterized by universal self-deception and hypocrisy” (Niebuhr, 1960, p. 117). Not only does this continue to reap individual level benefits for individuals through the continuation of individual privilege, but the systems of oppression the privileges operate under

are sustained as well; in short, both individual and group level of privileges and power systems are perpetuated through individual and collective climate denial.

One such distinguished example of defense of individual and collective privilege and maintenance of power structures through climate denial is Ben Shapiro. In one of Shapiro's multiple debates on college campuses addressing climate change, he engaged in playing "devil's advocate" by attempting to dismiss and discredit climate action by entrenching himself in White, male, able-bodied privilege. As cited in Hbomberguy's (2019, 3:50) video, Shapiro fashioned an argument with the momentarily agreed-upon setting that if sea levels rose by ten feet within the next one hundred years and subsequently placed low-lying coastal areas underwater, "let's say all of that happens. You think that people aren't going to just sell their homes and move?" Shapiro took the complex problem of climate change and artificially shifted into false objectivity and rationality, imposing his experience as White cis male to all of those affected by climate change; one can simply move to a place where climate change is not occurring. White cis males are most insulated by climate change effects, not only due to where they live, but due to financial status/mobility and access to livelihood through employment and housing. Shapiro effectively says, *I* would be okay, so *you* would be okay, so there is nothing to worry about and no climate change risk to counter.

In a response that has since been memorialized in memes thousands of times over, using an axe, hbomberguy (2019, 4:20) famously broke through the wall of his YouTube set, akin to breaking the fourth wall when the reality testing of a world demands it, and ingeniously challenged Shapiro: "Just one small problem—Sell their houses to who, Ben!? Fucking Aquaman!?" (see Figure 4.3).

**Figure 4.3**

*Man Demands Answer for Bad-faith Argument of Climate Denialism*



What hbombguy (2019) describes is a significant disconnection with logical analysis, such as assuming anyone would want to buy a flooding home, other than the titular king of Atlantis himself. Shapiro's privilege granted him the dysconsciousness (J. E. King, 1991) afforded to his position as a White cis male. Environmental and transnational privilege (granted by colonialism, ableism, patriarchy, and White supremacy) insulate Shapiro and other climate deniers from climate change impacts while granting them the invisibility of their shielding and absence of the need for further analytical inquiry. Bestowed privileges are normalized and unseen, and engagement in climate change discussions and subsequent "solutions" reflect this line of thinking and seek to defend business-as-usual.

Climate denialism is deeply intertwined with structures of power and privilege, as those who most benefit from the status quo, conservative, White cis het men, are the most represented group of climate deniers and utilize their privilege to attack efforts to address climate change. Hegemonic masculinity, tied to dominance and control over the environment, perpetuates climate denialism, with collective denying of climate change across genders to conform to societal norms associated with and values of hegemonic masculinity. Overall, the perpetuation of hegemonic masculinity through climate denialism reflects a broader struggle for dominance and power, perpetuating systems of oppression and maintaining male dominance and dominant group supremacy.

The perpetuation of hegemonic masculinity through fossil fuel use intersects with settler colonialism, as domination over land and pollution become mechanisms to assert control and *power over* marginalized communities and land, and is reflected in White supremacy. Climate denialism, far from being a mere lack of scientific understanding, becomes an active refusal rooted in the defense of fossil fuel lifestyles and the hierarchies they sustain, with hegemonic masculinity being the biggest predictor of voting for Trump, a notorious climate denier. Petro-masculinity bridges fossil fuel use to ideals of White supremacy and hegemonic masculinity, exemplified by Trump's nostalgic campaign rhetoric centered on reasserting American and masculine dominance through fossil fuel consumption. His denial of climate change and dismantling of environmental protections further align with the values and meanings associated with hegemonic masculinity, showcasing the entrenchment of hegemonic ideals in political and environmental policies.

White supremacy's hierarchy of superiority and inferiority necessitated and glorified the genocide and displacement of Indigenous Peoples that upheld ideals of whiteness and White

supremacy that are (a) stubbornly persistent today, (b) woven into the fabric of American government and institutions, and (c) inseparable from the inception of climate change. Eugenics through ableism is the driver and justification of a *survival of the fittest* when the *fittest* are those who are historically represented as oppressors and benefitters of exploitation of those deemed weak, unworthy, or uncivilized. “Remember, White Christian nationalism will always be the goal, but ableism will always be the toolkit” (Barbarin, 2023d, 0:18). When disability is grounds for extermination and marginalization, ableism will reinforce the righteousness of conquest and violence against the other. Ableism informs White supremacy’s desire to build and maintain “superior” traits while calling for the elimination of disabled people and disability, perpetuating capitalism through the lens of productivity. Hence, power differences becomes deserved, normalized, and expected by way of also signaling the deservedness of their subjugation and exploitation.

Denial of systemic ism, rather, acknowledgement of systemic ism would supplant the fundamental concept of superiority (and deservedness of advantage) over others in its consequence of examining one’s self and group as having been granted underserved advantage, which directly counters and procs the invisibility of privilege, eliciting attempts to disarm perceived attacks to privilege. Climate denialism is a charged self-defense of the ideologies and power structures it subsists off of through the legacy of settler colonialism. Climate denialism is the violent thrashing as the very ideals that allowed for its existence continue to suffocate it; White supremacy and capitalism require continued, unsustainable growth through exploitation of land and BIPOC bodies to uphold the socioeconomic and health security of whiteness and colonial powers.

Further, climate denialism is coded through the privilege of defensiveness and borrowed outrage, wherein perceived attacks to the status quo are opposed with counterclaims of oppression, persecution, and violation of individual freedoms:

Your solidarity with Palestine is accused of anti-semitism? Like your feminism is accused of misandry/man-hating? Like your workers rights' unionism is accused of treachery? Like your protests are accused of vandalism? The oppressor will always find ways to appropriate, co-opt and manipulate the language of the oppressed to claim victimhood and to justify their violence as self-defense. (Kunjulakshmi, 2023, para. 1)

As Kunjulakshmi (2023) eloquently described, role reversal occurs to claim victimhood to continue to serve the agenda of oppression's violence and domination. The only difference for climate denialism is that climate denialism serves the agenda among a buffet of oppressive power structures, calling for the concurrent counterattack and supposed victimization of multiple power structures.

The panoptic view of climate denialism is clear. Colonialism birthed the current climate crisis and remains the engine that fuels climate denialism, as created specifically through settler colonialism and its pistons of ableism, White supremacy, and patriarchy. Ableism inflates presupposed superiority of the conquering people while dehumanizing and enabling the deaths of those deemed inferior (i.e., the people to be colonized and exploited), which buys luxury, capital, and status for the conquering class; "productive" means superior and "unproductive" is to waste, be it land or burden to society. White supremacy utilized these ideals to further entrench whiteness as morally and genetically superior with superior culture, prioritizing the (white) individual and warranting the genocide of the Indigenous Peoples and the enslavement of Africans to maximally produce from land. Patriarchy's dictation of *power over* people and land



corroborated the exploitation of land and marginalizing groups, with hegemonic masculinity demanding the unfettered use of fossil fuels and pollutants to demonstrate power, dominance, and mastery over land and marginalized groups.

Climate change data is not the real threat to climate deniers (Klein, 2019), “Rather the message is that revered ideas and values of American culture are under frontal attack and in serious jeopardy” (Fischer, 2019, p. 143). Climate denialism is profit, exploitation, violence, and dominance *over* recognition of systemic injustice, undeserved advantage, and collective concern and action for marginalized groups and the environment. Climate denialism is the refusal to give up privileges granted through oppression and to brazenly utilize privilege to undermine and attack climate science and those most vulnerable to climate change. Climate denialism is at war with the admission that whiteness is not a savior, is not superior, and that the American dream was only ever an illusion painted over by centuries of unjust violence; as White people and as Americans, we have not, nor have we ever been, heroes or harbingers of progress and civilization.

## CHAPTER V: DISCUSSION

Climate denialism is not a secret code to be unlocked by finding the “right” psychological concept, but psychology aids in the understanding of how power is threaded through institutions, cultures, and people. Climate denialism is informed by interlocking systems of domination that reinforce one another with compounding effects. Separate entities that fly under the banner of settler colonialism in the U.S. are ableism, White supremacy, and patriarchy, all of which tout superiority through privilege identity and warrant the violence of those deemed lesser. Structural racism was the hyper visible and invisible infrastructure that served to separate, protect, and obscure privileged groups from climate change impacts. Privileges historically upheld systems that prioritize the interests of dominant groups at the expense and exploitation of marginalized people and land. Individualism and prioritization of dominant group status and privileges negates social interest (Adler, 1929), as community connection and goodwill cannot be built or harnessed within a system that runs on and encourages oppression. Perpetuation of current power hierarchies inform climate denialism through unwillingness to accept existing scientific consensus through the protection of the status quo, intentional dissemination of doubt and misrepresentation of scientific facts, and deflection of accountability through the invisibilities, comforts, and deservedness of privileges to defend against the American way of life, as conceived through a history of settler colonialism.

Understanding climate denialism as a means of protecting power, way of life, and perceived deservedness of privilege provides a comprehensive perspective on the complex interplay between privilege identity, power, and the endowment of colonialism. To respond to the call of climate action is to recognize that both climate change and climate action affect groups of people differently and that responsibility for action is not the same for everyone. There

is an inherent recognition that the systems of power aid certain groups at the cost of others; climate change was produced by power hierarchies and exploitation and the solution to climate change is to unmake the same hierarchies and create something new and different. Recognizing and addressing these underlying dynamics is crucial for developing inclusive strategies to address climate change.

### **Moving Forward: What to Do and What Not to Do**

One of the most important parts, if not considered the most important part, is the next steps provided within any body of literature. Yet, as Liboiron (2021) points out, “Colonialism lurks in assumptions and premises, even when we think we’re doing good” (p. 45). My present dissertation is no exception to this, and I seek to explore meaningful solutions that similarly tread carefully so as to not transgress into assumptions that perpetuate colonialism. My vision of my work, and the solutions therein, are an extension of my lived experiences and biases as a White, able-bodied settler in academia, with my experiences serving as both valuable and as a limitation.

Contrary to common belief, more information on climate change or climate change harms does not work because climate denialism is not an information-deficit situation (Fessmann, 2019). Climate denialism is rooted in perpetuating systems of power and dominant culture, and the denialism is counter to perceived attacks on privileged ways of life. Climate change is only the symptom of the disease of colonialism and other systems of power that are being clung to through climate denialism. Climate denialism must be disentangled from the web of power of colonialism and other power structures that have historically advantaged the same groups. J. E. King’s (1991) concept of dysconsciousness, the absence of critical analysis, dictates that throwing information at the problem does not allow for new insight, but fostering a critical

consciousness can; a facts-based approach is ineffective in prompting critical analysis of beliefs and inequities. As such, to target climate denialism, the same systems of power must be targeted to reflect critical consciousness of social hierarchy. This, of course, is easier said than done. Continuing to resist, build community, and educate (both within and outside of academia) to topple systems of oppression is vital.

I see no path forward to remedying climate change and climate denial without unmaking the systems that were the necessary conditions for their creation. To do otherwise is akin to using a napkin to staunch an infected gory wound. Furthermore, I see no path forward that does not also include Indigenous Peoples at the forefront. Indigenous Peoples of the world only constitute 5% of the population, stewarding between 13% and 20% of global lands, and yet, Indigenous people protect an estimated 80% of remaining biodiversity (Seddon et al., 2019). As the IPCC report demonstrated, Indigenous People are more vulnerable due to effects of colonialism, however, Indigenous Peoples and their histories and knowledge are absent from mitigation measures and included in decision-making (Carmona et al., 2023).

Indigenous knowledge underpins successful understanding of, responses to, and governance of climate-change risks. Western scientific practices and technology may not be sufficient in addressing future natural resource management challenges. Supporting Indigenous self-determination, recognising Indigenous Peoples' Rights, and supporting adaptation underpinned by Indigenous knowledge are critical to reducing climate-change risks to achieve adaptation success. (Pörtner et al., 2022, p. 1933)

More than to serve climate change risks, advocacy for Indigenous self-determination, protecting Indigenous rights, and honoring treaties is essential to unmaking the legacy of colonialism.

As clinicians, educators, and inhabitants of the Earth, we must remain vigilant and engaged in the fight against injustice, whether injustice and oppression show up in our institutions or in our homes among friends or family. One example of insidious duplicitousness is the seemingly benevolent play by Exxon to lobby for a carbon tax (Irfan, 2018). Public relations for the fossil fuel industry continue to flood money into lobbying in what may seem counterintuitive campaigns and proposals. Yet, as is the case with the proposed carbon tax, the proposal only requires one million dollars for donation and two years to be spent on climate change with the catch that Exxon will be granted immunity from being sued for climate related damages. Pushing for a carbon tax that amounts to little money will also then further politicizes climate change reform, as conservatives already have political platform for hating taxes. Wariness is necessary.

While climate denialism is not caused by a deficiency in information (Fessmann, 2019), it is still imperative that in terms of communicating science, it is done so clearly and with intentionality. Misinformation still exists and is disseminated. Science communication occurs everywhere: at home, in the office, on the phone, in the White House. As such, it is helpful to be prepared at a moment's notice and to adapt the message to the audience.

While in Ireland in 2023, I met a wonderful scientist by lucky happenstance, and we discussed climate change communication, as science communication was one of her areas of expertise as well as a passion of hers. In her book, *The Art of Science Communication: Sharing Knowledge with Students, the Public, and Policymakers*, she outlined three major components of science communication: accessibility, curiosity, and collaboration (Thomson, 2021). She emphasizes that academic language is inaccessible and unnecessarily complicated, and it does not need to be. Further, overwhelming a person with facts is not effective. Both of these

communication hazards can be rectified by explaining the science neatly and succinctly, such as explaining that we know climate change is anthropogenic because we can identify the isotopes of carbon; carbon-14 (radiocarbon) is normally a rare naturally-occurring isotope, but it is also emitted through fossil fuel use, and scientists can trace the increasing quantities of carbon-14 in the atmosphere, effectively linking increased carbon-14 to fossil fuel use. Replacing misinformation with the facts should make that information more plausible and easier to understand than the information it was replacing. Of note, the amount of information will change depending on the audience. If preparing information to a politician with the goal to implement a policy, still keep it brief, but prioritize and highlight the key information, provide solutions, and identify stakeholders. *Make the information accessible to the audience.*

Thomson's (2021) second theme, curiosity, comes with a necessary humility. Mental health clinicians likely have a head start in terms of this tenet due to curiosity being a heavily honed skill for professional work. Thomson used the example of 'I was taught X' instead of 'I learned X,' with the former demonstrating you as the learner who is open to new ideas and the latter suggesting a potential dynamic of superiority that would make an interaction ineffective. Finally, collaboration is the last focus of science communication. Conversation and connection made in good faith and collaboration will serve efficacy, whereas confrontation will not. If the focus is on showing you're right, the conversation (and apparent argument) is already lost. Curiosity and collaboration go hand-in-hand, but pairing both precepts with poignant, accessible language creates an effective message that is inviting and connecting.

Imani Barbarin (2023e) identified how to communicate effective solutions. She shared that time is a luxury, and when communicating solutions or changes, to do the cognitive work up front. Telling people to stop engaging in X or buying Y can lead to "boycott fatigue." Instead,

Barbarin recommended giving additions more than applying subtractions. Barbarin noted the “If this, then that” formula makes it easier for people to engage in protest or changes since they have the opportunity to replace without expending cognitive energy. When applying Barbarin’s (2023e) recommendation to climate denialism, the effectiveness of her approach could increase significantly, given that climate denialism is a defense against a way of life and freedom is perceived to be impugned, highlighting choice instead of taking away choice could be especially beneficial.

Lastly, the most crucial of information that I can impart in my dissertation is this: do not despair. Anguish and surrender do nothing to move us forward, and they are born of falsehoods, as all is not lost. “To face the realities of our lives is not a reason for despair—despair is a tool of your enemies. Facing the realities of our lives gives us motivation for action. For you are not powerless” (Lorde, 1989, para. 10). Our situation *is* dire *and* we can still take action and persist in the face of multiple opposing forces.

There is a scene in *The Lord of the Rings: The Two Towers* that has always stuck with me. I find I am frequently drawn to Sam’s speech that he gives at the end of the film, the one where he briefly laments the current situation but then authors a narrative of determination and hope that inspires him and Frodo to persist against the odds: “Even darkness must pass. A new day will come ... Folk in those stories had lots of chances of turning back only they didn’t. They kept going because they were holding on to something” (P. Jackson, 2002, 03:22:40). And when asked what they were holding on to in the face of monumental enmity, Sam had replied, “That there’s some good in this world, Mr. Frodo. And it’s worth fighting for” (P. Jackson, 2002, 03:23:35). I think of this sentiment frequently and I, now, reflect on its ties to Adler’s (1929) social interest. To place one foot in front of another in resistance to systems of power or

seemingly unsurmountable odds in the pursuit of a community goodness and connection is what makes those footfalls easier and worthy of taking. Our fight in climate change is for the good in the world, and it is for the chance to reshape it into something different and brighter. That our fight in this is just that—ours, and reflecting on our collective connection and community spurs me forward each day.



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