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Global Youth Study Report

Youth in a Warming World:

What we can learn from Youth in their 'Climate Grief'

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"We cannot afford the next generation of climate justice leaders' dread to become a self-fulfilling prophecy. Their psychological resources of resilience, imagination, efficacy, and, against all odds, their fierce capacity for joy, are just as necessary for the future of a viable planet as natural resources like clean air and water."

-Sarah Jaquette Ray, Professor of Environmental Studies
at Humboldt State University in Arcata, California (Jaquette, 2020)

Introduction:

Climate change will affect us all but it will not affect us all equally. While it is well known that climate change is one of the defining issues of our time and it will affect people in unequal ways, it is less explored as an intergenerational justice issue that has far reaching consequences for young people today and into the future. Feminists have long argued that the climate debate is clouded by patriarchal approaches, including being dominated by empirical scientific methods, misogynistic politics and a security apparatus framework, which all lends itself to patriarchal solutions of economic techno-fixes that ultimately maintains the status-quo (Atkin, 2020; Daggett, 2018; McCright & Dunlap, 2011). Instead, a much more limited debate exists in framing climate change as a justice, equity and health struggle, which lends itself to solutions oriented towards anti-oppression and systemic change (Daggett, 2018; McCright & Dunlap, 2011). Hence, this paper accepts a feminist perspective to analyze the climate crisis in terms of how the crisis is disproportionately affecting youth and their wellbeing, that of their physical and mental health.

Youth are defined in this report as "Generation Z," people who were born in the mid 1990's to early 2010's and constitute the largest youth and adolescent demographic to have ever existed, as they currently represent nearly one-third of the global human population (Patton et al., 2016; Spitznagel, 2020). Yet as this generation comes of age, they face one of the greatest ecological crises humanity has ever faced, and yet they have received little preparation

or support in responding, grappling and negotiating their future with this crisis. Instead, much like the *Technocene*, they have been left on their own in a storm of our own making, without even as much as a life raft. However, their story is not simply one of victimhood, but rather they are facing the crisis head on, as they experience a complex journey of 'climate grief,' while fostering a sense of resilience that the adult world has much to learn from. This report attempts to describe the complex journey young people are undertaking as they respond and adapt to a warming world.

The Crisis: Youth in Double Jeopardy

"The sea is swallowing villages, eating away at shorelines, withering crops. Relocation of people...cries over loved ones, dying of hunger and thirst. It's catastrophic. It's sad...but it's real."

- Timoci, 14-years-old, Fiji (UNICEF, n.d.)

What is known about climate change is that since the industrial revolution, humans have been emitting greenhouse gases (GHGs) emissions into the earth's atmosphere from polluting industrial activities, which become trapped into the Earth's atmosphere and increase the global temperatures, creating a series of climatic changes and global consequences for humans and the more-than-human world. It is also known that those that have contributed the least to this issue will generally be the most impacted, such as what Timoci, a 14-years-old Fijian native, describes above (UNICEF, n.d.). While those that have contributed the most to the issue - that of the Global North's polluting industries, high consuming behavior and the governments that profit from it all - will be the least impacted. Perhaps that is why climate change in recent years has been reframed as a human rights and justice issue, increasingly more so than an environmental issue, in which the youth climate movement has played a major role in that reframing, to be discussed further below. For climate change will not only affect marginalized communities and nations, as well as women facing greater threats of domestic violence in a

warming world, but arguably one of the largest populations to be affected are youth (Sanson, Hoorn & Burke, 2019; Sanson & Burke, 2020), and who are the first generation to face a lifetime affected by this crisis. For them, this is a defining generational issue.

Youth face a kind of 'double jeopardy' in dealing with this crisis, as they face both physical and mental health consequences (Sanson & Burke, 2020). In terms of physical health, according to the World Health Organization, children and youth are projected to suffer 80% of the illnesses, injuries and deaths attributed to this crisis (Sanson & Burke, 2020). Due to their immature immune systems and the ways in which they interact with their environments, they will face both direct and indirect effects of the climate crisis from a physical health standpoint (Sanson, Hoorn & Burke, 2019; Sanson & Burke, 2020). Direct effects include: natural disasters such as typhoons or hurricanes, extreme heat, droughts, and floods, as well as personal injuries, exposure to environmental toxins and infectious diseases, which will all become more prevalent in a warming world (Sanson & Burke, 2020). While indirect effects include: food shortages, intergroup conflict and wars, economic downturn and dislocation, as well as mass migrations and relocation (Sanson, Hoorn & Burke, 2019; Sanson & Burke, 2020).

In terms of mental health, there is growing research indicating how climate change will affect the psychology and emotional wellbeing of youth. For example, extreme weather events have been linked to post-traumatic stress disorder (PTSD), with symptoms as wide ranging as depression, panic attacks, sleep and anxiety disorders, as well as cognitive deficits, including learning problems and impaired language development (Sanson & Burke, 2020). However, there is also a growing body of research on the ways in which youth who may only have limited contact with natural disasters, or whom have never yet experienced a natural disaster, may nevertheless experience mental health issues from the climate crisis as well in the form of pre-traumatic stress disorder or what is increasingly referred to as 'eco-anxiety' (Sanson & Burke, 2020; Forani, 2019; Plautz, 2020; Wu, Snell & Samji, 2020). This equally manifests as a form of

trauma and stress when confronted with the sense of irreversible loss and an impending doom, and this can cause symptoms of hopelessness, which is compounded by witnessing rapid changes to the world, such as through social media and news exposure (Forani, 2019; Plautz, 2020; Wu, Snell & Samji, 2020).

However, in either experience of pre or post traumatic stress disorder from climate change, youth may face long-term developmental and educational consequences making it harder for them to reach their full potential in their lifetime (Sanson & Burke, 2020). This is due to chronic stress and anxiety during youth and adolescent years over the climate crisis that can result in permanent brain structure alterations and even the emergence of psychopathologies later in life (Wu, Snell & Samji, 2020). For according to the Lancet report on *Climate Anxiety in Young People: A Call to Action* (2020), the "the stress of a climate crisis during a crucial developmental period, coupled with an increased likelihood of encountering repeated stressors related to climate change through life, will conceivably increase the incidence of mental illness over the life course (Wu, Snell & Samji, 2020, pg. 435). For this reason and more, some critics have framed this issue as 'structural violence' and an intergenerational injustice to youth as "climate change disrupts the basic necessities of life - shelter, food and water - and it is regarded as the biggest global human health threat of the twenty first century (Sanson & Burke, 2020, pg. 345). Hence, the paradox of our era is that youth are experiencing a kind of impairment to their life potential exactly at a point of history when we very much need the full potential of youth available to the world - with their imagination, joy, resilience and adaptability - in order to survive this crisis. Without this, the massive decarbonization agenda of reaching net-zero and adapting our entire society to a warming world is a goal that itself becomes impaired.

Youth Responses: 5 Stages of Climate Grief

However, youth should not be solely understood as simply 'victims' of this crisis, but instead understood as actors who have agency in this crisis. Therefore, in attempting to understand the agency of youth, this Global Youth Study Report attempts to explore the diverse and wide-ranging responses by youth to the climate crisis. While some reactions by youth may still remain reflective of the kind of 'victimhood' described above, other reactions reflect youth as 'agents of change' and agents of their own domains, fostering resilience that shows the ways in which they are determining their own life course and future all while facing the crisis head on. However, this report is by no means attempting to absorb all youth experiences and responses to climate change, as if to present a complete and holistic picture, but rather attempts to be a window into the lives of youth as they grapple with a rapidly changing world.

Moreover, in order to explore the diverse response of youth to the crisis, this report uses an adapted version of the Kübler-Ross model, otherwise known as the 5 stage of grief model. **(**Kübler-Ross, 2014). First published in 1969 in the book *On Death and Dying* by the Swiss-American psychiatrist Elisabeth Kübler-Ross, the model described various stages of grief in patients experiencing loss and terminal illness (Kübler-Ross, 2014). Since then, the model has been heavily popularized and criticized as being far too simplistic of human emotions and psychology in dealing with loss and illness, as well as criticized for its lack of empirical data on the bereavement process (McVean, 2019). However, Kübler-Ross herself stated that the model was not meant to be understood in such a rigid linear fashion of a predictable progression of human emotion **(**Kübler-Ross, 2014). As well, the 50th anniversary edition of the book states that 'stage theory' was merely a set of artificial categories to isolate and separate the experiences of grief in a way that could be more clearly and simply communicated to the public at large (Kübler-Ross, 2014). Hence, given this context, this report uses the Kübler-Ross model but in adapted version called the "5 stages of climate grief" that takes liberties with the model in

adding new stages and blending other stages together, with the understanding that this too is an artificial categorization of emotions in dealing with the climate crisis. It is also important to note that by no means does this adapted model reflect a straightforward linear progression of youth's experiences and responses to climate change, and that many youth may experience these stages in a different order, may experience none of these stages or may experience entirely different psychological phenomena than what is described in the following pages. Again, youth experiences are incredibly diverse and wide-ranging, and this is merely a window into their lives, and by no means is a complete or holistic report.

However, with the above mentioned, the five stages of climate grief are categorized in this report as such: the first stage is shock and denial, exploring how the consumerist identity of youth and failures in environmental education has created a 'numbed' response to the crisis leading to denialism and even violent reactions. The second stage of pain & anxiety is explored through the experience of eco-anxiety and climate distress as a growing psychological phenomenon amongst youth in facing the issue. The third stage is anger and bargaining, which is examined through the experiences of the youth climate movement, and Friday for Future in particular, as a form of resistance to the crisis, as well as a form of negotiating with the adult world for decarbonization. The fourth stage is that of depression and reflection, which is a return to despair but with a deeper level of critical thought in which this experience is explored through the COVID-19 global health pandemic and how it has affected the youth climate movement as of late. Lastly, and perhaps the most significant stage for developing positive wellbeing for youth on this issue is not the acceptance stage, as this is where the report deviates from the Kübler-Ross model, but is instead in an entirely new stage this report postulates, that of a reconstructing and resilience stage, which is explored through the lens of Critical Environmental Justice (CEJ), and the experience of Black and Indigenous People of Color (BIPOC) youth.

Shock & Denial: Climate Denialism and White Supremacy

"The longer you live in a world that sees you as just another cog in the machine, the more your eyes glaze over the injustices in front of you - and the less you question."

Jamie Margolin, 19 years old, Co-Executive Director of Zero Hour &
Plaintiff with Our Children's Trust, Seattle, Washington *(Margolin, 2020, pp. xiv)*

It is perhaps not shocking that the demographic with the greatest propensity for climate denialism falls with Conservative white males who historically and predominantly remain as the socio-political and economic elites in the Global North (Atkin, 2020; Daggett, 2018; McCright & Dunlap, 2011). For according to a 2011 study in the *Global Environmental Change* journal of the American population, where this result was found, this denial ideology is attributed in part to their desire to maintain the status quo that disproportionately benefits them (McCright & Dunlap, 2011). While those calling for systemic change and recognizing the reality of climate change tend to be the most marginalized and impacted by the crisis (Atkin, 2020). Climate denialism or 'climate skepticism' is a powerful ideology for the elite class, which is understood as the wholesale rejection of the notion that the Earth's temperature is rising and that weather patterns are changing from human activity on the planet (Merriam-Webster, n.d.). However, is climate denialism an ideology that is taught to young white men or is it something else, such as internalized anxiety over a changing world?

When it comes to education, scholars in critical ecopedagogy argue that traditional Environmental Education (EE) and Education for Sustainable Development (ESD) are pacifying young people to the scale of our ecological crisis (Kahn, 2010). The criticism of EE and ESD stipulates that these once alternative educational realms have been bounded by internalized neoliberalism, particularly in the way in which they treat youth as consumers rather than citizens when it comes to engagement and solutions to environmental problems (Kahn, 2010; Langer, 2002; Norris, 2020). For example, in teaching that the solutions to ecological crises can be

performed as acts of individual lifestyle choices - such as reducing individual carbon ‘footprints, recycling more and using one’s ‘buying power’- rather than teaching them about collective action and challenging elite power, it neutralizes young people’s will to take political action. While this is a ‘safe’ way of teaching about environmental issues in the classroom, it reinforces and internalizes the neoliberalism mentality of individuals as consumers rather than citizens (Kahn, 2010; Langer, 2002; Norris, 2020), while annihilating young people’s sense of agency and power in addressing issues like climate change. Furthermore, by teaching young people that we can save the world through individual acts, it sends the message of collective denialism in terms of the scale of the crises that we are facing and the scale of action that is needed, that of systemic change to decarbonize the global economy. Hence, not only is our education system disabling youth with a lack of effective political tools to address ecological problems, but we are creating a culture of denialism by refusing to face the magnitude of the ‘tsunami’ before us.

However, there are of course many youth that have chosen to face the crisis head on, regardless of a lack of educational tools and support. For there is an increasing ‘generational divide’ when it comes to climate denialism and skepticism, with Generation Z and Millenials' polling much higher in accepting the science and reality of climate change, as well as supporting alternative energy transitions, regardless of political party associations (Funk & Tyson, 2020). While, perhaps to no surprise, Boomers and Generation X lag behind as they poll lower in accepting the science, nor supporting alternative energy sources (Funk & Tyson, 2020). In many ways, this generational divide reflects how older peoples are very much stuck in this first stage of climate grief of ‘shock and denial’ in this adapted Kübler-Ross model. For similar to an older person being diagnosed with cancer, this initial stage is often characterized with an experience of denial as if the doctors (or in this case, the scientists) got the diagnosis wrong, while other may experience a paralyzing feeling emotionally and cannot grasp the reality of the

situation **(**Kübler-Ross, 2014) -- all which are similar to the characteristics of climate denialism.

Nevertheless, as many adults may have found a somewhat permanent refuge for their emotions in climate grief by staying within this initial stage, some youth too cannot seem to go beyond this initial stage psychologically and give into a sense of helplessness. However, what's perhaps most dangerous about the stage, is not only that is perpetuates decades of denialism and inaction on the crisis, but also that it is a form of internalized anxiety that can manifest in disturbing and violent ways. Such as youth joining or being recruited into counter-movements, that of extremist right-wing groups and populist groups like the Proud Boys (Daniels, 2017, Atkin, 2020). For some young white men, groups like the Proud Boys represent a space to seek an identity beyond consumerism, a sense of community and a sense of nature as the 'pastoral past,' which is linked to the settler colonial gaze of nature (Atkin, 2020; Daggett, 2018; McCright & Dunlap, 2011). However, a more critical perspective argues that groups like the Proud Boys also reflect a kind of internalized anxiety over a changing world, both in terms of the social changes, such as power struggles over gender and race, but also in terms of a changing physical environments, perhaps from climate change and the likes (Atkin, 2020; Daggett, 2018; McCright & Dunlap, 2011). For as Cara Daggett in *Petro-Masculinity: Fossil Fuels and Authoritarian Desire (2018)* states: "while misogyny and climate denial are often treated as separate dimensions of new authoritarian movements, a focus on petro-masculinity shows them to be mutually constituted, with gender anxiety slithering alongside climate anxiety, and misogynist violence sometimes exploding as fossil violence" (Daggett, 2018, pp. 28) We see this 'fossil violence' play out from Charlottesville in the U.S to Christchurch in New Zealand, and in Toronto with the van attack in 2018 with the young white male perpetrator targeting women. Hence, not only does this stage of 'shock and denial' demobilize some youth, it also has a reverse effect of mobilizing other youth in ways that reinforce systemic violence and oppression, ultimately driving humanity further away from the systemic change and cooperative solutions we need in this time.

Pain & Anxiety: Eco-Anxiety and Climate Distress

"Some of my students become so overwhelmed with despair and grief about it all that they shut down...many stop coming to lectures and seminars. They send depressed, despairing emails. They lose their bearings, question their relationships and education, and get so overwhelmed by a sense of powerlessness that they barely pass their classes"

-Dr. Sarah Jaquette Ray, Professor of Environmental Studies
at Humboldt State University in Arcata, California (Jaquette, 2020)

In 2008, one of the first cases documented of 'eco-anxiety' was in the Australian Medical Journal that chronicled a case of a 17-years-old boy who was hospitalized from severe dehydration after refusing to drink water during a national drought (Plautz, 2020). While eco-anxiety or climate anxiety are not yet defined as a clinical diagnosis, it is a very real experience by a growing segment of youth globally. Surveys are increasingly showing that youth are more lonely, depressed and even suicidal than any previous generation (Jaquette, 2020), and while this is due to a number of factors, climate change is at least one of those factors. For example, a poll released in 2019 found that 57% of American teenagers said that climate change made them feel scared and only 29% of teens said they felt optimistic about the issue (Plautz, 2020). In Australia, the numbers are even more stark, as 82% of youth agreed with the statement that "climate change is going to diminish my quality of life in the future" (Ward, 2019). This reflects a growing concern that many researchers express in the how this heightened level of anxiety is affecting young people's ability and capacity to invest in their future, from education, career goals, social life to having their own children (Sanson & Burke, 2020)

As mentioned, eco-anxiety or climate distress is referred to as a pre-traumatic stress disorder related to a sense of threat from a global climate crisis and/ or impending doom from an environmental apocalypse (Wu, Snell & Samji, 2020). Symptoms can be wide ranging from panic attacks, insomnia, and obsessive thinking, as well as substance use disorders and anxiety disorders (Forani, 2019; Plautz, 2020; Wu, Snell & Samji, 2020). Since there is emerging but

growing research in this area, it is encapsulated as a new stage that amends the Kübler-Ross model as the second stage of 'pain and anxiety,' which is understood as a psychological phase of moving away from disbelief and into experiences of the pain, sadness, regret and emotional anguish over the climate crisis (Buckley, 2021). This is of course a heavy burden to bear for anyone and yet it is also a slippery slope, as eco-anxiety can easily manifest into an emotional back step of returning to denialism (Buckley, 2021). That is why many leading experts studying this emerging psychological phenomenon of eco-anxiety or climate distress are calling for a 'balanced' approach to anxiety. For example, Dr. Christine Karol, the director of the Vancouver Anxiety Centre, argues that while too much anxiety paralyzes a person on the one hand, some level of anxiety can be a type of stress that increases motivation to act, such as encouraging participation in climate action (Forani, 2019). Alternatively, Dr. Sarah Jaquette Ray, quoted above, argues that by youth learning how power works and imagining alternative worlds, only then can they move from despair into empowerment (Jaquette, 2020), or as is described in this paper, into the next stage of 'anger and bargaining.'

Anger and Bargaining: Youth Climate Movement

"You have taken away my dreams and my childhood with your empty words. And yet I'm one of the lucky ones. People are suffering. People are dying. Entire ecosystems are collapsing. We are in the beginning of a mass extinction, and all you can talk about is money and fairy tales of eternal economic growth. How dare you!

- Greta Thunberg, 16-years-old (at the time of the speech)
U.N.'s Climate Action Summit in New York City,
September 23, 2019 (Thunberg, 2019, pp. 96)

In August 2018, a 16-year-old Swedish student by the name of Great Thunberg staged a now infamous protest outside of the Swedish parliament, holding a sign that read "School strike for the climate" in Swedish (Han & Ahn, 2020; Thunberg, 2019; Wikipedia, n.d.). She vowed then to hold a weekly strike from her school, calling it *Fridays for Future*, until her government

took action to meet their Paris Accord international climate commitments. Through the power of social media and apps, along with her powerful speeches calling on the moral responsibility of adults to take action, Thunberg's 'climate strikes' went viral in a manner never seen before in the climate movement (Han & Ahn, 2020; Marris, 2019). Soon after her solo strike, many more students joined her in 2018 and organized in cities around the world (Wikipedia, n.d.). By March 15, 2019, there were 1.4 million strikers that organized in 1,700 cities, calling on their respective governments to take action and comply with the Paris Agreement (Han & Ahn, 2020). Following that, in September 2019, a campaign called a 'Global Week for the Future' was held with a series of 4,500 strikes across 150 countries, with an estimated 7.3 million people participating, which was the largest climate strike in the world's history (Han & Ahn, 2020; Wikipedia, n.d.). Of course, this movement was never really about one person, but rather it reflects a desire amongst global youth to take action on the issue, and if anything it happened in the right emotional space and time for youth to be mobilized on this crisis.

There was, of course, a youth climate movement before Thunberg and many youth climate organizations previously formed, but whom never witnessed the scale of this galvanizing moment, but whom could rally and support the coordination of these global climate strikes in this moment, including the Sunrise Movement, 350.org, Future Coalition and Zero Hour (Wikipedia, n.d.). Meanwhile, around the same time as these climate strikes, a group of teens had sued the U.S. government in a case called *Juliana v. U.S.* for failing to protect them from climate change, in which there are many similar lawsuits filed in other countries including Canada and Pakistan, with several lawsuits won including in the Netherlands and Columbia (Parker, 2019; Winston, 2019). Yet, while some call out the system for its failures, others choose to work within the system to drive change, such as Senator Alexandria Ocasio-Cortez of New York (or AOC as she is labelled). AOC is a 29-years-old, and while outside the demographic scope of this study, she is still worth mentioning as the youngest woman ever elected in Congress in the U.S.A. and who has moved the climate debate significantly in America by pushing for a "Green New Deal"

on equity and climate, otherwise referred to as climate justice (Winston, 2019). All of these examples and more reflect the defiant nature of youth (and young adults) who are grappling with the climate crisis by resisting the failures of the system, reframing the issue as a justice issue, and calling for political change inside and outside of the political and legal systems.

While there is much to report on in terms of the significance of the youth climate movement at large and what it means to the youth experience in addressing climate change, for the purposes of this report the focus is on how this movement relates to the next stage of grief, 'anger and bargaining.' Thunberg herself, while an iconic youth climate activist, also struggled with eco-anxiety and climate distress leaving her in a paralysis of depression (Klein & Stefoff, 2021), which was mentioned as the experience in the previous stages of grief. However, by engaging with climate activism, or in finding the right 'balance' with anxiety, she was able to turn her stress into her motivation to act (Klein & Stefoff, 2021). That action when analyzed more deeply expresses a real sense of anger and betrayal, found for example in her speeches to world leaders and to the adult world at a large, such as her distressing phrases like: "how dare you," "you are failing us," and "we will never forgive you" (Thunberg, 2019, pp. 96-97). Moreover, her sentiment and actions with the climate strikes seems to echo the sentiment and actions of Generation Z that is not only awakened to the climate crisis, but deeply resentful of a lifetime of broken promises by various international environmental agreements and commitments, such as the failure by global leaders to meet the Paris Agreement and significantly cut carbon emissions (Han & Ahn, 2020).

However, while anger is an emotion more easily understood by many, especially when it comes to the crisis and loss of this magnitude, what is less understood is bargaining. However, it is a useful lens to further understand the youth climate movement. For often at this stage, those inflicted by a crime will attempt to bargain with their perpetrators or the very institutions inflicting the crime onto them (Kübler-Ross, 2014). In this case, one of the limitations of the

youth climate movement is that their strategies and tactics are predominantly based on bargaining with the dominant power structures that are causing the crisis in the first place - be that political, legal or economic power holders. By protesting and calling governments to act, or by using the legal and political systems to transform the capitalist machinery, much of this work only serves to reinforce and reconstruct dominant power structures with youth acting as their subordinates, rather than manifesting new power and alternative system dynamics. This is an unfortunate limitation of this stage, for it reauthorizes the very systems that oppress us, all because we are far too often limited in our imagination for alternative worlds and possibilities, such as what Donna Haraway describes as 'tentacular thinking' (Haraway, 2016). Or as the environmental professor quoted above, Dr. Sarah Jaquette Ray, argues that by "limiting our ability to imagine ourselves as having agency beyond being a consumer, (it) has resulted in the 'privatization of the imagination' (Jaquette, 2020, pp. 3). Yet unfortunately, again, the paradox of this is that it is all happening in a time in history where the imagination of youth is very much needed if humans have a chance at adapting to a warming world, including the delegitimizing of oppressive powers that have created the very problems we are in.

Depression and Reflection: Activism 'Burnout' & COVID-19

> *"I got so burned out and fed up with everything I wanted to crawl into a hole and never do anything again. I sacrificed too much of my personal life and happiness, so much so that I started resenting the cause."*
>
> Jamie Margolin, 19-year- old, Co-Executive Director of Zero Hour & Plaintiff with Our Children's Trust, Seattle, Washington *(Margolin, 2020, pp. 172)*

Jamie Margolin writes about her experience of activist 'burnout' in her book *Youth to Power* (2020), quoted above, which few of those who have experienced 'burnout' have had the opportunity to do. For these people who suffer from 'burnout' are often never heard from again as they take leave from their respective social movements, and sometimes leave this world far

too early (Effective Activist, n.d.). A friend of mine and a former Graduate at York University, Dave Vasey, was one such activist, who while again falls outside the demographic scope of this report as he was in his early 30's, his story still deserves mentioning. Vasey was a dedicated climate justice activist for over ten years and passionately worked as an Indigenous ally for communities particularly affected downstream of the Alberta Tar Sands. In a significant protest convergence, he had a significantly traumatic experience at the G20 summit in Toronto in 2010, where he was the first person arrested with the new draconian measures placed by the then Harper government to criminalize dissent of the G20 summit. These temporarily laws lead to the largest mass arrests in Canadian history, with more than 1,000 people detained and whom many had experiences of sexual abuse, violence and emotional trauma from the police force. From this experience and likely from so much more than what is known, Vasey experienced severe activist 'burnout' and began to lose many friends around him, years later taking his own life.

My own experience of 'burnout' pails in severity to my friend, but it happened in a very different way, and therefore deserves mentioning to reflect the diverse nature of 'burnout' experiences. After dedicating over a decade of my life to environmental activism, my own 'burnout' turned into postpartum depression and anxiety after the birth of my son. I had a crippling sense of fear and panic almost daily that robbed me of genuine enjoyment for my new child in the first year of his life, as I was pained by the thought of a 'climate apocalypse' he may face. This experience forced me to take several years away from my activism, to deeply reflect and learn from the years past that had led me to this breaking point. I share these painful stories to shed light on the traumatic ways in which activism - led by anger and bargaining - can lead to this next stage, which is perhaps the most difficult stage of all, that of 'depression and reflection.'

This stage, as mentioned, is far too often where the activist journey can end, and sometimes life itself ends. For once anger and bargaining does not get the results once hoped for, a person can fall back into a deep depression and often experience a much more severe kind than in previous stages expressed earlier (Kübler-Ross, 2014). While also they can undertake deep critical reflection about one's life and the loss they are experiencing, such as the climate crisis and losing a sense of optimism for the future (Buckley, 2021). On the other side of this stage however, reflection can lead to a deeper sense of one's identity and gaining greater knowledge on one's cause, even reframing one's sense of loss into alternative perspectives, worldviews and even sometimes, solutions. Exploring this stage on a macro scale, the global health pandemic of COVID-19 has in many ways forced our collective humanity into this fourth stage of grief - forcing a kind of collective depression and reflection. For in many ways, this moment in time has forced us to depart from each other and deeply reflect on the state of our world, from systemic racism to climate change. We see that the underlying meta narratives of our globalized and industrial societies are unraveling, while a new set of values are emerging about what is and what is no longer acceptable.

The youth climate movement, specifically that of *Fridays for Future* (FFF), shows evidence of this deep reflective state that is establishing a new set of norms, specifically with climate justice. For while the movement has had to adapt to become a virtual movement, with a severe drop in participation from 7.3 million participants in September 2019 to as little as a few thousand by some estimates in their last virtual strike on March 19, 2021 (Fridays for Future, n.d.; Kuebler, 2021; Wikipedia, n.d.), this has forced the movement to switch their youth engagement strategy from breadth to depth. This depth has entailed weekly webinars that are thematically linked to issues around human rights and environmental justice, along with deeper connections and conversations with participants from the Global South and Global North, all while connecting dots on various forms of systemic oppression of people and the climate crisis (Kuebler, 2021; Reyes & Calderon, 2021). As a youth coordinator from FFF Mexico, Adriana

Calderon, states: “now I think the international community is doing more because we were forced to move to digital, forced to interact with other groups...and I can see how much the movement has grown since last year" (Kuebler, 2021, pp. 5). Hence, while there may be a collective depression we are all experiencing from the global health pandemic, the youth that are continuing to participate in the youth climate movement are also experiencing critical and deep thinking about their cause, the world and their place in it.

Reconstructing and Resilience: BIPOC Youth & New Power

“I grew up knowing that nature was my relative and everything was part of me. People only care for something they feel affects them, but if you learn how we are all connected with nature and each other, one person’s suffering is our collected suffering. It’s not the earth's suffering, it’s all of our suffering.”

- Tokata Iron Eyes, 16-years-old, Standing Rock movement founder & Water protector (Margolin, 2020, pp. 203)

Vanessa Nakate is a 23-year-old climate activist who was the first climate striker in Uganda, joining the global FFF movement, after experiencing drought, floods and the impacts of climate change firsthand (Klein & Stefoff, 2021); Kuebler, 2021). She later founded the Green Schools Project, which is a renewable energy initiative that aims to transition schools in Central Uganda to use renewable energy, while teaching them about the climate crisis, all while inspiring more youth in her country to take action (Klein & Stefoff, 2021). Nakate should be treated as a global climate hero, however, the Associated Press just last year erased Nakate as the sole black body in a picture filled with white young climate activists alongside her at the World Economic Forum in Davos (Kuebler, 2021). She called out the press for not only the erasure of black lives, but also the erasure of how climate change is impacting the Global South as their stories are seldom reported on by media of the Global North (Klein & Stefoff, 2021). Yet what Vanessa’s message also teaches us is that for most BIPOC youth the crisis is a lived reality and not a future threatening scenario, and that the crisis is not just about the climate but

about oppression everywhere. Hence, just as Black Feminists and critical social theory teaches that those that are the most impacted by oppression have the most to teach the rest of us about anti-oppression and systematic change, perhaps then so does BIPOC youth have the most to teach us about the climate crisis, in terms of it's true root causes and alternative solutions. For the most impacted youth of the climate crisis are those that are already unfairly disadvantaged by inequalities, that of BIPOC in small island nations and coastal communities of the Global South, as well as impacted communities in the Global North (Sanson & Burke, 2020). According to UNICEF in 2014, "the most serious impacts of climate change are predicted in low to middle income countries (LMICs), where 85% of the world's children live (Sanson & Burke, 2020, pp. 345), while many youth are already experiencing these impacts today.

In this vein, the status quo is no longer an option for many BIPOC youth as it violates their existence, currently and in the future. Hence, we see many impacted peoples and communities systematically resisting and delegitimizing existing structures, institutions and power dynamics held by white supremacy and the neoliberal empire - as not only a form of resistance but as a form of reconstructing power. For late stage capitalism has historically placed BIPOC on the margins, but as of late, Indigenous and Black rights movements are radically reimagining and reconstituting their own sense of identity, place making and interconnectedness between humans, as well as the interconnectedness with nature and the more-than-human world. For example, among some of the key concepts in Critical Environmental Justice (CEJ), 'nature' is reframed to include 'inside places' as opposed to solely being understood as 'outside places,' which has profound implications for anthropocentric dualities, such as human vs. nature (Pellow, 2016). But one step further, it also puts into question the very way in which BIPOC bodies have been 'naturalized' and therefore, the similar ways in which both marginalized communities and the physical environment has been oppressed by the neoliberal empire as objects for commodification rather than subjects in which we all have a relational connection with (Pellow, 2016). Another key component to CEJ is that it

represents a deeply anti-authoritarian worldview that is no longer bargaining with dominant power structures and thereby legitimizing power, but rather constructing new forms of power, alternative systems and hence, offering pathways towards alternative solutions, such as adaptation and resilience (Pellow, 2016).

That is why in this final stage of grief, it is essential to shift old models and thinking that would state that the final stage is 'acceptance,' because that would nihilism or returning to a state of subordination to the systemic violence we call capitalism. Instead, this final stage of grief is reframed as 'reconstruction and resilience,' that by learning from the most marginalized and impacted peoples, including BIPOC youth, we can begin to understand how to gain our own power and agency, while adapting to a warming world together, fostering resilience, and even quite possibly reducing some of the worst impacts from the climate crisis. Perhaps that is why community gardening by Black and immigrant communities is so much more than husbandry of nature, but developing resilience for families who will face the greatest impacts of the crisis with food shortages by sharing education and tools on food sovereignty. Such as the Baltimore Corps describes the Black Food Sovereignty Movement as: "controlling our own destiny and determining our own future for self-determining Black Communities…(while) reconnecting and deepening a relationship to the land and traditional food-ways" (Chen, 2020, pp.1). Alternatively, Indigenous-led and community-owned renewable energy projects, of which there are over 300 such projects in Canada alone, have been described as: "break(ing) free of colonial ties, a move towards energy autonomy, (and) establishing more reliable energy systems" (Castleden, 2019, pp. 3). Or even 'artivism' where art and activism meet as a space of collective healing, creating new stories and even rebuilding imagination, as Toronto-based Black artist, Syrus Marcus Ware, describes her own work (Ware, 2018).

In these and many other examples, they reflect a vast and far reaching movement towards reconstructing power and building resilience, that both youth and adults are undertaking

in their communities and countries. This represents important work to learn from and foster, as we undertake an expansive transformation of decarbonization across all sectors of society to reach a zero-carbon economy. For it is an agenda that includes reimagining and rebuilding industry, transportation, agriculture, housing and relocating economies in ways that are equitable and fair to all. That is why those with the most at stake and those that have the most to lose by the climate crisis should be the architects of these plans. While undertaking a decarbonization agenda of this kind, we just might work through our collective stages of grief together and ultimately help develop a resilient human society to a warming world. This is perhaps the greatest gift we can offer one another in our time of crisis.

Conclusion:

"The reality is that you will grieve forever. You will not 'get over' the loss of a loved one; you will learn to live with it. You will heal and you will rebuild yourself around the loss you have suffered. You will be whole again but you will never be the same. Nor should you be the same nor would you want to."

- Elizabeth Kübler-Ross

Climate change is best understood as a pathology, perhaps the greatest global virus we will ever face. Greater than anything like the global health pandemic during and before our time. For it is a virus we cannot simply quarantine ourselves away from, nor is there a vaccine on its way. It is instead a virus that will affect us all - but it will affect us all in unequal ways - especially for youth. That is perhaps why young people have the greatest stake in the crisis as they are the first generation to be directly affected from the virus for the entirety of their lifetime. Since the late 80's and before they were even born, there was the *Exxon Valdez* oil spill that contaminated nearly 11 million gallons of oil into the Pacific Ocean, and since then there has been a series of human-caused ecological disasters, climatic changes and a series of broken

promises by adults on addressing the crisis - from the Earth Summit, the Kyoto Protocol to the Paris Accord. This has left youth with perhaps the greatest generational betrayals of all time - cleaning up this global virus from past generations' ineptitude. This is a heavy blow and a severe burden to place on the shoulders of young people, for not only are they carrying the weight of a now warming world on their backs but they are also doing the majority of the 'emotional labor' in coming to grips with the crisis in front of them. But as expressed, they are not simply victims, and instead they have agency in this crisis as they are finding new ways of coping, adapting and fostering resilience to the changing world. In many ways, they can 'school' the adults with their emotional intelligence in grappling with this crisis.

While many adults around the world, including our elected world leaders, continue to stay in the initial stage of climate grief, that of "shock and denial,' this report argues that Generation Z exemplifies a higher level of emotional intelligence in dealing with the climate crisis as they have progressed to later, if not all, the stages of climate grief within their short years on Earth. Hence, youth have much to teach the adult world in terms of their innate wisdoms, emotive strengths and powers, as well as their overall capacity for change. That is why in tackling the climate crisis our approaches must move away from paternalism - from politics, science, and media culture – that dictates the lives of youth (including the Global South) in how we collectively respond to the crisis. Instead, we must begin a dialogical approach (Freire, 2000), whereby intergenerational knowledge can be shared in a manner in which youth knowledge can help emotionally evolve adults, enabling them to show the kind of leadership and resilience that youth are already embodying today. Therefore, while climate change may be the greatest pathology we have ever faced, it is young people that might just be the 'antidote' by teaching the rest of the human species how to adapt to a warming world.

References:

1. Atkin, E. (2020, October 1). Proud Boys and petro-masculinity. *Heated*. Retrieved from: https://heated.world/p/proud-boys-and-petro-masculinity

2. Buckley, D. (2021, March 18). Understanding the stages of grief. *BetterHelp.com.* Retrieved from: https://www.betterhelp.com/advice/grief/understanding-the-stages-of-grief/

3. Castleden, H. (2019, April 23). Indigenous-led clean-energy projects could power reconciliation. The Conversation. Retrieved from: https://theconversation.com/indigenous-led-clean-energy-projects-could-power-reconciliation-111903

4. Chen, C. (2020, June 24). Baltimore's Black Food Sovereignty Movement: what you need to know. *Baltimore Corps.* Retrieved from: https://www.baltimorecorps.org/press-and-media/2020/8/16/baltimores-black-food-sovereignty-movement-what-you-need-to-know

5. Daggett, C. (2018). Petro-Masculinity: Fossil fuels and authoritarian desire. *Millennium: Journal of International Studies*, Vol. 47(1) 25 –44, pp. 25 - 44. DOI: 10.1177/030582981

6. Daniels, E. (2017, October 24). Activism in Youth: It's a Good Thing. *UVA Today,* University of Virginia. Retrieved from: https://news.virginia.edu/content/activism-youth-its-good-thing

7. Effective Activist. (n.d.). *Effective Activist: An evidence-based guide to progressive social change (*zine). Retrieved from: http://effectiveactivist.com/wp-content/uploads/2018/11/Effective-Activist-zine-2018.pdf

8. Forani, J. (2019, September 24). Hopeless or hopeful? How eco-anxiety affects kids and youth. *CTV News.ca.* Retrieved from: https://www.ctvnews.ca/health/hopeless-or-hopeful-how-eco-anxiety-affects-kids-and-youth-1.4608324

9. Freire, P. (2000). *Pedagogy of the Oppressed*. 30th anniversary ed. Bloomsbury Academic.

10. Fridays for Future. (n.d.). Strike States. *Fridays for Future*. Retrieved from: https://fridaysforfuture.org/what-we-do/strike-statistics/

11. Funk, C. & Tyson, A. (2020). Millennial and Gen Z Republicans stand out from their elders on climate and energy issues. *Pew Research Centre.* Retrieved from: https://www.pewresearch.org/fact-tank/2020/06/24/millennial-and-gen-z-republicans-stand-out-from-their-elders-on-climate-and-energy-issues/

12. Han, H. & Ahn, S.W. (2020). Youth mobilization to stop global climate change: narratives and impact. *Sustainability*, *12* (10), 4127; https://doi.org/10.3390/su12104127

13. Haraway, D. (2016). *Tentacular Thinking: Anthropocene, Capitalocene, Chthulucene.* E-Flux Journal, 75.

14. Jaquette, S. R. (2020, July 22). The new faces of climate justice. *Zocalo Public Square.* Retrieved from: https://www.zocalopublicsquare.org/2020/07/22/gen-z-climate-justice-generation/ideas/essay/

15. Jewell-Kemker, S. (Director). (2018). *Youth Unstoppable* (documentary film). Canada: Scythia Films.

16. Kahn, R. (2010). *Critical Pedagogy, Ecoliteracy, & Planetary Crisis: The Ecopedagogy Movement*. Peter Lang International.

17. Klein, N. & Stefoff, R. (2021). *How to Change Everything.* Canada: Puffin: Penguin Random House Books.

18. Kubler-Ross, E. (2014). *On Death and Dying: What the dying have to teach doctors, nurses, clergy and their own families* (50th anniversary edition). Scribner; Reissue.

19. Kuebler, M. (2021, March 19). Has COVID changed Fridays for Future? *DW.com.* Retrieved from: https://www.dw.com/en/coronavirus-fridays-for-future-fff-covid-19-pandemic-climate-strike/a-56911641

20. Langer, B. (2002). Commodified Enchantment: children and consumer capitalism. *Sage Journals and Thesis Eleven*, 69, pp. 67-81. DOI: https://doi-org.ezproxy.library.yorku.ca/10.1177%2F0725513602069001005

21. Maclear, K. (2018). Protected or Prepared? Children in a Stormy World. *Journal of Curriculum and Pedagogy,* 15 92), pp. 127-157.

22. Margolin, J. (2020). *Youth to Power: Your voice and how to use it.* New York, NY: Hachette Books.

23. Marris, E. (2019, September 18). Why young climate activists have captured the world's attention. *Nature.com.* Retrieved from: https://www.nature.com/articles/d41586-019-02696-0

24. McCright, A.M. & Dunlap, R.E. (2011). Cool dudes: The denial of climate change among conservative white males in the United States. *Global Environmental Change*, doi:10.1016/j.gloenvcha.2011.06.003

25. McVean, A. (2019, May 31). It's time to let the five stages of grief die. *Office for Science and Society*, McGill University. Retrieved from: https://www.mcgill.ca/oss/article/health-history/its-time-let-five-stages-grief-die

26. Merriam-Webster. (n.d.). Dictionary: Climate change denial. *Merriam-webster.com*. Retrieved from: https://www.merriam-webster.com/dictionary/climate%20change%20denial

27. Norris, T. (2020). Are students becoming consumerist learners? *Journal of Philosophy of Educatio*n, 54 (4), pp. 874-886. DOI: https://doi-org.ezproxy.library.yorku.ca/10.1111/1467-9752.12489

28. Parker, L. (2019, June 26). Kids suing government about climate change: It's a global trend. *National Geographic*. Retrieved from: https://www.nationalgeographic.com/environment/article/kids-suing-governments-about-climate-growing-trend

29. Patton, G.C., & et al. (2016). Our future: a Lancet commission on adolescent health and wellbeing. *The Lancet Commissions,* Vol. 387, pp. 2423 - 2470. DOI: https://doi.org/10.1016/S0140-6736(16)00579-1

30. Pellow, D.N. (2016). Toward a Critical Environmental Justice Studies: Black Lives Matter as an Environmental Justice Challenge. *Du Bois Review*, Hutchins Centre for African and African American Research, 13 (2), pp. 1-16. DOI; 10.1017/s1742058x1600014x

31. Plautz, J. (2020, February 3). The environmental burden of Generation Z. *The Washington Post*. Retrieved from: https://www.washingtonpost.com/magazine/2020/02/03/eco-anxiety-is-overwhelming-kids-wheres-line-between-education-alarmism/

32. Reyes, M. & Calderon, A. (2021, March). What is MAPA and why should we pay attention to it? *Friday's for Future Newsletter,* Edition No. 1. Retrieved from: https://fridaysforfuture.org/newsletter/edition-no-1-what-is-mapa-and-why-should-we-pay-attention-to-it/

33. Sanson, A.V., Hoorn, J.V., & Burke, S.E.L. (2019). Responding to the impacts of the climate crisis on children and youth. Child Development Perspectives, 13 (4), pp. 201 - 207. DOI; 10.1111/cdep.12342

34. Sanson A.V., & Burke S.E.L. (2020). Climate Change and Children: An Issue of Intergenerational Justice. In: Balvin N., Christie D. (eds) *Children and Peace*. Peace Psychology Book Series. Springer, Cham. https://doi.org/10.1007/978-3-030-22176-8_21

35. Spitznagel, E. (2020, January 25). Generation Z is bigger than Millennials - and they're out to change the world. New York Post. Retrieved from: https://nypost.com/2020/01/25/generation-z-is-bigger-than-millennials-and-theyre-out-to-change-the-world/

36. Thunberg, G. (2019). *No one is too small to make a difference*. UK: Penguin Random House Books.

37. UNICEF. (n.d.). Youth for climate action: elevating the voices of young people to protest the future of our planet. *UNICEF.org.* Retrieved from: https://www.unicef.org/environment-and-climate-change/youth-action

38. Ward, M. (2019, September 20). Climate Anxiety is real, and young people are feeling it. \ *The Sydney Morning Herald*. Retrieved from: https://www.smh.com.au/lifestyle/health-and-wellness/climate-anxiety-is-real-and-young-people-are-feeling-it-20190918-p52soj.html

39. Ware, S.M. (2019, August 7). How to fight activist burnout (op-ed). *NOW Magazine.* Retrieved from: https://nowtoronto.com/culture/theatre/activist-burnout-syrus-marcus-ware-2

40. Wikipedia. (n.d.). School strike for climate. *Wikipedia.org*. Retrieved from: https://en.wikipedia.org/wiki/School_strike_for_climate

41. Winston, A. (2019, March 26). Young people are leading the way on climate change, and companies need to pay attention. *Harvard Business Review.* Retrieved from: https://hbr.org/2019/03/young-people-are-leading-the-way-on-climate-change-and-companies-need-to-pay-attention

42. Wu, J., Snell, G., & Samji, H. (2020, October). Climate anxiety in young people: a call to action. *The Lancet Planetary Health*, 4 (10). DOI: https://doi.org/10.1016/S2542-5196(20)30223-0