22nd Century A Generation Awakens to Climate Change

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Introduction

Quinn Breen and Lea Hamel

In 2013, the philosopher Thomas Morton coined the term "hyperobject," an object so big that it is almost inconceivable, that we can only think about abstractly because it confounds the limits of our understanding. The internet is a hyperobject, he says, and so is language itself. Climate change is another.

The science of climate change is well-documented, if not universally well-received. We know the environmental processes—the greenhouse effect, for example—that cause climate change and we understand how they work. Scientific data tells us that temperatures have increased over the decades, and we're well aware of the pollutants driving those increases. We've felt the impact of climate change locally and witnessed its more catastrophic effects globally. The idea that unseasonable weather and the floods and fires we see on the news are the interconnected results of a larger phenomenon is easy enough to understand.

Still, the reality of climate change—the scale and the totality of it—remains unfathomable. It's nearly impossible to imagine our world and our lives changing to the degree that science indicates they will or must. We are currently living in what scientists call the "Anthropocene," a geological epoch in which human activity is the driving force of environmental change. See how the very language of climate change overwhelms our usual way of thinking. We can hardly conceive of how all of our human days, weeks, months, years, decades, and centuries add up to these grand things called epochs, of which we inhabit only one of many. We are unaccustomed to thinking about humanity as possibly secondary to something greater, something older. But climate change compels us to think of ourselves not only as members of a society, citizens of a nation, or actors in the drama of human history, but as

creatures (the status of "human" is demoted in this panoramic view) inhabiting the life of Earth. The other side of this grandeur is the granular; what will be sacrificed, compromised, or lost in our everyday lives? There is a pervasive sense that we are living on the cusp of some change that, however big or small, is unimaginable.

If you've happened to stumble upon our publication, welcome. What follows hereafter are not words of wisdom nor declarations of action. In his novel *Siddhartha*, Hermann Hesse expresses the futility of trying to convey wisdom, writing that anyone "can find wisdom, one can live it, one can be borne by it, one can work wonders with it, but one can neither speak it nor teach it." We're not experts, nor are we scientists, but we are awakened. We don't intend to write polemically. Instead, we humanists have tried our best to compile our thoughts and engage with the current environmental crisis rather than turn away from it. Indeed, after awakening to climate change, turning away is the least helpful action one can do. Still, it is sometimes necessary. We understand that. Like you, we are struggling to deal with the uncertainty, helplessness, anxiety, depression, anger, and powerlessness that climate change causes us to feel. Our purpose is not to give you more expert knowledge and opinion. Rather, we aim to give a voice to these feelings. We aim to foster a sense of generational unity and resolve, both of which we will need to effectively confront the environmental crisis we are currently facing and alter its precarious future.

Our publication is an attempt to comprehend this hyperobject, climate change, and to find meaning in it. The following essays address a number of topics related to life during climate change. They endeavor to rethink our relationship to Earth. They explore what it means to first awaken to climate change and nature, and how that awakening affects our understanding of both. The following essays are concerned with human well-being in the face of environmental danger.

They propose new, sustainable ways of living. They consider the gravity of taking climate change seriously, exploring which actions we must take to make a difference. In the end, they all refuse to be complacent. If their tone is at times foreboding or their perspective bleak, it is only because a generation raised on catastrophe cannot afford to be naive. There is nothing to gain from self-delusion, nor from giving in to alarmism. And it is only from reckoning with the worst possibilities that meaningful optimism can be cultivated. These writers have their eyes on a regenerated Earth and a healed society.

If you're coming to this publication with similar concerns in mind, we hope that it will provide you with something valuable. Throughout time, Mother Nature has always been there for us. It's time we were there for Her.

Awakening

"Those who dwell among the beauties and mysteries of the earth are never alone or weary of life."

—Rachel Carson

Literature as a Guide to Awakening

Maya Staples

With the Earth transitioning into a planet that researchers report will soon be uninhabitable for human beings, our culture, more than ever, desires to be awakened-- to make sense of the chaos that surrounds us. Books such as Herman Hesse's *Siddhartha* and accounts of awakening from authors such as Margaret Fuller and Ralph Waldo Emerson can guide us to learning about the process - but how can we integrate this information into our modern-day lives? And what about the discomfort that follows awakening that Fredrick Douglas wrote about in his book, *My Bondage and My Freedom*? His work poses the question: why would one want to awaken to a world where there is poverty, war, and prejudice?

When I chose to research the experience of awakening, I was fully aware that there was not one clear answer, there is no one-size-fits-all route path that leads us to a peaceful existence. The definition of the word "awakening" itself is quite simple, as it means to "come into awareness." I decided to write about awakening because I believe that "coming into awareness" can lead us in creating a meaningful life, a life of intention and presence. Not only is this valuable on an individual level, but it has the potential to affect the whole world.

I believe there is a lot to glean from literature on the topic of awakening, maybe even more so than the new and shiny self-help books. I've found that when I cannot find my own words to describe my internal experience, I can always find solace in others' words-- that, often, writers can assist in understanding heavy, theoretical topics through story-telling. Through their stories and meditations, we are guided in better understanding ourselves and the world we live in. In one of Margaret Fuller's journal entries on her personal experience of awakening, she writes "... I saw there was no self; that selfishness was folly and the result of circumstance; and it

was only because I thought a real self that I suffered; that I had only to live in the idea of ALL and all was mine" (Fuller 11). This is a profound statement, as it points out that by making ourselves the center of our universe, we suffer. A substantial aspect of awakening to ourselves is recognizing that there is much more than our "small self." In order to feel a sense of freedom, one has to break free of the belief of separate-ness. I see this idea as especially pertinent in today's times. Within the world of social media, there is this desire to maintain an image, or the self we want the world to see. Although Margaret Fuller has not been around in this age of technology and social media, I think she would agree social media traps us in a cycle of maintaining separate-ness. This curation of the self pulls us away from a feeling of unity with others and the entire world that surrounds us. Just as Fuller suffered because of a belief in a separate self, we suffer anxiety and depression because of our curation and performance of self.

A way to access this experience of one-ness is getting 'outside of ourselves' and into our natural environment. In Ralph Waldo Emerson's "Nature," he talks about the profundity of the moment he awakened to nature -- how through being in nature he experienced "... perfect exhilaration." He writes:

"Crossing a bare common, in snow puddles, at twilight, under a clouded sky, without having in my thoughts any occurrence of special good fortune, I have enjoyed perfect exhilaration. I am glad to the brink of fear. In the woods too, a man casts off his years, as the snake his slough, and at what period is a soever of life, is always a child. In the woods is perpetual youth" (Emerson 1836).

It may be easy for one to read this and roll our eyes, saying that Emerson was possibly exaggerating or simply accusing him of using overly flowery language. But before disregarding Emerson's words, it is important to analyze what going out into nature looks like for us now.

Oftentimes when I am in the woods, I see people with their phone in their back pocket. There are usually earbuds in their ears and every few minutes they unlock their phone screen to look at the

notifications that have popped up, taking them out of the present moment they are in. Although one is "out in nature", there is not a full experience of diving into where they are. By being fully immersed in our experiences, especially ones where we are outside-- we become aware of the magic of all that is occurring around us.

The good news is, there is always the opportunity to re-connect. Herman Hesse reminds us of this in his novel *Siddhartha*, when the eponymous character awakens to the world around him: "All of this, a thousand-fold and colorful, had always been there, always the sun and the moon had shone, always rivers had roared and bees had buzzed, but in former times all of this had been nothing more to Siddhartha than a fleeting, deceptive veil before his eyes..." (Hesse 58). This passage highlights an important distinction about our ability to change how we see the world. We are not fixed in how we experience the world, nature, or our experiences. It is possible to change the way we relate and connect to our lives and our surroundings. Through our openness we find the possibility of re-connecting to ourselves in other ways, maybe ways that we had not before.

Although there is a sense of newfound hope and wonder that comes from awakening to nature and our connection to the outside world, there are other parts of the "awakening process" that are not so beautiful. Often, there is an experience of deep discomfort that can come from awakening.

I believe there is a lot to glean from Fredrick Douglass's writing on the topic of awakening and the discomfort that comes from seeing things we previously were blind to.

Although his work focuses on the specific subject matter of slavery, his reflections also apply to the aspect of awakening that is unpleasant and hard to sit with. In the book, *My Bondage and My Freedom*, Douglass reflects on his awakening as an experience that disturbs him, the illusion and

submission to slavery and 'submitting to one's fate.' He states, "the revelation haunted me, stung me, and made me gloomy and miserable.... I almost envied my fellow slaves and their stupid contentment" (Douglass 47).

Awakening does not always mean awakening to some blissful and awesome world. The experience of awakening also 'wakes you up' to the chaos and illusions that you may not have been aware of before. I believe this part of awakening is not often talked about, the painfulness of waking up. Douglass's account also expresses that awakening sometimes does not just come from sitting in a forest, but can come from studying, learning, living, and noticing-- not turning away from truths that disturb your ways of being and beliefs about the world. Awakening to the horrors of the world, the destruction, and the systems that oppress us, do not bring us to a state of blissful contentment, but in fact, can make us feel strong emotions of disgust and hate.

I think this is the biggest reason why people stay stuck in their way of looking at the world and themselves. There is this intense fear of what is on the other side of our comfort zones, especially this fear of being awakened to a destructive and upsetting reality. We, as humans, desire comfort and if we wake up to a world where there are unknown and scary things happening to our environment, it is hard to remain calm and centered, and we want to return to the safe, somewhat ignorant place we were before. 'Waking up' can often feel like a punch in the stomach. But although there may be a feeling of discomfort, I see it as a better option than living a life of ignorance and complacency.

I see literature as an embodiment of theory. Others' words, reflections, and stories can help us understand ourselves and our experiences in a profound way. It can guide us in understanding big, heavy, theoretical topics-- such as the topic of awakening - by interpreting them through the written language. Texts from hundreds of years ago, such as Margaret Fuller's

diary entries and Emerson's novels are timeless. They continue to bring light to ideas and experiences that are hard for us to put into words.

So, why is awakening an important part of the human experience? Because even though the process may not be comfortable, awakening to ourselves and our environment expands our worldview. We move outside of the small daily dramas in our lives, and instead focus on tuning into the world around us. Awakening guides us to finding what our life path is-- what matters to us, what moves us, and is ultimately what brings us closer to ourselves, and to the world.

What Do You Hear When You Stop and Listen?

Rebecca Mann

Imagine yourself walking outside. As you walk, what do you feel beneath your feet? Maybe you feel hard rocks or crunchy sticks beneath your thick hiking boots, or soft sand between your toes and the surface of your bare feet. Or maybe you feel the grass tickling your ankles as you walk through an overgrown field. What kind of sounds do you hear? Maybe you hear the crashing of the ocean waves. Or perhaps you hear the whistling of the wind as it pushes through leaves and branches, pushing them back and forth as it runs. Or perhaps you hear an animal, running through an open field trying to find food, or maybe shelter. As you walk, do you hear voices? Maybe you hear the earth calling to you through the rushing sounds of a babbling river. Do you hear the trees calling down to you, or are you walking too fast? Do you feel the waves trying to reach your feet to grab your attention? Do you feel the grass as it sticks to your legs, begging you to stop and listen? It's asking for help, for love, for some care. What do you hear?

Often as we walk through our lives, we find that we fall into certain categories.

Specifically, ones having to do with our connections to nature. Some people rush from place to place, oblivious to their surrounding environment, while others take the time to "stop and smell the roses." Some fall into gray areas in between those categories, and I think that is where I fall. I live on Cape Cod in Massachusetts, deeper into the island where I can still feel the sea breeze. While I am still near the coast, my house is surrounded by massive oak trees that shade the entire property. I love to sit in my yard and feel the breeze on my face coming through the trees, whistling as it hits the leaves. Once the snow from monstrous Mass winters melts away and the flowers start peeking through the patches of dirt around the trees, I find my peace. I love to close

my eyes at the beach down the road from my house and feel the sun beam down on me, and to hear the waves roar, the seagulls squawk, and be completely absorbed by my surroundings. However, when I am not at home, but at school at the University of Massachusetts Amherst, I usually have places to be. I walk fast, looking down at my feet the entire time to make sure that I do not trip over them. Sometimes, I forget to look up and see that the clouds have turned into a deep orange and pink as the sun sets behind the mountains surrounding the Pioneer Valley. Trust me, that is not a sight you want to miss.

The urgency to reverse the effects of climate change is not present in everyone's everyday agenda or priorities. I think that mostly has to do with the fact that we are moving through life so quickly that we fail to put the pieces together and to see the larger picture of what is happening in the world around us. We wake up every day, and the world is still here. The sky is not falling, the trees are still standing, and water still runs from our faucets. We have been lulled into a sense of comfort and security, taking the clear skies, rushing water sources, and cool air around us for granted, and all the while nature is begging for us to help. Sometimes I fail to recognize what is happening to our environment out of sheer anxiety about what opening that door might bring. We have all experienced that fear of the unknown: what will happen if I do not do anything? What will happen if I do not do enough? With so many sources out there, who do I listen to?

The answer to these questions might be easier to find than you think. Listen to what nature is telling you. Of course, we should also listen to science. Scientists have been tracking the effects of climate change for decades, and compiled facts and figures that can show you what the world will look like in the next year, ten years, and even one hundred years. Any Google search can show you that information. However, despite these scientific facts and figures, what I

have found is that nature has its own way of speaking to us. We ourselves do not need to have all of the answers. Nature itself does. However, we'll never know what those answers are unless we take the time to listen.

Let me first start by saying what I mean when I say "nature." To me, "nature" is the outdoor world that surrounds you. Your back yard is nature, the stream by your house is nature, the bug you see crawling up the side of a tree is also nature. No matter where you are, where you live, or what your situation is, your environment is affected in some way by climate change. Nature has been around far longer than we have been and has seen much more than we have seen. The tree that hangs over your house and gives you shade could be hundreds of years old. Imagine what it has seen in its hundred years, being rooted in the earth by your house. Maybe it saw Native American tribes that had once lived on your land before the British colonized North America. Or maybe it saw slaves working in the cotton fields. Even if it is not centuries-old, I'm sure that tree is old enough to have seen your family move into your current house. That tree might have seen you play pretend in your yard. It could have been watching as you got off the bus and walked to your front door. It might have stood through hurricanes and blizzards while you were taking shelter inside. That tree stood before you met and built your house underneath its protection. Even if you live in a city where the concrete you walk on is younger than your dog, what about the dirt underneath the skyscrapers and the pavement that has been there before cities were erected around the globe? Some turtles have been swimming through the same waters in our deep blue oceans for over 150 years. When you go to the beach and step your feet into the cool water, do you know that water has traveled a long way just to be there? Through the global oceanic conveyor belt that circulates water around the globe, it can take one thousand years for a

single drop of water to complete its journey. In the grand scheme of life on Earth, we humans are not the driving force, but perhaps only the loudest and most destructive.

I might come off as crazy by saying that we can solve all of the world's problems by listening to trees and the ocean, and I know that. After all, trees can't speak, and neither can the waves in the way that we humans understand verbal communication. However, that doesn't mean that nature has nothing to say. Rather, it is just speaking a different language. As a collective, we need to move away from the idea that humans run the world, despite our strong influence. I, and I am sure many others, have had an experience when all of a sudden, I feel extremely small, like a piece of dust floating through a vast universe. Have you had this experience? Standing by the ocean, looking up at the night sky, looking at the horizon and realizing it is so expansive that even your own eyes do not know how to comprehend it so all you see is a straight line. For some, personal relativity is felt through their spirituality and the idea that they are a part of Creation. Others feel like they are a piece of the Universe, a being among the stars. Whatever makes you feel like you are not in control, that is what I want you to hold on to for the remainder of this essay, whatever makes you feel like there is a force out there bigger than yourself.

I am reminded of this myself when I see the big oak trees outside my house. They've been standing there since before I was born, and their roots expand past the tree line, rooting them deep in the soil. Looking up at those trees, I realize how easily we are all able to trip, get lost, and feel insignificant while they refuse to budge or change who they are. They have found a way to get around the forces that push them. They are bigger and wiser than we are. But then come the blizzards. The fear envelops me every time I hear the wind shaking the foundation of my house during a classic New England snowstorm. One winter, those winds blew so hard and

broke one of the oak trees in half, crashing the tree trunk onto my mom's minivan. The storm's power was too great for the tree that never budged.

We fear fire, storms, volcanic eruptions, tornadoes, and hurricanes because they are forces that can cause extreme damage to us and the nature that surrounds us. If we fear their power so much, why don't we listen when they ask us for help? The wildfires are telling us that the Earth's climate is getting too hot. Global temperatures increase due to carbon emissions, and those carbon emissions only increase the fire season in dry climates by a couple of months. If the global temperature increases, the fires will burn longer and hotter, therefore making them more destructive every year. For instance, the 2019 California wildfires destroyed acres of woodlands, habitats, and houses. Unseasonal storms, such as the blizzard that struck New England in March of 2018 during the week of my "spring" break, are telling us that global temperatures are shifting drastically. Increasing numbers of hurricanes and tornadoes are telling us that something is wrong in our atmosphere. Rising sea levels are causing the water cycle to speed up and cause larger and more destructive storms. Why don't we listen? The earth, the trees, the ocean—all of the forces that have seen everything, more than we ever have and ever will, are scared. And frankly, that terrifies me. What do we do when the forces that scare us are afraid of us? We listen. We fix it. We start to heal.

The coronavirus hit our globe like a bolt of lightning at the beginning of 2020, uprooting everyone's lives and changing the trajectory of life on Earth. I never thought I would live through something that had such an impact like COVID-19. Schools and airports have shut down, factories in China that never before ceased have closed their doors, and people have retreated to their homes for safety. If you are not convinced that we can learn something from nature, let me tell you about what it has been saying to us since the outbreak. Through all of the

panic, through all of the fear and the loss that we have suffered from COVID-19, nature has quickly started to heal. Carbon emissions have decreased significantly since factories have shut down. According to Climate Brief, a UK based climate change group, since China has closed its factory doors, carbon emissions in China have dropped 25% in four weeks. Air pollution has decreased with the decline of car and air travel. Since the coronavirus outbreak, we have caught a glimpse into what might happen if we start to take climate action seriously. Although the coronavirus outbreak also has links to the effects of climate change, we can see what happens when we listen to nature and stop the harm we are causing. Scientists have described this pandemic as "climate on warp speed," meaning that everything that has happened within the past couple of weeks due to COVID-19 is what we should expect in the coming decades because of climate change. This includes the economic crash, more mass pandemics, mass hysteria and panic, less people walking the streets, and so on.

But we also get a piece of hope in all of the hurt. Since the outbreak of coronavirus, the water that has run through the Grand Canal in Venice has run clear enough to see fish in the water for the first time in years. Without boat traffic and air pollution, the water quickly began to heal and attract. Other sources report that in certain parts of India, the Himalayan mountains are now visible after being blocked by pollution for years, as well. We, and our actions, have a serious impact. When we listen to science (wash your hands, don't touch your face, stay home), and listen to the reality of the power that nature has (the mass spread of a pandemic), we can make an actual difference.

Altogether, I can tell you that I fear nature and all the power that it has. I have always been scared of forces beyond my control. When it comes to climate change, it is so easy for us to turn a blind eye to what is happening around us. I have experienced this first hand. After all,

trees and water can't actually talk to us. However, I know that there is a piece of nature in everyone. For me, it is the smell of the ocean air and the grand oak trees hanging over my house. I have seen what the waves can do. I have seen the destruction of trees when the weather gets violent and pushes them down. During a time when we are all at home, trying to survive during this global pandemic, I fear nature the most. It reveals elements we have never heard of that can cause immense destruction to the human race. This makes me feel small. This pandemic has given me that same feeling as when I look at the horizon. We cannot fully conceptualize the number of unknown elements that are out there. We are not in charge, so we need to listen. Just as fear motivated us to listen to science when the outbreak first started, we also need to listen to nature as it begins to heal, to ensure that it continues to heal. Listen to the friendship you have between you and the trees, or you and the night sky. We have a lot to learn, if only we stop and listen.

Remembering What We Leave Behind

Cameron Smith

Walks in the woods shouldn't challenge me, but they always do. Keen attention develops when taking those steps among the trees. Most commonly, I see the beauty and strangeness of that place. However, more than grace can be seen out there; behind every bloom is a story of degradation. Small marks of mankind seem to be scattered everywhere these days. What I fear most whenever I take my first step into the woods is what I might realize. Possessions are left in these places, and once I have them in my sight, I struggle to turn back. Each item, or litter we may call it, has a story, and I have been trying to figure out those stories for a long time. That unknowable junk haunts me, as it will outlive me. The worst thing about these items is that most everyone isn't giving it a second thought, but they should. When awakened to these stories, we have a responsibility to remember the influence that they carry. This essay, a recollection of three walks, could be my attempt at remembering.

Balloons and tiny booze bottles seem rampant these days, or so I thought as one came into sight on the trail. A balloon that was of the blue foil variety. \$2.99 at the craft store, or the card store, or Walmart, or what have you. As for the tiny booze bottles, I mostly left them behind when I walked onto the trail, expecting to be far away from any trash among the trees, and yet here they were in front of me. What is strange is how the trash changes the further you walk into the woods. It becomes more intimate, deliberate. As I continued down the path, I knew that some real work had to be done for the litter to get to this place, the woods place, set beside the pond in Amherst, Massachusetts.

Two miles of walking brought me to the pond with a barren shroud of hemlocks on a winter day. The balloon's shimmer caught my eye. It had landed in a thicket, tangled in a half-deflated mess, more like garbage than anything else. I wanted to have it in my hands, and so I thought I might grab it and throw it away. I pushed through the bushes with thorns. They caught on my shirt and clung to my skin. Here, just off the trail, five feet of walking was much denser. I thought to myself, *Work needs to be put in when tidying a forest*.

When I reached the balloon, I found a message written on its side that read, "Hi Dad, We miss you, love you." Three names followed the message, which I assumed were the names of three daughters writing to their deceased father. They must have gathered together in their yard and in a somber requiem released the balloon into the air. Just days later, and miles away, I had it in my hands. At that moment, I realized that I had come across a message to heaven, or that's what my brothers and I called it as kids.

Leaving the dentist, with our reward of aching molars and smiley balloons, we would release them high into the air, saying they were en route to Beep. He had died before we had known him, and so this was our best attempt at a connection with our faraway grandfather. Foresight is difficult when it all seems so good, and when a balloon is shooting higher and higher into the air, reaching up near the sun. Just like those daughters, my brothers and I sought connection in a physical form where Beep's presence was lacking. This one, a balloon, happened to be plastic coated and able to drift half a state away.

All my balloons at the dentist, like the one in the woods, were Mylar, *non-biodegradable*. The Mylar balloons are the shiny foil kind, the ones that you get for birthdays and graduations, although the microplastics will remain for a much longer time than those celebrations. I didn't know the name then, nor did I know the plastic pollution being released out of my hands. How

could I have known? Nobody told me. Every adult in my life thought it endearing that our love found a tangible form, that our mourning could be swept away with the wind.

Another day, I followed the blue flares leading through Amethyst Brook in Amherst. It was early June, and the day was hot. As I moved through the trail I came across a wooden footbridge. A stream flowed underneath, adding sound to an otherwise silent day. Following the markers, I soon reached the bottom of the first hill, where the trail jut out on an unmarked path. Many fear to tread further than where the markers end, but that is often where well-kept secrets can be found. While walking down that path for a half-mile or so, I came across a collection of dilapidated automobiles left to rot. I assumed the woods had been a car dump, left for regrowth.

Among the cars, I caught sight of a 1953 Ford Thunderbird in its final resting place. Although rusted, dented, and covered with tree droppings, the Bird still had a shimmer of its past glory. The roof had caved in, and a pool of acorns and pine needles filled the empty spaces. The original teal coat remained where the rust hadn't yet reached, and the bumpers still shined like new. The wheels and doors were long missing, but it all still felt intact, like old engineering done right. Over sixty years old, the car still had so much going for it. Sure, it needed some work, but it was *salvageable*. It had found its end too soon.

Coming across an abandoned car deep in the woods really makes you question how it got there. The Thunderbird is considered a part of the movement towards luxury vehicles. This wasn't a daily driver, especially not with Amherst's New England winters. No, this Thunderbird would have been used for special occasions and rotted in a garage long before it was driven into the woods and stripped of its wheels. Long before the days of environmentally efficient vehicles, this car would have once been shooting condensed poison out of its exhaust. With each mile, that

small-town air the Bird was driving in would have become a little more exhausted. All of that for a temporary shimmer of status. But status doesn't last for more than a generation, and this car had been destined for the ground the day it left the lot.

I walked clumsily towards the car as if approaching the grave of a stranger with a familiar name. The sun shone on the interior as I reached in through the missing windshield. I could almost feel the glass that had once inhabited that space. The driver would have rolled the windows down on a day like that and held on firmly to the steering wheel as he sped through those curving New England roads. But then, sixty years later, I had the wheel in my hands. It was handcrafted from maple. The hardwood had returned to its place back among trees. I thought of the day to come when nature had done its work and corroded the car down to its final elements. The wheel would rest among the soil then.

The Bird seemed so at home among the trees. The clearing, brimmed by hemlock and beech trees, seemed a graveyard to me. All the cars had long been set in rows and, like headstones are forgotten, were slowly sinking. A certain clarity arose when I passed through the gate into that collection of fading memorials, and a recognition that whatever lay there wasn't coming back.

In the winter, a mouse hung from a branch. Draped over the branch head first, with its body and tail dangling toward the ground, it seemed as though the mouse stared back at me.

Beside the corpse hung an orange peel, which was left wrapped on the tree by a passerby. I was on the Robert Frost trail again, heading up the hill and hoping to escape the cold on higher ground; it's counterintuitive, but sometimes it works. I would have missed the mouse completely. I usually just tune into the ground below when walking on the trail; the trees can

quickly become overwhelming, but the ground is solid and still, consistent and cold. Cory, my friend and nature guide, shrieked behind me when he saw the mouse hanging there. We almost believed it was resting, hanging eight feet above the ground in that low branch.

It was February 8, and cold. Real cold. Cold enough that people were telling me not to go out at all. Mice don't have friends like that. The passerby, who dangled the peel on the branch, must have walked the trail the day before. It was even colder then. The temperature reached only 20 °F. Even I wouldn't have gone out with a high of twenty degrees.

I tried to picture him, the passerby, while I walked away. He must have strolled onto the trail in a jacket far too light with a water bottle and an orange in either pocket. I was sure that he had walked past all the same markers as I had: the blue flashes leading up the first hill, through the tree farm, over the streams, and across the rockslides. All that time he had held the orange in his hand. When he reached the summit, he must have pulled it out and ripped back the peel. He must have feasted while looking out over the Pioneer Valley. On the way down, he must have flung it onto the branch, and called out to his friend, saying that it's *biodegradable*, of course!

The orange peel was, of course, *edible* too. The mouse must have known this as it drew forth from its warm shelter and moved up the tree and across the branch. The temperature must have been two below zero by the time it reached the peel. The mouse froze in place just before it reached its dinner. Frozen in time, dead and waiting-food for a passing bird.

As I sat in the back seat of Cory's car as we headed home, I thought of "The Salmon Fisher To The Salmon," the poem in which Seamus Heaney depicts himself fishing as a child. As he hooks a salmon he thinks, "We're both annihilated on the fly. / You can't resist a gullet full of steel. / I will return home fish-smelling, scaly." Heaney couldn't help but to take the memory of the fish back home, dragging the smell with him years later. That day on the trail, I took a picture

of the mouse and the orange peel. It still lays where I stashed it, hidden under some scraps of half-written poems and books that I haven't yet read.

We are forgetful creatures. Our realizations fade away in the ridiculous babble and complications of life. E. E. Cummings once wrote:

all ignorance toboggans into know

and trudges up to ignorance again:

but winter's not forever, even snow

melts; and if spring should spoil the game, what then?

I feign to know how to live in the spring season, always acting as if there is an answer to staying awake all the time. My walks in the woods help me to remember the horror and the beauty that is still around us. Like a balloon that honors a lost father but pollutes the soil where it lands. Like a Thunderbird still flashing its glory, but left rotting on the trail. Like remnants of a determined hiker who had good intentions but caused an unnecessary death.

I think sometimes of a picture I once saw. A water bottle floats in the open water of the North Pacific Ocean, caught in the heap of plastic drawn together by currents much larger than any of us. The sunshine shimmers across the water and catches beautifully against the transparent and distorted plastic of the bottle. I often wonder how the trash is so glorious and tormenting all at once. I also wonder, who is going to fish the bottle out of the water?

The Pain of Being Aware

Zaily Alvarado

If life was fine before you knew about something notable—whether in a good or bad sense—why should you bother to consider it tomorrow? The way the mind processes information can make all of the difference between having a powerfully altered train of thought and going about like you did without that information only a few moments ago. Awakening is a moment of realization for someone, a moment of magnificent change within the self, whether purposely enabled or not. This moment can be deeply intimate, spiritual, joyous, or even spiteful, while other times you'll find yourself in awe of a newfound meaning for something you've always felt a certain way about.

One day, as I had gotten back from school, I set my belongings aside, changed into comfortable clothing, and then hopped onto my bed with my phone at hand. I answered my messages, scrolled through various media platforms, and then came across a video that was flagged as sensitive content on my Instagram. Curious as to why it had been flagged, I clicked on "See Video." First, I saw a video that shows a stray, white puppy covered in dust, shyly approaching whoever was recording from sandy rubble in what looked like a dessert. A clear liquid substance was then drizzled over the puppy as it wagged its tail, only for a burning piece of wood to then be thrown at it. The puppy yelped in pain as it ran away in distress around the sand. Meanwhile, the individual behind the camera was speaking in another language as he poured even more lighter fluid on the puppy until the camera cut off. With no time to react, a second video revealed two men behind a beat-up shed. One man was banging dogs over their head with an ax as they were aggressively pushed through a door as the other man stirred a gigantic pot of reddened, boiling water. The video then ended, returning to the first clip. I saw

dogs of all breeds, colors, and sizes; none were spared. Once the video ended, my eyes lifelessly fixated on my phone as tears frantically tried to find their way out of my eyes. That was two years ago and I will never forget it.

Trauma from those images keeps them well and alive in my head whenever I think about why I bother to care about climate change. When I witness the use of animal products or companies that depend on animal testing. When I hear people saying they wish they could be vegan but "can't do it." Even when I selfishly want something of monetary value, knowing full well that I could instead be donating to the cause—I see that innocent puppy walking towards the camera not knowing what was about to happen. The shock and disbelief that that was a real recording kept me from exiting out the moment that burning stick came into frame. I had already known about the violence, abuse, and other terrible things that we have to coexist with, but to see those videos was simply my breaking point. I felt a miserable pain and anger like I never had before. To see the unfairness towards an animal who expresses trust despite its fear just to have that trust violated in the most gruesome way. To not be able to ask the people behind the camera, why? To not be able to know who I'm supposed to be mad at—heartbreaking. After the video finished, I translated the caption underneath, which was asking people not to report that type of content, and rather, be aware that such things occur in this world.

Whether or not the video is still up is not something I try to investigate. The captions against what was portrayed in those videos left me wondering, is it okay to give people access to such explicit content to get a point across? Should those images be taken down on the platform just because it might make people like me upset? While I did not ask to see those images, had I not seen them, I would have just gone about my day like any other. I wouldn't now be vegan nor put so much effort into helping the environment. Making a compost pile for the animals in my

yard and trying to avoid waste finally feels meaningful to me. In my mind, these small changes are in honor of animals who innocently suffer from human action. I had seen other videos that showed butcher shops and farm animal harvesting, but because it's so normalized in our culture, I did not think much of it when it came to changing my ways. Being a dog owner and making the connection that these people behind the cameras were carelessly treating them the same way as lots of farm animals brought me to a dark place. My newly found pain had enabled me to find a reason to do good for the environment, and a burning desire for others to feel this almost radical love for nature that I had developed overnight.

Yet, in my efforts to relay this emotion, I have come across those who ask: why do I care so much if I wasn't even there? They ask whether or not I am aware that there are more explicit videos of "worse" types of violence online. The truth is that there's no way to know what will cause someone to have his or her awakening, and then push that someone towards change.

Whenever I ask family and friends to at least take some initiative, sometimes I'm shut down, and that is never easy. However, I understand that I too never thought about life the way I do now for some time. I once felt the same way before my awakening, before those gruesome videos.

By no means do I encourage people to now go look up graphic videos in an attempt to have a different perspective. Something I do urge others to think about, however, is what comes to mind when you think of climate change? Have you personally seen its effects in an impactful way, or is your mind drawn to images you've seen online and other media portraying it? Humans tend to focus on one or two figurative representations of a concept no matter how big or small it may be - this concept is known as "anchoring". David Wallace-Wells, the author of *The Uninhabitable Earth*, notes that there is accredited awareness towards the impact of cognitive biases upon how climate change is perceived. Contrary to my reaction to that video, behavioral

psychologists and other researchers have studied how media, while still having an impact, can also make it seem that climate change is something that only happens on a screen and is therefore not as significant as it should be. Speculation regarding when and where we will start to see drastic effects of climate change, such as cities like Manhattan and Miami being underwater by 2030 through 2050, have been around since the mid-nineteenth century. With many of these predictions blowing over or not occurring as planned, it's easy to dismiss them and go about life just like you did before knowing it. Indeed, accepting a degraded version of climate change is easier than wanting to actively do something about it. For example, upon hearing the news of wildfires burning in California, the Amazon Rainforest, and Australia in 2019, many people were brought together in efforts to stop these disasters. We saw celebrities, notable activists, and national governments all getting involved with the conversation and making these terrible circumstances seem like something so worryingly tangible despite the distance between locations; that is until its awareness died down and once again faded into the shadows of how things were before the catastrophes. While there is no one leader that all people of the world listen to, many trends exist that slowly ease us to move on with our lives, creating a sense of unity with all those who follow this same trend.

Generally, many people find it more comfortable to not confront a challenge if no one else is doing so, because having to rethink the way you live your life is just not easy. Known as the *default effect*, which is a derivative of the *status quo effect*, this behavioral pattern reveals "a preference for things as they are, however bad that is" (Wallace-Wells 159). This is something I have noticed in abundance when I have talked to friends and family, urging them to at least try to be eco-friendlier rather than strictly dismissing the idea. Furthermore, the numbers and severity of the facts are genuinely difficult for most of us to grasp. Wallace-Wells provides us with an

example surrounding a potential scenario as described in a journal named *Nature Climate Change*. The scenario revolves around what would happen if the overall temperature of global warming went up by 2 degrees rather than the 1.5 it has been going up by for some time now. This would mean that about 150 million people would die as a result, a number that is "equivalent to twenty-five holocausts" (28). With our naturally centralized train of thought, it is hard to picture these scales in an understandable way, especially when you're not given the tools to conceptualize such high-scale numbers.

There is no exact way to get every person to change, and that's the painful paradox of putting in the effort to take initiative on helping the environment. While it may seem meaningless to take any initiative to incorporate sustainable living into your day, it's not. Just because someone else might not feel as strongly as me or anyone who lives their life in a way dedicated to the environment, that doesn't provide the right to condemn that person as lesser or as being maliciously driven. Whether or not you have experienced an awakening to climate change, it is a very real circumstance that we have been living through and will continue to live through—but so is one's understanding of the subject. While it may take many years to undo the damage we've done to the climate for so long, extreme global disasters such as the Arctic disappearing, the flooding of major coastal cities, and many species going extinct can be undone if we unify to make a change.

Mental and Public Health

"When we marvel at that blue marble in all its delicacy and frailty, and resolve to save the planet, we cast ourselves in a very specific role. The role is of a parent, the parent of the Earth. But the opposite is the case. It is we humans who are fragile and vulnerable and the Earth that is hearty and powerful, and holds us in its hands."

-Naomi Klein

Is it Climate Change, or am I Just Depressed? Coping with Mental Illness in an Age of Uncertainty

Anne Moore

How do you keep on living when it's the end of the world? This is a question I've had for a long time, but I find myself asking it ever more frequently. Whether it's hurricanes, floods, or raging wildfires, increasingly common climate disasters seem to be a signal of impending doom. Maybe it's hysteria, but maybe it's an awakening to our reality. Either way, I find myself paralyzed with fear and helplessness over climate change. As I prepare to leave college and enter the "real world," I feel directionless and lost in the fog of climate anxiety. What's the point of trying to find a job? Of getting out of bed? I'm nervous to express these thoughts out loud, because they seem so alarmist and nihilistic, but I can't be the only one thinking them. I know that I'm not. In fact, the American Psychiatric Association has a word for this feeling: Ecoanxiety. But even with a name, this phenomenon remains hard to truly describe, and even harder to treat. How do we face these fears, how do we manage the overwhelming feelings of helplessness, of hopelessness in the face of climate change?

I'm sitting in my kitchen, it's day I-don't-know-what of shelter-in-place due to the COVID-19 pandemic. I'm having trouble writing this essay because I'm so distracted by the immediate chaos and uncertainty surrounding me, but also because I'm reluctant to engage with any other crisis right now. When everyone is encouraging each other to keep spirits up, to put our mental health first, why would I immerse myself in such a depressing topic? Before the coronavirus, I was already weighed down with doubt and uncertainty about the future, partly because I'm a young adult about to graduate college and that's just what we do, but also because

I genuinely have no idea what awaits us as a society. I already had no idea what the world would look like in five, ten, twenty years, and that uncertainty has only increased since the start of the pandemic. When I try to imagine the future, my mind fast forwards to dystopian scenarios straight out of the science fiction stories I loved so much as a kid. I don't trust these predictions, because my imagination hasn't, historically, been all that reliable or rational. Negative thinking is a symptom of depression and anxiety, two battles I've been fighting since pre-adolescence.

The thing about depression is, my tolerance for prophetic thinking is already clinically low. For a long time, I couldn't envision a future for myself. I couldn't imagine becoming an adult, or even graduating high school, because it took everything I had just to make it through the day. I still struggle with mental illness, but after high school I reached a point in my recovery where I could start thinking ahead, I could picture a life for myself past the immediate future. But just as I began to adjust to this newfound sense of hope and possibility, the world I knew came crumbling down. Two months into my freshman year of college, Trump was elected, and a renewed sense of despair hit me. Suddenly, all these issues that had been peripheral, climate change in particular, surged to the forefront of my consciousness. I, like many semi-complacent liberals, had engaged with environmental issues at a comfortable distance. The gravity of climate change that we'd been shrugging off throughout the Obama years, finally sunk in. Gone was the blissfully naive belief that if we all just stopped using plastic bags and drove hybrid cars everything would be okay. I cried to my mother over the phone at three o'clock in the morning. "I'm so sorry," she said, "I'm so sorry we couldn't fix this for you."

I had finally reached a point where I actually, actively wanted to be alive; I'd accepted the fact that I would live past age twenty-five, but now even that doesn't seem certain. I know I am exaggerating here, and the probability of me dying from climate change-related causes in the

next three years is statistically low, especially given my position as an upper-middle class white woman living in the Northeastern United States. I know that climate change and environmental injustice disproportionately affect low income communities, people of color, people in the southern hemisphere, and those with the least amount of political power to fight it. I don't want to dismiss those facts. It's this kind of rational thinking that gets thrown out the window during a climate-change induced anxiety attack.

I'm by no means blaming climate change for my mental health issues - no, I have innately problematic brain chemistry. But eco-anxiety has certainly added unnecessary stressors, bringing further pain and distress to an already overwhelmed system. I think the two-- mental illness and climate grief--feed off each other. A mind programmed to jump to and linger on worst case scenarios, is not one well equipped to cope with an existential threat to humanity. Detangling destructive thought patterns from justified, universally felt dejection has been difficult, to say the least. Am I the only one picturing Mad Max: Fury Road-style water wars within our lifetime? Is it normal to start sympathizing with survivalists? Or am I crazy? For the record, I don't like that word, but I still ask myself this question every day. Mostly I've decided I'm not completely crazy. And I'm not alone.

Eco-anxiety and climate grief are now incredibly common inflictions. People are talking about this phenomenon, particularly as it affects young people, more and more. A quick Google search will turn up hundreds of hits. Even between the time I first had the idea to write about climate change and depression, and when I actually sat down to do it, a few dozen more articles have appeared in magazines and websites such as The Washington Post, National Geographic, and even Teen Vogue. The psychological toll of climate change on children and young adults is

unprecedented, and no longer going unnoticed. Teens have always been angsty, but this widespread fatalism and despair verging on passive suicidal ideation seems different.

I remember a conversation I had this past fall with a friend. We were talking about post-college plans, about where we saw ourselves in ten years. I asked her if she still wanted children. "Oh, I won't be alive to have kids…" she responded, barely a trace of humor in her voice. I thought maybe she was being sardonic. She wasn't. I have had a few dozen more exchanges like this one since—it's not an uncommon mind-set among people my age.

When I talk to my mother on the phone, she tells me she lays awake every morning thinking about climate change. In the first hours of the day, she'll wake up in a panic, and can never go back to sleep. She still lives in my hometown, a small coastal city north of Boston. I grew up fifteen minutes from Plum Island Beach, a small barrier island now popular among summer tourists. Stilted houses dot the shoreline, built atop eroding sand dunes. During hurricane season houses will fall into the Atlantic Ocean, while others are severely damaged. And yet, they always rebuild. Those houses aren't meant to be there - the sands are migratory and won't be tamed by the town's feeble stabilization efforts. Still, the sight of someone's home collapsing into the sea—no matter how irresponsibly built—is deeply distressing.

I first heard the word "solastalgia" in an Irish literature class. The professor had a penchant for ecocriticism and often discussed the effects of ecological disasters and environmental degradation on national psyche. First coined by Australian philosopher Glenn Albrecht, Naomi Klein defines solastalgia as "when the homelands that we love and from which we take comfort are radically altered by extraction and industrialization, rendering them alienating and unfamiliar." Though originally referring to sacrifice zones and exploitation

colonialism, the term has since expanded to encompass feelings of loss one experiences when their home and sense of place is disrupted or destroyed by environmental changes.

I think we are all suffering, in one form or another, from solastalgia. Watching the world literally burn around us causes undeniably immense psychic pain. Of course, teen depression rates are soaring. It's not smart phones or social media—as news reports and think-pieces love to suggest—that are causing an entire generation to experience the sorrow, anxiety, and anguish associated with mental illness. Of course, young people are indescribably angry and exhibit downright contempt for a generation we feel has left us to weather this not-so-proverbial storm alone. But can we direct this grief and rage into something, anything productive?

I'm so angry I want to scream, I want to take to the streets, I want to throw bricks and light cars on fire and demand action. Of course, I've never done any of this. I've never even participated in a climate strike or school walk out. The guilt and shame I feel for my lack of action mingles with my existential anxiety, creating a ball of iron that sits cold and heavy in my stomach. But as a student, I don't feel like I have the time or energy for activism. The pressure to do well in school, to finish my studies and find a job, prevent me from actually doing anything but wallow in climate grief. Besides, I'm still struggling with my own demons. How am I supposed to protest when some days I can't even make it to class, or get out of bed?

I feel like a hypocrite, because I'm unbelievably frustrated and resentful towards my parents' generation for letting this happen, for being so passive. Sometimes I try to say to myself that it doesn't matter anyway, that climate change is a lost cause, and nothing I do will change anything. This rarely works, because somewhere deep inside, in the small corner of my consciousness where the faintest glimmer of hope still lives, I know this isn't true. But on another level, I know it probably is too late. I have this gut feeling, I've had it before, when I just

know something is about to go wrong. I think this is a symptom of anxiety—even so, I'm usually right.

My therapist used to tell me to practice meditation when I start to feel overwhelming thoughts creep in. I refused to try it, and she eventually gave up suggesting anything to do with mindfulness. When it comes to my own mental health, I tend to favor psychopharmaceutic solutions. In learning to live with and manage my mental illness, I'd hoped I would also find some relief from the gnawing feelings that keep so many of us up at night. Antidepressants are a magical drug, but even Wellbutrin can't solve climate change.

Nature's Effect on Mental Health Living in the Age of Climate Change

Catherine Buckley

In 2020, we're living in a world where most people around us are slowly starting to awaken to climate change, whether or not that's due to visible changes in weather patterns, news outlets, school, or social media. As we continue to realize the effects climate change has on our planet and as we continue to recognize those effects in our immediate everyday lives, the idea of the earth heating up exponentially to the point where it's uninhabitable for humans can be extremely difficult to grapple with and even more difficult to conceptualize. After opening our minds up to this knowledge and the definite, horrifying future, how do we learn to cope? How do we find true purpose amid a climate disaster? How do we pick back up and carry on as before? Where do we go from here?

These are all questions that I've asked myself plenty of times before, more so when I had first become more aware of the state of our home on Earth. I have a feeling that many others are also asking themselves these same questions and struggling to find some sort of solution to these problems. Before you read on any further, please allow yourself to know that, if you're afraid, your fears are real and your fears are valid, and while I may not have the answers, allow yourself to find some consolation within my words and take them for whatever it may be worth to you.

When I first awakened to climate change, I was horrified by the facts, and that common fear is only a part of our common human nature. I remember always knowing about climate change and global warming from a very young age. However, I never really started to pay attention to it until the summer of 2019, when there was an unusual surge of climate change

information being brought up in the news. One article I remember reading in particular that grabbed my attention stated that we only have about ten years left to act before the effects of climate change become irreversible. After I started doing some research of my own, the information that I found and learned about sent me into a mental spiral. For example, I discovered the fact that the global sea level has risen by about eight inches since 1880 due to melting land ice; by 2100, it's predicted to rise another one to four feet, flooding and destroying coastlines worldwide. Once I had awakened, not a day would pass where I wasn't thinking about climate change and how it will inevitably affect my life and the many generations to come.

Similar to many young adults my age, I also began to wonder whether or not I wanted to have a family of my own. Having a family is something that I've always dreamed of and was always a given in my life, but now I may never get to fully experience that due to our untimely future reality. Why would I want to bring more life into this world in times of struggle and loss? In times of fear? In times of doom? After all, the children that are born into today's world are going to face many more of the harsh conditions that come with climate change than even I will. Climate change will be something that these children will face each year. They'll never have known what the world was like when effects were still somewhat mild and not as threatening. In the darkest moments of my realization and awakening to climate change, I began to wonder if there was even a purpose left to anything in life or if it was all pointless, like graduating college, attending graduate school, and pursuing my dream job. I found that the best way that I could start to grapple and cope with these ideas was to talk to others, whether it was with my friends, family, or even classmates. I realized that, chances are, we're never the only one having the thoughts or ideas that we have. There's always someone else who feels the same way, and with that comes a community.

I recently spoke with a number of my friends, family, and colleagues regarding climate change and its relation to mental health. The first question I asked was: do you enjoy spending time in nature? The answers I received, from people of all walks of life, were all positive. Overwhelmingly, many individuals expressed the notion that they found solace in nature during stressful times. Lynn, one of my closest friends, a movement science major from Westfield State, told me that when she's out in nature, she feels as though she's able to escape stressful thoughts about school, homework, or life in general. She told me that in her classes, she learns about the effects that being outside can have on one's mental state. She informed me that "when you're outside and you're exposed to things like the sun and gain more vitamin D, you're able to become more balanced." When we feel balanced and more physically healthy, we tend to feel mentally healthy, as well. So, one could argue that there can be direct correlations between being outside and getting vitamins, like vitamin D, and improvement of our mental health. As I sat with her words, I thought about the many others who expressed their feelings of a wandering mind in nature and their feelings of peace. Many also associated nature with activity and the feeling we get from the release of endorphins after exercise, such as a run, walk, hike, or bike ride, instantly improving mental health.

In addition to wanting to know if people liked spending time in nature, I wanted to know how climate change made them feel when they were first introduced to it. Another friend of mine named Kevin said, "When I first studied climate change in-depth, I became very hopeless." This hopelessness became a very common trope in the responses I received, mine included.

When first hearing about climate change, it's difficult to conceptualize and to not feel small from one's own awakening. It's difficult to understand the impact that just one person can truly have.

In fact, many even decide to ignore their emotions and feelings of hopelessness towards climate

change because it's easier than confronting them. Kevin also said, "I never denied climate change, but I was reluctant to change my life for it for quite some time." Eventually he realized and grappled with the fact that he would have to soon face his feeling of hopelessness and take literal action if he expected others to do the same and to help be a part of the change.

In trying times like these, when individuals are battling thoughts similar to my own and Those of my colleagues, I believe we must turn to the arts and humanities for mental relief. With the facts of science bringing us harsh realities, novels, music, and all types of art are crucial for our self-expression and can be used as coping mechanisms. After all, art can teach us valuable lessons no matter the medium. With this in mind, I would like to focus on Henry David Thoreau's *Walden* and Richard Powers' novel *The Overstory*. *Walden* brings to light a real encounter with nature and its direct effects on mental health, illustrating the bond that humans can have with nature. *The Overstory* introduces us to fictional, but realistic and very probable encounters with nature in the time of climate change that have clear effects on the characters' mentalities.

In his chapter titled "Where I Lived, and What I Lived For," we read how Thoreau, a Massachusetts native, a poet and a journalist, survived in the woods. One of his most well-known books is *Walden*, a piece written during the time he spent isolated away from civilization at Walden Pond in Concord, Massachusetts, living in a house he built on his own for about two years. Thoreau wanted to go into the woods to not only "live deliberately," as he claims, but to also discover the true necessities of life, which are food, shelter, clothing, and fuel (74). He wanted to live freely of society's constraints and experience life in a new light, stripping it down to the bare minimum. During his time in nature, Thoreau regained a clarity of life, one that can sometimes be clouded by the push and pull of everyday responsibilities. Thoreau found that

nature was a place where he could let his mind roam. In *Walden*, he reflects on his time in the house he built with his bare hands, suggesting that even though "the view from my door was still more contracted, I did not feel crowded or confined in the least. There was pasture enough for my imagination" (71). Thoreau, similarly to many of the individuals that I spoke to before writing this essay, was also one to find clarity in his thoughts while out in nature. Even though the house he built may have been small, the natural world surrounding him stimulated his imagination. Away from materialism, the stress from the civilized world and society vanished.

The purpose of Thoreau's seclusion was to gain knowledge from and listen to what Earth has to offer all of us. This is a mindful practice that many of us don't experience often because we live such busy lives. However, I believe that if we were to participate in this practice, we'd be much more in tune with nature and appreciative of it. We'd be able to enhance our mindfulness skills and associate them with nature and, in turn, improve our self-image and self-worth in the process. Nature then is no longer something that we fear because of climate change. Rather, nature remains a place that brings us peace, joy, and reassurance in ourselves. In times when thoughts of climate change begin to consume us, it's crucial that we recognize and come back to our natural roots just as Thoreau did when he felt that he needed answers to many of life's questions.

Similar to Thoreau, Olivia Vandergriff, a character in Richard Powers' novel *The Overstory*, has many experiences with nature that alter the course of her life and improve her self-worth, can be seen as more than just fictional. When Olivia is first introduced, she's a college student who's barely scraping by. Her motivation to do well in not only school, but in life is explained as a "kick [that] has long since gone limp" (Powers 146). For example, Olivia has taken the National Society of Actuaries preliminary exam three times and failed each time.

When we first meet Olivia, her drive to maintain a meaningful life has disappeared. She no longer cares where life takes her, always assuming that she'll get her degree and "if not, she'll sample whatever opportunities disaster presents" (146). She lacks passion and action - that is, until she gets electrocuted and dies. Olivia will go on to tell the story for years and years: when she came back from her short moment of death, "there was everything, with beings of light telling her how the most wondrous products of four billion years of life needed her help" (336). After having looked death straight in the face through a natural freak accident, Olivia's life and her mentality on life changes. After her electrocution, Olivia is filled with purpose when she sees a news story about a group of activists trying to protect the remaining 3% of giant redwoods and decides to dedicate her life to environmental activism. From that day forward, Olivia sets out to fulfill her purpose in the world, reuniting herself with nature once again. She joins a group of non-violent radicals and ends up setting up camp high up in a large redwood tree for over a year as an act of protest against clear-cutting. Eventually, she's forced out and moves to Oregon where she joins another activist group. While participating in another more serious form of climate activism with this group, Olivia passes away in an accident.

In the end, Olivia dies fulfilling her purpose and doing what she felt called to do: environmental activism. If it weren't for the redwoods calling to her, she would have barely graduated college and she would have moved on to a world of uncertainty and unhappiness with no true calling. She would have questioned what was worth fighting for in life. In her fight for the trees, Olivia discovered a newfound self-worth that resonated itself in her love for nature and the earth. When we feel as though we have a purpose or a calling, our self-worth indefinitely increases. Similar to Olivia, when we're battling things like climate change, self-worth can always be found in our motivation to stand up for what we believe in. One thing in particular that

we can learn from Olivia is that even if we're dealing with difficult truths like climate change, we can use our fear or sadness for positive purposes, like deciding to become an advocate among the community of those fighting for climate justice. Transforming negative emotions into positive actions can then pave the way for instilling a greater sense of self-worth in any individual.

As I mentioned before, I undoubtedly struggled with the facts and concept of climate change until bit by bit I started to remember the original love that I had for nature and our planet. I thought to myself that I could either sit here and worry for the rest of my life and do nothing about it or, at the least, make my values and morals match my actions in an attempt to reduce my impact on the earth. I began riding my bike, carpooling, and taking the bus more for travel instead of my car. I stopped eating meat, not only for environmental reasons, but also ethical ones. Further, I started to pay closer attention to the products and foods that I buy so as to not support certain industries, like the palm oil industry, and reduce unnecessary emissions. I believe that just as nature nurtures us in many different ways with resources, food, and mental clarity, we must nurture nature back, even if it may very well be the thing rooting against us right now. With love and care come solutions. With the slightest bit of hope, we may be able to slow down the rate of global warming, but that only comes with action. Our fears, as I've said before, are valid. Rather than let them shut us down, we should let our fears motivate us.

I've spent a great deal of time wondering how I could end this essay, with words of inspiration or consultation regarding nature and the effects that climate change may have on our self-worth and mental health, but I've found that there's no right way to answer any of the questions that have previously been posed. How we decide to cope with and respond to climate change is all a matter of the individual. What we decide to do with our innermost difficult

thoughts will be reflected in our actions. Do we mourn nature because of climate change and our seemingly inevitable extinction in the years to come? Of course we do. Do we let that take hold of us and define the rest of our lives? No, because we simply cannot.

Where there's room for mourning and uncertainty in the unknown, there's room for improvement and healing in what we do know for certain, that we are still living and breathing on this beautiful earth. A quote written by Thoreau stands out in my mind when pondering this idea, "Be it life or death, we crave only reality. If we are really dying, let us hear the rattle in our throats and feel cold in the extremities; if we are alive let us go about our business" (80). While we are here we must live, even if it's in the midst of trying times like climate change. We cannot sit back and let these moments define us, we must define them. Whenever I get upset thinking about the future that Earth will face, I always remember how, at one point, everything and anything that had to have happened at the perfect moment for me to be here, happened. There may not be any greater or grander meaning to life besides the fact that we all just happened to end up here by chance. But now that we are, we must enjoy the time we have that we were undoubtedly graced with receiving.

Cutting Down Trees Spreads Disease

Noorshifa Arrsath

In the year 2020, climate was no longer the crisis.

Not because China's air quality had improved, not because the Venetian waters were clear for the first time in years, and not because the Himalayan mountain range could be clearly seen once again. These were merely the side effects of millions of people around the globe being locked up in their homes, as disease stopped all functions of the society we once knew. I could not tell you what the outside world is like during this time except from the glances I steal from my living room window. As of April 16, 2020, it has officially been an entire month since I have stepped outside my front door, let alone taken a walk around my neighborhood. This is not only my story, but rather the life that much of the global population now lives. For weeks now, I have only listened to the voices of various government officials from my TV, repeatedly telling everyone to stay at home, maintain their distance, and to update their cities on the rising death toll. Had you asked me earlier this year, I would never have thought that I'd live through a global pandemic, but within months, much has changed.

In the year 2020, climate caused a crisis.

World leaders and governments channeled all their energy into fighting the disease, specifically known as Covid-19, also known as the coronavirus. Many resources have been allotted to fighting the coronavirus, from increased hospital staffing to the hyper-production of ventilators and masks. Thinking forward, scientists and doctors are working endlessly to find a cure or vaccine so that we may find a way out of our current conditions. However, thinking back, what exactly brings us to this predicament? Various factors led to the large scale spread of the virus, but many have speculated, and indeed research has supported, that the negative effects of

climate change on animal populations have played a role. Virologist Dave O' Connor at the University of Wisconsin at Madison speaks to the degree that human invasion of animal habitats, whether it is through deforestation or poaching and hunting, forces more animal and human interactions. The mutation of animal diseases to infect humans may be a likely explanation for the coronavirus outbreak.

In the year 2020, climate has been the crisis.

Covid-19 is not the only disease that is easily spread through symptoms of environmental degradation, such as deforestation, global warming, and rising sea levels. Biologists, environmentalists, and climate change specialists alike have been studying how climate change affects global health for many years now. As animal populations shrink, due to human invasion of natural habitats, animals are stripped of the genetic diversity that controls diseases. Diseases that begin in animal populations are referred to as zoonotic diseases or zoonoses, and those that have genetically modified to make humans their primary host are most specifically referred to as anthroponoses. Examples include the novel coronavirus, which is known to have originated amongst pangolins; HIV/AIDS, from non-human primates; the constantly modifying influenza pandemics that begun amongst pig herds; the bubonic plague which was spread from rodents and cats; and the Ebola outbreak that was transmitted through bats. This list also includes diseases spread through mosquitoes and other biting insects such as malaria, dengue, chikungunya, and the West Nile virus, more commonly found in warmer parts of the world.

Zoonoses/Anthroponoses have contributed to several of the world's deadliest pandemics. The outbreak of these diseases has been linked to climate change as severe weather conditions have led to an increase in disasters such as droughts and floods. A warmer planet becomes a less stable planet as natural disasters become more and more common. Such disasters destroy homes

and cities and displace large segments of the population, leading to more than a global health issue. Scarcities of food and clean water sources have been driving factors behind political conflicts and humanitarian crises. Not to mention that economic and political issues complicate the handling and treatment of disease. War and famine overwhelm governments' capacity to effectively manage public health. Research conducted at Harvard University also shows that climate change aggravates pre-existing global health issues. For example, high levels of pollution make it difficult to treat and to recover from respiratory diseases, like those caused by the coronavirus. Pollution is another byproduct of global warming through the large amounts of greenhouse gas and carbon gas emissions, which will eventually increase the number of lung irritating allergens and small particles in the air.

Both the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) have allocated more resources towards researching the various ways the climate crisis will impact global health, whether it is directly through air pollution, allergens, and vector borne diseases and indirectly through the issues that will come out of such pandemics like food and water insecurity, housing displacement, and mental health and stress related disorders. Both organizations' pages also discuss how it is equally important to think about how to decrease our footprint on Earth through environmental policies as well as preparing to deal with the inevitable outcomes of already heightened environmental issues before they occur. As we all may know it, the world was not prepared to deal with the current coronavirus outbreak. Truly, we are only playing a game of catch up as the number of cases continue to skyrocket and the death toll increases every day. But like several world leaders and academics have warned us years prior, we should have seen such a pandemic coming, and we should have been prepared.

In the year 2020, climate should still be the crisis.

The world is not what it used to be. Streets and markets that were once crowded with people are now completely empty and quiet. Today, even the friendliest of people will not shake your hand or give you a hug but rather cross the street to maintain their distance, as they should. Schools and university buildings are without students, teachers, and professors, and parks no longer host the joggers and dog walkers they once used to. Alternatively, hospitals are overfilled with patients and funeral homes are burdened with bodies. This pandemic may not affect everyone the same way, as some have safe homes to quarantine in and access to food supplies, while others live in far more crowded housing situations or find themselves unemployed and unable to pay the bills; but this disease itself does not discriminate as it does not care for who you are and where you come from, when you find yourself sick in bed. Similarly, the climate crisis may not affect you personally right now but eventually will impact each and every one of our lives. This is not just my problem or your problem, but is a global issue that we must all work together to improve for both this generation and generations to come.

So, what can we learn or have we learned from living in a global pandemic that is only worsened by climate change? Both of these crises prove that us humans cannot be healthy unless we ensure that our planet is and remains healthy as well. For now, that may mean a shutdown, a temporary solution to minimize and eventually eradicate the spread of this disease. But a permanent fixture is more necessary than ever and would require transforming the way we treat our planet. Despite being confined to the walls of our home, there is still much work to be done to raise awareness and reduce the effects of the climate crisis. It may start with small and simple actions such as recycling, switching to reusables, reducing consumption, and using energy wisely, but it should not stop there. While we face many hurdles, the importance of the climate

crisis does not disappear, and efforts can be continued through advocacy work, promoting research, and allocating funds to climate change organizations.

For the last month, humans have been on pause; air quality has improved, carbon emission levels have decreased, Venetian waters are clear for the first time in years, and the Himalayan mountain range can be clearly seen once again. My time indoors has led me to reflect on our role on this planet and our responsibility to take care of it. As our planet's condition improves and our condition deteriorates; I cannot help but wonder: *are we the real disease?*

Consumerism

"...he dreamed of money! And as often as he awakened from this hideous enchantment, as often as he saw his face in the mirror on the bedroom wall grown older and more hideous, just as often shame and disgust assailed him, he fled further, fled into new games of chance, escaping into the anesthesia of lust, of wine, and from there back into the pursuit of accumulation and acquisition. In this senseless cycle he ran himself down, exhausting himself, growing old, growing sick."

—Hermann Hesse, Siddhartha

The Mass Deception of Green Consumerism

Julia Evans

After three decades of scientific discourse and political avoidance, it seems that the last year of the 21st century's second decade saw a rebirth of action against climate change. As headlines circled about the burning forests of California and Australia, the heatwaves in Europe and India, and the devastating typhoons in China and Japan, many people seemed, for the first time, to awaken to the urgency and severity of climate change. Led in large part by young activists, citizens around the world began to demand that governments and corporations address and prioritize the warming planet.

The new climate change movement has shifted away from, and in fact directly attacks, the neoliberal dialogue about climate change—that market solutions can control global warming—that has prevailed since the scientific community first began to recognize the global impact of carbon emissions in the 1960's. This lie, perpetuated by government and industry alike, serves, as cogently articulated by Naomi Klein in *This Changes Everything*, to excuse the extraction of natural resources and mass pollution in the name of economic expansion. Rather than addressing our unsustainable consumption, reckless practices of extraction, and detrimental beliefs about our right to overtake the earth—all of which would fundamentally challenge and antagonize our Western way of life—governments and industries have chosen to invert the issue by selling citizens an alternative solution packaged as "green consumerism".

The basis upon which green consumerism rests is simple. The market theory posits that the unsustainable goods and services we all rely on (cars, energy for heating, single-use plastic

etc) all have viable, low-emission alternatives. In order to slow global climate change, it is the consumer's responsibility to purchase these "green" commodities in place of their dirty counterparts. This deceptive notion remains deeply pervasive in the public's view of climate change mitigation but fails to effectively address the causes of climate warming. In reality, individual solutions to climate change are nothing more than a thinly veiled approval of consumption, whose accumulative effect barely makes a dent in the fight against climate change. Placing the solution to climate change within the framework of a capitalist, free-trade market falsely posits that global climate change—a direct consequence of industrial emissions—can be effectively slowed by shifting the market towards trendy "green" products, which can be produced with slightly lower emissions. While there is nothing wrong with green products in themselves, elevating their implementation as a conclusive climate change solution completely ignores the larger systems that drive climate change: unsustainable levels of consumption, inefficient transportation of goods, and lack of regulation on corporate emissions. By posing as civic action aimed towards a more sustainable future, green consumerism only encourages further consumption, while diverting accountability away from the oil industry and other corporations whose emissions make up the vast majority of pollution.

Although green consumerism fails to provide any significant resistance to climate warming, it is more than successful as a means to pacify the consumer against demanding systematic climate action. Beyond its clear political motivation, it should stand as no surprise that the ideology of green consumerism has successfully created a false narrative of climate action; using the illusion of choice to drive consumer complacency is not unique to green consumerism. Rather, it is an evolution of the strategy already largely in place in our media and political realms, and thus is the rational if not ineffective solution offered by capitalist

enterprises. As long as the consumption of material products remains profitable, we will continue to inhabit a world in which no viable alternative to capitalism is imaginable. Instead, we will be bombarded with marketing and ideology that deceives us into believing we have no choice but to continue consuming, even as it pushes our species to near extinction.

Perhaps the best example of using calculated product variations as means to suppress dissent and evade a consumption embargo is exemplified in the distribution of contemporary media. In Dialectic of Enlightenment Adorno and Horkheimer coin the term "The Culture Industry" to describe how media and culture are no longer expressive or disruptive forms of art, but a type of homogenous propaganda that serves capitalist interests. They argue that because the Culture Industry is reliant on the more powerful electric and banking industries, its hidden purpose is to serve these larger industries and their shared agenda of mass production and consumption. The Culture Industry accomplishes this by producing uniform content that reifies the social reality of free market capitalism. In order to market products that are essentially the same, the Culture Industry creates slight product variations, and emphasizes these distinctions so that the consumer believes they have the freedom to choose what to consume. In reality, these differences are calculated deviations created to suppress the consumer's ability to seek out media and culture outside of the influence of the industry. Even more radical media, such as Bong Joon-Ho's satirical *Parasite*, which explicitly addresses class difference and climate change, is accepted by the Culture Industry insofar as it stamps its mark of approval (in this case, four Academy Awards) in order to diminish the work's revolutionary power. As Mark Fischer brilliantly points out in Capitalist Realism, "film[s] perfor[m] our anti-capitalism for us, allowing us to continue to consume with impunity". In this sense, the Culture Industry is highly successful in co-opting dissenting ideas, and selling them back to the consumer in a deradicalized form.

Following the example of the Culture Industry, green consumerism similarly juxtaposes products in order to effectively further consumption. Green consumerism gives the consumer the choice between two products, allowing them to purchase the "better" one. Because they made the environmentally conscious choice, the consumer is free from guilt or further action; they are already doing everything they can. By claiming to effect real climate change mitigation, green consumerism attempts to deceive the consumer into believing that not only is transitioning to green products sufficient direct action, but that climate change itself can be solved painlessly and effortlessly. Ironically, whether or not the consumer truly believes this deception does not matter; the *idea* that green consumerism is the only option is enough to depoliticize the consumer against any other form of climate change action. This lie is harshened when we consider how the negative effects of climate change escalate in direct relation to the time we spend ignoring climate reality. The longer we spend under the illusion that sorting recycling, giving up meat, or investing in a reusable water bottle actually makes a difference, the longer it will take us to realize that corporations and governments care only about economic gain, and never about us.

In order to collectively demand systematic climate regulation, we must first recognize our government's merciless attempts to deceive us into non-action. Just as the extent of rape culture was brought to light through the #metoo movement, and racialized police brutality was put in the spotlight through the Black Lives Matter Campaign, youth-led climate movements such as the Sunrise Movement have begun to shed light on the truth of climate change. Building on the decade's earlier climate marches and demands for fossil fuel divestment, the 2019 school strikes for climate continue to pressure governments and institutions to address the global economic system that produces climate warming.

In September 2019, over 7.6 million people in 185 countries participated in a Global Climate Strike, the world's largest recorded mobilization against climate change. As systematic action becomes a forefront demand, it is essential that we see it through to its end and commit to rejecting the empty words and false promises that have been echoing for half a century. But to command this kind of action, each of us must also confront the false climate solutions we've been sold, and recognize the intent of such false advertising. Truth has started to circulate in certain environmental circles, revealing well-kept secrets like the fact that less than 10% of the world's plastic actually gets recycled, and that the US military is the world's largest emitter of greenhouse gases. Still, this information does us no good if it leaves us feeling paralyzed against a bleak climate future. No, understanding our own deception is just the first step.

It is not enough to simply know that capitalism and industrial life contribute to the warming planet. We must also understand that everything we've been taught about the solution to climate change is false as well. The time for action is now, just as the time for deception is over. Although neoliberalism tricks us into many false beliefs, the threat of climate change just may be the call for resistance we've all been waiting for.

Abundance in Minimalism

Gabriel Shannon

Minimalism has become a rising trend in today's society. A movement started by Henry David Thoreau in "Where I Lived and What I Lived For," minimalism challenges people to live more intentionally, which in turn could have a profound impact on the environment. Thoreau emphasized the value of living intentionally, which meant living outside the societal norms in order to find out what brings value to your life. Along with this idea, Thoreau urges people to declutter, and simplify their lives in order to live a freer life. To Thoreau, freedom was the ability to live untethered to the expectations of society, to live for one's own fulfillment. Thoreau's ideas about simplifying are seen today in the minimalist trend, a way of living devoted primarily towards mindful consumerism. This trend translates directly to the health of our planet, the main effect of living minimally is reducing your carbon footprint.

The minimalist mindset requires you to honestly ask yourself what brings value to your individual life. According to "Minimalism: A Documentary" on Netflix, minimalism does not mean living in an empty white room with no possessions. You might assume that minimalists do not buy anything, limit themselves to a set number of possessions, live in an empty space, or even reuse tea bags. These are all hyperbolized versions of the truth. Minimalism is really just a lifestyle where you determine what brings value to your life and rid your life of the things that don't. This may seem like a very elementary idea at first glance, but there are multiple interconnected facets to minimizing your life that all work towards gaining freedom. In the show, they talk about how decluttering your living environment is the first step towards living a minimalist lifestyle. So many people are collectors of things, and those things just get put to the side until their home is full of junk. One of the architects on the show talks about how we should

be, "buying homes that fit our lives, not the other way around". I thought this was a powerful statement on the glutinous mindset of a lot of people today who buy crazy big houses that they don't need. The main characters of the show, Milburne and Nicodemus, argue that living minimally is more sustainable, and therefore benefits not only you, but the environment as well. In the documentary, they emphasize the impact of sustainable living through minimalism.

Minimalists believe that overconsumption is a lifestyle, and it has direct impacts on the environment. Being mindful of what you consume is the biggest step towards cutting down the size of your carbon footprint. Having less things in general most definitely reduces your impact on the environment. Minimalism forces you, the consumer, to ask yourself, "Do I really need this?", and "Is there a more sustainable option?" Just being more mindful of what you consume can reduce the amount of waste you produce. Imagine one person who buys: a case of plastic water bottles, a box of ice cream cones that come in Styrofoam, a pack of soda that comes in plastic rings, and a bunch of chips that come in non-biodegradable bags. That person is going to put out a lot more waste than a minimalist who buys one reusable water bottle, a bunch of fruit and veggies that do not come in packaging, and food that comes in a glass jar. The minimalist shopper is not producing any waste. They can reuse the water bottle every time, and they can use the glass jar for storage.

Consuming mindfully does not only apply to food shopping, it applies to anything you buy. Imagine the Great Pacific garbage patch, which was once the size of Texas. Now imagine all the animals who are suffocated by plastic bags and bound by plastic rings, whose stomachs are filled with human trash. Now, imagine everything we buy today, and how much packaging and waste comes along with it. There is the plastic wrap, the plastic zip ties, the Styrofoam inserts, the plastic casing, etc., and this is all for a phone case? This is an aspect of consumerism

that is overlooked - how much waste am I producing by purchasing each item? This is where the minimalist mindset comes into view. You buy less things because you limit your purchases to items that bring true value to you, effectively cutting down on excess, trivial items that you may buy based on impulse. This alone will decrease the amount of waste you directly and indirectly produce.

There are so many layers to the amount of waste produced by consumerism, not just the direct waste that you see yourself. Another benefit of minimizing the number of items you buy is the positive effect on the pollution produced. The richest 20% of countries are responsible for using 86% of the world's natural resources, meaning they are also responsible for the majority of the pollution production. This means that the other 80% of the countries in the world may not be as wealthy, but they are capable of surviving on so much less than we do. Our culture as a society has moved towards supersizing everything. We are constantly wanting more and more, but we clearly do not need all the excess that we have. This is where the minimalist trend's beliefs come in: a freer and more fulfilling life is not a result of consuming and owning material items, and people need to focus on the things that truly matter, like experiences and people.

Another aspect of a minimalist lifestyle is transportation, how you get around. We know how much pollution we create from cars alone. Minimalists try to limit the amount of emissions they produce from travel. Burning through fossil fuels like gasoline emits CO2, which we call a greenhouse gas, into our atmosphere. The expansion of the greenhouse gasses being emitted into our atmosphere causes global warming. This is an epidemic whose effects are already being seen in the rise of temperature year to year in winter. Minimalists call upon their supporters to limit the amount of greenhouse gasses they produce by being more mindful of how they get from place to place. One prominent Youtuber named Shelly detailed in one of her videos why she

decided to get rid of her car in order to help save the planet. In her video, she cites the statistic that, "the average American's biggest contribution towards climate change comes from car fuel, and 91% of Americans own at least one car." She then talks about other means of transportation that would be good for the environment, as well as good for you. Instead of driving your own car, try biking, walking, or taking public transportation. These are all forms of transport that do not require you to be polluting the air. She calculated that she reduced her own carbon footprint by 30% by getting rid of her car. The added bonus to reducing your carbon footprint is that you save tons of money that you would have spent on gas, car repairs, etc. She also stated that going car free generally can shave off five to ten thousand dollars per year. If that is not a good enough reason to minimize your car usage, then think about the exercise you get when you decide to take a bike or walk to get around. You do not have to get rid of your car altogether, like Shelly did, but being more mindful of how you get around can help save the planet and save your bank account.

The final way that minimalists can help better the environment is being mindful of where they live. Big houses with big lawns require a lot of energy to keep up. Imagine all the electricity required to keep the lights on, all the water needed for the sinks and the lawn, and all the power used for heating and air conditioning. This type of living is not sustainable. We need to find a more economical way to live. The TV show "Tiny House" shows us families who decide to downsize from their homes to live in much smaller, more sustainable houses. According to an article in the New York Post, "tiny house dwellers slashed their energy consumption by nearly half after downsizing". A study run by an environmental design researcher named Maria Saxton showed that those who downsized reduced their energy consumption by 45%. Minimalists who decide to downsize in order to reduce their energy consumption will help decrease the amount of

emissions put out by power output, and they will also save a significant amount of money as a bonus.

If you want to help save the planet from climate change, but do not know where to start, you can start by trying to limit the amount of excess in your life. Ask yourself what do you truly need to survive? What really brings value to your life? Figure those things out and cut out the rest. Saving the world from global warming requires different ways of living and thinking, and the minimalist mindset is the perfect first step towards doing your part in keeping the planet healthy for generations to come.

"I'll have the steak, hold the plastic."

Abigail Cicerchia

Growing up, going out to eat meant that my family was celebrating something very special. We didn't have a lot of money to spend, so when I was younger, I only stepped foot in a restaurant for good grades, birthdays, and the occasional family celebration. Eating out held so much magic to me. Something about sitting in a booth with low lighting, loud music, and the endless glasses of soda was just so fancy to me. If you asked for something, they gave it to you. Needed another straw? Sure, no problem. More napkins? Here's a whole bunch. Do you want to bring your food home? Here is a Styrofoam container to put it in. Take two, just in case. These acts of service were a luxury that I was so happy to indulge in from time to time. It wasn't until I started a job within the restaurant industry that I realized the environmental burden that going out to eat truly is. From your seat at the table, the small uses of plastic and the large pieces of meat may seem minor, but from my position in the kitchen, I can now see the horrifying overload of single-use plastic that goes into serving one person. I am here to expose the environmental dilemma that is... going out to eat.

I work for a chain restaurant that will remain anonymous throughout this essay because the issue does not lie just within one specific corporation, but with the restaurant industry as a whole. All restaurants are basically the same unless advertised differently. In larger cities like New York City and Los Angeles, it is easy to find vegan and environmentally friendly places to eat that are doing their part and making it known to the customer. In places like western Massachusetts, however, restaurants of that type are hard to come by, leaving people of the area with fewer options but an array of chain restaurants that can be found all across the country and sometimes even in the United Kingdom. I work for one of those restaurants. One restaurant

located on a busy street that has eight other restaurants just like it, all with locations stretching across the country. The difference between a standalone, vegan restaurant in LA and a chain restaurant in Western Mass is corporate. The smaller the restaurant, the more room there is to be creative with products used. On the contrary, the larger and more locations a restaurant has, the larger the corporate office. And all corporate cares about is money. It's hard for corporate businesses to care about the environment when money is involved.

I started my job as a host when I was 19 years old. I hated the idea of working for "The Man," but my dad was no longer going to let me occasionally babysit for a paycheck, so I swallowed my pride and got my start in the restaurant industry. As a host, I spent little time in the kitchen, meaning I was slightly unaware of the large amount of plastic that was being used back there. However, upfront at the host stand, I had to give out plastic-wrapped toothpicks and throw away perfectly recyclable menus left and right. One time, I timidly suggested that we should use unwrapped toothpicks and laminated menus that would last longer, but my manager laughed in my face at the idea of putting in the effort to make changes.

Rather than be deterred, I graciously accepted the challenge and made it a personal mission to make our location an environmentally friendly leg of the chain business. I moved up to working in the takeaway department, giving me access to knowledge of the amount of plastic that goes into serving a meal. In the back of the kitchen, a closet we employees refer to as the "dry stock" haunts the rest of the building with its mere presence. This closet is the equivalent of Carrie Bradshaw's closet if you switch out all her designer clothes and shoes for plastic products. You walk in and you are surrounded by mountains of cardboard boxes that are filled with plastic to-go boxes, cups, and utensils. One day, in light conversation with my manager, I asked him

how much and how often we ordered our plastic products and I obtained the following information:

large styrofoam containers - 500 per week small styrofoam containers - 1,000 per week large plastic containers - 1,800 per week medium plastic containers - 1,200 per week small plastic containers - 800 per week plastic topping containers (with lids) - 5,000 per week styrofoam topping containers - 1,000 containers per week plastic silverware - 10,000 per week straws - 60,000 per week.

I am too scared to add up these numbers for a grand total, mostly because that is not everything. These numbers don't even account for the plastic that is used outside of my department, such as the plastic bags used for preparing and portioning out food, the gloves, the plastic lids that cover the salads kept in Styrofoam containers, the plastic wrap, and the plastic bags everything is shipped in.

From the customer's point of view, the use of plastic items doesn't seem that bad. Maybe you order to-go once a week, so a couple of single-use plastic items may not seem like a lot to you, but the plastic container and utensils are only contributing to the thousands and tens of thousands of plastic products ordered on a weekly basis. And eating in doesn't change the numbers as much as one would think. Even though the food is served on a washable plate, the food went through its own plastic process. For example, each side of broccoli is placed in a plastic bag with a scoop of butter that was also kept in a small portioned, plastic container, and then microwaved before being placed on the plate. Every piece of food that enters the dining room touches a piece of plastic before it leaves the kitchen. Not to mention, roughly 50% of the meals that start on a plate will end up in a plastic container to be brought home.

Now, as I'm sure you must have felt reading those numbers, I was extremely overwhelmed by how large the numbers of plastic products being purchased were. I decided my first goal had to be small, especially since I didn't (and still don't) have any real power in this one branch of a chain restaurant. The goal that I had in mind was to take action against the white Styrofoam cups that the company used for employees. The company provides these Styrofoam cups for employees to use during our shifts. After weeks of effort, I finally convinced the majority of the employees to bring in some type of reusable cup from home in the hope that we would no longer need to order those Styrofoam cups. I don't know who snitched, but we got a letter from corporate headquarters saying that a reusable cup from home being used in the kitchen was a health hazard to the guests in the dining room. Personally, I feel as though the stalls in our restrooms are a health hazard, but that is an argument for a different day. Just like that, the white Styrofoam cups secured their spot indefinitely, but I wasn't done yet.

The next issue that I was eager to tackle was recycling. Fun fact: my location does not recycle. Most restaurants, if not all, do not recycle. Instead, all of the trash goes in one dumpster at the end of the night, to never be thought of again. Within our chain, the only location I know of that recycles is in the Vermont region, and that's only because it is against the law to not recycle there. When I presented the idea to my manager, he immediately said it would never work. What was his reasoning? He said the guys in the kitchen would never be able to separate the items out. With my manager refusing to provide extra bins, this mission felt nearly impossible. I begged and pleaded. I even promised to drive the recyclables to be dropped off myself. I said, "If Vermont can figure it out, then so can we! We're smarter than Vermont, don't let them be ahead of the game. Think of the media attention you would receive and how it could increase sales!" But it didn't work.

I soon learned that my manager simply does not believe in climate change. When I pressed further, he shared his views on the end of the world. He told me that he thinks he will be long gone before that ever happens. This man is in his late 30's. He will still be alive and well during the death of our climate. As David Wallace-Wells states in his novel, *The Uninhabitable Earth*, the world will see major environmental changes in the year 2050, thirty short years from now. His great, great grandkids won't be living an environmental hell. It will be him. And me, too. We will all be living through major environmental changes within thirty years, which only fuels my need to fight my war against single-use plastic.

At the restaurant, being environmentally friendly has become a part of my personality. My coworkers think it is "so cute" that I get so worked up about saving the world. To them, I am just another planet-loving vegetarian working at a restaurant that is known for its overpriced pieces of steak. It is exhausting talking to someone about something really important knowing that they don't understand and probably weren't even listening. I understand now why babies cry so much. It is a frustrating experience.

All things considered, my environmental quest was not over. I still had a few tricks up my sleeve. Next step? A PowerPoint presentation of all the biodegradable products I found that could replace most of the plastic we were using; not everything, but most things. I showed my manager slides of bamboo straws, utensils made from the pits of avocados, and containers that were made of a material that could be planted and grow into these little sprouts. I presented this to him while he was trying to peacefully eat his dinner after a long shift. He shot down every option. My timing could have played a huge part in the refusal to go green, but he protested that the cost of switching could bankrupt the whole company. I fired back, "How can you put a price tag on saving our planet," which was then followed up with the offer from my manager to

sacrifice my paycheck to afford a greener option. At that moment, I realized I was not the martyr for my planet that I thought I was; I couldn't give up my paycheck in order to save the planet.

My quest to turn my western Mass chain restaurant into a eco-friendly eatery had halted abruptly. I had made no progress. I tried to hold the argument of making changes, but I knew that it was corporate that ordered the tens of thousands of plastic products and I was not big enough to go against corporate. I realized that I was part of the problem. I had spent three years working in a job that contributes to the environmental crisis and all I had done was scream into the void without accomplishing anything. I was not the Greta Thunberg of the restaurant industry. I could have written letters, or staged a walkout, but I did none of those things. Instead, I presented information to a man who not only does not believe in climate change, but also has no real power to change any of the products we use. I worked my scheduled hours, whined about climate change, went home, and cashed my plastic-fueled paycheck. But... I needed the job. I still do need this job. After three years, I continue to work for this environment-killing company. I have loans and bills, as most people do, and I cannot risk losing my only source of income. Saving the world comes at a financial cost but letting the planet die comes at a humanitarian cost, as well.

However, my work as the environmental Mother Teresa, or so I thought of myself, was not a total fail. Server Joe now writes "save the turtles" on every straw wrapper before handing each over to his tables. My manager will sometimes let me bring cardboard boxes home to put in my personal recycling bin. Talk of new menu items has begun between managers and I am strongly advocating for at least one vegetarian option in the sea of steaks, ribs, and burgers. Once a week, I am allowed to go into the parking lot and front yard area of our property to sweep up all of the trash that has been thrown on the ground; I get as dangerously close to the busy road that I can. And yes, I continue to work for the environmental enemy with a smile. We order the

same amount of plastic as when I started and now we offer delivery, allowing our employees to pollute the air while bringing the customer their steak dinners presented in many layers of plastic. My environmental protests have fallen on the deaf ears of my manager; however, they still remain part of our daily banter. I haven't given up on my fight. I am just hoping that I can annoy him enough to really wear him down. It used to work for my parents; if I whined about wanting something long enough, they would hand it over just so I would stop talking. So, what's my new approach? To collect my paycheck while slowly trying to psychologically change the mindset of my manager.

My journey through this plastic crusade has opened my eyes to see how much plastic sneaks its way into every part of our daily lives. I've learned how removing or even boycotting is not as simple of a choice to make. It was ambitious of me to think that I could change the way a whole business is run in the same sense that it can be difficult for someone to change certain aspects of his or her life to be more environmentally friendly. Saving the world is not as black and white as it is often presented. I could have sacrificed my pay, but no one should have to go broke in order for there to be a better environmental solution. I don't have a solution. I don't have the right answer. I don't know how to directly fix the single-use plastic use in restaurants nationwide. I hope that this essay can serve as a piece of awareness of how much little pieces of plastic can add up even when you don't see them all being used in a single moment. I also hope that this serves as an inspirational message showing that it is not about having the power and knowledge to fix the big picture issue. Sometimes you have to start with picking up trash in the parking lot before you can order the biodegradable to-go containers. Saving the world won't happen overnight. Educate yourself. Express your passion. Don't be afraid to start small, the planet will thank you later.

How Much is Your Wardrobe Costing You?

Maia Brams

Imagine this: you go online and search up Forever21.com. You browse around and see the exact top Kylie Jenner was wearing in her latest Instagram post, but it's only \$5! And next day delivery is only \$2.99? Perfect! Or is it? Fashion is something we can't escape from; it runs so many of our lives, but it is detrimental to our planet. Sure, that \$5 top that you got for a bargain may have cost you almost nothing, but it has cost our environment everything.

Climate change is a prevalent discussion in our generation (Generation Z) and has been a fast-growing global issue throughout the twenty-first century. In our current understanding of climate change, however, many important factors are omitted from the discourse. People understand that they should lower their carbon footprint, something that is largely promoted through the act of flying less, carpooling, and turning off light bulbs in unoccupied rooms. However, very rarely do we hear about how our interest in dressing well affects our environment. The fast fashion industry emits 1.2 billion tons of CO2 equivalent per year. This is about 5% of all global emissions ("The price of fast fashion"). That's more than the emissions created by air travel and international shipping.

So, what is fast fashion? Fast fashion emerged in the 1990s, most notably with the brand Zara (Faletra). Fast fashion is the practice of mass production of clothing items at a rapid pace to meet the demands of the public. These products are based on expensive brands but made at a lower quality and in much worse conditions. They are then sold for an inexpensive price to satisfy public demand. That same top that Kylie Jenner wore in her Instagram post or even those jeans Liam Hemsworth wore in the magazine suddenly become must-have items overnight, causing brands to scramble in an effort to replicate those same articles of clothing. Verbs such as

fulfill, *demand*, and *satisfy* are ones that display the issues of our consumerist society. We have been trained to think in fashion and businesses are only fueling this mindset.

Fashion, in many ways, rules our society. Decades are known for and labeled by their fashions. The 1970s was a time characterized by peace and love with the hippy style at the forefront. The 1980s was the period of disco and the 2000s? Well, that's not even really worth discussing. In any case, fashion is ingrained in the minds of the public in so many ways and to function in our society is to have some involvement in clothing. Even those who attempt to avoid it, also known as hipsters, are market-ized by brands who seek to recreate those hipster trends. But the twenty-first century? We are known as a generation of recreation. The '90s came back, the '70s came back. However, most infuriatingly, items that could then be bought at a lower price, otherwise known as thrifting, or even passed down from previous generations were instead desired to be new. If fashion does in fact rule our society, then we need to figure out a way to make it sustainable. We, the inhabitants of the twenty-first century, may love new items disguised as old ones, but this new desire is slowly affecting the health of our planet.

The desire to frequently own new items is the consumerist mindset our generation suffers from. A fact that frequently stuns people regarding fast fashion is that "with current technologies, it would take 12 years to recycle what the fast fashion industry creates in 48 hours" (Kianna). This alone is a shocking consideration, but when you bring in the fact that our modern world now consumes about *eighty billion* new pieces of clothing every year and the average American generates *eighty-two pounds* of fabric waste each year, these numbers are only enhanced in their shock factor. Our environment is not prepared to combat our consumerist desires ("Disposable Clothing"). In a conversation I recently had with a friend, I was told that if she did a photoshoot in her dress, she could not wear it again since everyone would already have seen it. The question

I think that is worth asking ourselves then is, would you rather be seen in the same outfit twice or watch your environment, the one that you so love and cherish, struggle to survive?

Now, fashion isn't just about material waste and carbon footprints, but it is about water too. The fast fashion industry is responsible for producing 20% of global wastewater (UN Environment). In 2015, the fast fashion industry created 92 million tons of wastewater (Kiana). This resulted in the contamination of rivers, oceans, freshwater sources, and soil. When you consider the fact that only around 0.3% of the water on our earth is usable by humans and not all of that is even actually attainable, then that's a large amount of water being destroyed for the sake of society's shopping addiction (WaterAid). I am sure that growing up people will remember commercials for WaterAid or similar charities, raising money to provide clean water globally. Access to clean water is something the global north takes for granted. Consider this, "785 million people don't have clean water close to home" (WaterAid). That is about everyone in ten people. If the people who take clean water for granted and consider it a norm in their lifestyle are the same ones who contaminate the earth's freshwater supply by the amount of clothing they buy, then really, they are only hurting themselves. *We* are only hurting ourselves. Let me ask you, are you willing to shop less if it preserves clean water globally?

Let's test something out now. Walk over to your closets, wardrobes, and drawers. Look around, how many clothes do you own? And then, once you've considered how many clothes you have personally, think about how many clothes you see per day. If you consider that amount regarding the whole planet, you reach a pretty intense number, right? Right.

As the climate crisis worsens we must consider what is essential to our lives. This is a question that has been prevalent in our society during the recent global pandemic we have all been suffering from, COVID-19. People have been forced to consider what is necessary for them

to function in their daily lives and what they can live without. As a society, we have been gifted with too much.

Globalization has allowed us access to whatever we want, whenever we want it. Amazon now even does same-day delivery in certain countries! This may seem like a great advancement in the short term, however, its long-term effects need to be considered. Realistically, how many t-shirts, trousers, ties, or dresses do you actually need? Today's society needs to consider that if we want the environment to both thrive and survive, we need to be progressive and combat the global fashion industries that are fueling this climate decline. I would like to say that changing the way you shop and how many times you wash or dry your clothes is the most important thing, because it is definitely important, but it is largely about first changing our consumerist ideals. If there is no demand to fulfill, then businesses will be forced to create on a smaller scale. The sad truth is that fast fashions' effect on the environment will not be massively altered by our individual choices. We can still and should still promote charity shopping, upcycling, and sustainable brands. I am not saying that these options will not have a positive effect on our environment, but in the midst of our current climate crisis, we do not have time to wait for individual people to shop differently. Rather, the businesses that thrive from public demand need to take action. Fashion companies need to consider their materials, their mode of delivery, the longevity of their products, and what is actually going to sell. Essentially, our environment is suffering because of us. As a society we need to change our attitudes and habits if we are to have any chance of saving our planet. Whilst our individual actions will unfortunately not make a huge difference, our attitudes can. Our attitudes can ensure that the companies and industries that can make a difference actually do.

Moreover, it is not just the climate that fast fashion affects. A recent video released shows the factory workers of the fashion brand Pretty Little Thing working during the COVID-19 UK lockdown; the video shows a distinct lack of social distancing being enforced. This could potentially put the health and safety of the company's workforce and the people they may encounter in danger. Fast fashion is as much a human rights issue as it is an environmental one. The fast fashion industry is, in so many ways, inhumane. The public votes for its government in polling stations; consumers vote with their money. Shop sustainably, think carefully, and the world will thank you.

The Population Bomb & Awakening to Nature

Rebecca Hamilton

In Paul Ehrlich's *The Population Bomb* (1968), he expresses greatly exaggerated fears about an explosion in the American population, causing worldwide environmental disruption. However, even though the book was, and is still, considered radical, it brought up many interesting points that still hold relevance in today's society. In his book, Ehrlich theorizes about how a massive upturn in both human and animal populations would result in dire food poverty, plagues, and a need to turn to drastic population control legislation as a possible solution. His book is relevant to modern-day society and to awakening to our environment because it brings our attention to the future—however far ahead—and how we may impact it with every decision we make, whether we expand our food industry, bring more children into this world, or tackle the issue of resource distribution.

The Population Bomb begins with a jarring statement, "The battle to feed all of humanity is over. In the 1970s hundreds of millions of people will starve to death in spite of any crash programs embarked upon now. At this late date, nothing can prevent a substantial increase in the world death rate" (xi). When a reader picks up a book that writes to chaos and destruction and reads these first lines, he or she may feel disheartened or fearful, having just read a prediction by a well-educated author. This quote is also what led to a mass discredit of the novel by critics, thinking immediately that Ehrlich was little more than a doomsday author, having gone far past an earth lover. From those first few lines, the author begins a steady argument that the world, in the late 1960s, was already at near capacity for human lives and could not take another population boost like the one between 1950 and 1970, when the human population increased by more than one billion. With such a high birth rate, Ehrlich's argument held water, especially as

the world had only naturally grown foods and would not see GMO-created agriculture until the mid-1980s. In his book, he argues that with agricultural supplies (mostly crops like corn) as they were, farmers could only support a certain population. From a contemporary perspective, in which most of our food contains genetically modified organisms (GMOs), pesticides, or is mass-produced, we might scoff at the author. Despite this, Ehrlich's argument makes us more aware of how we use our environment. In the 1960s, America had plenty of farmland. Decades later, our country is covered in cities, farms, and cattle ranches more than it is wilderness. Yet, even with this apparent overuse of the land, food insecurity continues in the United States, one of the world's wealthiest leading countries.

Our environment is what used to supply our society and what used to give a man, historically speaking, the means to support and feed his family. However, with the "domestication of mankind," Ehrlich believes we have become too reliant on agriculture, and instead of attempting to regulate how it affects our earth, we push it forward. We try to feed a growing population by growing our cattle ranches and farms, and as the population is fed, the natural environment suffers while the population grows further, becoming a cycle of growth, supply, and more growth.

The population had exploded by 1968, but Ehrlich's prediction of the human society collapsing in on itself was proven wrong almost immediately after the book was published, with a downward trend in birthrates beginning in 1970. At the time of publication, the population growth rate was 2.09%. Today, it is 1.09%. Instead of the world collapsing into famine and mass die-offs, we accommodated and slowed our growth naturally.

One has to wonder though, was the US birth rate slowed because authors like Ehrlich began bringing awareness to the issue? Did our growth go down due to unease about the future,

because of environmental education, or was it natural after the 1948 to 1964 "Baby Boomer" generation? Around the same time that Ehrlich published *The Population Bomb*, other authors were also writing about how society may become a government-run dystopia, or how it could collapse in on itself and roll back decades of technological growth. With all of the texts available, it's easy to understand why people began to become more aware of the environment in the early 1970s and to start up movements to preserve the earth for future generations. Prior, humans were unable to measure how technology and society were affecting our planet, likely because they had not seen the effects and it was considered radical to be concerned about cutting down too many trees, sowing too many fields, and farming too many cattle.

Ehrlich helps bring attention to a few possible answers to agricultural production, all of which were outdated in the book, and irrelevant to today. What is relevant though, is his argument for mandated sterilization on a mass scale, whether temporary or permanent. For a myriad of reasons, the approach the author takes to discuss this topic was met with heavy criticism at the time of publication. Religious groups attacked him for pushing for contraceptives in the life of married couples, civil rights activists went after him for sexist and racist remarks, and the several then-current senators spoke against the book because it painted the government as a common evil of the people that would force them into mandated sterilization. His largest campaign in the book is against India, which was already showing extreme population growth at the time. Ehrlich mentions, "I don't see how India could possibly feed two hundred million more people by 1980. I have yet to meet anyone familiar with the situation who thinks that India will be self-sufficient in food by 1971." It was true that there was 90% food poverty in India at the time, but as the country became independent from Britain, it slowly worked down that statistic to a healthier 40%. Of the entire world population, since publication, those who qualify as

"undernourished" have dropped from 33% to 16%, according to the World Health Organization as of 2018.

This prediction of Ehrlich's was removed from later editions of the book as it was proven false so quickly after he published the novel, but it still came up in a recent 50th-anniversary interview in 2018. The interviewer asked Ehrlich what current reaction was to the prediction, and he stated:

I'm still right 'bout India, even if they got their act together. They got 1.2 billion now, and that means a lot more people starvin', even if the percentage is lower. I regret putting the country in the bad light though, they turned themselves around and they're still improvin', I wanna live to the day they go to 15% food poverty- but I don' think I will.

This quote is relevant to today, not only in regard to India, but also in how the emotion towards a population or environmental crisis changes with each new generation, technology, and year. In 1960, environmental protection meant picking up your trash and calling a rescue group for a stranded seal pup. In 1980, it meant moving toxic waste to one or two designated areas. In 2000, it meant carpooling, placing regulations on farmers, and buying organic foods. In modern 2020, it means driving an eco-friendly car, recycling, holding rallies, and boycotting oil and coal companies. As a society, how we view our earth and its needs evolves both socially, and individually. Ehrlich remains firm on his idea that overpopulation will be the end of the earth and lead to a massive breakdown in society someday. He also acknowledges now that the world can continue growing and using more resources—and that humans can change.

With universities and movements now educating people about realizing the sensitivity of the environment and how we as humans affect it, and normalizing that mindset, the idea of overpopulation holds less and less weight. As of 2018, in a census by the US government,

Americans in the current and previous generation are predicted to have the lowest birth rate in history. Many young people ages 18 to 30 are discouraged from bringing children into the world, and many accredit it to "not seeing a future for society on a dying planet." This is almost directly in contradiction to the predictions in *The Population Bomb*. Instead of continuing to overpopulate the earth, society has educated itself and started to bring "herd-recognition" to the crisis of the planet. The new generations have a goal that was never relevant before a few decades ago: saving the earth so that future sons and daughters not only have the means for a house, but a planet to put that house on.

Ehrlich's "radical" ideas about the environment, all of his concerns and changes warranting concern, are normalized in today's society, but it was his idea of government interference and a complete explosion in population that did not hold throughout the decades. He spends a majority of *The Population Bomb* explaining why the next few years would be the most important for society, theorizing that it would need to curb the birth rate harshly. As it turned out, society may have listened to authors like him or to the government and environmental groups. Or maybe it was generational. Regardless, Ehrlich's argument still holds true today, as the world population hit 7 billion in 2011, is at 7.8 billion as of March 2020, and is predicted to reach 8 billion by 2021, according to a World Health Organization census. Our collective sensitivity to a possible overpopulation and how that could affect the planet in the overuse of Earth's resources, or even how it could mean a major relapse or end of society, was beginning to gain ground in 1968 and is still a leading topic in 2020.

Ehrlich ends his novel on a rather dark, but interesting social note. In the last few pages, he says, "Solving the population problem is not going to solve the problems of racism, of sexism,

of religious intolerance, of war, of gross economic inequality—But if you don't, you're not going to solve any of those problems." This holds true. All of our social and political issues as well as the things that are luxuries to have as society evolves would vanish if the earth was overpopulated and died—perhaps it is just as serious as Ehrlich thought in 1968.

The American Nightmare

Emily Brunelli

I hadn't thought much about climate change until my junior year of college, when I took a writing class for my economics major. It was one of several topics that we could write about for our final paper. As I started to learn more about it, I realized how ignorant I was. It was alarming, and I had only begun to scratch the surface of this incredibly complex issue. What scared me even more was the idea that other people were probably like me too: they had learned about climate change mostly through the context of politics and knew it wasn't good for the environment but didn't think about it much more than that. It had always been an abstract issue to me and I did not see it as something that would affect me personally. It was something that people had a lot of opinions on and I didn't see it any differently than other issues; it was something that all politicians debated but hadn't affected me personally. Still, as I started to learn more, I realized how flawed my thinking was; climate change is not something in the distant future that one politician is going to solve, nor is it just a philosophical issue to debate. It is incredibly real and going to affect everyone, regardless of your political stance.

Prior to my writing class, I had known climate change as a topic of debate among politicians as well as between scientists and nonbelievers. I hadn't thought about how much politics and economics shape our view on it. I am a double major at my university, studying English in addition to economics. In a lot of my English classes, we talk about capitalism and the role it plays in everyday lives and how it serves to oppress people. It's clear that within my English classes, "capitalism" has a negative connotation and is seen as the driving force behind many political, economic and social injustices. I later studied this economic system through the lens of an economics major and I started to better understand it. It made sense to me why people

would strive to maximize profits. I understood why efficiency was so important. Based on the economic models that I had learned about, capitalism seemed to make sense. It didn't always seem fair or favorable to certain people, but I had been able to understand it and see why it was practical. Until I began to look into climate change more.

Although I am glad to have taken classes that help me understand this system fully, it is interesting to see the different perspectives taught within the same school, and I wonder how they might influence students in the future. For example, will students who have only taken economics classes be less inclined to see the harms of capitalism because it is taught in a way that portrays it as the only practical economic system? I feel as though I fell victim to this. Even when I was in my economics class where I learned more about climate change, I was only able to look at it through the lens of capitalism, and although I saw it as a major issue, I was constrained by this economic system because it had been taught to us as though it is the only option. My knowledge of this issue was challenged when I took the English class for which I'm writing this essay. I think the humanities offer a valuable perspective on this issue because they look at something that economics completely ignores: lived experiences. I did not become invested in this issue until we looked at literature about it, such as *The Overstory* by Richard Powers, where I was able to read about some effects of climate change through a fictional account following several characters whose lives were affected by it. I think this has given me an even broader perspective on the issue that my economics major could not offer because after reading this story, I was able to empathize with the characters, which is lost in the field of economics when you view everything through such a practical and restricted lens. And with this empathy, I was able to better see the importance of this issue and not look at it through just an economic perspective. With an issue as complex as climate change, it's important to educate ourselves

about all aspects of the issues and really think about how much our education influences our opinions.

Take the issue of oil drilling. It has many components to it. Naturally, it is bad for the environment, so we should stop doing it. But the issue is much more complex than that because it has been justified economically and politically. According to the logic of capitalism, oil drilling is great. When we drill for oil in America, there are some benefits that help our economy. It cuts down prices of importing it from other countries, creates new jobs within the oil industry, and lowers costs for consumers using gasoline. When an industry like this expands, several jobs will be created in different areas. They will need drilling crews, truck drivers, mechanics, and so on. With more people concentrated in one place for their work, the local businesses in that area have the chance to make more money. Oil drilling is a perfect example of an issue involving climate change that should have a straightforward solution - we should stop doing it - but doesn't because it's complicated by political and economic issues.

If you look at oil drilling in terms of capitalist economics, it appears to be great and promotes a lot of economic stimulation. But if you look at oil drilling as a climate change issue, or look at the people it affects, it becomes a completely different story. In the book *This Changes Everything* by Naomi Klein, she explores the effects of oil drilling on a community in Bella Bella, British Columbia. It highlights the issues faced by communities in areas where there is oil drilling. She introduces the idea of the "cascade effect", which is the chain reaction of events that occur in the case of an oil spill. There was a spill that affected the salmon in this community for years after it occurred. Although killing salmon seems like a negative side effect of an otherwise profitable business, it disrupted all life in Bella Bella. The ecosystem was hurt, and the many animals there that feed on salmon were without food. The people who rely on fishing for their

economy and food were deprived. It is alarming how capitalism can be justified still, even if it is able to completely dismantle a society, not only by hurting their economy, but by threatening a major food source that drives their ecosystem and fishing economy.

A common rhetoric of politicians is that policies that favor climate change threaten

American workers. Take the Paris Agreement for example, it was introduced in 2015 and called upon countries to work together in a collective effort to reduce greenhouse gas emissions in order to reduce the increase in temperatures for this century to 2 degrees Celsius. Countries are supposed to adhere to this by decreasing pollution. It's complicated because even though Trump withdrew the United States from the agreement, because of the conditions of the agreement, the United States cannot actually withdraw officially until November 4th, 2020. Overall, the Paris Agreement appears to have a positive impact on the environment and manages to unite the whole world in an attempt to fight climate change before it gets too bad. So why would President Trump be so concerned with getting the United States out of this agreement? He justified his decision by claiming that "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," which is a scary statistic. It is clear that statistics are being used to justify behavior that supposedly will save the country economically, but at the expense of the environment.

Trump's response to the Paris Agreement highlights a major issue in the way that we talk about climate change. Ideas like this are problematic. They put the working people in competition with climate change by giving them an ultimatum: they can either save the environment, at the expense of their own livelihood, or choose to save themselves. When it's presented this way, it makes sense that some people are against policies that favor the environment. Politicians have put prioritizing climate change in competition with the American

dream. This political rhetoric works to keep Americans believing in a system that justifies hurting the environment in the name of profit and jobs. Meanwhile, we are hurting ourselves long term because we are getting closer to a world that we don't even know will exist anymore, which in my opinion, is more important than the American dream.

In the end, this rhetoric works to perpetuate capitalistic ideas and serves as a justification as to why profit is more important than the environment. When Trump claims that a specific policy, such as the Paris Agreement, will threaten the jobs of people who work in industries such as coal or oil, it makes cutting emissions synonymous with taking away jobs. What this political rhetoric ignores are the economic possibilities of a completely new industry that will emerge: the alternative energy industry. This industry will emerge, whether we acknowledge it or not. The amount of countries involved in the Paris Agreement is an indicator that pretty much every other country in the world is committed to reducing these emissions. As a result, they will have to find energy sources elsewhere. If other countries are investing in this industry, while America ignores it, we are going to end up behind other countries, which isn't good for competition. Another aspect of this industry is that it is a new industry, so it will create jobs. If solar energy becomes more popular, there will be demand for solar energy technicians, the wind industry will need more wind turbine technicians, and as more industries want to become cleaner, they can talk to a sustainability consultant and learn how to take the appropriate steps. It may not create as many jobs as the amount that will be lost, but it is a start and a solution that seems to be overlooked by many politicians.

Although Trump criticizes the Paris Agreement for taking away jobs, there are other political legislations that have challenged the idea that climate change policies take away jobs. The Green New Deal, proposed by Rep. Alexandria Ocasio-Cortez and Senator Ed Markey,

focuses on both the creation of jobs and the reduction of carbon emissions. This proposal is important because it shows that stopping climate change won't stop the creation of jobs and is a perfect example of how we need to begin to rethink our economic system and shift away from the view that all that matters is profit-maximization. It serves as a productive solution to a lot of the claims made by President Trump that any climate change policies will threaten jobs. Within this deal, there would be a carbon tax for companies who emit fossil fuels. This tax will incentivize them to emit less. Without a carbon tax, emissions are projected to keep increasing. According to the article "Would a Green New Deal Add or Kill Jobs?" by Marilyn A. Brown and Majid Ahmadi, carbon emissions will reduce by 37% in 2050 if we implement this deal by taxing sixty dollars per each metric ton of CO2 emitted. But, without any policy implementation, it's projected that these emissions will be higher by 2050.

The Green New Deal has been highly criticized for many of the same reasons as other policies; politicians are worried about this deal because of the threat it proposes to the whole fossil fuel industry and the workers there. Once again, it's clear that politicians are ignoring the alternative energy industry and the jobs that will emerge. Yes, some jobs will be eliminated in fossil fuel industries. But, it's projected that energy-efficient jobs will increase by at least 1.8 million by 2030 and 4.2 million by 2050. Since the shift to a green economy is completely new, there will be demand for jobs in all aspects of this industry, whether it be engineers, construction workers, technicians, environmental managers, and so on. Not only will this industry create a variety of new jobs, it will do so while we transition to a greener economy, which serves as a major solution to the claim that climate change policies take away jobs.

If we continue to only view climate change as a political issue, rather than an incredibly real issue that will eventually kill us all and our planet if we continue to ignore it, then we aren't

going to make the right decisions regarding our futures. We need to start thinking about the long term, before it's too late. The economic implications and our future are explored in the New York Times article "Climate Change's Giant Impact on the Economy: 4 Key Issues" by Neil Irwin. Irwin observes that "a warmer planet could mean a big hit to G.D.P. in the coming decades," according to a government report. G.D.P. stands for Gross Domestic Product, it's the monetary value of all goods and services produced in a country for a given period of time. A warmer planet has the potential to threaten this number for a variety of reasons. With warmer weather, certain industries will become irrelevant and go out of business, which could set off a chain reaction and hurt several aspects of an economy, similar to the cascade effect introduced by Naomi Klein.

The skiing industry, for example, is reliant on cold weather and snow. It will be impossible for this industry to stay in business if the weather is too hot and there's no snow. If a town is reliant on tourism from the skiing industry, then that town will suffer. Businesses there will begin to lose customers because people will no longer travel there to ski and stay at resorts. After they lose customers, they may be forced to go out of business. People will lose jobs, unemployment will increase, and this will most likely increase at a national level as industries all over the country will be threatened. This is just one example of how a small economic externality (losing the skiing industry) could have a major ripple effect and eventually contribute to the crash of a national economy.

Irwin's article also explores the idea of increasing wealth inequality as a result of climate change. The wealth gap in this country is already a major issue, but it has the potential to get significantly worse. If climate change becomes bad enough, certain places will be wiped out by floods and other natural disasters. Not only does this create less places to live, it also creates

better places to live. Certain places will become more desirable to live because they aren't as affected by natural disasters. As demand rises, prices rise. Only the wealthy will be able to afford to live in places least impacted by climate change. Not only will the wealth gap widen, but there will be less space for everyone to live and the poor will be displaced.

It's clear that economics plays a major role in our response to climate change. It takes an issue that should be black and white (we should do whatever necessary to save the environment) and makes it incredibly complex. Although economics is practical and we should strive for efficiency and profit, it's going to hurt us in the end. We need to change our views on the economy and be willing to make sacrifices before it's too late. We need to stop viewing climate change as a threat to the American dream because new industries will emerge and jobs will be created. This is an opportunity to rethink our economic system without the constraints of capitalism and think beyond profit-maximization. It may be cheaper to continue living the way we do, but will any profit made be as valuable as the future of our planet?

Naturalizing Civilization

Aaron Kotulek

The blue jay builds its nest in the brown, resuscitating trees outside my window in Amherst, Massachusetts. Its blue plumage strikes against the brown, leafless branches as it picks and plucks the building blocks for its new home. Snow covers the ground from a late-March storm. I watch from the window of my one-bedroom, ground-floor apartment. I am insulated from the cold and the sound; I can only barely hear the birds chirping over the hum of the dishwasher I loaded after lunch. Often, any noise gets drowned out by the waste pipe running down the outside of my window. I have my desktop lamp on because the midday light from the window is not enough to see my notes on the yellow pad on my desk. My relationship with nature is far removed.

It was not always so. Before I came to school in western Massachusetts, I was a geological surveyor for the United States military from 2012 to 2017. Back then, I knew quite well what it meant to live in nature. My job required me to use a combination of mathematics, theodolite telescopes, and land navigation to pinpoint exact locations on the earth to provide information for cartographical operations. I lived in nature for weeks at a time in the southern Philippines. I did it for even longer spells in the mountains of southern California. I knew but didn't appreciate what it was like to live with the true basic necessities of life, to not need any more than food, clothing, and shelter. We had Meals, Ready-To-Eat, cold or hot weather clothes and boots, and tents that we could pack up within minutes. Now, in my senior year of college, I have lost that gumption. I have spent more days than not in this chair at this window, watching the birds come and go, the trees wilt in the fall, and the flowers bloom in the spring. Writing, but not living. Reflecting, but not experiencing. My food is at the grocery store less than a mile

away, so I hardly need to worry about starvation. A Brita filter in the refrigerator filters my tap water into drinking water, so my thirst is always quenched. It has become very easy to isolate myself from the world, and it is getting easier. Now, in 2020, it is possible to live and never step foot outside or interact with nature.

Thoreau spoke of self-reliance as *the* worthwhile journey of the human, and I am beginning to see why. It is independence and freedom from neediness that gives us meaning in life. It gives us authority within ourselves. Thoreau maintained that independence is hard to come by in modern life, which if true in the 1800s, then doubly so for now. We have trains to take us everywhere, although it isn't clear what good going to far-away places does for us. Telephone signals connect us with anyone from anywhere, although it is not clear why that is a good thing if there is nothing of real importance to discuss. The majority of transportation and phone usage is not spent on anything significant. It seems the more we build our society up, the more it constrains us, and the more we lose touch with our natural roots.

We have relinquished nearly all control of our lives. We build and advance, build and advance, and so on. We build taller, sleeker offices hoping to impress competitors and clients. The first Ferris wheel ever created was built for the Chicago World Fair in 1893, with the explicit purpose to outclass the Eiffel Tower, which had been built at the previous Paris "Exposition Universelle" in 1889 (Blazeski). Most of the buildings we construct are not built with any sort of consciousness, but animalistic competition without regard for the earth that supplies the materials and space for it. Most of our technological improvements do not have any significant effect on society's happiness or well-being, but are merely a result of competition in a market economy. Does a step-by-step navigation system improve the daily life of the average user? Or, does it make things easier for them so they don't have to put any effort into a trip? If

you don't have to put any effort into something, does it have meaning? If the success or failure of a trip depends on a piece of technology, then that technology becomes, at best, a shortcut and, at worst, a scapegoat for failure, something to take the blame off the user so they never have to feel upset. The technologically-dependent user can walk through life numb, never challenged.

My point is, our advances in technology have thus far been self-serving. It seems that most major advancements have been in communication devices, vehicular safety and technology, or logistical shipping and delivery. Most of our advancements in robotics and artificial intelligence are for the sole purpose of reducing the amount of work that we humans have to do. It will not be a stretch when I say that these advances have come at a great cost. Most of our technological devices are built with what is essentially slave labor in poor, impoverished countries. Those countries that are rapidly trying to increase their wealth and status are polluting the earth in the process via unregulated factories. Our vehicles are still dependent on oil and gas, both in production and operation. Even the vehicles that run on electricity are produced with coal, nuclear, or some other finite natural resource that pollutes when burned. This is not even to mention the environmental cost of shipping via jets, cargo ships, and trucks on the road. What I am saying is, I think that we are focusing on advancements in all of the wrong areas. As a society, our entire philosophy needs to change. I am not suggesting a "back-to-basics" lifestyle like someone pining for the "good old days." Rather, I want us to use the tremendous amount of intelligence and resources we have to make the construction industry more efficient and to give back to the earth the very substances we take from our planet. We would not need to sacrifice our modern comforts. Instead, we would pivot our industry towards a path of sustainability and cohesion with our natural surroundings to establish a symbiotic relationship with the planet

rather than the current, parasitic one. Fortunately, there are programs that we can support that would drive this change in philosophy

One such program is called the Living Building Challenge (LBC). Established in 2006 by the International Living Future Institute, the Living Building Challenge seeks to drive a change in the philosophy of industry and create standards of sustainability that would effectively combat climate change and environmental destruction. The LBC sets the bar high for the certification of buildings which, both new and renovated, can be titled "living buildings." The Living Building Challenge recognizes that it is not enough for us to just be less destructive; we have to aim higher. We have to create buildings that both merge humans and society with nature and also regenerate in that space.

In 2016, a living building was constructed at Hampshire College in Amherst, MA near the Mount Holyoke mountain range. Only the fourth in Massachusetts and the twenty-third in the world, the Hitchcock Center was built as a non-profit educational facility. The operators of the center seek to educate the next generation of environmental decision-makers. Most importantly though, they have shown that the construction industry can design a building in a way that harvests and recycles its own water, uses composting toilets, and operates on responsibly sourced, non-toxic construction materials. The Hitchcock Center is also standing proof that such a building can exist and operate without the sacrifice of beauty or utility.

The most interesting thing about living buildings like the Hitchcock Center is the philosophy behind it. The Living Building Challenge lays out a construction philosophy following seven "petals," which correspond to Energy, Water, Material, Beauty, Health & Happiness, Place, and Equity. The idea behind the seven petals is to spur industry leaders to design and structure buildings that function as elegantly and efficiently as a flower, with each

petal representing a core responsibility for designers and manufacturers. Each petal is a high standard that, when adhered to, will bring us closer to that symbiotic natural relationship that benefits all involved.

Take the Hitchcock Center for example. The creators have embodied the philosophy of cooperation with nature and understand that knowledge of our natural surroundings is imperative when building in nature. In the actual construction of the building, non-toxic materials were used, and all construction waste was either reused on-site or recycled. Every area disturbed during the construction of the Hitchcock Center was planted with a native meadow seed mix and native plants that support native birds and wildlife. Solar panels cover the entire rooftop to collect energy from the sun, which is stored and used throughout the building much like the photosynthetic process of a flower. All the water used in the building comes from rainfall collected by the watershed-like design of the rooftop and is stored in a 6,000-gallon tank. The water is treated with UV sterilization for drinking, and all greywater leaving the building is filtered through a constructed wetland, after which it returns to the surrounding environment through the land or the process of evaporation. The near-waterless toilets flush into a compost chamber, which, like nature's soil, use microbes to break down waste and release nutrients to be used as fertilizer. With south-facing windows, the sun is allowed to penetrate the building and warm and inspire the inhabitants inside. The HVAC system automatically turns off when the conditions are good enough for natural ventilation; a green light will appear and signal that it's time to open windows.

The Hitchcock Center is full of independence. It needs nothing other than what nature provides. The living building is both a philosophy of construction and a philosophy for living.

My goal in giving the Hitchcock Center this description and praise is not to shill for the Center

itself, and I understand that I may have projected some of my own idealism onto it, but I genuinely do believe that the Living Building Challenge and buildings that aspire to its certification are steps in the right direction for a healthier, more cooperative relationship with nature. As of right now, these buildings are more like a "proof-of-concept" rather than a feasible goal for the vast majority of construction projects. It will take widespread support for this sort of industry change to take place, which is why I write these words, in the hope that they inspire you to support your local living building. If there are none in your location, then take action and petition your local government to include a living building in its next budget. Change never comes easy, nor cheaply, but it's always worth the effort.

Activism

"The Earth is a fine place and worth fighting for."

—Ernest Hemingway

A Case for Calm Climate Activism

Emily Duffy

I. Issues Demand Action

When tackling a topic as contentious as climate change, the question of how to approach activism is especially important. Staring the destruction of our world in the face makes it difficult to remain silent, but we often do not know what to do about these feelings of fear and desperation. A natural reaction is to hastily jump into sharing your horrifying realization with others, aggressively inciting shock and spurring action...but is this really the best way to approach the topic? Action is undeniably necessary, but how we approach activism is important as well. In a situation as dire as we are in, we must be strategic.

Undoubtedly, climate change is shocking. However, realizing the true severity of the issue is not always immediate. Whether we come to an understanding of the climate crisis over many years or in one life-crumbling, hope-crashing realization, the sense of horror is quite similar. This horror often translates into a need, a drive, a feeling that draws one to act *now*. Indeed, as time progresses, the crisis escalates. So, why should we act timidly, ultimately contributing to the culture of apathetic inaction? I understand that it feels critical to seize the moment of passion and to not let our awakening slip away into apathy, but how do we do that? Knowing how to channel the fierce waterfall of fear, anger, and determination into a manageable stream of clear-minded activism can be difficult.

Thus, we find ourselves faced with two major paths of activism: a calm and reasoned, yet slow approach, or a fiery and swift, yet polarizing approach. With any issue demanding action, a variety of perspectives regarding the best way to address the issue materializes. In this essay, we

will focus on these two major methods of activism in an attempt to reveal their merits and their shortfalls, and to determine which one is more beneficial to the cause of climate activism.

II. Calm and Concerted

Taking a slower, less aggressive approach to climate change activism involves taking a step back from one's own despairing thoughts and accepting the fact that progress is not always as quick as we would like.

One method of calmly approaching the topic of climate change is through a gradual, perhaps indirect angle like that of Richard Powers' *The Overstory*. Although this novel is not directly concerned with climate change, its underlying theme of the importance and ubiquity of the natural world helps ease one into understanding climate activism. Under this mindset, reaching out to those who are apathetic or even completely unreceptive towards the severity of climate change necessitates careful, gentle rhetoric. Providing readers with a palatable story involved with the themes of climate importance and activism allows them to form their own opinions on this topic organically.

In his novel, Powers' achieves a delicate balance of proselytizing on behalf of nature while withholding any sense of fear and blame. His use of entangled stories that are in themselves intertwined with nature conveys to the readers a sense of the importance and ubiquity of nature, which is in our best interest to not meddle with. Many underlying metaphors can be construed from the arguably fantastical importance of the natural world in this novel, working beneath the scenes like roots: obscured yet accessible if one desires to dig. In the very first story out of the many that weave together in *The Overstory*, the many generations of the Hoel family are featured, with a family tradition forming throughout the years: taking photos of their chestnut tree. Pondering the photos, Frank Hoel, Jr. muses how humanity's idea of a "story happens

outside his photos' frame"; inside the frame, through hundreds of revolving seasons, there is only that solo tree" (16). The natural world, subtle yet eternal, is the unseen backdrop to our lives. The Hoel family's tradition demonstrates the value in shifting our gaze to the slow, long-term beauty of nature.

Later in the story, tragedy strikes, with most of the Hoel family perishing from carbon monoxide poisoning. In this moment of tragedy, the chestnut tree remains ever-present and unaffected, "as if this moment, too, so insignificant, so transitory, will be written into its rings" (23). Here, Powers is sharing with his readers the sentiment that nature is eternal, and our actions are fleeting. Respecting the power and importance of nature is the first step in developing the sympathy needed to step up in the fight against climate change. The Hoel family revered their small window into the natural world, letting nature simply be nature, isolating this beauty in the timelessness of photographs. The story of the Hoel chestnut tree is a striking example of how climate activism can be small and incremental, yet still incredibly powerful.

This raises the issue of why it is necessary to deal with the climate crisis through long-winded novels or metaphors. Can't this method be considered too *tame*? A novel is, by nature, not an extreme method of activism, but it has immense value nonetheless. Aggressive rhetoric can leave fence-sitters and dissenters feeling victimized by having another's view pushed upon them as a supposed moral necessity. Telling someone how to feel about climate change without allowing them the opportunity to realize their feelings on their own has the potential to be harmful. Being told that you are morally wrong and an enabler of destruction is not an easy-to-accept idea, especially when climate change seems invisible and overblown to many. In contrast, education without blame can open many resistant minds, and Robert Powers achieves this in *The*

Overstory. His novel is an entertaining, yet thought-provoking text, prodding hearts in the right direction in a way that can reach out to many people who need to hear Powers' message.

III. Passion Requires Action

I understand that there is merit to be found in taking a hardline stance on climate activism, as coming off as weak or apathetic is a disservice to such a crucial movement. We owe it to ourselves and future generations to take strong, decisive action. We are complicit in the murder of our world if we stand by, averse to conflict. Our future is not something to take lightly, so we must act in a way that embodies these ideals that we have become newly awakened to. Following this passion, some people adopt a mindset leading to inflammatory activism.

Rash decision-making can cause one to fight back against society, taking well-intentioned but misguided actions in an attempt to awaken others. One can believe that he or she is taking actions that will benefit the world long-term, using methods that, in actuality, are short-sighted.

An example of a potentially backfiring act of climate activism is David Wallace-Wells'

The Uninhabitable Earth. This book is composed of an avalanche of climate-related facts loosely tied together with purposely fear-inducing rhetoric. Facts are important, but it is undeniably counterproductive to leave one's reader hopelessly dejected with no tangible path forward.

Readers of Wallace-Wells' book are already likely to acknowledge the crisis that is climate change, so what can such doom-steeped rhetoric hope to achieve, other than backfiring and causing an existential paralysis in the very people who care enough to buy and read a book explicitly on climate change? The dust jacket's descriptive blurb alone, meant to entice potential readers, is one of the more egregious examples of fear-mongering. It reads:

It is worse, much worse, than you think. If your anxiety about global warming is dominated by fears of sea-level rise, you are barely scratching the surface of what terrors are possible. In California, wildfires now rage year-round, destroying thousands of homes. Across the United States, '500-year' storms pummel communities month after month, and floods displace tens of millions annually. This is only a preview of the changes to come. And they are coming fast. Without a revolution in how billions of humans conduct their lives, parts of the earth could come close to uninhabitable, and other parts horrifically inhospitable, as soon as the end of this century (Wallace-Wells).

Wallace-Wells' facts are doubtlessly important and need to be heard, but his methodology is flawed. This extreme approach to climate activism exemplifies how much care must be taken while tackling a horrifying issue. Having the blurb to a fact-based book be so incendiary no doubt turns away potential readers, stunting the ability to raise awareness.

A crisis demands sufficient reaction, and shocking people in order to disrupt "business as usual" lifestyles is a valid method of evoking an appropriate response to the horrors at hand. I know for myself, as reading Wallace-Wells' book incited a sense of urgency in me towards fighting the crisis at hand. However, this shock-value must be tempered, controlled, and carefully planned if we are to raise awareness, not defiance towards the climate crisis.

IV. The Path Ahead

When calm methods of activism are used, these productive discussions can act as a springboard for true, problem-solving dialogue. Aggressive action is alluring, but successful progress often requires buildup. It is difficult to identify one "perfect" solution, so open-minded

collaboration is a necessity. Hoping, predicting, and planning are all we can do with the hazy forecast of our future, but we must do it nonetheless.

Taking decisive action to fight the climate crisis would benefit greatly from a concrete, shared mindset among its activists. A hodgepodge of squabbling extremists among timid hopefuls just cannot be productive. We must strip away the excessive, hellscape-invoking, and at times, brutally judgmental rhetoric that feeds on our natural passions. These passions, angers, and dreams can be made more productive by sloughing off our understandable yet inhibiting thorniness towards those who do not yet understand the severity of our situation.

To be blunt, scaring potential climate-allies off with excessive pessimism and harsh blaming is just not the answer. The impassioned, desperate rhetoric of well-intentioned activists is needed—but not yet timely. We need to start smaller, as starting small and working our way up to large-scale climate action is much more desirable than jumping to extreme measures and failing altogether to grasp a foothold in the general public's sentiments. If you take a hot cup fresh out of the dishwasher and pour ice-cold water in it, it will shatter. Although, if the water's temperature is gradually decreased, the cup will be just fine. What's the lesson? When one is dying of dehydration, waiting a little bit longer for water is better than risking getting none at all, though it may be painfully tempting.

Youth Climate Protest and the Urgent Need for Mass Mobilization

Emily Bernhard

Looking back upon the twentieth century's history of social justice, one can clearly see the presence of youth-led activist leadership. From the 1960 civil rights student lunch counter sit-ins in Greensboro, North Carolina to the student anti-war movement of the late 1960s, the mid-twentieth century has seen youth leadership and bravery emerge from systemic violence and moments of sociopolitical crisis. By exploring some examples of today's contemporary youth climate actions, this paper seeks to reclaim a lineage of social justice which extends from the civil rights and anti-war movements of the 1960s to the efforts of individuals like Greta Thunberg, Thomas Lopez, Xiye Bastida, Mari Copeny, and many others involved in climate actions across the country (from the 2016 Dakota Access Pipeline protests to the nationwide school walkouts of 2018 and 2019). As the contemporary young people of this country, our hope is that this reclamation will contextualize the sincerity and urgency of today's climate activism for older generations of Americans (Americans who have seen the realities and disenfranchisements of the Vietnam War and the racial segregation of the mid-twentieth century), facilitating a more understanding conversation between young people and their older relatives. Further, by bringing attention to lesser-known youth activists of color, we will attempt to break the older generation's culturally dominant assumptions about youth climate activism. The urgent message of this conversation is one that dissolves the generational barriers which prevent a more collective understanding of climate justice; we are all citizens of this planet, with valuable voices capable of forging great change.

In Greensboro, North Carolina, and across the country, racist segregation laws prohibited Black customers from being served at white-only institutions like Woolworths, a diner in the city's downtown. The sit-ins, staged by black college students, highlighted the absurdity of the racist laws in place: the students would sit at the lunch counters after being refused service, would often be violently harassed by white patrons, and would then be forcibly removed by the police. The action, rooted in the philosophy of nonviolence, in turn exposed the violence underwritten into the fabric of the laws of municipalities like Greensboro. The effect was momentous; because the sit-ins were televised and covered by the newspapers, the visibility of the civil rights cause was able to spread across the country, inspiring more sit-ins by more activists and gathering more public awareness of the disparities reinforced by local and federal law. The leadership which arose from these initial sit-ins (and, eventually, in the ranks of the Student Nonviolent Coordinating Committee), echoed the exceptional nature of Dr. Martin Luther King, Jr.'s prominence in the civil rights movement. However, the strength of these actions came directly from the collective nature of their participants. Because the activists were many in number, their cause (and not their individual accomplishments) strengthened. While the sit-ins alone did not end all racist policies of segregation in the south, they were essential to the country's ultimate, collective disillusionment with racism (and, arguably, subsequent mainstream acceptance of figures like Dr. King).

In the late 1960s, student activists were again poised to object to America's involvement in the Vietnam War. Organizing actions against policies like the Nixon Administration's military draft policy, students on college campuses sang protest (and peace) songs and organized sit-ins and rallies, all in the name of the anti-war movement. Like the

Greensboro activists, students were again on the front lines of the movement, both figuratively and literally drawing visibility to their precarious, vulnerable position in the face of an unjust political state. In 1970, National Guards were deployed to Kent State University's campus to break up anti-war student demonstrations. The violence quickly escalated, ultimately ending in the deaths of four students. Without the actions of the Kent State students, immediate deaths could have been prevented, but the spectacle of violence against students might not have shifted the public (and Nixon administration) mind toward the cause of peace. In both the cases of the Greensboro sit-ins and the Kent State demonstrations, young activists sacrificed their safety in order to draw visibility to their cause; this strategy, while seemingly unsafe and radical at the moment, is destined for success. Beyond the outcomes of desegregation and ending the war in Vietnam, these activists shifted how our history is reflected on us. Their leadership and visibility make the violence done to them impossible for history to ignore. This kind of change is what is needed in every political movement.

In our contemporary moment, the climate crisis is dominating the young minds of our generation. The realities of our inheritance are far too clear, and change must again be made. Events and actions have been ongoing for the last decade, notably in places like the Standing Rock protests against the Dakota Access Pipeline, which passes through the Missouri and Mississippi Rivers, threatening the reservation community's access to clean drinking water. The protestors, named water protectors, were initially led by reservation youth (who called themselves ReZpect Our Water). While the pipeline did eventually get completed under the Trump administration's order, the mobilization of youth climate protestors and water protectors on North American Native reservations continues to this day. 15-year-old Autumn Peltier, from the Wiikwemkoong First Nation on Manitoulin Island in northern Ontario, has emerged as a

leader of the youth movement of Native water protectors. Like her contemporary Greta
Thunberg, Peltier has traveled to the UN to appeal to world leaders on behalf of her Nation,
which is affected by unclean drinking water and constant climate threat. While these two young
women are speaking words of truth and appeal, it is worth noting that not all activists can
secure an invitation to the UN. In Rebecca Dingo's piece, "Speaking Well: The benevolent
public and rhetorical production of neoliberal political economy," she cites the problems of
"Girl Power" movements which rely upon the commoditization of "well-spoken Brown girls,"
like Malala Yousafazi, to reinforce a globalist, "multicultural," neoliberal political economy
(whose interests are often in opposition with the demands of activists).

While sincere, measured appeals to world leaders are a notable component of the climate movement, the harder work of civil disobedience, arrest, and personal endangerment is as essential to the cause of the climate movement. It is important not to alienate these "less acceptable" activists who are on the front lines of demonstration and protest, while in the same breath solely praising the politically sanctioned visibilities of individuals like Thunberg. While Greta Thunberg's words and actions are at once sincere and urgent, their ability to be heard and normalized, potentially over the collective voices of other activists, many of them youth of color, is troubling. Outside of her own motivations and desires, Thunberg's exceptional status and mainstream "chosenness" has led her to become the approved face of the climate movement. Within this context, there is potentially less room for youth climate activists of color, like Thomas Lopez of Standing Rock, North Dakota, a member of the International Indigenous Youth Council, or Mari Copeny, a 12-year-old protestor from Flint, Michigan, where drinking water still contains unsafe amounts of lead, or Xiye Bastida, from San Pedro Teltepec, where Indigenous people are disproportionately affected by climate change and water

scarcity. All of these students engage in rallies, school walkouts, and direct-action protests against their governments. As history has shown, these intersectional efforts (not public-facing addresses to the UN alone), which complicate the climate movement by talking about climate racism and capitalist profiteering, are the stuff of revolutionary change.

While the public's current involvement in climate crisis awareness is monumental, the fight is far from over. America's oil interests and capitalist drive to preserve political power in a global marketplace will continue to bulldoze the efforts of climate activists. When a historical line is drawn from the civil rights and anti-war protests of the 1960s and 1970s to the multi-racial, anti-capitalist efforts of youth climate activists, a collective stirring may be accessed. To enact change, the work of many, not just a few, must be amplified and carried by the masses. These actions of protest do not die after one event; they must live on until change can be seen. As in the 1960s and 1970s, this burden is again falling upon the shoulders of America's youth. However, it is up to all of us, and not just those in media spotlights, to ensure the strength of the collective movement. We invite you to not just watch us but to join us.

For example, in September of 2019, the Global Climate Strikes became the largest climate strikes in history, with over 4 million people participating worldwide.

82 Propositions for the Apocalypse

Grace Brotsker

- 1. I've been waiting for this for my whole life.
- 2. When I was around eleven years old, a teacher explained to me that Yellowstone was the site of so many geysers because it was actually a supervolcano--long dormant, but not extinct. A giant that, as we understood it, was only sleeping; in fact, oversleeping. When it woke, the devastation would be global. My family had just moved to Colorado, and, ripe for anxious fixation, I chose Yellowstone to manifest my fear. Every day I would stare out my bedroom window and (having oriented myself geographically to the imminent eruption site) I would picture vividly the cloud of ash rolling towards me, hundreds of miles high, engulfing the horizon and then the houses across the street until finally it came to encase me in my fearful crouch, frozen eternally like a citizen of Pompeii, an uncanny ashy specter.
- 3. The terror dulled its edge eventually, as most existential fears do with age. When I moved to the east coast for college, I found myself re-adjusting the fantasy. No cloud of ash, no instantaneous and morbidly poetic--to the mind of a child--demise. Just a sun smudged out.
- 4. Yellowstone is just one entry of many in a rolodex of apocalyptic events. Should you choose to flip through--begin at **A** for:
 - 1. Aliens, Invasion and Related Contingency Planning;
 - 2. Asteroids, Impact of;
 - 3. Anarchy, Mere;
 - 4. Airborne Pathogens, anabasis of;
 - 5. & etc.
 - 6. Flip to the tab labelled "C" and find:
 - 7. Climate Change, the Irreversible effects of;
 - 8. Cybernetic Revolt [pro or con];
 - 9. Coastal Erosion;

- 10. **D** divulges no dearth of damnables:
- 11. Divine Judgment, or: Eschatology (heterodox);
- 12. Disaster, Natural & Un-;
- 13. Deforestation;
- 14. Death, (varied--see also: Accident, Sudden, & Untimely);
- 15. Deluge, Noahic & Gligameshi, et. al.
- 5. Long have we imagined the end of the world--sometimes in faith, sometimes with fear, and in the past half-century, with fetishistic fixation. The pornography of the Catastrophic is culturally now so commonplace that its suffusion barely registers. If this isn't the apocalypse that you've imagined, you've been imagining the unimaginable. Even if it were feasible for us to scale our projections--paranoid, fearful, or otherwise--to hew more closely to the true dimensions of the unknowable End, would it be desirable to try? We would prefer that it were not.
- 6. So, didn't you think you'd feel more prepared? Why doesn't this feel the way that you thought it would? All those times you went to see a zombie movie, all those articles you read about the rising temperatures and sea levels--shouldn't you have felt more ready for this?
- 7. In my imaginary apocalypses I am alone, in a wasteland. I hunt and I gather or, as I decided in high school when reading *The Road*, I opt out early on. In these visions, The End happened quickly, popped us out on the other side like newborns. This hasn't been like that.
- 8. I've felt a fairy tale at the edge of my consciousness for some time now.
- 9. I am isolating from a novel viral pathogen in an old New England farmhouse, where I rent a room. The yard is massive, with a fire pit, a garden plot, and lean-to housing a kiln and some thoughtfully arrayed junk. The house is slightly obscured by untamed brambles; the snow has melted away to reveal undisturbed a carpet of dead leaves. An impulse to aid the smothered spring grass leads me to the basement and two rusty rakes and soon I'm joined by a few of my roommates. It is the gentlest of manicures. We rake the leaves into piles to turn over until they return to the dirt; collect cigarette butts and fallen branches. It is the first time since childhood that I have kneeled in the dirt with the

- intent to nurture. My roommate Maddy shows me which sticks to save to build a fire, from dry reeds as starters to the larger limbs that can only be split with the full weight of my body rocking down through my heel. Maddy has me start a fire in miniature on our pathway. It is the first time in weeks that I have felt powerful.
- 10. Picturing the future feels impossible now. When other people say 'when this is over,' I don't understand what that means. [I feel like I'm in a stand-off with every oracular authority figure. Voices without bodies try to give me timelines. The voices and I both know they're lying. It's uncomfortable. I'm still in school and I'm not sure what the last day of the semester is and I haven't looked it up. Everything is so elastic now. I switched from a planner to a diary—scheduling seems absurd. When the semester is over, I will graduate. At least, that was true before. I think once I had plans for what comes next, but I can't remember them now. I do not know how I will pay my rent. It doesn't feel urgent, somehow. It does feel as if I've already died. My friends suggest trips we can take when this is over. Cheap fare. I smile but I have no idea what they're talking about.] *None of this is an unfamiliar feeling. Having difficulty picturing a future is a symptom of a trauma. Being in the trauma event rather than post-traumatic. Your brain can't get outside of it.*
- 11. "I don't feel like I really sleep anymore. It's just a long day punctuated by naps." My roommates typically wake up around 2pm.
- 12. Of course you weren't ready, not really. All the stories in the world fail in the face of communicating something of this magnitude and difference.
- 13. Helios, the Greek god of the Sun, rode a chariot from East to West each day, bringing light across the sky. He fathered a son with Clymene, a headstrong boy named Phaethon. As a young man, Phaethon, taunted by his nay-saying friends, sought to prove his legitimacy as the son of the solar deity. Helios vowed to give Phaethon anything he asked for. To his horror, proud Phaethon asked for only one thing--to ride his father's chariot through the sky. The god tried to dissuade him; none but he was strong enough to tame the fiery horses, not even Zeus. Phaethon insisted, and with a heavy heart, Helios granted his wish. The flight did not go well. Nearly immediately, Phaethon lost control of the steeds. They charged upwards--too high--the earth below freezing to ice. Then the flaming vessel plummeted, scorching the earth black. To prevent celestial annihilation,

- Zeus intervened, striking the chariot down from the sky with a thunderbolt. The boy Phaethon died.
- 14. Life now has the unworldliness of an ancestral dream. A dream dreamt alone, under a star-flecked cosmos in a place long ago.
- 15. On warm days I take walks around my neighborhood and listen to self-help audiobooks. A man in a soft German accent tells me that he has found enlightenment. He tells me that time is an illusion. He tells me that I am not my thoughts. I'm not even my body. Who am I, then?
- 16. Stories are too small. This is too large. We are too large.
- 17. Suppose I were to begin by asking you to tell me the story of your life. How would you begin? Where would you end? There would be milestones: births, first words, steps, falling in love, illnesses, divorces, moments and events particularly good or particularly bad. Suppose I then ask you to tell me the story of a tree. Of a river. Where does it begin? Where does it end?
- 18. I don't mean to suggest that trees or rivers, blades of grass, deep sea fish, don't know time. Some evidence suggests that plants even have memories. But they do not have stories. waiting, yet we know not what for. I have known that I do not Know. Still, I wait.
- 19. Amber is hardened resin, pine sap dried out and fossilized over millions of years. It has been worn as jewelry since the Stone Age. The oldest amber recovered is estimated to be around 320 million years old. Amber (around 150-130 million years ago) contains plant and animal matter that may have gotten caught in the resin as it was secreted out of the tree. (Famously, insects). Spiderwebs, flowers, feathers, and fruit. Things unfathomably old.
- 20. Tarot reading: It's okay to be still for now. Changes have occurred. More are coming.
- 21. I put on a pair of disposable gloves and walk to the liquor store in town to buy cigarettes. [Stubborn]. Walking back I pass the local bookstore, closed to the public. In a window, a simple printed sign says: "YOU KNOW WHERE THERE AREN'T A LOT OF PEOPLE? NATURE."
- 22. Rest while you can an intermission and a metamorphosis. A cocoon.
- 23. In the early days of the apocalypse, I find myself explaining to a friend the strange sense of relief I'm experiencing. *It's like...even my weird fucked up anxiety brain can't contort*

- itself to make this my fault. It's not personal. And for once everyone is as freaked out as I am.
- 24. Time is running out.
- 25. Time is growing. Time is rooting.
- 26. My classes are all held online now. We spend a lot of time checking in with each other. How are your papers going? How are you managing your time? A chorus: Time doesn't make sense anymore.
- 27. Iceland Review Headline, April 10th 2020: Forest Service Recommends Hugging Trees While You Can't Hug Others
- 28. Amber smells sometimes like vanilla, sometimes like charred wood.
- 29. I feel a strange sense of comfort, of being somehow less alone in all of this isolation. Personal catastrophe is so singular--its incidence is universal, but its circumstance and its experience is so singular (like birth, like death). The burden of explaining what has happened to you (TELLING THE STORY OF WHAT HAS HAPPENED) produces alienation and shame. What is the way to explain myself to others that will reduce their judgment? How do I propagandize my own struggle so that it may be excused by a capitalist society? If all that is required for human flourishing is hard work, tenacity, etc.; then any struggle to bootstrap must be not an unfortunate coincidence or systemic hardship, but a moral and personal failure. No amount of political theory or therapeutic treatment I have so far experienced has ever been able to root down deep enough to convince me that I am not, simply, Bad. Feeling 'not good enough' is the common phrasing, but to distill it--not good. Bad. Bad at being a person--not really a person at all.
- 30. 'Stop making excuses' and 'life isn't fair' were the contrapoints of my childhood; I never understood how they worked to reinforce each other. If life isn't fair, isn't context important? I remember hearing 'no excuses' and trying to explain that I wasn't lying, I was just saying what had happened. The answer returned to me: it doesn't matter whether it's true or not. Fiction or fact--the command is not 'no excuses'; it is 'no stories' whatsoever.
- 31. (Certain things hurt to think of permanent antagonisms (originating within me, I think, mostly). Why always this urgency?)

- 32. If you deny me my story. If you fashion my story into a gun and then hold it to my head. Then, I will simply become too big for stories. I will become something else instead.
- 33. Time doesn't make sense anymore. Stories are too small. This is too large.
- 34. Why even try to write this? "I choose words, more words, to cure the tameness / not the wildness / I remember everything it isn't past it's wild" (Alice Notley, "I'm Just Rigid Enough")
- 35. "Junior year of high school I had enough absences that my family almost had to go to court, because in that one year I'd gone to so many funerals. The school wouldn't believe my parents about it so they were marking them all as unexcused absences. They made us bring evidence in, like documentation from all the fucking funerals. It was... humiliating," Maddy tells me.
- 36. The truth is things have been hard for a long time. But it doesn't feel so lonely anymore. The sheer volume of the catastrophes, the stories to tell or be told. We don't have time to hear all the stories, or to measure each against our own. Just ask your state's Unemployment Department.
- 37. Sometimes I would like to be more alone. Intentional solitude never seemed like a privilege to me before now. I've been trying to wake up earlier, but waking into this strange and new world is a bittersweet experience.
- 38. "It is a serious thing // just to be alive / on this fresh morning / in the broken world" -- Mary Oliver, "Invitation"
- 39. "This morning has the texture of an eggshell. Delicateness makes it frantically solid." -- my diary entry, 3/8/20
- 40. "No matter what I have said, my life, my actions say that I have not loved the truth, that I have not wanted the truth." (Susan Sontag).
- 41. Wake up.
- 42. To awaken is to become conscious, to become aware. Whether it is to the morning, or to divine truth, it cannot be done at will, or through effort alone.
- 43. "I saw how long it must be before the soul can learn to act under these limitations of time and space, and human nature; but I saw, also, that it MUST do it that it must make all this false true and sow new and immortal plants in the garden of GodI saw that there was no self; that selfishness was all folly, and the result of circumstance; and it was

- only because I thought a self real that I suffered; that I had only to live in the idea of ALL and all was mine." (Margaret Fuller, from a journal entry)
- 44. So many images of bones a word I come back to roll it across your lips clean and white. What if our bones were different colors? What color would yours be? Black--dull? Sheen? Glint? That glossy look of onyx? Amber bones.
- 45. "In the woods, we return to reason and faith. There I feel that nothing can befall me in life, --no disgrace, no calamity, (leaving me my eyes,) which nature cannot repair. Standing on the bare ground, --my head bathed by the blithe air, and uplifted into infinite space, --all mean egotism vanishes. I become a transparent eye-ball; I am nothing; I see all; the currents of the Universal Being circulate through me; I am part or particle of God...." (Ralph Waldo Emerson, from Nature)
- 46. I saw that there was no self / I am nothing.
- 47. To awaken is to lose the self. Undifferentiate. You don't feel so alone anymore.
- 48. Wake up into the world. The sudden awareness that you are part of something larger. A web, a network. Breathe it in. Sometimes it hurts, overwhelms your air-hungry lungs.
- 49. Please refer again to the Apocalypse Rolodex, under C.
- 50. This is the biggest reason I have felt both ready and not ready for the end of the world. That felt so predestined and inevitable as to be religious, to rule out other outcomes.
- 51. I guess I just never thought this would happen in my lifetime. What is a lifetime to a tree?
- 52. Last year an article circulated around social media, issuing a new prediction; that by 2050, the effects of climate change would be an "existential threat" to most of human civilization. I've been told I am in a generation aware and resigned to its fate, but a statement like that has an effect beyond fear not into complacency, but, like someone receiving a terminal diagnosis, I was forced to face the real likelihood that my life will be cut short by climate catastrophe. I had always pushed this thought away, having been convinced in some way, by some desperate narrative or statistic, that it would only 'get bad' after my lifetime. But the confrontation with the end of the world made me realize the dreams I had for myself consciously articulated or not were... hugely predicated on 'glory,' a desire to be remembered, to have a lasting impact on scholarship, culture, loved ones, etc. To consider my placement at the end of human history the only passion or dream I did have, that was salvageable in the face of catastrophe, was a radical fight

for the post-apocalyptic society, an acknowledgement that society as it stands now, capitalism etc, can not be fought on its own terms. The creation of something, even something beautiful, no longer seemed some sort of noble pursuit. Writing some political treatise now seemed meaningless. We don't have the time. The only worthwhile use of the thirty, maybe more, maybe less, years on this earth is to prepare ourselves for the slim possibility that we may survive—and that the world of that survival, the society of that survival, can hold little resemblance to our current one.

- 53. Another thought plagues me sometimes: What does it mean to fall in love at the end of the world?
- 54. Phaethon did not die unmourned. His sisters, the Heliades, cried for their beloved brother. They cried for his boastful, charred heart, and for all the sunlit days he would never get to see. They kept vigil over the place where his body fell, wailing. Extreme and endless grief. Weeping beyond words.
- 55. What does it mean to fall in love at the end of the world? Is there anything else worth doing?
- 56. The warning is in our DNA. The warning appears to us in dreams. What can we say to persuade that hasn't been said in countless documentaries, novels, plays, anecdotes, statistics, scientific papers, parables, bedtime stories, legends, myths? Who said this? Has anyone spoken thus?
- 57. Some things are too large to make sense of. We surrender, we supplicate ourselves.
- 58. What is the function of fear? Should I dismiss it or is it trying to tell me something? Why do I feel like I can only love the permanent? (Which is nothing). An abstract -- formatively and normatively--future built for all of us, comes easily to me now in a way it never has previously. Yet myself, a year out, two years, is unbearable to my gaze. And still.
- 59. And here we are now, at the end of the world. And it still doesn't feel the way I thought it would. Maybe we're all waking up. Not in the way we expected. The world is catching up to a way we already felt, as we locate ourselves in the Something Larger. The world feels bigger than ever, not smaller. Undifferentiate yourself. Interconnect.
- 60. "I found myself thinking much earlier today about the concept of movement, and the discomfort we may collectively experience as we have our movements restricted. Our

freedom to roam, to socialize, to be mobile throughout a larger public—these are all central to the human (American) experience in the anthropocene. We face now a situation where we may be asked to *root* ourselves in place, to limit our interactions and our vantage point to our homes. The idea makes me feel isolated, makes my skin crawl, but also reminds me of our class conversation a couple of weeks ago regarding the arboreal world and the vantage of the tree. I don't have many clear ideas regarding the future, but perhaps there is an opportunity in this strange situation to reorient ourselves into stasis. How can we, separate and immobile, communicate with one another? How can we, trees, warn each other of approaching danger or tell each other where the water flows?" (Email to a professor before my last in-person undergraduate class).

- 61. The cries of the Heliades went on for four months. The gods, unable to bear the whimpering and moaning any longer, silenced the sisters by turning them into poplar trees. Their tears, still welling from their eyes, calcified into droplets of amber.
- 62. What can we do to save ourselves in the world hereafter? Do we have a right to hope?
- 63. Apocalypse means uncovering (recovery, discovery). < Latin *apocalypsis*, < Greek ἀποκάλυψις, noun of action < ἀποκαλύπτειν to uncover, disclose. Sweeping away the soil to see the roots below.
- 64. For a long time we thought that, in a forest, trees of different species competed with each other for sunlight, shading each other out, pushing each other away to reach the sky faster. Self interested. In the eighties during clear-cutting, however, some scientists noticed that, for example, if you took out a Birch tree that was next to a Douglas fir, the fir would quickly become diseased and die. Wanting to figure out why, the scientists ran some experiments and discovered that the trees, of all different species and varieties, sharing their food underground. Food from one tree could end up in another, thirty feet away. And another, and another. One tree could be connected to fifty other trees, passing resources back and forth through a vast and complex underground root and fungi network.
- 65. Climate grief as a trauma rehearsal. Often when we experience trauma, our relational systems fall out of sync.
- 66. The tree network is largely dependent on a fungus. *Fungi are more closely related to animals than plants. Ancient.* The fungus creates a massive network in the soil, mining

- minerals from rocks and insects and trading them with the trees in exchange for photosynthesized sugar. They communicate through chemical signals. *Hey, I have something that could help you. Could you soften your roots please?* And *yes, of course. Have some sugar.*
- 67. In *Atlas Shrugged*, the novel by capitalist champion Ayn Rand, a character rewrites the Phaethon myth. In it, Phaethon succeeds in his journey across the sky. A triumph of individualism. *No excuses*.
- 68. The trees use the fungus web to talk to each other. They give each other loans. They warn each other of danger. Something is wrong. Beetles. It's too late for me, but you still have time. Make yourself bitter. Undesirable. Save yourselves.
- 69. Ecosystem--systems--we are all in this together. Healing as it occurs in a system.

 Liberation as a system. Systems → brains → forests → code → humanity → earth
- 70. Hopefully, you will see: mutual aid and solidarity -- post awakening/apocalypse, your part in the system and your obligation to the whole network.. That it loves you, it needs you. And on.
- 71. How would our future change if we learned from the wisdom of our non-human elders?
- 72. What happens if the whole system wakes up at once? Becomes aware of itself as a system?
- 73. All over the world, forests are warming up. Trees are struggling in the rising temperatures. Their needles are fading pale yellow, they are hurting. *Something is wrong. Look out*, they signal through the network. But it doesn't end there. The dying trees will dump their carbon, their resources, into their neighbors. Its legacy moves around the forest.
- 74. Don't think in lifetimes. Cultivate your liberation. Nurture it.
- 75. "...one of the weirdest parts of this though is when sick trees give up their food, the food doesn't usually go to their kids or even to trees of the same species. What the team found is the food ends up very often with trees that are new in the forest and better at surviving global warming." (Radiolab, "From Tree to Shining Tree")
- 76. "Struggle is a never-ending process. Freedom is never really won. You earn it and win it in every generation." (Coretta Scott King)

- 77. "It's as if the individual trees were somehow thinking ahead to the needs of the whole forest...there's an intelligence there that's beyond just the species. We don't normally ascribe intelligence to plants, and plants are not thought to have brains, but when we look at the below ground structure, it looks so much like a brain, physically, and then now that we're starting to understand how it works, we are going well. There's so many parallels." ("From Tree to Shining Tree")
- 78. Would you sacrifice life to save a way of life? / Would you sacrifice a way of life to save life?
- 79. In one telling of the myth, the Heliades are turned into trees not for their grief but for their complicity; Phaethon steals the chariot from Helios and his sisters help their brother yoke the horses. Which path are you being punished for?
- 80. "I do find it magical. I think there is something like a nervous system in the forest, because it's the same sort of large network of nodes sending signals to one another. It's almost as if the forest is acting as an organism itself." ("From Tree to Shining Tree")
- 81. Here's a myth: Dying alone.
- 82. In the apocalypse we are together. Individualism doesn't fall away, but it is exposed as an entity outside of our natures, a man-made thread woven into the fabric of our reality.

 Now, in the light of the setting sun, we can see its synthetic shine.

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