
ANTHROPOZINE
SPRING
ISSUE 01

intro

Hi! Welcome to the first issue of Anthropozine! - Notre Dame's first sustainability zine (that I know of?).

I have always found zines to be a unqiue way to connect to the community around me - one of my most memorable experiences at Notre Dame was writing for WVFI's zine, Mindset, as a sophmore. I was assigned to explore local music venues and in the process I discovered a super cool music community. Becuase of how awesome I found this experience to be, I have been consistenly surpised at how small and disparate indie media networds are on this campus.

This project was an attempt to address both of both the lack of student/indie media at ND and to increase levels of student activism. The idea was to create a space where students concerned about issues related to climate change and the environment could freely share their opinions, beliefs and knowledge, while simultaneously building community with each other. This community would then be empowered to act together. While it is not yet clear how good Anthropozine is at manifesting this form of collecive-action, I think it is fair to say that action-taking was done through any participation in this project.

What I am confident that the zine succeeded in, is creating a space where students of all backgrounds can share their perspective on climate change and the environment. I've come to see this zine as a super-cool reflection of the multidiscplinary ideas that are required to address the climate emergency. Science, social studies, and art have a large role to play in finidng solutions; we see all of these interacting with each other within these pages. Hopefully, this zine may also be a step towards having the multiple arms of ND's sustainability community come together in other arenas.

Moving forward, I hope to see this zine become an even more inclusive space. How I approach sustainability is infomed by being Latina, so I know that highlighting Black, Indigenous, Asian and marginalized voices will create a much more robust and just concept of how our generation will solve the climate emergency and other environmental issues. Because of this, I think it is super important Anthropozine takes an intersectional approach going forward.

Well, I'm running out of space! I've had a really great time putting this issue together with the other editors, Meg Hilbert and Sarah Kikel. It has been a fulfilling way to close out my four years here. I am so amazed by how many people contributed to this projec and can't wait to see it grow.

If you ever have an itch to create - get in touch; you will always have a space in Anthropozine!

Even better though - Go make your own zine!

Cheers,

ISABELLLE ELIZONDO '21

Howdy! Meet the team!

Hi! I'm Isabelle Elizondo! I am a senior studying Economics and Sustainability (an interesting combo which I recommend to everyone!). I'm originally from Houston, Texas where the annual "history-making" hurricane spurned an interest in sustainability studies and climate justice. I'm particulary interested in how these topics intersect with DIY cultures and alternative spaces, which is how this project came about! In my free time I am probably getting lost in whatever parks (i bad with map) are around or listening to angry grrrl music.

Sarah Kikel is a junior studying PLS and Sustainability. She is proud to call Cleveland, Ohio and Cavanaugh Hall home. A huge advocate of sustainable living, Sarah can often be found praising the wonders of thrift stores, used books, reusable cups, and walking.

Meg Hilbert is a sophomore at Notre Dame studying Environmental Science. Originally from Denver, Colorado, Meg lives in McGlinn Hall on campus and is involved in a handful of environmentally-focused groups around ND. She is passionate about saving the planet, especially our oceans, and enjoys doing art and swimming in her free time.

What's in the zine?

CONTACT US AT:

@anthropozine.nd (intsagram)

baby on board

she storms into the room
in all her baby glory,
drool and diaper and all
pudgy dinosaur legs,
as she stomps over,
head fiery with intention,
deep grimace on her fat lips,
spaghetti stains on her mouth.
she wants the blocks for her castle,
she wants the space for her kingdom.

her older brother
quivers and cries,
devastated by her desire,
watching the destruction
quench his home,
watching the collapse
of his paradise
destroyed in seconds,
watching the colorful wood
tumble
at her command.

he retreats farther back
into the bustling living room,
wondering
how she learned to defy
and
wondering
if she will stop
before every single block is hers
and
wondering
why she thinks
her kingdom
will be more beautiful
than the creation
he built for her

Sarah Kikel

Inferno at the altar,
Our pride begins to falter
Stain glass begins to melt,
Damn the pity that is felt!

“Ordained ingenuity”
Or so it pleases us to think
Of our masterful incongruity,
But in a single blink

The pace of fire hastens
The builders chastened
Their masonry reduced
By walls crumbling, bricks loose.

We construct, we adorn
After legacy we lust
Each time, freshly forlorn
When our creations turn to dust

All the while, Amazonian breeze
Carries fire through the trees,
Marring fearful symmetries.
Divine design reduced
By humanity’s abuse

A space improperly exalted
Whose beauty has been halted
By a disrespect, a greed
Mistaking orchid for a weed

No place of higher sanctity exists
No greater church is there than this
Which the hand of God has carved
And the mouth of God has kissed

Still, we worship what we wrought
Bow down to what we build
Not mourning like we ought
The Creation that we’ve killed.

Catherdrals, Cathedrals, Burning Bright

Sophia Sheehy

THE DARK SIDE OF RECYCLING

Americans have largely bought into the recycling industry being a positive contributor to environmental health and climate change. However, as Americans have thrown their recyclables out, Chinese and other Asian rural populations have felt the negative health and environmental effects.
In 2017 – this process got a lot more complicated with implementation of the Chinese National Sword trade deal, which halted recycling sales to China and threw the American Recyling industry in flux.

by Anna Whelan; Edited by Isabelle Elizondo

"Forever, we have depended on shipping our scrap overseas,"

Sunil Bagaria, who runs a recycling company called GBD International, bemoans. "Let's stop that… The U.S. only recycles 10% [of their plastic waste]. How tragic is that?" This statistic of only 10% of our plastic waste being recycled begs the question, where does the rest go? As of 2017, a lot of this waste went to China. Prior to regulations preventing most American imports in 2017, China was one of the only countries whose government allowed for buying and managing recyclable materials from other nations. This resulted in not only a buildup of recyclables throughout China, but the introduction of toxic electronic-waste to the area. However, in 2018, China decided to cut back on trash imports by issuing a deal called National Sword. This policy generated multiple issues, including driving up the costs of recycling multi-use plastic and has left the United States without a place to send its waste.

Health and Environmental Effects

The recycling industry creates health and social consequences for both those handling the work and citizens in the surrounding areas of recycling manufacturers. One of the most toxic forms of recycling occurs through the reprocessing of e-waste or waste electrical and electronic equipment (WEEE). After years of its build-up in China, the government intensified its environmental regulations and effectively made it illegal in the rural countryside. However, the processing of e-waste still occurs illegally. In the southeast, Guiyu, China is home to one of the three traditional e-waste recycling sites where tens of millions of tons of electronic waste is discarded annually. Instead of professional industries carefully and safely disposing of these materials, these family workshops employ thousands of migrant and local workers and utilize dangerous techniques, including acid leaching, landfills, and incineration while neglecting to wear forms of protection. Workers, who are most often children, face repercussions of the harmful chemicals, such as developmental issues, due to the lack of protective equipment and air circulation in the factories. The workshops are also often near schools, community centers, and residential neighborhoods, making it more likely for the toxic chemicals released from illegal recycling practices to affect people living near the factories. The population around these areas have high rates of skin damage, nausea, headaches, ulcers, chronic gastritis, and other critical conditions and high levels of lead in the blood steam – sometimes exceeding 1.53% higher than the normal amount.

WEEE also has environmental impacts due to the radioactive and hazardous chemicals found in e-waste. Various technological waste, including computers, phones, and refrigerators, increases in amount as living standards rise. Although the Chinese government tried to enact regulations to WEEE, they were never successful and since 2011, the environmental ramifications of recycling facilities in China have increased, both in quantity and quality. Factory owners implementing more primitive techniques for e-waste recycling that become a source for environmental pollution: heavy metals present in most WEEE, such as lead, cadmium, and copper, are released into the water, soil, and the atmosphere. These facilities are also often located in proximity to agricultural fields, where heavy metals infiltrate the soil and irrigation water. As a result, environmental costs from the recycling industry are negating the benefits of repurposing of plastic and other recyclable materials. The recycling industry in China has increased profits at the expense of the safety and health of the workers and the environment. And the U.S. has enabled this by sending their waste for the Chinese to deal with. Only when National Sword was enforced did recycling enter the policy and political conversation in the U.S.

Post-National Sword

Recycling has become an economic predicament in America after China released the National Sword policy, decreasing the amount of tons America sent to China by 95% and effectively destroying the market for recyclables. The recycling industry profits off of selling various recyclable materials to buyers, which was previously China. After National Sword was enacted, the economic incentive of recycling decreased and the entire industry became less profitable. Unaware of this dilemma, Americans contribute to it by encouraging recycling. The immediate solution for the U.S. was to sell scrap to Southeast Asia, including Thailand, Vietnam, and Malaysia. However, these countries mandated their own regulations as a result of the mass quantities of imports they started receiving. With nowhere to send the materials and without any financial gain to recycling, industries have resorted to throwing plastics, cardboard, and glass into landfills. Additionally, many U.S. cities have been scrambling for places to send their plastic, since recycling companies either stopped altogether or reduced the amount they take. For example, in Douglas County, Oregon, recycling completely halted and they stopped accepting plastic and glass. In Philadelphia, the city still accepts plastics but ends up burning half of it. A meeting called Life After National Sword took place in Washington D.C. in 2019 to discuss the future of the plastic and recycling industry and its economic implications. People there included trash sorters, recyclers, and executives from plastic companies. Although some proclaimed it was the rude awakening they all needed, the truth is that National Sword has forced the market and prices to an unrecoverable an all-time low.

Solutions

In order to decrease the disastrous influence recycling has on the world, it is each individual's responsibility to educate ourselves on this topic. We obtain the power to create change in our society, and change begins with the people. When citizens exhibit their interest in a topic, the government will act more than if they appear to have no interest. Rather than increasing recycling in America, the ideal solution would be the reduction of plastic as a whole. With federal regulation on how much companies are allowed to produce, the amount of plastic made would decrease. Additionally, it might be beneficial for these companies to resort to buying repurposed plastic from recycling facilities, therefore re-stimulating the market for recycled products while further reducing plastic manufacturing. One aspect of the recycling industry is that is remains difficult for them to manage mixed materials resulting from single stream recycling. A resolution to this obstacle could be a community recycling center where each household divides their recycling into multiple groups: cardboard, electronics, hard plastic, soft plastic, etc., as seen in more progressive cities like Wellesley, Massachusetts. The safe disposal of these materials is instrumental in the process as well. Instead of shipping the products off to China to be inhaled and burned, safe and formal recycling practices need to be put in place in America.

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FIND YOUR PARK LOCAL!

A Guide To Michiana Parks

Riverside Trail

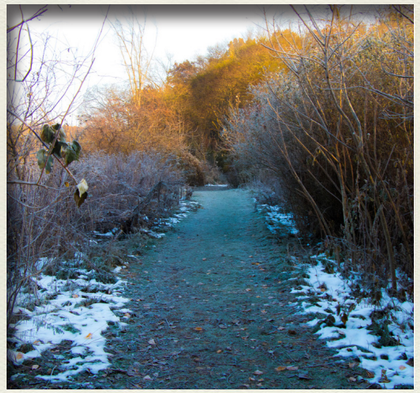
Riverside Trail is an easy 2-2.5 mile walk from Campus. This trail follows the St.Joseph River for about 3 miles and crosses multiple parks and scenic views. It is great for runners, bikers, walkers and river-enthusiasts.

Howard Park was a popular destination this winter for its super-cool ice trail. However, this recently renovated park is great in warmer weather too. Visitors can enjoy a picnic by the river, play cornhole at the park's pub and even catch a concert. Students can easily get to the park via South Bend Transpo

Howard Park

Saint Patrick

Saint Patrick's County Park, a 10-minute drive from campus, is a close getaway to nautre. The park has multiple trails that feature beautiful foliage in the fall and offer some nice peace when classes are stressing you out.



Potato Creek

Craving the beach and the forest? Potato Creek offers both of these! Potato Creek State Park has some great trails (some even have some incline). And when you are done hiking, relax on the beach, kayak or canoe. The park also has some great camping!

Bendix Woods County Park is absolutely amazing in the spring. Be on the lookout for colorful wildflowers dotting the hilly landscape! The park also features a nice nature center and trees that spell out "Studebaker".

Bendix Woods

Other Resources:

South Bend Venues Parks and Arts

Indiana Deparment of Natural Resources

Michigan Department of Natural Resources

St.Joseph County Parks

PROTECT THE PLACES YOU LOVE

Matt Millado

AS the current pandemic has certainly shown us, there's nothing like a breath of fresh air to drive the stale air from our lungs after a long day at home. Many of us look to the outdoors for inspiration, for solace, for the trickle of streams or the rustle of leaves.

Think about an outdoor space that you enjoy spending time in – a local park, a nearby beach, whatever it may be. We often find comfort and peace in these natural areas, and in turn we have a responsibility to safeguard them from harm as well.

Ironically, many of the threats to local parks and forests come from the very people that enjoy these spaces. The presence of people in natural areas can cause stress to plants and animals and degrade the quality of ecosystems. Because we are the primary source of these problems – and the only ones that can do something about them – we must reduce the impacts of our visits in order to keep outdoor spaces healthy and open for our enjoyment.

If undertaken irresponsibly, human visitation to natural areas threatens the well-being of plants, animals, and ecosystems as a whole. The frequent presence of people has been shown to cause stress in wildlife and change their behavior in harmful ways. Additionally, informal trails can break up plant communities and reduce the amount of undisturbed land for plants and wildlife.

We humans are not free from the effects of irresponsible behavior either. The more we stress out plants and wildlife, the less likely we are to experience the excitement of spotting a wild animal or a beautiful flower. The same is true for other aesthetically pleasing aspects of natural areas, like the landscape itself. For example, I think it's fair to say that we prefer quiet lakes to noisy ones, or properly established trails to patchy ones surrounded by trampled soil.

The relationship is simple: the more our daily behavior threatens the health of plants, animals, and the land, the less we are able to enjoy these natural resources and allow them to be enjoyed by others. Doesn't sound ideal, right? Here's what you can do about it.

To be better visitors to natural areas we must always be conscious about how our actions are affecting the environment and its other inhabitants. One easy way is to educate ourselves about the places we visit. Stop to read informational signs, flip through a brochure, or talk to a park employee. As you wander outside, stick to designated trails and campsites, and remember that these were specifically designed to keep people in certain areas and to protect the quality of other areas.

When we control our own behavior to minimize our impacts, we directly help the plants, animals, and the environment while also allowing park employees to focus on more important parts of their job like keeping outdoor places clean and accessible. So, the next time you leave to enjoy a natural area, remember that its well-being depends on your decision to recreate responsibly. Your actions can conserve or destroy the very places that you care about whether you know it or not.

So let's choose to be aware, to be better visitors, and to conserve the integrity of natural spaces for all.

Local Nature

Ryan Vigilante & Grace Akin

The Cold Never Bothered Me Anyway:

Natural freeze tolerance of Lithobates sylvaticus

Matt Millado

The wood frog, Lithobates sylvaticus, is a quaint little amphibian found in temperate forests throughout North America. Adult wood frogs typically reach two to three inches in length, with females growing to be larger than males. Wood frogs are usually brown, tan or rust-colored, and the patterning on their heads resembles a dark robber's mask atop a thin white mustache. Wood frogs are highly terrestrial and favor cool, moist woodlands. Vernal pools are their preferred breeding habitats, though any sort of standing water will usually suffice. Wood frogs are widespread across mesic forests in North America, ranging from the southern Appalachians in Georgia all the way up to Alaska (Pfingsten 670). In fact, wood frogs have the northernmost range boundary of all North American amphibians - this is due in part to their remarkable ability to survive harsh winters by regulating the freezing of their body water when exposed to frost.

Like some animals, wood frogs spend the entire winter unconscious. However, they have a unique overwintering strategy: they freeze solid. Unlike hibernating mammals that enter a deep sleep beneath a thick layer of insulating fat, the wood frog surrenders to the cold entirely. As winter approaches, the wood frog buries itself in a shallow burrow and soon freezes. When completely frozen, it has no heartbeat, no measurable brain activity and it does not breathe. This death-defying adaptation involves a complex series of biochemical responses within the frog's body. When the frog senses that temperatures are dropping near freezing, it moves water out of its blood and organ cells and into its abdomen instead of urinating.

At the same time, the frog's liver dumps tremendous amounts of glucose, supplemented by additional sugar alcohols, into its bloodstream to push its blood sugar level up a hundred times its normal level. This surge of sugar significantly lowers the freezing point of fluid in the frog's bloodstream, thus creating a sugary antifreeze (Moalem 43). In addition to lowering the freezing point in the frog's blood, the high concentration of sugar also minimizes osmotic and mechanical damage to cells and blood vessels by reducing cell dehydration and shrinkage (Costanzo and Lee 2005), and forcing ice crystals that do form into smaller, less jagged shapes that will not puncture the walls of cells and blood vessels (Moalem 44).

Excess water in the frog's body is moved into areas where ice crystals will cause the least damage. Intracellular freezing is lethal to virtually all organisms, so water is typically transported to the coelom and other extracellular spaces where water can freeze with little harm. In some regions, ice might even have a beneficial effect. When biochemist Ken Storey dissected frozen frogs, he found flat sheets of ice sandwiched between the skin and muscle of the legs. He also noticed a large chunk of ice in the abdominal cavity surrounding the frogs' organs, though the organs themselves were not frozen (Moalem 43). In effect, the frogs had put their organs on ice, similar to how humans use ice to keep human organs cool as they are transported and prepared for transplantation. Keeping organs as cool as possible without actually freezing them slows down metabolism and minimizes cell death.

While it may seem close to death, the wood frog can recover just fine when spring comes. The thawing process starts from the inside of the animal's body and moves outwards, allowing the frog to gradually emerge from its frozen state. After rising temperatures start to thaw the frog in the spring, its heartbeat is restored and it begins to breathe again. It also converts as much of the glucose it can back into glycogen and excretes the rest. The precise signals that reanimate the heart and lungs are still unknown. The rise in ambient temperature and humidity also cues wood frogs' migration to breeding pools.

Their strategy of tolerating freezing instead of avoiding it gives wood frogs an advantage over other frog species that bury themselves in the mud at the bottom of lakes and ponds. As the first to emerge in the spring, wood frogs get priority access to vernal pools and are able to breed before most other frog species (Pfingsten 673). Their freeze tolerance continues to attract research attention and just might hold the key to long-term preservation of human donor organs and tissue.

reclamation:

a meditation on Shana and Rober ParkeHarrison's Reclamation

by: lizzie petrosky

In a different context, Reclamation by Shana and Robert ParkeHarrison may not appear so strange. If the turf were being pulled across a football field I may not give it a second glance. The details of the piece, however, cast a rather sinister tone on the job the men are completing. Beyond the obvious unnatural aspects, such as the unending sea of turf being wrenched across dried land, there are details that elicit an uneasy feeling. Maybe it is the men, who are suspiciously unprepared for the task at hand. Clad in pinstripe suits and dress shoes, they appear strained as they attempt to cover the land below them. The distance between them is equally concerning- for being the only two men pictured in completing this job, they appear too far apart for proper communication. The man further from the camera begins to fade into the haze of the sky. A sense of disconnect is evoked. The tension in this photograph is further amplified by the separation between the carpet of grass and the land below. There are no roots on the grass that would enable it to attach to the ground and eventually grow, and the land appears uneven and unprepared to be planted upon. This is then a cover-up job, not looking to solve the problem at hand but instead attempting to mask it. Maybe this appears so unnatural and makes us uneasy because we are catching the men in the act. While we may know that humans have had a negative impact on the Earth, actually observing the effect of our actions is startling. We feel like uninvited intruders. If this picture were taken the next day, though, after the sheet of grass had already been laid, would the same feeling of concern be elicited? Would we even know that it was not natural, or are we too unacquainted with true nature that we would accept what we see as truth? If we noticed, would we care?

It is easy to say that we know nature. Coming from northern Michigan, I've always felt that I spent my fair share of time outdoors; swimming, hiking, and camping were the usual pastimes. But looking at the sheet of grass in Reclamation, which appears lush and healthy, I wonder if I've experienced pure nature. If I were to see this plain of grass on a walk, I doubt I would interpret it as an untouched piece of land, but the expanse of greenery would lead me to call the space "natural." How watered down, then, is our perception of what is natural? Even if we know that a landscape has been modified by humans, we find ourselves calling it nature. In a literal sense, nature is defined by the Oxford Dictionary as "features and products of the earth, as opposed to humans and human creations." In thinking this way, I remember that the outdoor activities I am so fond of are far from raw experiences. My hikes are always on worn paths that have posted trail maps. Swimming is done at a beach with fine, white sand that has likely been trucked in. Even camping, which is always sold as "getting back to nature," happens at a marked campsite, with premade fire pits and wood for sale. What is being sold to us as nature is far from it. Our perception has become skewed.

The men in the photograph, then, are important in deciphering who is shaping our perception of naturalness. Even if we accept that what we know as nature is not entirely authentic, how did our collective experiences lead us to this shared misinterpretation? The well-dressed, highfalutin-looking men in Reclamation lead me to wonder if this false sense has been fed to us by large corporations or big government players. Pulling the grass over the land, the men are responsible for developing an artificial appearance of nature while covering up the destructive impact we have made on the environment. I think of planting grass on top of landfills and corporations sponsoring Earth Day initiatives when they are the ones who have polluted it. But is it fair to place the blame on the few when we don't fight their actions? Does not doing anything make us complicit? I know I've never complained about the nicely manicured lawns and greenery on campus. I don't find myself actively upset about the paths around the lakes or the trees planted in neat rows on God Quad. Reclamation shows only a few business men, but maybe this is partially due to the lack of interest by the 99 percent. After all, they are only two men, and even though there may be money behind them, the sheet of grass could easily be taken if the broader population said so. Maybe we are perfectly okay with turning a blind eye while the landscape is destroyed then spruced up again, as long as appearances are kept up. If the imitation of nature is good enough, we call it a day.

Scott Russell Sanders, an acclaimed environmental author, explains the effect of this artificial nature in terms of how we perceive beauty. He offers that "those who regard 'beauty' as only the name of a pleasurable feeling might find all the stimulation they desire in movies or music or mathematics, without recourse to nature." If we are provided with something that we believe is similar enough to wilderness, such as the faux-yet-lush grass the men in Reclamation are laying, we may find ourselves ignorantly satisfied. We don't feel the need to make any changes if we don't know what we are actually destroying and missing out on. If we only interact with an artificial version of nature, then how are we supposed to care for our true environment?

Walking away from Reclamation, I strive to be more conscious of how I perceive the world. While I don't need to scoff at efforts made by men like those in the photograph to restore some sense of nature, I strive to focus on projects that are based on revitalizing the natural environment rather than putting a band-aid on the destruction we have caused. I'm left wondering if I have really experienced untouched nature and how I can fight for it to be preserved. If those who are not pictured in Reclamation - the everyday person, the employees, the families - work to develop a deeper understanding of true nature, I can't help but think we would feel more connected to our earth and as a result, more inclined to protect it. So maybe the takeaway from the photograph is more about what is not pictured than what is. The Reclamation can be the everyday person taking back the land, planting seeds that will actually grow, and finding out what real nature is.

TAKE ACTION

A BRIEF DESCRIPTION OF THE CLIMATE GROUPS YOU ALWAYS HEAR ABOUT

SUNRISE MOVEMENT

The Sunrise Movement is a US Youth Climate movement that uses both direct action and negotiations with local and national government officials to pass the Green New Deal and pressure climate action at any level. The Green New Deal is a legislative proposal to reform the "social and economic system" and proposes that this process will require mobilization not seen since WWII. The Green New Deal, based off of the New Deal, will bring greenhouse gas emissions to net-zero while creating "green jobs", securing climate justice and achieving American prosperity. Recent demonstrations have focused on green jobs -demosnttions were held in South Bend this Spring!

FRIDAYS FOR THE FUTURE

Fridays For the Future, an international youth climate group founded by Great Thunberg, seeks to influence the actions of states through direct action and disruptive behaviors; their members notably pledge to skip schools on Friday until the Paris Climate Accord Agreements are met. Members welcome both, moderate market-based strategies more radical change to reach these goals. Fridays For the Future inspired the Youth Climate Strikes in September of 2019.

EXTINCTION REBELLION

Extinction rebellion is an international organization that acts outside of conventional systems of change. Instead of lobbying, working with representatives or forming petitions, they seek to disrupt the state and effectively force it to do three things 1. declare a climate and ecological emergency 2. reduce greenhouse gas emmisions to net-zero by 2025 and 3. create a civilian board on climate change. Extinction Rebellion utilizes sustained civil disobedience, inspired by the civil rights movement, to achieve their goal. They also have a youth organization, Extinction Rebellion XR that focuses on issues of climate justice.

GET INVOLVED

Sunrise Movement - South Bend

Citizen's Climate Lobby

4-H Club

Unity Gardens

Bee ND (keep an eye out for our interview with them)

Notre Dame Student Policy Network

College Democrats

Environmental Economics Club

GreenND

South Bend Venues Parks and Arts

Let us know of any more local opportunities:
@anthropozine.nd

When Breath Becomes Privelege

Kate Thel

When seas separated headline from reader
Normalcy's cloak veiled the crux.
The unseen and unfelt easily brushed off
As another's problem, a hoax, a blip.

But the networks of today
Diminish traversal of seas
To the jump of an inch
between the web's threads.

Dangers born blind to the borders
That governed calamities past
Foment catastrophe, upheaval,
Disintegration of the veil.

Cities lit on fire, red spots on a map
Where people coming together
Perturb a system designed to fail
While ignorance stokes the flames.

Responsive silence roars louder
than the hoarse cries for justice.
Disregard fosters threat into crisis,
Inverting avoidable inevitable.

Subtitles of white script on black blocks
Punch letter by letter across screens
Reducing children unmothered,
Spouses left widowed to digits of a sum.

Of which disease does the headline warn?
The one dominating through droplets,
Or perpetuating callous prejudice,
Or eroding earth's fertile soil till futile?

Are the red dots illuminating maps
Wildfires, hotspots, unrest?
Who is the suffocator-
Particles, a virus, the bigot?

A minute withheld air brings discomfort.
Nine bring agony unthinkable.
How many need pass by
Until the Silent Spring into action?

How vile and cruel the disbeliever
Repeatedly each time to demand
A premature death, lungs robbed of air
As reason to begin to concede.

to Annie & Max —and all our future grandchildren

there are some things you will never see:
the Old Man of the Mountain,
the Imperial Hotel,
a world of stasis,
but today,
even Heraclitus cries.

for I say,
there is no loving without knowing,
no knowing without connection,
no connection without coexistence—
and that requires existence.

what are the Hanging Gardens of Babylon
but that mystical fantasia of your mind,
replete with wisteria and candy floss?
this wonder of the world
is just ever-elusive fabric
unable to penetrate modern dimensions.
there is no memory
no story
no meaning
to babes born in this millennium,
because
scholarly history
is just esoteric dream stuff
once you step outside.

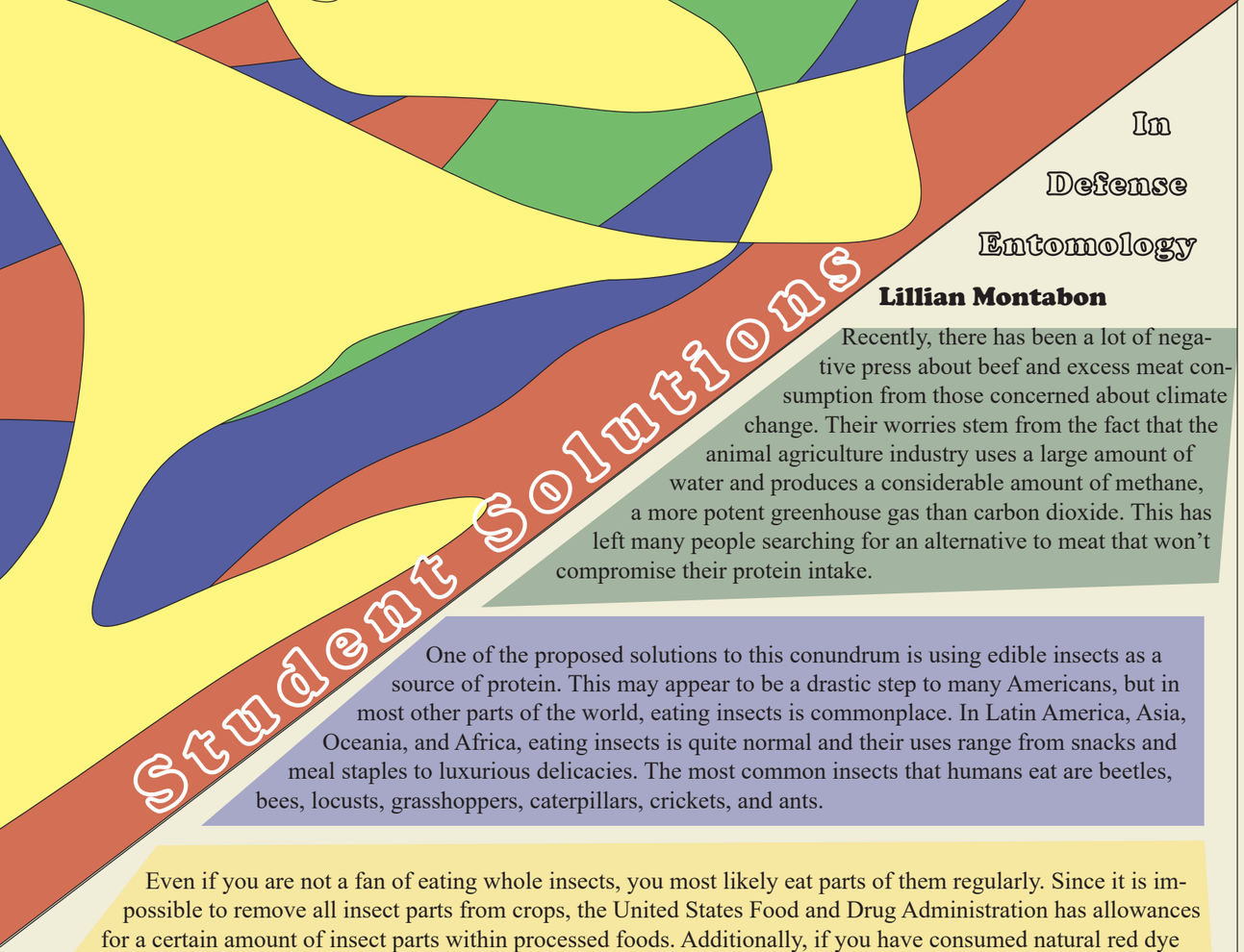
to hold only a blurry photograph
of the once breathing, now expired,
Great Barrier Reef
is but an intangible glimpse
into life unintelligible.
if you cannot be there,
it is only an episode to the
unattainable history of the world,
and where does that place you?

but,
to step foot inside history,
is to see past and future
in the infinite now.
to scale up the outcrop
is to touch flesh to flint,
pass through to the prehistoric,
listen to that Jurassic bark.
to walk among the Redwoods
is to glimpse into indigenous life,
peer into the natural pillars of our nation,
wonder at our carbon kin.
(we share the same banquet
and perhaps the same demise.)

so dear children,
although you are now unborn,
held in full embrace only within our minds,
we must, in the meantime, nurse Creation,
for you.
we must have the conversation,
make the sacrifice,
enact the change,
for you,
so that when you race out the screen door
to play, barefoot,
with all the neighborhood children,
you touch sole to Mother
and not on Mars.

because,
for you,
I don't want verdancy
on a sepia tintype.
I want it fresh and solid,
crafted into laurel wreaths,
and woven in your hair.

Sarah Kikel



In Defense Entomology

Lillian Montabon

Recently, there has been a lot of negative press about beef and excess meat consumption from those concerned about climate change. Their worries stem from the fact that the animal agriculture industry uses a large amount of water and produces a considerable amount of methane, a more potent greenhouse gas than carbon dioxide. This has left many people searching for an alternative to meat that won't compromise their protein intake.

One of the proposed solutions to this conundrum is using edible insects as a source of protein. This may appear to be a drastic step to many Americans, but in most other parts of the world, eating insects is commonplace. In Latin America, Asia, Oceania, and Africa, eating insects is quite normal and their uses range from snacks and meal staples to luxurious delicacies. The most common insects that humans eat are beetles, bees, locusts, grasshoppers, caterpillars, crickets, and ants.

Even if you are not a fan of eating whole insects, you most likely eat parts of them regularly. Since it is impossible to remove all insect parts from crops, the United States Food and Drug Administration has allowances for a certain amount of insect parts within processed foods. Additionally, if you have consumed natural red dye number 4 recently, you have dined on a substance made from ground cochineal beetles.

What other benefits do bugs provide? Their greenhouse gas emissions are negligible, they do not contribute to water pollution like animal agriculture does, and they do not need as much land to live, which is crucial as global warming decreases the amount of land usable for agriculture. In addition, insects have a high feed conversion ratio, which means that a lot of protein can be produced from relatively little feed. They are also less likely to pass on diseases to humans because they are more taxonomically distant from humans than animal sources of protein. Insects are quite nutritious and are high in proteins, fats, and vitamins.

Despite the knowledge of their extensive benefits, Americans are traditionally quite skeptical of insects as a food source. The bugs may be more palatable when they are ground up and no longer resemble their original form. For example, crickets can be ground into protein bars that come in many flavors. Meal made from insects can be mixed with traditional flours and used to enrich food items like cereals with more proteins and vitamins.

Changing the negative stigma around a certain food group may be difficult, but it is definitely achievable. There was once a time when lobsters were thought of as the cockroaches of the sea because of their abundance and ugly appearance. At this time they were eaten only by the least wealthy classes, until their delicate texture and flavor made them into the popular and often expensive food item they are today. In an age when the human population is increasing rapidly and arable land is decreasing, exploring these alternatives to traditional animal agriculture is more important than ever.

Transitional Climate Justice

Isabelle Elizondo

Transitional justice processes are judicial and non-judicial proceedings that have historically been used in countries during democratic transitions. The goal of transitional justice "is to recognize and at least partially remedy injustices, while also building a sense of unity or solidarity". Justice is achieved through mechanisms like truth commissions, prosecutions, reparations, and institutional reforms. While the United States is not undergoing political regime changes, a transition to a carbon neutral future will be dramatic. This transition should be just and recognize that there are actors and victims of climate injustice. The victims in the United States have historically been poor, black, Latino and indigenous groups. An effective transitional justice process could lead to transformational effects, with these marginalized groups and communities of color becoming climate resilient and empowered.

Transitional Justice processes emerged in the late 1980s and 1990s to address political regime changes occurring in Latin America and Europe. It may seem on the surface that there is not much connection between democratic transitions and climate change. However, they are more analogous than they first appear ; the main idea of a transitional justice approach is that including uncomfortable reckonings with the past may be essential for the long-term legitimacy of forward oriented agreements. This can be applied to climate change – to move forward with forward-oriented climate discussions, carbon neutrality and a greener future, inequalities related to climate change cannot be ignored.

A movement to promote transitional justice can organically grow out of groups already using grassroots and legal action to fight for climate justice. Climate litigation has been a particularly popular way to force states to adopt mitigation policies and/or seek revenue to manage climate impacts. Some groups are trying to sue Exxon, Chevron and even the United States for their inaction. For example, in my hometown of Houston, the Latino organization, Texas Environmental Justice and Advocacy Services (T.E.J.A.S), aims to "provide community members [in the ship channel] with the tools… to create a sustainable, environmentally healthy future… by empowering individuals with an understanding of applicable environmental laws and regulations" (TEJAS). In addition to mobilization and protesting, they have used litigation methods to keep the state accountable for instances of environmental racism (TEJAS). Their method of organizing community while simultaneously issuing lawsuits is a powerful example for this plan – as one seeks out transitional justice, they can attempt "small" victories through litigation. The legal strategy is also a critical component of the four pillars of transitional justice that can be applied locally across the United States.

These four pillars of transitional justice are : 1. Truth Commissions, 2. Prosecutions, 3. Reparations, and 4. Institutional Changes. Many of the pillar's build off each other to achieve justice, but the process usually begins with truth commissions. Truth commissions are groups that investigate documented and undocumented abuse and create a record of patterns into an official finding in order "redress harms and prevent abuses from recurring". It is fair to point out that there will be significant political pushback at this idea – especially because of the massive amount of political funding that's gone into preventing climate action. Having a strong grassroots movement would be critical here; there is a long history of bottom-up movements, such as local church groups, beginning the transitional process when the state is unwilling to establish a commission. If the state did not ever decide to act, this movement could also formally publish its own truth commission findings.

The commission would first seek to identify actors and the level of responsibility by asking questions like: What knowledge of climate change and possible harm was present for which emissions or pollutants? Were certain communities specifically targeted because of their lack of economic power? This truth commission could then examine what the long-term and current effects of climate change will be on marginalized and document the experience of victims to determine the levels of climate loss. Finally, this commission would be charged with identifying institutional reforms for both state and non-state actors. These findings are key to prosecuting individuals, creating lasting reforms and giving reparations.

Using the information found in a truth commission, prosecutions legally hold actors accountable for their crimes. In transitional justice, both individual actors or a collective state and company could be prosecuted. Fossil Fuel companies could be prosecuted for their carbon emissions that continued after they knew about climate change. Or a state, like Texas could be held responsible for something like the recent ERCOT scandal following the 2021 winter storms. Finally, any individuals who intentionally obstructed climate change action could be held accountable. The prosecution and accountability process are critical to transitional justice. Through the prosecution of one actor guilty of some form of climate injustice, other individuals will be deterred from taking similar actions. Certain legal pressures can impose costs and risks to those actors who may otherwise feel insulated from climate impacts or justice claims of those with less power. This type of pressure can go a long way in preventing future justice failures.

Reparations and institutional reforms can happen simultaneous to prosecutions. Using the information from truth commissions, reforms can designate how to repair or even dismantle public and private structures that perpetuate climate injustice (Klinsky 95). Furthermore, using information from truth commissions, reparations can be given to victims. Instead of reparations being individual payouts, they should be used to nourish human capital and repair the losses a community suffered as the result of climate injustice. This could be done by improving local schools, transforming public transportation and especially building climate resiliency plans to prepare communities for future climate events. Removing actors contributing to climate change from their roles, fixing institutions and providing reparations can have transformative effects on historically marginalized communities.

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Anthropozine Lifestyle

The Environment in Song

Isabelle Elizondo

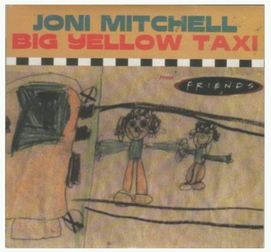
This is a review of environmental songs that I totally didn't pull from an old research paper. In making this review, I specifically wanted to look at how artists use concepts of dystopia and utopia when talking about the environment. Pristine nature or the degradation of nature are often rhetorical devices used to flesh out concepts of utopia and dystopia. I thought it would be pretty neat to see how this happens in music chronologically. So here is a collection of very famous environmental songs and my utopian/dystopian review of them!

1960s-1970s: Formation of the Environmentalist Movement

As an introduction to this collection of songs, I want to briefly discuss the environmentalist movement that paralleled and inspired the creation of this music throughout the 1960s and 1970s. The environmental movement is often attributed to a collection of events including the publication of Rachel Carson's Silent Spring in 1962, which discussed the harmful effects of pesticide use on human and animal health, the 1969 Santa Barbara oil spill and the Cuyahoga River fire in 1969. At the same time, student protests already addressing the Vietnam War and were primed to take on the environment as a social issue. As a result of the counterculture movements, Earth Day was created on April 22, 1970. On this day protests and teach-ins were organized across American universities to address environmental concerns. The influence of this movement would lead to the creation of numerous environmental policies like the Clean Air Act (1970), Water Pollution Control Act (1972) and the creation of the National Environmental Policy Act (1970). Water and air pollution were the main concerns of this era as well as the effects of nuclear testing. We can see artists addressing these concerns in their collection of songs. In addition, all the artists in this group rely on golden age visions of utopia to describe man's impact on the environment.

"Big Yellow Taxi" by Joni Mitchell (1971)

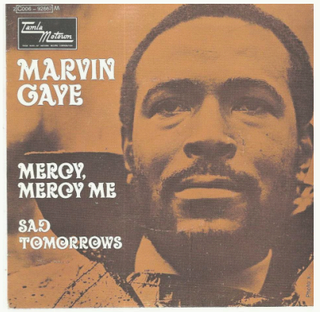
Joni Mitchell is a Canadian artist and one of the most distinguished folk singers of her generation. "Big Yellow Taxi" is one of Joni Mitchell's most well-known songs and reflects her connection to the environmental movement.



In "Big Yellow Taxi", the lilting tone of her acoustic guitar and Mitchell's lighthearted singing create a happy and joyous sound. Her backing chorus sings nonsense "shoo bops" that were typical of the pop-folk songs of the era. They contribute to the infectiousness of the song, but the musicality stands in sharp contrast to her musings on the loss of paradise. Lyrically, Mitchell is contrasting aspects of "paradise" or utopia to images of man's influence in each verse. We see "spots of [her] apples" placed against farmers using DDT or "all the trees" being put in a museum where people have to pay "a dollar and a half to see'em". She summarizes these comparisons in her chorus by claiming, "they paved paradise" to "put up a parking lot". However, she does not appear to be mourning any of these losses, instead she just seems sentimental. She matter-of-factly looks at the world around her and asks, "don't it always seem to go… that you don't know what you've got 'til it is gone?"

"Mercy Mercy Me (The Ecology)" by Marvin Gaye (1968)

Marvin Gaye's "Mercy Mercy Me (The Ecology)" is off his soul album What's Going On which produced anthems for counter-culture in the 1960's and 1970's. On the album he discussed a host of social issues, such as Civil Rights and the Vietnam War, in addition to the environment. In "Mercy Mercy Me (The Ecology)" we see overt biblical messaging as Gaye reckons with humanity's transgression of Eden.



In the first verse and chorus of the song, Gaye earnestly sings "Whoa, ah, mercy mercy me". It initially appears that Gaye is displaying confusion. He asks, "Where did all the blue skies go?" and questions the state of the world where "Poison is the wind". His descriptions of air pollution in this verse portray the Earth we know as an unfamiliar, barren and even dystopian land. However, he is not weaving a fictitious future, he is simply speaking of the realities of pollution. In the next verse he repeats his display of exclamation and confusion but speaks of "radiation underground" and "overcrowded land". He also constantly refers to a nondescript time before "fish [were] full of mercury" by claiming "things ain't what they used to be, no no". Even though Gaye does not describe the other time in detail, by speaking of current degradation, he effectively reminds the listener that land once existed in a better or even perfect state.

However, he is not explicit about how the land lost its purity until the end of the song when he questions "How much more abuse from man can she stand?".
n this instance, "mercy me" takes on a new meaning. Gaye is asking for forgiveness for man's abuse of the land. His pleas to "Lord… sweet Lord" demonstrate his guilt for man's destruction. Marvin Gaye is not exactly creating a utopia or dystopia in this song. Instead he sings about man's role in the loss of utopia. He is effective in indirectly reminding listeners of what utopia was, and how it now longer exists. According to Gaye, its destruction is the sin that humans will have to reckon with.

Perspectives on Environment during the 80's

The troubadours of the 60's and 70's called for peace, a removal from earthly concerns, and passionately advocated for the protection of our environment. However, America experienced a fierce reaction to the counterculture in the mid-late 80s. Under Ronald Reagan, the United States re-entered into a relationship with consumerism and environmental degradation. Proposals to curb acid rain were tossed out by the administration and the free market was touted as the solution to the country's problems. The music reflected the disconnect from the environment. The rise of New Wave brought synths, dance music and heavily-produced pop melodies back into the mainstream; the antithesis of the stripped-down folk of the 1970s. The music was fun, consumable and not as likely to address environmental concerns (although there are exceptions). At the same time, environmental issues became more global and threatening. In 1985 a hole was discovered in the Ozone layer and the UN formed the first panel to address climate change in 1987. The following song utilizes concepts of utopias and dystopias to demonstrate the dominance of consumerism as well as the creeping threat of global environmental issues to humanity.

“(Nothing But) Flowers” by Talking Heads (1988):

Talking Heads are considered one of the most influential bands of all time. They emerged out of the post-punk movement in NY where they helped form the distinct New Wave sound. While experiencing chart and mainstream success, they retained an avant-garde quality aided by David Byrne’s witty and ironic lyrics. This separated them from many other New Wave and dance pop bands and allowed them to retain their underground status.

“(Nothing But) Flowers” demonstrates Byrne’s cleverness as he subverts concepts of utopia and creates a satirical utopia that reveals his view on man’s connection to consumerism that is impossible to abandon. The format of Byrne’s song mirrors the format used by Gaye and Mitchell where the singer mourns the loss of the good ol’ days. However, instead of looking back at utopia longingly, Byrne is nostalgic for the world that the other artists criticize.

“In (Nothing But) Flowers”, Byrne imagines a future where nature has retaken the landscape. He even directly references the first utopia to describe his new reality. In the first verse he compares himself to “Adam and Eve [in]… The Garden of Eden”. In the new Eden, there are waterfalls, “birds in the trees”. This would traditionally be considered perfection, yet Byrne asks “Where, where have they [cars] gone?” and frustratingly quips, “Now, it’s nothing but flowers”. Throughout the entirety of the song Byrne nostalgically looks back at “shopping malls”, “real estate”, “Pizza Hut” “Dairy Queens” and “highways” that are all “nothing but flowers”. Byrne’s frustrations with utopia becomes even more explicit in a line where he claims “If this is paradise… I wish I had a lawnmower”.

Through his subversion the “positive dynamic which is typical of utopia is lost” and “the real world is valued”. Byrne’s subversion can be interpreted as his view that we are so entrenched in convenience and consumerism that not only would we not appreciate traditional ideas of perfection, but we would want to escape it. When we examine this song in an environmental vein, Byrne is clearly molding classical views of utopia into an inconvenient dystopia to warn us. He tells us as “things fell apart Nobody paid much attention”, in reference to his time that required intervention despite the glitz and glamour that distracted many. In order to avoid a world without “cherry pies, Candy bars and chocolate chip cookies”, we must act. In his final line he begs “Don’t leave me stranded here” because he “can’t get used to this lifestyle”.

Climate Change in Today’s Pop

By now, climate change has been part of mainstream political, scientific and economic conversations. However, in the last two years, it seems that the issue has moved to the forefront of all conversations. Many have witnessed the effects of climate change firsthand, whether it be in the forest fires of California and Oregon, or an unprecedented winter storm in Texas. It is becoming difficult to ignore how much our earth system has changed. The success and influence of climate activism reflects how climate change is viewed as a pressing issue by not only the American population, but the whole world. We can also see how pervasive the topic is in the songs of pop artists. The songs in this group reflect the global impact of climate change, its existential threat to humans and a creeping strain of nihilism.

“The greatest” by Lana Del Rey (2019):

Lana Del Rey has emerged as one the most influential voices of the 2010s. The influence of her introspective, vulnerable style of music is clear on other pop artists like Billie Eilish and Lorde. Her latest album, Norman Fucking Rockwell achieved critical acclaim and features the song “The greatest”. “The greatest” demonstrates an apocalyptic vision of earth with clear references to climate change.

Lana Del Rey’s song easily takes on two meanings. Through powerful imagery and double meanings, we are simultaneously able to see the world we know today where the “culture is lit” but literally has apocalyptic nights on “nights…on fire. In one reading of it, Lana Del Rey nostalgically looks on her past. She describes “miss[ing] Long Beach” and “dancin’ with” an ambiguous love at a bar where the “Beach Boys would go”. She mourns for those “nights… [where she] couldn’t get higher” and “had a ball”. In the second verse she again mourns for some part of her past and misses “New York… and [her] friends.” However, the use of fiery imagery in addition to biblical language calls for a more apocalyptic reading of the song. In the last line of the first verse, Lana Del Rey describes missing “Dennis’s last stop before Kokomo” in reference to the death of Dennis Wilson who drowned in 1983 after heavily drinking. Kokomo refers to the Beach Boys’ fictitious paradise, but in this context, it appears that Lana Del Rey is referring to Wilson’s afterlife. In subsequent lines, which initially appeared nostalgic, we can view Lana Del Rey getting wasted with friends with all her friends as her own “last stop.” One line in the chorus also alludes to her death when she announces she is “signing off after all.”. The references to death and demise expand beyond her own morbidity.

In some verses she uses words figuratively that have literal meanings associated with fire. While describing the culture as “lit” or “nights on fire” to repeatedly describe her nights out, she is also creating tension in the song due to references in the last verse to “L.A… in flames,” and “Hawaii [that] just missed the fireball”. It asks the listener to question what aspects of their lives are on the brink of ruin and destruction due to flames and heat or in other words, climate change. Our nights and culture certainly are, as well as our own lives. We are reminded of our mortality and our relation to God as Lana Del Rey sings that “nobody warns you before the fall”. This recalls images of Adam and Eve’s fall and their subsequent punishment. While Adam and Eve were expelled from Eden, Lana Del Rey is suggesting that herself and all of humanity is facing not only the fall, but the “greatest loss of all” – possibly the end of human life as we know it. . The last verse of the song claims “Life on Mars isn’t just a song”. This could both be referencing colonization efforts to Mars or a rapture event where humans are supposed to ascend into the air. Whatever the interpretation, as “it’s [keeps] getting hot” and the world increasingly reckons with climate change, Lana Del Rey blithely hopes the “live stream’s almost on.”

In “The greatest” Lana Del Rey is not trying to save the world or inspire activism. The most she wishes is that society is somehow memorialized. We are seeing a vein of nihilism here; Lana Del Rey is accepting her fate and that of the world as it faces “the greatest threat of all.” We see the same nihilism in the songs “All the good girls go to hell” by Billie Eilish and “Wild Time” by Weyes Blood. Both songs are from critically acclaimed records in 2019. It appears that many artists are using their space to reckon with climate tragedy and connect with listeners that are also giving into hopelessness.

“Earth” by Lil Dicky (2018)

This song was firmly entrenched in the public consciousness over the summer of 2019 and it would be an oversight to not include it. The song peaked on billboards chart at number 17 and features influential artists like Justin Bieber, Katy Perry, Snoop Dog and Leonardo DiCaprio. The song describes an abundance of wildlife through the artist features who introduce themselves as various living things. We meet Ariana Grande as a Zebra, Halsey as a lion cub, Zac Brown as a cow and plenty of other artists that act as giraffes, rhinos, elephants, wolves and even HPV. While humorous, Lil Dicky is drawing on the utopian visions of natural abundance to describe our Earth. Lil Dicky crafts an optimistic and collectivist tone with this chorus. “We love the Earth… We love our planet”.

The music video, which was an essential aspect of the song’s success, furthers the concept of abundance and contributes to the optimistic and paradise-like vision of Earth. We see Lil Dicky traveling across the world to pristine mountains, waterfalls, glaciers, coral reefs and deserts. Lil Dicky even demonstrates human civilization in a utopic fashion. We see the famously polluted Rio De Janeiro as a blemish-free city nestled between a glass-like ocean and sprawling rainforests. St. Petersburg glistens under a cloudless and sunny sky and Agra, India is missing most of its population as the Taj Mahal lays empty.

These images are fictionalized and depict an inverted image of our world; this earth is like a utopian, alternate, way better, version of our own. Because of the catchiness of the song and the brightness of the music video, it is easy to buy into Lil Dicky’s vision.

This hope and optimism are powerful and even necessary in an age where it is so easy to adopt nihilism as default. Lil Dicky is obviously utilizing these visions as a rallying cry; these are the places that we need to fight for and create. However, part of his rhetoric is acknowledging that “we might die”. This morbidity stands in contrast to the relative optimism of the song and a sobering reminder of our current realities. We can create a better future, but action still needs to be taken now..

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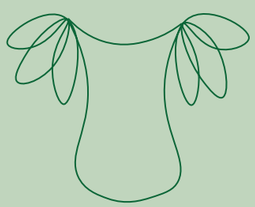
Fast Fashion Industry's Contribution to Climate Change and Environmental Destruction

By : Ashley Lizana
Edited by: Isabelle Elizondo & Meg Hilbert

Human industry is at the heart of the causes of climate change; people are cutting down trees for space to raise cattle, overfishing, dumping fuel waste into waterways, and so much more. Interestingly, the fashion industry is one of the biggest entities negatively impacting the environment daily, though it was not always this way. As the population grows, social media expands, and capitalism becomes a more prominent international economic system, the fashion and textile industry from the past has been revolutionized into a new sort of production model: fast fashion. Fast fashion is "the production of trendy, inexpensive garments in vast amounts at lightning speed in subcontracted factories".



Fast fashion differs from other facets of the industry because it is not about creativity, innovation, or expression; its sole purpose is to generate money by producing trendy clothes to be consumed by the masses on a constant basis. Throughout modern history, fashion has been produced and released in one or two seasons a year. Now, as fashion journalist and author Dana Thomas notes, "instead of two seasons a year, we practically have fifty-two seasons a year. So, we have something new coming in every week and fast fashion has created this so that it can essentially shift more product. The price has dropped, the way of making that product has completely, completely changed. And you have to ask yourself at some point, 'where does it end?'"[1]. According to their annual report, Inditex the biggest fast fashion production company, "alone made 1.6 billion pieces of clothing, and they run nearly 7,500 stores"[2].

So, what is the issue? The issue lies in the fact that an increase in demand leads to an increase in production, and this increase in production leads many companies to cut corners both ethically and environmentally. And now "the global fashion industry is now an almost three trillion-dollar industry"[1], with "the average American woman buying 64 new articles of clothing per year, half of which are worn three times or less". To summarize, there are more clothes being produced in an unsustainable manner and many clothes being disposed of, as well. These cycles have negative effects on almost every aspect of life.

The popularity of fast fashion contributes to the creation of greenhouse gases and CO2 emissions every day. The apparel and footwear industries together accounted for more than 8 percent of global climate impacts -- the equivalent of 3,990 million metric tons of carbon dioxide in 2016, according to a report from Quantis. Total greenhouse gas emissions related to textiles production are equal to 1.2 billion tons annually -- more than those of all international flights and maritime shipping trips combined, according to the Ellen MacArthur Foundation"[4]. The textile industry is "identified as one of the largest producers of GHG all over the world and is indicated as the fifth largest contributor of CO2 emission".

Not only does the production of clothing release harmful gases into the air, so does the obliteration of these clothes. Many people believe that donating old clothes to their local Goodwill makes them environmentally sustainable, but it has been found that the majority of donations are not sold. CBC investigator Diana Swain has discovered that some organizations like Salvation Army sell their unsold clothes to developing countries in Africa, where these clothes still do not find a happy fate. The clothes donated are often too damaged to be used or made of materials that do not mix well for recycling. So, these clothes fill landfills and are eventually burned, releasing even more toxins into the air.

The consequences of fast fashion are not limited to the release of dangerous gases, it also consumes large amounts of fresh water and pollutes many water sources, both freshwater and saltwater. Looking first at the effects of the production of textiles on water sources, The World Bank is a collaboration of international agencies who document the effects of industry on developing nations and found that "every year the fashion industry uses 93 billion cubic meters of water — enough to meet the consumption needs of five million people". The Water Footprint Network observed that India it takes 22,500 liters of water on average to yield one kilogram of cotton. BBC investigative journalist Stacey Dooley traveled to the country of Kazakhstan which has suffered greatly due to the production of cotton in its land. The Aral Sea, a body of water covering 68,000 square miles, has been shrinking since the 1960s due to cotton production. Dooley visited the country to see the damage for herself and reported that "the water has all but gone, and it looks like a desert, with one of the rivers that fed it – the Amu Darya – diverted into cotton-production farms and sucked dry before it could reach the sea".

Large amounts of freshwater used to produce necessary materials and "around 20 % of wastewater worldwide comes from fabric dyeing and treatment". The Citarum River in Indonesia has become polluted with toxins from the local textile production site. It is known to be the most polluted river in the world because production companies for brands like Gap, H&M, and Uniqlo use the river as "an open sewer... to dump toxic chemicals, thousands of litres at a time, creating an ecological disaster". The dangerously high levels of toxins have significantly decreased the fish population, leaving many fishermen jobless. The few fishermen who catch fish cannot sell them because their catch is not safe for consumption, according to an Indonesian news site. People cannot wash clothes, dishes, or produce in the water because it is truly dangerous. Many complain of constantly being sick and the color of the river often looking black. The use of plastics in clothing also contributes to the pollution of rivers and oceans. The World Bank organization has found that "every year a half a million tons of plastic microfibers are dumped into the ocean, the equivalent of 50 billion plastic bottles". The issue here is that "microfibers cannot be extracted from the water and they can spread throughout the food chain".

One of the most surprising connections between fast fashion and environmental destruction is the increasing use of plastics (oil) and trees in clothing. The Ellen MacArthur Foundation—an organization that works to make economics more sustainable and ethical—has found that "342 million barrels of oil per year [are used for] fashion". Materials like spandex, polyester, and nylon have increased in popularity, as athletic clothing—also known as athleisure—has entered mainstream fashion. Many people do not think or bother to see where clothing material comes from, so the demand for oil increases as the trend to wear athleisure continues to grow. These articles of clothing eventually go out of style and are thrown away. Landfills are now filled with clothes that can take up to 200 hundred years to decompose if they are made from plastic. Other materials that make up a lot of fast fashion products are viscose or rayon. The creation of these materials depends on the logging of 150 million trees, yet only thirty percent of the tree is used for the fabric. The fashion industry has been identified as "one of the key drivers of biodiversity loss and deforestation". The Natural Resources Defense Council (NRDC) provides an informative chart that details a multitude of fiber types and their environmental impact, from their land impact to their water consumption.

Though the fast fashion industry is negatively affecting the planet, many brands have emerged with the goal of changing the future of fashion. Women's clothing brands like Reformation are dedicated to providing the more sustainably sourced fashion and when they cannot provide this, they are very open with their customers. For example, their swimwear that is made from recycled plastics, which when washed can result in microfibers ending up in the ocean. So, the company provides bags that buyers can use to hand wash their swimwear and catch the microfibers that escape the clothing articles. Other brands have similar goals, also focusing on creating carbon neutral fashion and lessening the amount of water used to generate their materials. The creation of internet sources that inform people on the sustainable brands has also increased, with one of the most popular sites being Fairtradebrands.com. This website is used to determine which brands are truly sustainable and which fall short on delivering quality without environmental and ethical sacrifice. Even the University of Notre Dame has fair trade events that sell hand-made goods to people looking to help developing economies in a kinder way. Other recycling companies are using old clothes as materials re-cycled to stuff mattresses and pillows. Another great option is to simply purchase less clothing. If people wore their clothes for nine months lon-ger, it would reduce [their] carbon footprint by 30 percent! The effects of this industry need to be publicized because if people shopped with an environmentally and ethically conscious mind, the industry would not have the negative impact that it has today.

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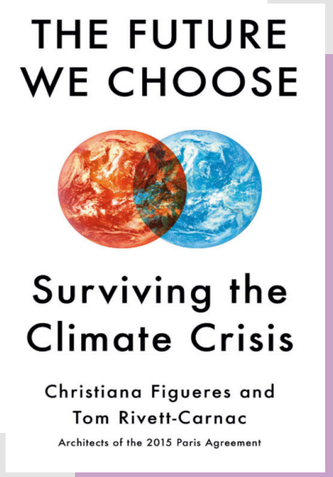
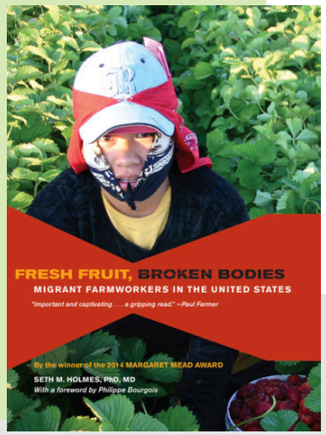
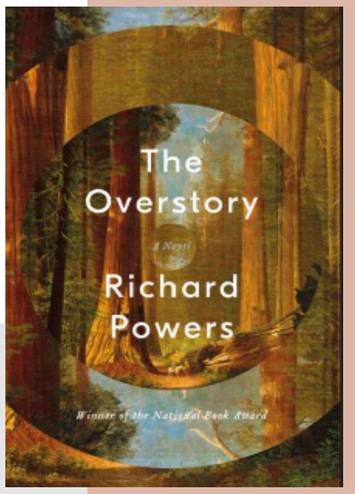
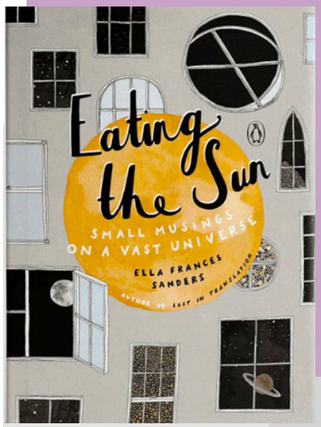
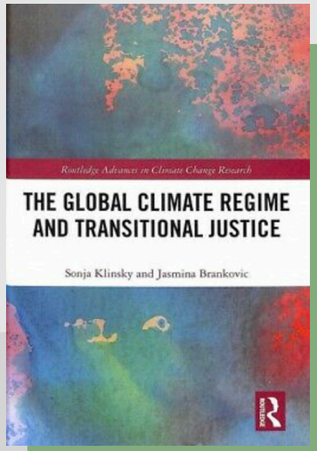
Zine Reads

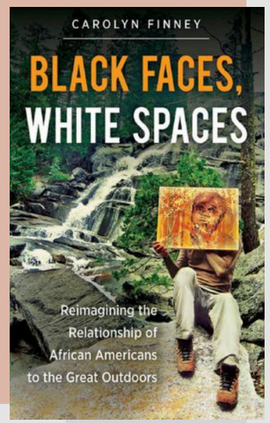


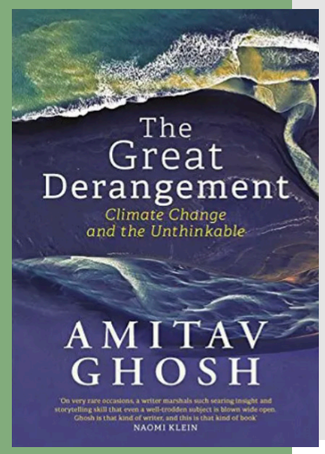


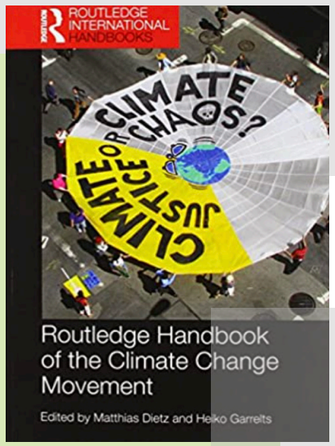


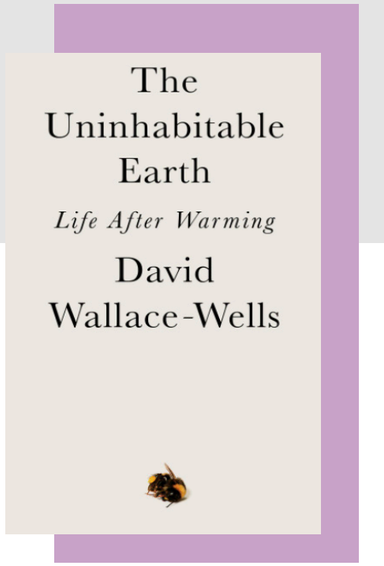




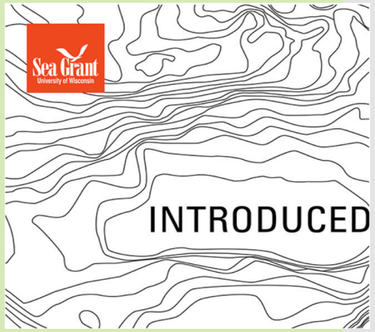




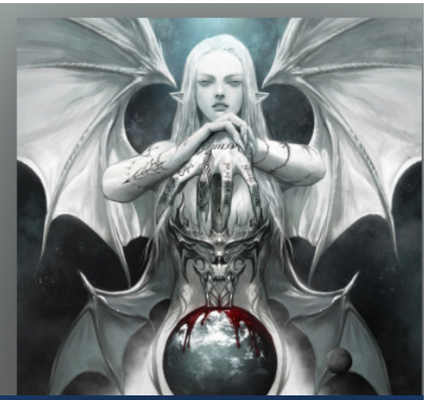




Zine Pods



Dismantled



Miss Anthropocene: Grimes

Titanic Rising: Weyes Blood

Los Mirlos Discografía Completa

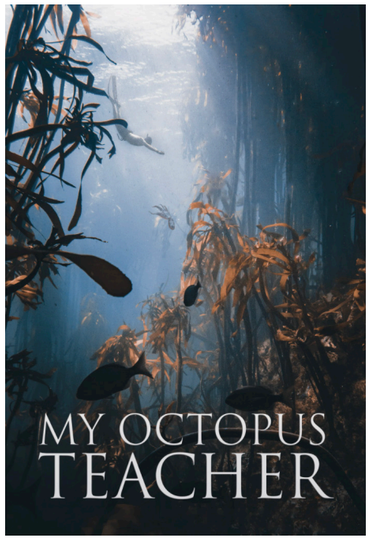
Zine Albums

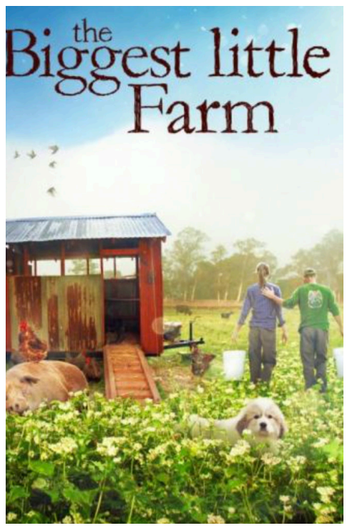
picking classes for next semester?

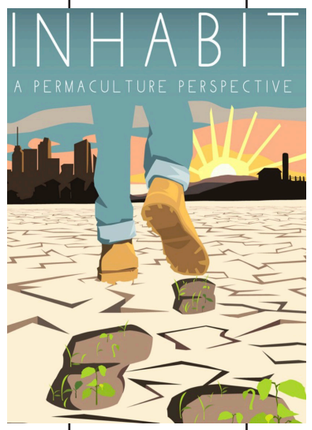
Here are some sustainability-focused recommendations:

- Environmental Economics
- Our Global Environment: History and the Anthropocene
- American Wilderness
- Environment, Food and Society
- Sustainability: Principles & Practices
- Fundamentals of Conservation Biology
- check out the sustainability minor website for more electives!

Zine Flicks







Some very cool people:

Rachel Johnson
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Anna Whelan
Matt Millado
Lizzie Petrosky
Kate Thel
Lillian Montabon
Ashley Lizana
Grace Akin
Ryan Vigilante
Sarah Kikel
Meg Hilbert

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Create with us, nourish ND's sustainability-minded community and take action through DIY-media!

insta: **@Anthropozine.nd**

email: **ielizond@nd.edu, sus@nd.edu**