"The Forest Quiet, Where is its' song?" A Musical Approach To Environmental Academia

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Abstract

It was my first semester at SEAS when a professor presented the sobering idea that "as many as 50% of [academic] papers are never read by anyone other than their authors, referees and journal editors", and that 90% of published papers are never cited (Eveleth, 2014). I began to reflect on this finding, and my own relationships with individuals outside of environmental academia. Indeed: rarely, if ever, have any of my family or friends outside of the academic bubble read any primary academic literature — let alone environmental literature. Upon observing what my friends and family readily consume, I noticed that music was a universal medium that moved not only my community, but communities of people all over the world. I began to wonder whether pursuing a creative practicum, which used music as a medium to spread environmental messages, may be an interesting way to complete my academic coursework at SEAS. I pitched this idea to my advisor, Kyle Whyte, then applied with the Duderstadt Center to record a music album whose lyrics and messages mirror much of the themes covered in my classes at SEAS.

The goals for going this route with my degree were twofold: firstly, recording music at the Duderstadt would provide me with valuable and highly transferable skills for my future career. These included storytelling, professional collaboration, management skills, and budget mapping. Secondly, I wanted to help show that art can, and must be, a legitimate academic pursuit in the field of environmental sciences. In order to complete this written portion of the practicum, I have included the following:

- 1. A literature review which discusses the powerful role of storytelling by the fossil fuel industry in international climate governance spaces,
- 2. A section on the theoretical framework which grounds this work, called "Music as a powerful Tool for Union and Social Change",
- 3. A chapter on learning objectives and skills gained during this process,
- 4. An analysis of my lyrics which relates them back to themes we discuss in my coursework at SEAS.

- 5. A behind the scenes section which gives the reader a "backstage look" into the recording studio experience, and finally,
- 6. Links to the music itself.

I hope that this practicum might increase the resource base that SEAS students have access to and help build the pathway for other creatively oriented SEAS students to incorporate creative praxis into their academic work.

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Introduction

Environmental issues are far from apolitical or asocial, but rather are deeply interwoven with human rights, community health and safety, politics and economics. From deforestation of Indigenous Amazon forests in Ecuador to Richmond, California: a city overridden with heightened cancer rates (Brody, 2009) due to the Chevron facility which refines that same oil... From National Parks which push Indigenous peoples off their lands (Kantor, 2007) to unnatural wildfires which rage as a product of historical mismanagement and fire suppression by settler conservationists (Safford, 2022). These stories exhibit the deeply human and intertwined narratives that lay underneath the statistics, numbers, and scientific data that dominate primary environmental literature. For every endangered species or degree change in global temperature, there is a community at risk of losing their homes due to sea level rise (Zsamboky, 2011), (Lyimo, 2013), (Salic, 2015); several indigenous languages being disconnected from their people; or a person dying too early of a disease linked to environmental racism. These are human stories attached to the numbers in academic literature on climate science that I aim to highlight in my music.

Thinking back again to my own community and the stories we tell about our origins, livelihoods, and cultural realities, I realized that these narratives seldom touch environmental themes. As Iranians in a diaspora that resulted from the violence of an extremist regime, my family is more often concerned with issues of government corruption, human rights abuses, and the hard work it takes to make a life in this new country. Through my academic and historical research however, I have found that our concerns are deeply tied to environmental mismanagement and climate catastrophe in and outside of our country. I hope that my songs can support a bridge for my community (and others with similar narratives) in understanding the environmental themes that underpin so much of our histories... that diaspora, violence in our homelands, and our yearning for a beautiful life directly relate to biodiversity crises, drying up of aquifers, loss of traditional agricultural practices and increased desertification in our home country. This intertwining of storytelling and

scientific evidence, I hope, can penetrate culture, rather than dancing above it in an ivory tower.

Chapter 1. Literature Review

The Fossil Fuel Industry and the Cultural Stories They Wield

Background.

This practicum has been conducted under the notion that environmental scholarship at SEAS should not be limited to the production of academic papers and research, but be open also to creative expressions on environmental themes. In other words, bodies of work which influence our cultural understanding of the world must also be valued by our academics, as underneath academic publications is a set of cultural realities which determine the progress of our society economically, politically and socially.

I will use this literature review to evaluate the power of storytelling through the lens of the fossil fuel lobby against climate regulations. I will do this because the science on climate change is crystal clear, and the goal of building climate regulations should, logically, also be a clear objective following that science. These regulations however, have proven to be more difficult than science may indicate. I will evaluate studies on the fossil fuel industry to understand how tactical story weaving and lobbying for public opinion has succeeded in complicating the hardest of scientific ideas. The purpose here is to evaluate how, even with the clearest of scientific evidence — if that information is not properly translated into popular understanding, it can be twisted to represent something completely different. The idea here is to explore just how powerful storytelling and propaganda can be, even in the face of such clean scientific evidence. This points back to the larger message of this thesis: that cultural organizing and story weaving are just as important as the information on climate itself.

Introduction.

Climate change is an issue which will inevitably impact every human and nonhuman community that exists on our planet. Because of the global nature of this issue, including the intertwined economies and diplomatic ties which are at stake due to it, I thought to focus this literature review on the international climate

governance space. The United Nations Framework Convention on Climate Change (UNFCCC) and its Conference of Parties (COP) is the world's largest annual climate summit, which brings together diplomatic, corporate and civil society leaders from all over the world to discuss the state of our environment. Scrutinizing these events can be a good way to get a general temperature reading on the major actors in international conversations on climate. We will be evaluating the role of storytelling by the fossil fuel sector in thwarting climate action and regulations. The main question is: what moves decisions on climate change? Is it money, knowledge, or social power?

Literature Review.

The influence of fossil fuel interests on climate diplomacy is as old as the UN Framework Convention on Climate Change itself, which was birthed after the Rio Earth Summit in 1992. The Summit occurred just a few years after James Hansen, then NASA administrator, had raised the alarm about the "greenhouse effect", in his testimony before the United States congress in 1988 (SOURCE). In attendance at the Rio Earth Summit was a large group of corporate members from a diversity of polluting industries, who dubbed themselves the Global Climate Coalition (GCC). At the summit, the GCC pushed the idea that industry "was already tackling the problem of the greenhouse effect via voluntary measures" (Westervelt, 2023) and there was therefore no need for external regulatory mechanisms. They have been pushing the same narrative since. Robert J. Brulle in his book, "Advocating inaction: a historical analysis of the Global Climate Coalition", writes that since its inception, the GCC has successfully monitored and contested climate science, commissioned and utilized economic studies to amplify and legitimate their arguments, shifted the cultural understanding of climate change through public relations campaigns and conducted aggressive lobbying of political elites. "Through these activities", Brulle writes, "the GCC played an important role in obstructing climate action, both in the U.S. and internationally".

In 1999, Simon Retallack spoke with the GCC's chief spokesperson, Frank Maisano about their stance on climate action. In a report on this interview, Retallack writes that the GCC's first line of defense in their lobby against climate action was rooted in climate denial. Examples of these tactics include claims that, "measurements from satellites have actually shown a cooling trend", and "severe weather and global warming have almost nothing to do with each other". These denialist ideas are ones which still ring true today, 24 years later. Maisano also tended to indicate a large amount of apparent "uncertainty" around the issue of climate, and that any meaningful action to curb emissions would cost large amounts of unnecessary funds. As written in Grist, the GCC would "not just deny the science, but also argue that shifting away from fossil fuels would hurt the economy and the American way of life". These arguments, again, were so successful, that they are still employed today (Yoder, 2022). The GCC though, isn't the only corporate group which has organized against climate action during recent decades. The Global Climate Council and the International Petroleum Industry Environmental Conservation Association (led by ExxonMobil) also have joined the GCC in their millions of dollars spent on thwarting climate action (Grist—Yoder — 2022). Also, the National Mining Association, Dow Chemical company and US Chamber of Commerce have been similarly lobbying against climate regulations for decades.

With the top 10 fossil fuel companies generating \$2.24 trillion in revenues in 2022, this industry makes enough money to place it within the top ten GDP countries in the world, based on 2021 figures from the World Bank (Mandel, 2023). In fact, 18 of the 20 sponsors of the 2022 UNFCCC climate talks in Egypt directly supported or partnered with the fossil fuel industry (Corporate Accountability and Corporate Europe Observatory). One year prior at COP26, the fossil fuel industry brought more than 500 delegates to Glasgow, according to the BBC — a number larger than any one country's representation there (McGrath, 2021). This infiltration of climate mobilization has taken place while BP, Shell, Chevron and Exxon (some of the world's largest fossil fuel companies), have pocketed nearly \$2 trillion dollars since the 1990s when the GCC was founded (Taylor & Ambrose, 2020). An Influence Map report conducted in 2016 found that major fossil fuel companies and trade groups spent nearly \$115 million dollars annually on efforts to reduce climate

legislation (Williams, 2016). More recently, according to an Industry Profile of the Oil and Gas industry from Open Secrets, the industry spent \$123,106,364 on lobbying in 2022, and had 753 lobbyists involved in a revolving door between the oil and gas industry and government positions.

What is happening at the hands of all this representation and money spent? Have these tactics been effective? According to the Union of Concerned Scientists, they have been. In her article, L. Delta Merner, lead scientist at the science Hub for Climate Litigation writes, "...policy addressing anthropogenic climate change remains slow and insufficient. This dangerous delay in action is largely due to the fossil fuel industry continuing to ... [stand] in the way of change." Merner exposes that even the marketing around COP27 was conducted by Hill+Knowlton: a major public relations firm that "works with a number of fossil fuel polluters, as well as a key international lobby group for the industry, and whose founder (John Hill), "pioneered the tactic of creating seemingly objective, independent science to manipulate public policy". This relationship created "unacceptable conflicts of interest" in COP27 communications and lead Merner to join more than 400 other scientists in a call for Hill+Knowlton to drop its fossil fuel clients in light of its work at COP27. This plea was not brought to fruition.

These inequalities in representation and financial investment in the COP meetings (and climate policy in general) have had incredulous effects on our current reality. In R Licker's seminal paper, *Attributing ocean acidification to major carbon producers*, authors link the fossil fuel sectors' knowing climate deception to the acidification of our oceans. They found that emissions from the 88 largest industrial carbon producers from 1880 - 2015 contributed 55% of the decline in water pH during those same years. During peak emissions is when the industry's own scientists were well aware of the impending issue of climate change, and instead of encouraging climate action, chose to spend mountains of money trying to stop it (Hall, 2015).

In fact, the fossil fuel industry's investment in climate disinformation became so rampant that the United States House of Representatives Committee on Oversight and Reform conducted an investigation on this issue in 2022. In

September of that year, the committee released more than 200 pages of internal corporate documents further revealing industry deception. In December, they released more documents which "demonstrate[d] how the fossil fuel industry "greenwashed" its public image with promises and actions that oil and gas executives knew would not lead to meaningful emissions reductions". Instead, the industry moved aggressively towards continued fossil fuels projects for decades — "actions that could doom global efforts to prevent catastrophic climate change" (US Committee on Oversight and Reform, 2022).

Examples of these documents include a strategy slide presented to Chevron's board of directors that writes, "[while] traditional energy business competitors [are] retreating" from oil and gas, "Chevron's strategy" is to "continue to invest" in fossil fuels, and take advantage of the resources' consolidation and increased profitability. Another internal email from the American Petroleum Institute revealed that the company's Climate Action Framework was oriented around "the continued promotion of natural gas in a carbon constrained economy". This coincided with its "Energy for Progress" advertising campaign, which described natural gas as a clean and environmentally friendly energy source, with the promise of reducing United States emissions (American Petroleum Institute). This campaign was aimed at both the public as well as policy makers, to support the U.S. energy industry's plan to invest hundreds of billions of dollars into building terminals and pipelines to increase exports of natural gas in its liquid form (LNG) (Volcovici, 2020).

Burning natural gas *does* result in fewer emissions of air pollutants: a point that the industry has focused their advertisements on. Articles from the Department of Energy (DOE) to the International Finance Corporation, written by fossil fuel affiliates, lay claims that natural gas is an integral part of de-carbonization (Townsend). Independent scientists though have a more nuanced analysis on the influence of LNG. Rob Jackson, a professor at Stanford University and chair of the Global Carbon Project, stated "Most of the new [LNG] production isn't supplanting coal - it's supplementing it. It's answering the demand for new energy". Although natural gas produces less emissions, the global climate agreements made at COP summits leave "less room for use of fossil fuels of any kind" — including natural gas

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(Volcovici). In fact, the emissions from the US natural gas industry are growing so rapidly that they are "quickly becoming one of the biggest... challenges to address climate change", according to Pep Canadell, senior research scientist at CSIRO Climate Science Centre in Australia. In November of 2019, a United Nations team of researchers found that by 2030, we were on track to produce 70% more natural gas than would be compatible with the Paris Climate Agreements' 1.5C goal — a limit we have already breached over multiple months (Wallace, 2023).

These internal documents confirmed that fossil fuel companies have been investing in falsely convincing the American public that they are taking climate seriously. The Committee on Oversight and Reform memorandum goes in depth into this issue, citing several instances where the fossil fuel industry has misled the public about its intentions. For example, a 2022 article released in the Washington Post wrote that ExxonMobil was aiming for net zero greenhouse gas emissions by 2050 (Gregg, 2022). This article referenced a press release on ExxonMobil's corporate website, which lists more than 150 "potential steps and modifications" towards that goal. Looking more closely at the fine print though, Exxon only committed to cutting its operational emissions, which account only for 10% of total emissions from their oil and gas. On the contrary, they continued to increase overall fossil fuel production during this decade (Gregg, 2022). Even a document titled, "Chairman's Report to BPA Board" quote's BP America's chairman saying, "we continue to balk at taking accountability for the emissions of our products". These released documents, which include communications from BP, Shell, Exxon, The American Petroleum Institute, and Chevron are all guided by the same principles of spreading disinformation to the public for the purpose of skirting accountability, and continuing to profit off business as usual.

Antonio Guterres, UN Secretary General, has pleaded with the delegates at COP, stating, "We cannot afford slow movers, fake movers or any form of greenwashing". All the while, fossil fuel companies still invest mountains of cash flow into the PR campaigns that succeed in seeding doubt in climate science, pretending to act on climate change, and overall thwart climate related regulations. At the core of these efforts is a common tactic of spending a large number of resources on

public relations. That is to say, that a large sum of money goes into rewriting narratives, both for policy makers and the public — to twist and undermine scientific evidence in order to push a profit motivated agenda. Although this is a frustrating reality: that the hardest "facts" we have access to can be twisted with enough capital, it reveals something vital: public perception *matters*. Not only does it matter, but it seems to lay at the heart of why policies can or cannot be passed. There is a reason fossil fuel companies work hard to influence the stories we tell culturally about climate change. These stories determine their economic success, both directly and indirectly. We can see that much of the fossil fuel's lobby against climate regulation relies on narrative building: influencing public perception about climate issues to justify a lack of action. As written by Robert Brulle, shifting the "cultural" understanding of climate change through public relations campaigns" has been an integral part of the multifaceted climate denial campaign led by the fossil fuel sector. Even when the cold hard science gives a direct and clear indication of what needs to be done, industry lobbyists have been able to twist the narrative and create an alternative story based on their interests. In this way, we can observe that public opinion is at the *center* of whether climate diplomacy leans towards the knowledge produced in academia or is bent towards the will of another motivation.

Where then, as scientists and academics, is our power? Is it in the continued production of scientific knowledge, devoid of effective translation into popular culture? In my practicum, I argue a resounding *no*. Culture matters - and academic institutions must start to understand this. Investing academic resources into the production of culture work is invaluable. Both for translating scientific data to everyday understanding, but also for sharing the human narratives that have erupted at the cause of environmental catastrophes. Linking the lived realities of everyday people: Indigenous communities in Ecuador's Amazon or those in Richmond next to the Chevron refinery, to our academic work is vital integration that builds a necessary interdependence between the grassroots and the ivory tower of academia. This is the work that can create the massive waves of change that we need in order to build a more sustainable future.

Chapter 2. Theoretical Framework

Music as a Powerful Tool for Union and Social Change

It was the fall of 2022 when the Iranian government violently arrested Shervin Hajipour for spreading anti-government propaganda. The method he used? Music. His song *Baraye* had become an anthem for the Mahsa Amini protests that raged on the streets for months, starting September of 2022. Hajipour's lyrics used twitter posts by Iranians, who had written quick tidbits about why they chose to protest, to consolidate a grander message of hope and unity in Iran. Some of the lyrics translate to, "for dancing in the streets, for fear of kissing your loved one, for my sister, your sister, our sisters..."

Only days after Shervin posted the song on his instagram, it exploded in popularity. Schoolgirls were crying its lyrics in the streets with their hands raised in peace signs. It was blasting from car speakers on busy streets, and was even covered by the famous band Coldplay, who performed the song in Buenos Aires. This powerful song tied together the hearts of Iranians all over the world, who were tired of an oppressive regime that stamped shadows onto a historically vibrant culture. Even me and my family, miles away from our homeland, were moved to tears listening to this song and all of the painful truths woven within it.

We can see in Shervin Hajipour's story, something vital to the theoretical framework of this practicum. Shervin's lyrics were functioning on two levels: one which brings to light science and academic findings (observed in lyrics such as, "for the Asiatic Cheetah's impending extinction" — referring to the country's disregard for its own precious environment), and the other which focuses on the lived experiences of everyday people in Iran ("For all the pills for nerves and insomnia"). His song envelopes both data and lived experience to create a wider call for mobilization against corruption in Iran. Lyrics like "For the discriminated Afghan children", "For this polluted air" or, "For the shame of being penniless" all combine both data and lived experience. The last line, "For the shame of being penniless", for example, highlights the impacts that both corruption in the Iranian government, and American sanctions on Iran have had on the population. Without journalists and

academics studying and exposing these elements, Shervin wouldn't have a lyric to write about these issues. He doesn't, however, write a wordy, jargon-filled report on these experiences. He simply sings the lived truths associated with these findings, and therefore in an indirect yet deeply powerful way, brings light to them. Not only this, but Hajipour's lyrics also build opposing pressure, as the protests in Iran gain more momentum through his music, more academics, human rights advocates, and journalists pay attention and develop research on the issues he touches on.

Hajipour, the 25-year-old-singer, was arrested with charges of "propaganda against the Iranian regime" and "instigating the violence", only a few weeks after having posted *Baraye* onto his instagram (Gambrell, 2023). He is now also banned from leaving Iran, and could face up to six years in prison. He is only one amongst over 19,600 people arrested amid the demonstrations, according to the group Human Rights Activists in Iran — an organization that has been monitoring the Mahsa Amini protests since their dawn in 2022.

Shervin Hajipour's *Baraye* isn't the only song that has played a powerful role historically in bringing people together around a common vision. Unfortunately, he is also not alone in being incarcerated and targeted by oppressive regimes as a product of his music. In February of 2011, Ramy Essam wrote a song that would become the soundtrack to Egypt's revolution and was arrested for doing so. Víctor Jara, the famous Chilean musician and supporter of Salvador Allende, was killed by Pinochet's military upon the successful (United States-backed) coup in 1973, for his moving political folk songs. Hachalu Hundessa used his music to call for greater rights of ethnic Oromos in Ethiopia and was murdered in 2020 after his music had gained great momentum (Britannica). In 1976, many members of Czechoslovakia's famous bands The Plastic People, were arrested and charged with "organized disturbance of the peace". In the United States, beloved jazz singer Billie Holiday was sent to prison and stripped of her cabaret performer's license after she refused to stop singing "Strange Fruit": a song that spoke vividly about the violence associated with lynchings of Black men at the south of the United States (Fields, 2021).

Above are just a few names of the many musicians that have been arrested and even killed for their political music. There is a reason for this: music is powerful.

So powerful, that just one song, like "Strange Fruit" or "Baraye" can become an essential part of the rope which ties people together in a blockade large enough to change the tides of history. So, during our time of environmental collapse, the time is ripe for music that brings people together around environmental issues, and all our stories that intersect with that theme. I hope to do just that with this practicum: answer a call and expand a movement of music that speaks truth to the injustices that lead to environmental degradation. Environmental issues require bold action now. Academic research is invaluable, but should not be the only way that our higher education institutions are supporting knowledge building around different environmental issues. This practicum asserts that music is vital to cultural change, and explores that theme by recording an album that explores this idea.

Chapter 3. Learning Objectives and Skills Gained *Transferable skills for an environmental career*

In this section, I will discuss the different learnings that I gained from this practicum experience. These experiences have been invaluable to my career and my education at SEAS. I hope that this section will provide insight into why projects like this one can be a valid and legitimate part of a SEAS education.

1. Collaboration

This project allowed me to work and collaborate with staff at the Duderstadt Center on creating a musical album (with 10 songs and one poem) and one music video. This included working with professional sound engineers, video studio staff, other musicians, and undergraduate engineering students. This highly collaborative project required bringing many different peoples' ideas together to create one cohesive vision. I also had to coordinate and manage many different schedules at once, and conduct outreach to locate the right talent for the skills that we needed. For example, finding accompanying musicians required me to design and post flyers around campus, send emails to music school staff, and build relationships with individuals who could lead me in the right direction.

2. Leadership and management

Coordination: This project required me to coordinate and manage people, as well as lead the work schedule and creative progress. This required coordinating many people's schedules in order to ensure that we had proper rehearsal and studio time to finish our work. I also had to organize schedules such that certain individuals coincided for the right amount of time in the studio.

Leading vision: As the central visionary for this project, I got to stretch out of my comfort zone by giving constructive feedback and writing parts for accompanying

musicians, work with the sound engineer towards a sound that matched the vision, write + direct an entire music video, and set up a timeline for our work. I practiced my leadership skills in this way, and became more comfortable being the directing voice at a table, which increased my ability to communicate clearly, directly, and in an organized manner.

3. Budgeting

Grant Writing: I wanted to support my fellow musicians (bassist, pianist, drummer, oud, guitar, percussion, strings) by paying them with money for their time in the studio. This required me to first find grants that would support a project like ours, and write them in time for their different deadlines. This experience has supported me in organizing budgets, seeking grants and making application deadlines.

4. Storytelling

This project helped me to become a more powerful visual and musical storyteller that might help to bring people on board of our environmental movements. Through the music video, I was tasked with matching my lyrics with visual representations that could captivatingly share the songs' message. This required creating a storyboard, troubleshooting different scenes in order to locate the most effective one, using the video studio space in several creative ways: such as creating visual reels that were presented behind the actors on screen, or having paper fall from a ladder someone was standing on above the main character.

The album itself forced me to condense my messages into shorter, bite sized pieces, compared to an academic paper. I had to use imagery and symbolism to capture in very few words, very large statements. I also became a much more confident performer as a product of this work, as I got to listen back at myself playing instruments and recording vocals over and over again until we got the right take. I realized that any lack of confidence or preparation showed in the recordings, and

this pushed me to show up to my performances in a stronger manner than I had previously been trained to do.

Chapter 4. Lyrics Analysis

Because song lyrics by nature are often symbolic and metaphorical, this section will help song listeners to understand the relationship between these songs and an interdisciplinary environmental degree.

Mother Bird

Mama is a bird

She flew over oceans to the beast

And baba ran away,

Somewhere over mountains he lost his heart

The ones whom he never called in graves across the world

Starting a flood down his face

Rivers cried her name and left her hair braided with seeds.

Oh lost Vatan, take them
Remember,
Oh wealth of this nation
Are you freeing them? Are you freeing?

The old man arrived but he couldn't kiss my face Come back where your roots grow Beyond those empires gates,

They're the ones changing
Veins of lands we held so dear
And cut the calloused hands from
Where they buried their own, raising again a home
From this earth of bone.

Oh lost vatan, take me Remember, Oh wealth of this nation are you Freeing me are you freeing me?

Oh, my homeland far away
Oh in the loom we are woven, do we stay?

Hours escape here
Pour our sweat into the scheme
The golden view of Amrika
Was never quite what it seemed.

Overview.

This song is about my family, but more largely can relate to any child of diaspora whose family moved to this country as a product of its' meddling in their homelands. Though the history I speak to is centered in Iran, these stories of neocolonialism by the hands of the United States echo in many countries all over the world that have been mired by coup d'etats, natural resource extraction, and the like by this country.

3. Line by Line Analysis

Mama is a bird, she flew over oceans to the beast:

This line refers to my mother as a bird, who immigrates from one land to another. The beast here refers to the United States, as this country, is an essential part of the source which wreaked havoc in her homelands in Iran, and ultimately forced her departure from there.

And baba ran away, somewhere over mountains he lost his heart. The ones whom he never called in graves across the world starting a flood down his face :

This refers to the bottling up of pain and nostalgia that many men do when they immigrate to new lands. The norms of their gender expression might cause them to "lose their heart" as they suppress the ineffable loss that is losing ones' homeland. "Starting a flood down his face" refers to the deep well of emotion in my own father that has resulted from all his years of running away. Any wave of emotion or nostalgia can send him crying, as there are so many family members now passed away who he never called, even after so many years away from home.

Oh lost Vatan, take them, remember, oh wealth of this nation, are you freeing them?:

"Vatan" in Farsi translates to "homeland" in English. This line is asking our homelands to take back the lost souls who have fled their soils for lack of another choice. The second part of this line is asking whether the material wealth present in this new country (in this case the United States), is indeed freeing the immigrants. The backstory here is multifold:

- Immigrants are often discriminated against in this country and cannot exist comfortably here without erasing huge parts of themselves or committing themselves to exorbitant amounts of labor in order to make ends meet.
- Stepping into this world of material wealth also often means losing the depth of community and camaraderie present in our homelands. As American culture is rooted in individualism, it differs greatly from the collectivist cultures that I, and many people like me, have come from.

The old man arrived but he couldn't kiss my face, he said come back where your roots grow beyond those empire gates. They're the ones changing veins of lands we held so dear, and cut the calloused hands from where they buried their own, raising again a home from this earth of bone.:

This lyric is referring to my grandfather, who finally was able to step foot on "American" soil after years of difficulties with the Muslim ban. It had been years since I'd seen him, but even though I was finally hugging him on the farm I worked at in California, it felt sorely like he wasn't actually there. Indeed, he is one of those men who is so tied to his land, that nothing can move him from his place. Even when his body is in the United States with the rest of his family, the essential parts of him are still back home in Iran, on his farm with those two dogs that follow him everywhere. When this lyric speaks of empire, it is referring to the United States influence that, through operations like TPAJAX, caused immense and unsustainable changes in our environments and cultural ways in Iran (Allen-Ebrahimian, 2017). 'Cutting the calloused hands' refers to a forced diaspora that ensues after so much chaos in ones' own country.

Hours escape here, pour our sweat into the scheme. The golden view of Amrika was never what it seemed:

This is commenting on a common view that many people in developing nations feel about the United States: that moving to this country will commit you to a life dripping in gold: all the material pleasures you could ever ask for. Indeed, this is often not the case, and even when families do manage to make ends meet for themselves and succeed in this place, the question still remains: was obscuring our deep roots, cultural heritage and family ties worth this new found material wealth?

Oh, this America.

Man in marble office
Dropped a missile on our heads,
He sits there laughing,
With a coffee in his hands.

Oh this America talk about big privilege,
Woke things you say on screens
Throw your throne into the
Trash picked by children and
You are still arguing
Canceling imperfect,
Passport in your pocket.

Their crimes put fear in us?
With AJAX and Cointelpro?
This isolation is a tactic
Making ends meet on our own
Selfish cultures have us posing in the glass
Forgetting all life's connected
The visionaries died for this,
Oh, what is this?

Oh this America talk about ignorance,
Fauna don't know borders still you build fortress,
Best things in life were free til they put price tags on
Clean water, air I breathe, lost time in the concrete.

1. Overview:

I wrote this song after having traveled to Iran and witnessed the depth of poverty in my communities, largely at the hands of American sanctions. I became disgusted at the deep global inequalities that fuel our "first world" lives in the United States, as well as the political games which hurt ordinary people more than they hurt any powerful politician whose pockets are often already filled with abundance. This song is largely about this pain that comes from being a middle eastern diaspora kid, and watching the country of your family's "salvation" be the same that has bombed your people and sucked them dry of their heritage, wealth, and sovereignty.

2. Line by line analysis:

Man in marble office Dropped a missile on our heads. He sits there laughing with a coffee in his hands:

This lyric refers to many instances when the American government has decided to attack other nations with such seeming ease, that politicians can drink coffee and laugh with their colleagues while their bombs drop. This lyric is specifically drawing on histories of the United States' presence in the Middle East: from Syria, to Iraq, to Afghanistan, Palestine, Iran... (the list goes on), but is not limited to this region. In a larger way, this lyric is commenting on the global death that is at the hands of American politicians who 'drink coffee and laugh' while wreaking havoc in other nations. The lyric is trying to draw an image of contradiction, as a powerful man laughs and drinks coffee, meanwhile approving missiles to be dropped in a foreign land.

Oh this America talk about big privilege. Woke things you say on screens, Throw your throne into the trash picked by children and you are still arguing, canceling imperfect, passport in your pocket:

This lyric is speaking again to the gross contradictions that exist between the United States and the rest of the world. It is calling out the immense global privilege we often have as American citizens, as our country wreaks havoc all over the world. "Woke things you say on screens" is referring to the instagram activism that I have

seen too many people engaged in, whilst not understanding the true magnitude of struggle that many people in the global south are suffering. This line is a commentary on the performative nature that many "justice" oriented actions can be, when they are more about someone looking "radical" than actually changing the fabric of global inequality we all participate in. All the while, people are "canceling imperfect" — shutting down anyone who's politics aren't using the exact right lingo or particularities, while themselves holding an 'American passport' — a document which holds immense global privilege.

Fauna don't know borders, still you work in fortress: This lyric refers to two different things: borders and fortress conservation.

Fortress conservation is defined in the Sage encyclopedia of Environment and Society (Robbins 2007; see also Brockington 2002) as the following:

"a conservation model based on the belief that biodiversity protection is best achieved by creating protected areas where ecosystems can function in isolation from human disturbance. Fortress, or protectionist, conservation assumes that local people use natural resources in irrational and destructive ways, and as a result cause biodiversity loss and environmental degradation. Protected areas following the fortress model can be characterized by three principles: local people dependent on the natural resource base are excluded; enforcement is implemented by park rangers patrolling the boundaries, using a "fines and fences" approach to ensure compliance; and only tourism, safari hunting, and scientific research are considered as appropriate uses within protected areas. Because local people are labeled as criminals, poachers, and squatters on lands they have occupied for decades or centuries, they tend to be antagonistic toward fortress-style conservation initiatives and less likely to support the conservation goals."

When this lyric mentions "fortress" it is partly calling on this racist and colonial form of conservation. Ivette Perfecto, John Vandermeer and Angus Wright write about conservation enclosures in their book, *Nature's Matrix: Linking*

Agriculture, Conservation and Food Sovereignty. Here, the authors contrast the effectiveness for conservation between two farming ideologies: 'land sparing' vs. 'land sharing'. Land Sparing is the process by which farmers intensify production and yield on their farms, (leading to sweeping monocultures doused in herbicides, pesticides, and other industrial inputs), in order to preserve patches of pristine biodiversity. Land Sharing, on the other hand, is a conservation practice where farmers "share" their land with existent biodiversity, often involving polycultures, less industrial inputs, and more habitat for wildlife throughout the farm matrix. In her book, Perfecto argues that in a land sparing approach, local extinctions (which are natural), will often become regional, as local species have not the ability to traverse through swaths of industrial monocultures, to get to the next patch of pristine ecosystem. The fortress lyric is also referring to the violent borders we build in the United States, even to the point of arming them in razor wire, to prevent refugees from accessing American soil (Gay, 2023).

"Getme, Getme"

Gozlerin aldi meni Kamande saldi meni Getme, getme gel gözel yar Getme getme gel

The forest quiet where's the song
Has it gone?
I savor every moment,
The birds will sing when new days begin
Will it begin?
So i pray for the revealing

The birds are singing about the end,
About the end
So i savor every moment
The Birds will sing when new days begin
New days begin
So i pray for the revealing

The borders rise and forests fall,

The men in suits guarding the wall.

Where are you from,
I said this ground,
Then shot me down oh, shot me down

Gozlerin aldi meni Kamande saldi meni Getme, getme gel gözel yar Getme getme gel

Overview

The first and last sections of this song are a famous Azeri folk song from the Northwest region of Iran (where my family is from), called "Getme", which translates to "don't leave". Traditionally, this song is interpreted as if it's about a lover, whom the singer is begging not to leave. In this song, I reinterpret the lyrics, and am more so begging our beautiful world not to leave us in chaos. This is a song for the clean rivers, pure air, tall forests and bird songs which are becoming more and more sparse as environmental destruction continues to raze our forests, deplete biodiversity, and pollute our resources. This song is a plea for our natural world not to leave us due to these forces. In this way, I am trying to convey to the listener a sense of desperation — watching these resources dwindle before our eyes with the deepest grief in our hearts. This sentiment is expressed in English in the following lyrics:

2. Line by line analysis

"The forest quiet, where is its song, will it return?":

This lyric was written after taking a hike in a California forest after having read about the immense amounts of natural life that once crawled, swam, climbed and flew across the states' rich ecosystems. Due to the various cascading influences of colonization, from land change into cattle ranches, to decimation of native populations who stewarded the natural cycles, the landscape in California has changed immensely, and although the forests are beautiful, when you have a trained eye, you can notice that these majesties are but a figment of the bustling life they

once were (Margolin, 1978). This song came out of a yearning to see that world. What would it feel like to be in a forest that was actually healthy? This is a feeling that I barely know as a human on this abused planet.

"The earth too dry to hold us here, but still we drink. Whose water we stealing?":

This lyric touches upon the issue of water, in places where water is used unsustainably by populations that are too consumptive and too large for the ecosystems which hold them. We see the stark effects of this in cities like Los Angeles, where water is shipped from hundreds of miles away just to fuel the city (Los Angeles County Waterworks District). Shortages now are becoming more dire as the years pass. Last year, as Mayor Eric Garcetti regarded the Hollywood Reservoir from a helicopter, he said, "It's as low as I can ever remember it being" (Smith, 2022). The Colorado River, more than 22 years into the longest-running drought in the American West (Houston, 2022), has declined in its flow by nearly 20% since 2000.

"Men in suits guarding the wall. Where are you from, she said "this ground" then shot her down, oh what a sound":

This section is expanding on the theme of fortress conservation and borders discussed in "Oh, this America". This lyric more specifically is drawing an image of a woman who cannot access her own lands due to a foreign, but violent power that has stolen rights to it. The "men in suits" ask her where she's from, and when she claims her rights to this territory, they 'shoot her down'.

This section will take the reader "behind the scenes" of the music through photos of the recording process.



Kimia Rafaiean, graduate student in collaborative piano at the University of Michigan, preparing her part for one of the songs on the album.

Neeka with Dave and Matthew on the first day in the studio, summer of 2022.



Neeka and Kimia in the studio after a day of recording.



Our undergraduate student bassist in the studio, recording for several tracks.



Cameron (on drums) and Zachary (assistant sound engineer and guitarist) getting the drums ready to record.



Negin (Neeka's sister) and Neeka working together in the video studio on the music video for "Oh, this America".



Conclusion

As it has been said before, there is enough scientific evidence to show that the earth is warming at an unprecedented rate (NASA), and that post-industrial revolution activities in the global north are the principal cause of this (Baer, 2012). As a Master's student in a two-year degree program, I didn't feel that I had the time nor the resources to produce the type of academic literature that I would feel was a valuable addition to this already gargantuan pile of work. What I did have, was my power and drive as a storyteller and musician to weave together intersecting narratives associated with environmental degradation in the communities from which I come. My hope is that this music can be a reflection of a rising cultural awareness that brings to life the real, lived impacts of climate change and environmental destruction — that it can serve as one voice which speaks truth to our lived realities as we navigate this time of immense global environmental collapse. My hope also, is that this unconventional approach to a graduate degree in environmental sciences can be an an example of academically informed culture work that could deeply augment the scientific and academic literature produced at institutions like ours. As we have seen through this paper, the stories we tell *matter*. They matter so much, in fact, that these stories can twist even the clearest of scientific evidence. This practicum, however imperfect, is an attempt to link culture and academia, so that our work as academics can more readily flow into the communities we need the support of in order to create a more sustainable future. Not only this, but this thesis is also an attempt to open a pathway for the opposite flow as well, as the lived realities of everyday people are seen as vital to environmental academic work. I am so grateful for having had this opportunity to work with such an incredible staff and set of musicians at the Duderstadt, and I couldn't have done it without the support of SEAS. Thank you!

Google Drive Link To Music:

https://drive.google.com/drive/folders/1dYgmKFYc0LmL0lcBgjy6dIaG18V5Pi2l

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