Occasions Online

A collection of prize-winning works by students of the Program for Writing and Rhetoric

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UNIVERSITY OF COLORADO **BOULDER**

OCCASIONS 2020-21

Table of Contents

1st-Year Longform

ARJUN NOVOTNY-SHANDAS
Thoughtful Democracy: Bubbles, Chambers, and Conversation....1
1st-Year Longform 1st Place

SARAH STRETZ
Preventing the Next Pandemic....6
1st-Year Longform 2nd Place

HENRY PERRY-FRIEDMAN
The Closed Road....11
1st-Year Longform Honorable Mention

1st-Year Shortform

MARIAN WALMER
Melting Away: How Does Climate Change Stand To Impact the Ski Industry?....17
1st-Year Shortform 1st Place

LILY SERGI
Decriminalization Can Only Benefit Sex Workers: Anti-Prostitution Laws Are Unsustainable and Washed Up—It's Time to Make Some Changes....20
1st-Year Shortform 2nd Place

DANIEL GRIFFITH
No Minced Words....24
1st-Year Shortform Honorable Mention

Multimodal

MYA LILLIEMOEN
Opportunity....26
Multimodal 1st Place

CHARLOTTE WHITNEY
The Walk....26
Multimodal 2nd Place

REID FRIEDENBERG
Time Is of the Essence....26
Multimodal Honorable Mention

Multilingual

YUN-PING YANG
Perception of an Accent When Speaking Another Language.....27
Multilingual Writing 1st Place

Knowing Words Cover Art

SABRINA RUIZ
Queen of the Elysian People.....32

Upper-Division Arts and Sciences

KATHRYN ADAMS
From Housewives to Activists: How Silent Spring Helped Mothers Find Their Voice.....33
Upper-Division Arts and Sciences 1st Place

SABRINA RUIZ
Something Broken.....38
Upper-Division Arts and Sciences 2nd Place

Upper-Division Business Writing

NATHAN J. BOWERSOX
Alcohol Industry's Advertising Exploitation of the COVID-19 Pandemic.....42
Upper-Division Business Writing 1st Place

Collaborative Writing

NYIKA CAMPBELL, DEVIN SHARPE, ALEX RAYMOND, AND JAMES WONG
Boulder Climbing Community: Impact of COVID-19 on Front Range Climbing Area Visitation.....48
Collaborative Writing 1st Place

ABDULAZIZ ALABDULRAZZAQ, DENNIS WINDHAM, AND JEREMY BALDERRAMA
Dumb Friends League Market Research Recommendation Report.....68
Collaborative Writing 2nd Place

Writing Certificate Portfolio

SARAH MARIE HOWARD
Writing Certificate Portfolio 1st Place.....80

CLAYTON MONTGOMERY
Writing Certificate Portfolio 2nd Place.....84

1st-Year CNF

DEEDEE NGUYEN
The Road Ahead....88
1st-Year CNF 1st Place

LILY SERGI
July 7th....91
1st-Year CNF 2nd Place

TESSA STIGLER
I Used to Love My Grandparents....94
1st-Year CNF 3rd Place

Upper-Division CNF

ALLISON ELKINS
The 26 Letters I Was Taught it Takes to Spell Woman....97
Upper-Division CNF 1st Place

REBEKAH ARNOLD
Connecting....101
Upper-Division CNF 2nd Place

NATHAN J. BOWERSOX
Notification....105
Upper-Division CNF 3rd Place

Diversity Writing

NEIL RAY
A New Look at the Nacirema....109
Diversity Writing 1st Place

AUSTEN SWINTON
New Horizons....112
Diversity Writing 2nd Place (tie)

BRENDAN THOMPSON
What the Poor Man Says Is Not Listened To....116
Diversity Writing 2nd Place (tie)

Mackison (Engineering)

MARK SHOREY
Gender Discrimination and Sexism on the Jobsite: An Ethical Report.....120
Mackison Fall 2020

JULIA BENDORF
The Rhetorical Life of Scientific Fact: From Viral Variants to Bat-ting for a Cure.....126
Mackison Summer 2020

SAM WILLIAMS
Alternative Education in Computer Science.....132
Mackison Spring 2020

ARJUN NOVOTNY-SHANDAS
Thoughtful Democracy: Bubbles, Chambers, and Conversation
1st-Year Longform 1st Place

It was one of those cold mid-winter days where the roads, houses, and trees all blended into the grey sky. It was a day that sent people inside to hide under their covers, protected from that weighty dreariness. But for some, that was not an option. Caucus was just a week away.

I met the campaign manager. He was standing on the dead grass in the front yard.

"You ready to make some calls?" he asked as I walked towards him.

"Are we asking for money today? Or just votes?"

"Their money, their soul, and their first born male child." We entered the house, and he closed the door behind us, smiling. "Yeah, just votes today. But if they want to give money, don't stop them."

The house was cluttered and there was a lingering scent of cat food. A petite young woman with bright eyes was sitting at the table.

"This is our new field organizer," the campaign manager said, "and this is her house."

"My parents' house actually. I'm Elliott." She shook my hand.

I sat down at the only other chair without magazines and sweaters on it, across from everyone else. Awkwardly, I moved a dish aside and put my computer on the table. The campaign manager went over the script and goals for calls today. "Mostly, we're just putting Singer's name out there and trying to get people to go caucus if they can."

"Do you know Singer?" I asked Elliott as I got set up.

"No, I don't. I wasn't even into politics before 2016. That election. . . ." She paused. "Well, it made me realize how messed up our democracy can be."

Elliot was not alone in feeling that way. The 2016 US election was different from elections in the past. Every election has a victor and a loser. It is well known, and somewhat obvious, that supporters of the victor tend to be pleased with the democratic process after an election, while those who backed the losing candidate are disaffected (Justwan et al. 425). In 2016, Donald Trump won the presidency despite a plurality of voters preferring his opponent. Due to the electoral structure of the United States, the winner of the most votes nationwide does not necessarily win the White House. Elliott, and many others across the country, woke up to the realities of our political system because of this disparity.

At the time, I thought that was the sole reason for Elliot's realization. Now, I understand that this explanation barely touched the complete story. There was an emerging force at work: social media. Since 2008, the last time the US held an election without an incumbent president seeking another term, social media use among US adults jumped from just a quarter of the population to 70% ("Demographics of Social Media Users and Adoption in the United States"). Additionally, a significant portion of those using social media rely on it to read the news and share political views (Justwan et al. 425). This does not sound like a problem. One key to a successful, functioning democracy is the uncensored exchange of opposing ideas and ideologies. The issue is, what we see online is filtered, both by ourselves and the technology itself.

The modern world is filled with information, a large portion of which is useless. To avoid inundation, we must choose what we wish to encounter. Most of us turn to information that is compatible with our political views or interests and ignore most everything else. If, for example, someone was fascinated by footwear, they might follow the social media accounts of shoe companies and artisans. This person would be up to date

about advances in shoemaking, but less informed about movie awards or the latest in interior design. While this is a bizarre illustration, it is not so different from the situation many of us are in today. Professor and scholar of philosophy C. Thi Nguyen calls this an epistemic bubble. An epistemic bubble is created by exclusion. In other words, relevant informational sources are omitted (Nguyen 143). In certain social media sites, such as Facebook, epistemic bubbles can be created inadvertently. We follow people based on social reasoning: we like them or find them humorous or enlightening. Facebook notes this and fills our home feed with more of what we enjoy. Our normal social behaviors form bubbles. Dr. Nguyen notes, "Friends make for good parties, but poor information networks." (Nguyen, 144)

Thankfully, epistemic bubbles are easy to pop. It is simple to shatter your bubble by making an effort to find other relevant sources. Other information is still reliable and true, but may not be what you are interested in. However, this is easier said than done. Say someone in your social circle starts to discredit sources that do not align with your interests and views; others begin to reinforce their claims. Soon, you find yourself agreeing with them. You never look at different information anymore. After having everyone around you agree with you for so long, your confidence in your political opinions is strengthened. Information outside of your bubble is wrong. You would bet your money, your soul, and even your first born child on it.

If you mistrust other sources, your bubble hardens and becomes a chamber. Scholars in the social sciences call this an echo chamber. Unlike epistemic bubbles, echo chambers are extremely robust. They are built by both confirmation bias, where all views are agreed upon and reinforced, and disconfirmation bias, where opposing opinions are deliberately (and often maliciously) undermined (Nguyen 146). This creates a deep mistrust between groups of people where there might have been no hostility previously. Recent studies show that ordinary Americans increasingly distrust those on the "other side" and find them to be hypocritical, close minded, and selfish (Iyengar et al. 129). Again, one key part of a healthy democracy is the open and free exchange of opposing ideas. But suddenly, no one is willing to listen to the other side.

At first glance, social media seems to be a solution to this issue. Major platforms, such as Twitter, cite community building as a founding principal of their company ("About Twitter | Twitter for Good"). Facebook CEO Mark Zuckerberg has testified in front of congress, maintaining the claim that Facebook is committed to fostering "positive connections" ("Facebook CEO Mark Zuckerberg Complete Opening Statement", 1:43). Social media was meant to be a tool for communication among all types of people.

Despite whatever good intentions social media was designed around, the reality is that it has exacerbated the problem. Dr. Robert Elliot Smith, a professional artificial intelligence (AI) engineer whose research focuses on technological bias, says social media algorithms do not prioritize civil debate. Rather, they accentuate the small minority of online voices who, regardless of what they learn or hear, never change their opinion. These voices come to dominate the discussion (Smith). The AI in algorithms has one goal: increase profit by guaranteeing the maximum amount of human interaction on a page. The more controversy an online page elicits, the more interaction, or clicks, it will receive. When controversy exists, divisions, and with them, echo chambers, emerge. Dr. Smith cites the 2016 story about the google search "unprofessional hair" bringing up images of mostly African American women. Controversy flared; AI had achieved its goal. Echo chambers are further solidified by our technology.

With so many powers working against it, is it possible anymore to have a substantive debate? Or will echo chambers continue to dismantle this foundational aspect of democracy?

I pulled up the voter database and dialed my first call. There was no answer, so I sent them a text reminding them to vote for my candidate. I called a new number. No answer. The third time I dialed, someone picked up.

"Hello?" they said. It was an older man's voice.

“Hey there, may I speak to Fred?” I asked.

“Speaking,” said Fred. I could feel his eyes narrowing through the phone. “Can I ask who this is?”

“You sure can. My name is Arjun, I work for Representative Singer. He’s running to be our next County Commissioner. Are you planning to participate in caucus this year? We need all the support we can get. I–”

“I’ll stop you there, Archie,” Fred said, cutting me off. “Tell me, what party is this Singer guy from?”

“He’s a Democrat.”

“Ah. I don’t vote Democrat anymore, not after how they’ve ruined this country. You shouldn’t either.”

“Alright Fred, have a good day.”

All in all, it was not my worst call with someone who did not like the Democrats. I have had people scream expletives at me for a few seconds before I understand the message and hang up. At the time, I shrugged and moved to the next call. I had never before had a real conversation about the issues with a member of “the other side.” Now, looking back, I wonder if I could have altered the exchange. Yes, Fred dismissed my efforts right after learning which political party my candidate was from, but I would have done the same if our positions were reversed. Is it possible to work in politics without becoming a part of polarization? Am I normalizing polarization by participating? Or worse, am I perpetuating it?

As information accessibility and social media use rose in the past few decades, so has affective polarization in the US (Iyengar et al. 132). These trends directly connect echo chambers to political division. Polarization is a natural element of social identity. We want to feel a sense of community with others through shared ideology, so we divide ourselves based on our partisan identity. This is formed when we are young, and it is unlikely to change throughout our lives, barring some dramatic change in personal situations (Iyengar et al. 130). This tribalism is nothing new, but its level of intensity is. The number of Americans with a favorable view of the opposing political party has fallen from 50% to 25% in the past 35 years (Iyengar et al. 132).

When parents were asked, in a survey conducted in 2012, what their thoughts were on their child marrying a member of the other political party, half of Republicans and a third of Democrats said they were opposed to such an arrangement (Iyengar et al. 132). Studies have shown that political biases run even deeper than racial biases. In one study, participants were asked to select one of two candidates for a university scholarship. The two had similar academic records, but one was African American and the other was white. The participants were also told which one was a Democrat and which one was a Republican. Very little racial bias was shown (most of the white participants actually chose the African American candidate). On the other hand, Republicans overwhelmingly chose the Republican and Democrats overwhelmingly chose the Democrat, even if their candidate had a worse GPA (Iyengar et al. 133). Participants chose their candidate based on their political affiliation instead of their credentials.

This should be disturbing to any citizen of a democracy. The reason the open exchange of differing opinions is such an integral aspect of a democracy is rather simple: hearing an opinion different than your own causes you to think. That is all. Thinking. At its heart, that is the greatest gift democracy has given humankind. The ability to look at multiple aspects of an issue and form your own individual belief. If there is no debate, then there is no thought. If there is no thought, then there is no democracy.

In a recent talk on how disagreement can be beneficial, entrepreneur Margaret Heffernan opened with the story of the physician Alice Stewart. In 1953, Dr. Stewart was given a small sum of money to conduct her research on childhood cancer. Through her investigation, she discovered that children of women who had been X-rayed while pregnant were far more likely to contract cancer. Despite the clarity of her findings, not everyone was convinced. Statistician George Neal decided to help Dr. Stewart prove her discoveries, but not in the

way one might expect. “My job,” Neal said of their work together, “is to prove Dr. Stewart wrong.” (Heffernan) Through their arguments, through their conflict, they wrote a fully fleshed out scientific paper that transformed the medical world. Today, pregnant women are no longer X-rayed. From disagreement came active thought. Conflict *is* thinking.

America, it seems, is a divided nation. We stay in our political groups and glare at the other side from across the room. Our political divisions run deeper than ever.

If I want to work in politics without being a part of the problem, I have to do more than my job. I have to seek out disagreement and debate. I have to learn understanding for those who do not agree with me. We all do. Democracy only works if everyone thinks. And I think democracy is worth preserving.

On a suburban street in Mt. Lebanon Pennsylvania, the Mitchells and the Gateses live in neighboring homes. The Mitchells have a Biden sign in their front yard and the Gateses have a Trump sign. A typical, divided neighborhood.

Or is it?

Next to the political signs, both families have a homemade sign with an arrow pointing at the other house. Written on them are the words “we love them” and “one nation” (Ansberry). Despite the difference between the Mitchells and Gateses, they are close friends. “It boils down to respect.” Chris Mitchell says. Bart Gates agrees—“Recognize that the other person deserves respect. Be willing to consider their opinion.” (Ansberry) It is difficult not to feel proud of these families. This is what we all want: to listen and be listened to, to respect and be respected.

The day was getting late. Elliot flicked on a lamp so we could see what we were doing.

“A couple more calls, then we’ll call it,” The campaign manager yawned and rubbed his forehead. “Good work today.”

I nodded and put my earbuds back on. The next number to call showed up on the screen. The last one for today. I quickly dialed.

“This is Jason.”

“Hi Jason. My name is Arjun. I’m calling on behalf of the Singer campaign. Do you have a minute to talk about the election?”

There was a long pause. Then a longer sigh. “Ok.”

“Great! Well, as you might know, caucus is coming up in a week and if we can secure seventy percent of the vote, we will be the nominee in November. Are you planning on going to caucus?”

“You know, if I do go, I’ll probably vote for your guy. But I don’t know if I’ll go.”

“Oh, alright. If you’re busy you can always ask someone else to…”

“No, I’m not busy. I’m just… I’m just tired of politics. I used to be like you. Used to volunteer and go to caucus. But the politicians never listen to you and the campaigning can just be so… *mean.* It’s devastating when you put in so much work and then nothing happens.”

Jason was right. Participating in politics can be a vitriol filled, seemingly pointless act. And when deep divisions exist, it often gets worse.

However, if I could go talk to Jason again, that is not what I would tell him. I would remind him that democracy is worth the stress, worth the discomfort because it gives us permission to think. Nothing great is ever achieved without thinking. In order to think, we have to be willing—willing to step out of our groups and listen with respect to the other side. When we engage in substantive conversation, we maintain the sanctity of democracy. So maybe that is better than the alternative. Think about it.

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SARAH STRETZ
Preventing the Next Pandemic
1st-Year Longform 2nd Place

The world is unlike any of us have ever experienced before. Over a million have died as a result of the SARS-CoV-2 outbreak that began late 2019, and the numbers are still climbing (World Health Organization). You leave the safety of your home and you see faces half-obscured in cloth masks, warm smiles hidden, and emotion conveyed in the subtlety of a raised eyebrow. Dear friends and loved ones feel worlds away, when the expanse may truly only measure six feet. Lives have been changed, and lives have been lost while the comfort of a soft hand has been replaced with the unloving weight of a smart phone. The world is full of fear and uncertainty with every day that continues to come to pass, with no clear end in sight. The COVID-19 pandemic is ravaging the world's populations. It hasn't been the first pandemic that has come to pass, nor will it be the last. Getting through "this time" only means that there will be a next time, the next pandemic, but what if we could prevent it from happening? What if we could spot the next pandemic before it even started and intervene before it could come into fruition? I believe we can.

Situation Overview

It is believed that the origin of the SARS-CoV-2 pandemic lies in a spillover of a zoonotic disease ("SARS-CoV-2 Jumping the Species Barrier:"). The phrase "spillover of a zoonotic disease" means that there is a disease, or in this case a virus, that was carried by a vertebrate animal host and eventually "spilled over" into human hosts (Plowright). Since 1980, more than 65% of the pathogens discovered have been of zoonotic origin which happen to constitute the majority of human infectious diseases (Johnson). As the human population increases, our dense habitations are pressing into existing ecosystems. The phenomenon of spillover is most prevalent in these locations with high incidence of exposure to animals which increases opportunity for infection (Johnson).

Zoonotic spillover is a significant health threat and has been so for a long time, so what is being done about it? In 2008, a group composed of the FAO, WHO, OIE, UNICEF, World Bank, and EU, among others, developed a document of strategies titled "Contributing to One World, One Health. A Strategic Framework for Reducing Risks of Infectious Diseases at the Animal-Human Ecosystems Interface" (Mackenzie). The summation of this framework is an intention to diminish the risks and impacts of emerging infectious diseases through enhanced disease intelligence, surveillance, and emergency response systems at all levels of organization (Mackenzie). These collective intentions are more commonly known as the One Health (OH) approach, emphasizing the need for an interdisciplinary approach to combating the impacts of emerging infectious diseases, most particularly considering the health of people, animals, and ecosystems (Mackenzie). Despite increasing global diffusion of this seemingly flawless approach, there are fundamental flaws within One Health that are impeding its efficiency in meeting the end goal.

No pandemic as of yet has been predicted before infecting human beings, but not for lack of attempt (Morse). So, where have we gone wrong?

Arguably the biggest hinderances to the effectiveness of OH are the lack of communication and collaboration between involved parties, weak leadership, insufficient training, and weak trans-disciplinary relationships (Mackenzie). One Health would most likely benefit the most from a single, unified international voice to better structure and organize such a broad outreach (Mackenzie). In addition, OH shows a particular interest in zoonotic pathogens with regards to food safety and tends to focus its disease surveillance efforts towards livestock, which may be wholly detrimental to any prediction of emerging diseases as I will explain further later on.

What Are Our Options?

Surveillance

I wholly believe that the key to predicting and preventing the next pandemic lies in surveillance. Surveillance means testing animals to determine existing and emerging diseases for anything that might pose a serious threat to the human population. This testing cannot be a free-for-all, though, and requires serious consideration to the allocation of resources. The locations for testing will be determined by hotspot models, or identification of the locations with the highest probabilities of becoming victims to spillover (Morse). These places are those in which there is high incidence of interaction with known pathogenic reservoirs (hosts that harbor diseases without being impacted by them), which we will reduce temporarily to wild animals, since the majority of emerging infectious diseases have wildlife origins (Johnson).

One particular wild animal of interest as a host reservoir is bats. Bats are a known reservoir for a wide diversity of novel viruses, and they are the perfect storm for virus survival and dispersal (Mackenzie). There is an abundance of cave-dwelling bat species, of which their numbers and densities are prime situations for virus transmission (Mackenzie). Bats are flying mammals, and that alongside their migratory behaviors suggest increased likelihoods of carrying viruses across large geographic regions, making an outbreak immediately more difficult to contain (Mackenzie). There is also speculation as to the role of the brown thermogenic fat of bats in virus storage, especially during hibernation and exposure to low temperatures, which may contribute to longer incubation periods of such viruses with consequent extended maintenance of dormant infections (Mackenzie). Such evidence supports the importance of monitoring bats in particular for emerging diseases.

The focus on viruses as infectious pathogens is not coincidental. Historically, most pathogens that have reached full pandemic emergence have been viruses (Morse). It is also true that only about one quarter of human viruses are particular to solely humans hosts, and the origins of these "specialized" viruses are truly unknown, although there is suspicion that they, too, have anciently zoonotic origins (Morse). Considering the youth of such diagnostic surveillance sciences, it would be far too broad of a suspect pool to consider every bacteria, fungus, or protozoan in each tested wildlife subject, and the odds of success are augmented if we can focus solely on the pathogen with highest pandemic potential: viruses. It is also true that there would still be too large of a suspect pool to consider all of the viruses in tested subjects. However, it is possible to narrow down the frame of reference even further. Virus characteristics synergistic to spillover include RNA viruses as well as viruses with high host plasticity, in other words host diversity (Johnson). Research has evidenced a strong linear relationship between viruses that have the ability to infect animal hosts from at least two different taxonomic orders and viruses with a likelihood of human-to-human transmission (Johnson).

Another factor to consider is the means of transmission. A vector of disease is an agent that is a carrier of disease between organisms, a well-known example being the mosquito. Vector-borne pathogens are known to have a broader host range than non-vector-borne pathogens, and approximately 40% of zoonotic viruses involving wild animals have required arthropod vectors for transmission to humans (Johnson). I maintain that a constrained focus to domestical animal surveillance would be detrimental to the success of this endeavor, but domestical animal surveillance as a part of the larger whole is in reality a necessity for successful prediction of emerging infectious diseases because they play a key-role in the transmission of zoonotic viruses as intermediate reservoirs from which humans can become infected (Johnson).

To summarize my proposed plan of action, surveillance as a means of predicting emerging infectious diseases should be focused on wild animals in locations of high incidence with humans, especially when they are hunted and consumed (Johnson). This surveillance should not be restricted to but should certainly be inclusive of any bat populations in the area due to their history as viral reservoirs. Testing should also include known

arthropod vectors (like mosquitos) and domestic animal populations in the area. Across this broad net of testing, there will be monitoring for any instances of the same RNA virus(es) appearing across all of the test species, and should any virus meet all of the designated specifications it will be marked as a high risk for spillover.

Action

Now that a virus has been designated as being high risk for spillover, then what? Unfortunately, this is where the limitations of scientific knowledge come into play. There is a lot that scientists still do not know about viruses or the way in which they interact with the human body. We do not know how many zoonotic pathogens people are exposed to compared to how many successfully cross the species barrier and cause infection, and we do not know why certain viruses make humans sick but have no adverse effects on their original hosts (Morse). Once we can come to better understand the processes of transmission from animal to human host, the science of spillover prevention will reach a new frontier. In the meantime, we must make do with the information available to us.

Advances in molecular diagnostic technology will assist in pathogen identification during surveillance testing (Morse). The end-goal is to have a global genomic database so expansive and particular that surveillance teams all over the world can rapidly and efficiently identify known or novel microbes in their subjects and immediately have a sense of their associated risk factors based off of their shared characteristics (Morse).

Once there is a greater understanding of the process of virus transmission across species barriers, we will be able to identify bottlenecks in the process. Bottlenecks are circumstances of increased required specificity for effective transmission of a pathogen (Plowright). Examples of such circumstances may include human exposure to the pathogen, routes of pathogen transmission, and physical or innate barriers that combat infection of the host (Plowright). The problem here is that the bottlenecks may be different between pathogens, so the most effective means of intervention against an infectious pathogen may not be the same across all scenarios. This concept is restrained to theoretical functionality due to our lack of understanding of infectious processes, but once we ascertain that knowledge as well as have developed a functional database for pathogen-identification including their individual modes of infection, we will know how to stop a pandemic before it even starts.

In 2009, the US Agency for International Developments initiated The Emerging Pandemic Threats Program (Morse). This program has projects labeled and similarly purposed PREDICT, PREVENT, IDENTIFY, and RESPOND in relation to emerging infectious diseases (Mackenzie). The program already has PREDICT projects active in 20 different developing countries in determined hotspot locations for spillover. Data from these projects is being used to refine global hotspot mapping and modeling strategies, increasing the efficiency of surveillance efforts. This program is also a promoter of the One Health approach, focusing on the necessity of an interdisciplinary approach to preventing and combating infectious diseases (Morse). Following refinement of surveillance details, The Emerging Pandemic Threats Program seems to have sincere promise in its likelihood in preventing the pandemic. It is important to note that despite the efforts put forth by this program, if the next large-scale spillover event occurs before sufficient knowledge is collected about virus transmission and host responses, we may miss it. This does not mean that the project is not worthy of investments of time or finances in order to increase its likelihoods of success in consequent instances of need.

There is a dire need for increased cooperation and organization on both the global and local levels to face these issues. Following the resolution of the SARS-CoV-2 pandemic, it would be wise to initiate revisions of International Health Regulations, taking into account what worked, what did not, and the necessity of supplies that were not immediately at hand (Morse). On the preventative level, as it stands, public health surveillance capabilities are fragmented and restricted (Morse). If there had been organized and wide-spread contact tracing efforts implemented in the early days of the COVID-19 pandemic, it could have been possible that the spread was slowed or even stopped. Contact tracing is a widely known and appreciated method for prevention of the spread of infectious diseases, but its efficiency is hindered if the disease has spread too far before efforts

have even been mobilized. There is also the issue that on the public level there is an inadequate level of reporting as well as self-reporting (Johnson). The general public cannot complacently sit back allowing larger powers to work against the problems, it is necessary that all members play their part in providing rapid and accurate information to monitoring and tracing efforts as soon as possible in order to best deal with both instances of new diseases and the transmission of current diseases as these instances arise. As children and young adults, it is preached that we learn from our mistakes, our losses, and our failures. In the face of the COVID-19 pandemic, the world has been responding to the best of its abilities, but the responses were not good enough, and it is time that we learn from our short-comings to be better prepared for the next pandemic, not if, but when it comes.

Application to COVID-19

The ramblings of a young college student are all well and good, but how well would my proposed methods work out in the real world? I will discuss some of my aforementioned points in relation to the realities of the pandemic now impacting our world and analyze their relevance as evidence to my support, or as points for reconsideration or alteration of ideas.

To clarify a common misconception, the virus causing the pandemic is not the first "coronavirus" that the human population has seen, it is just a new strand. SARS-CoV-2 is a single-strand positive sense RNA virus with 50% genetic identity to MERS-CoV and 80% genetic identity to SARS-CoV ("SARS-CoV-2 Jumping the Species Barrier:"). The important information to take away from this is that this virus with pandemic-capacity is both an RNA virus and one with a large amount of shared genetic material with other previously-identified pathogenic zoonotic viruses. So, had there been surveillance efforts towards RNA viruses as well as a genomic database that already included the information for the MERS-CoV virus and the SARS-CoV virus, it is theoretically possible that had a surveillance team flagged the SARS-CoV-2 virus as a danger due to its status as an RNA virus and shared genetic material with known pathogenic viruses, the world could have been one step ahead of the pandemic.

There is additional supportive evidence of the previous claim that it is worthwhile to test a plethora of potential host reservoirs because coronaviruses are known to have a variable host range due to their affinity for recombination and mutation ("SARS-CoV-2 Jumping the Species Barrier:"). It is also true that bats are a known natural reservoir for coronaviruses, and that the origin of the pandemic was likely from an intermediate host in a wet market in Wuhan, China ("SARS-CoV-2 Jumping the Species Barrier:"). These facts support my previous claims that if surveillance testing in bats as well as potential intermediate hosts in areas of high human interaction (such as a wet market) were followed, SARS-CoV-2 could have been identified. I am in no manner suggesting that there was a global failure to follow these steps and that is why the pandemic happened. There is neither the organization nor existing means that would have made this possible before the pandemic struck. What I am suggesting, however, is that these suggested means of prevention *could* have worked, and if they could have worked for this pandemic it is not entirely unlikely that they would not work in the future.

As of December 5th, 2020, COVID-19 was declared the leading cause of death in the United States (Diaz). Despite this frightening truth, one day many years from now the unpleasant memories of the COVID-19 outbreak will be tucked away in the backs of our minds. Our cloth masks will be stuffed away in a drawer, and we will gather with our friends and family with no worry of what consequences may come to pass. This pandemic has assured its place in the history books along many others, but I believe that one day we will have the abilities to stop these diseases in their tracks, and they will no longer make their way into our history books. One day we will have the knowledge, science, and organization on both global and local levels to prevent the next pandemic.

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HENRY PERRY-FRIEDMAN
The Closed Road
1st-Year Longform Honorable Mention

In America, the car is synonymous with liberty. It enables us to live and travel wherever we want without relying on anyone else. It becomes an extension of our personalities. The car has shaped the country's landscape, allowing the growth of suburbs, where families could opt out of urban living while still reaping its benefits. Picture a drive-in theater, where movie-goers sit together, but separate, each shielded in their own steel cocoon, free from social interaction. While the idyllic images of the open road do seem nice, the car also brings to mind these representations of conformity, where, despite our supposed freedom and independence, we leave our neighborhood of identical houses each morning to sit in traffic along with everyone else. While car culture's shortcomings have become obvious, both governments and individuals have trouble breaking the mold perpetuated by the auto industry that has shaped the physical and cultural landscapes of America's cities. Because the car defines American culture, shifting away from our dependence on it feels like letting go of a collective identity, but that identity, rooted in individuality, can transform into a collective liberty, where true freedom comes from open and equal opportunity rather than sole property.

Initially, the car came with clear benefits to American liberty. The early growth of the car industry cam in part from Henry Ford's innovation in manufacture, where, on top of pioneering the assembly line, Kenneth Jackson, in *Crabgrass Frontier: The Suburbanization of the United States*, writes that he "simply paid his workers more for their time", in the process "[stabilizing] his workforce, [increasing] the pace of his assembly lines, and [creating] more potential customers for his product," meaning that Ford not only strategically guaranteed the efficiency of his business, but also cemented himself as a selfless, equitable person in the eyes of the public. His approach set precedent with proof of trickle-up economics in action, where giving opportunity to the working-class benefits everyone. Jackson continues that, when 1920s college students ranked the greatest people of all time, Henry Ford received third place, a rarity for those with billionaire status. Ford's proper and prosperous image reflected ideals of the American dream and aroused excitement for the growth of the automobile industry.

As roads began to clutter, competition between automobiles and streetcars led to companies like GM launching campaigns for the streetcar's removal, but by then, streetcars, slow and plagued by corruption, couldn't survive much longer. Even before taking into account the effects of the car on public transportation, Stephen Smith explains in his article, "The Great American Streetcar Myth," that government regulation already took a toll when "local governments would not release streetcar operators from their obligations to charge the uniform fare for all trips" despite wartime inflation, essentially removing any incentive for streetcar companies to improve or expand service. Smith explains that local governments, seeing lack of improvement, enacted paving requirements for streetcar operators, meaning "when automobiles started arriving in cities, their roads were literally being paid for by the competition". Streetcars could not continue under the existing regulations, so governments squeezed all they could out of streetcars to pave the way for the automobile. Recognizing that, as Kenneth Jackson notes, "Bribery and political favoritism were the most common requisites of successful applications" of the streetcar, the public didn't mind when companies like Ford overtook these corrupt monopolies, replacing slow and limited transportation with, as Henry Ford puts it, a personal vessel that allowed "the blessings of hours of pleasure in God's great open spaces" (quoted in Jackson 160). The first attempt at an equal access transportation system failed as a result of the selfish greed ingrained in the current understanding of Liberty, so, as Ford painted the classic scene of the open-road, he laid out the failings of social programs that only took from the people rather than gave. To take control of one's own movement meant resisting a hostile power.

Because stepping into a car meant giving up certain legal privacies that citizens enjoyed before the automobile, a mechanism for the marginalization of people of color resulted, as police could more easily act upon their prejudices. In her book *Policing the Open Road: How Cars Transformed American Freedom*, Sarah Seo explains that "in the span of a century, towns and cities throughout the country—and not just in metropolitan centers—expanded their forces and professionalized beat cops, turning them into 'law enforcement officers.'" Where before the car, committing a crime most likely meant a serious offense, suddenly respectable citizens

broke the law every day, forcing police forces to expand and organize in order to face this new league of outlaws. Rather than deal solely with real criminals, cops now policed all car-owners. Seo continues that before the car,

> police mainly dealt with those on the margins of society, voluntary associations governed everyone else. Churches enforced moral norms, trade groups managed business relations, and social clubs maintained social harmony. Citizens and private groups, including banks and insurance companies, pursued criminal investigations and initiated prosecutions.

Where pre-car, various members of society enforced different rules, the police who enforced a relatively small set of laws on a small group of people became nearly omnipotent. Cops that needed a warrant to search one's house could use their discretion in determining whether they had probable cause to search a speeder's car, as, because cars traveled on public roads, the 4th amendment, which prohibits unreasonable searches, didn't apply. When people did argue that police had abused their power, Seo writes that "judges tended to side with order and security and conclude that zealous and intrusive police action for the sake of the public welfare was reasonable and did not compromise the values of a democratic society," instilling in police a sense that they could do no wrong, as when someone deemed their actions questionable, the court often defended them. It's no surprise that people of color take the brunt of over-policing; Seo claims that traffic stop killings happen "almost exclusively to minority drivers." Where driving once represented a freeing alternative to public transportation, the mostly inconsequential reliance on slow trains and a fixed route paled in comparison to the sweeping supremacy of law enforcement that meant incarceration and death for many.

Because wealthier white families could afford cars, they could forgo urban life and build on their individual liberties, leaving cities to decay and contributing to racial inequality. In 1967, the Kerner Commission, a presidential commission tasked with determining the roots of race riots in Detroit, determined that, as opposed to the common belief that black men carried inherent violence, riots resulted from the fact that "White society is deeply implicated in the ghetto. White institutions created it, white institutions maintain it, and white society condones it." While governments continued to support the burgeoning white middle class after World War II with development of the suburbs, The Federal Housing Commission blocked residents of predominantly black neighborhoods from obtaining mortgage insurance (Gross), keeping them from migrating to the suburbs and compounding the effects of white flight, supporting the inherent prejudices that brought whites to the suburbs with guidelines that ensured segregation.

Once urban areas consisted mainly of minorities forced into continued poverty, cities began to suffer. Memorably, New York's 'Welcome to Fear City' campaign in 1975 propagandized the city's dire state as it neared bankruptcy. Pamphlets handed out to incoming travelers read, "By the time you read this, the number of public safety personnel available to protect residents and visitors may already have been still further reduced[. . .]. Until things change, stay out of New York City if you possibly can" (qtd. in Baker 2015). While New York's police and firefighters exaggerated the claims of danger, they got their point across: the city cannot sustain order under these conditions. As assault cases doubled and robberies increased tenfold in the city from 1960 to 1975 (Baker), more who had the means left while those who couldn't became angrier. As Kevin Baker of *The Guardian* reports, as people, mistakenly blaming firefighters for larger problems, bombarded the few remaining ones with bricks after responding to calls, "the Bronx, [a] bastion of upper-middle-class living until the mid-60s, burned regularly a decade later," oftentimes as a result of arson by tenantless landlords looking to collect insurance money, part of a vicious cycle where governmental problems led city-dwellers to continue destructing in order to get by. As certain classes enjoyed the benefits of suburban living brought on by the car, they forced others into squalor.

In an effort to become more car-friendly, cities, hoping to win back suburban families, enacted comprehensive urban-planning projects that only continued to tear apart the community once present, bringing the isolation of the suburbs into urban life. Most notably, Robert Moses, known as New York's 'Master Builder', built 13 bridges and 416 miles of parkways throughout the city and the state (Sarachan), in the process destroying the

homes of 250,000 people between the 30s and the 60s (Robert Caro, quoted in Sarachan). On top of the careless displacement of hundreds of thousands of people, Moses' slicing and dicing of New York City left communities in shambles. As Clay McShane notes in *Transforming the use of Urban Space*, Moses and his contemporaries "made a decision to destroy the living environments of nineteen-century neighborhoods by converting their gathering places into traffic jams, their playgrounds into motorways, and their shopping places into elongated parking lots," essentially bringing the worst parts of suburban life to urban residents that the government blocked from moving to the suburbs as a result of redlining. Post-war urban planners shaped cities for outsiders, hurting the city-dwellers who couldn't leave.

In order to rehouse the many displaced by urban reconstruction, cities built low-income housing, continuing the theme of suburbanizing urban areas with single structures acting as their own subdivisions, homes stacked vertically but achieving the same outcome of destroying the city's community. These structures, instantly recognizable by their incongruous, monolithic facades, mimicked the general layout of a suburb with each building offset from the street by green space, just without any of the luxury. As Colin Marshall explains in his article "Pruitt-Igoe: The Troubled High-rise That Came to Define Urban America," one of the most infamous public housing projects, Pruitt-Igoe, built in St. Louis in 1954, "b]ecame a byword for the kind of dysfunctional urban abyss that [. . .] Americans who had the means believed they were escaping by moving out of cities. From the safety of their new, suburban communities, they looked upon central cities as too dirty, too crowded, too criminal—and, in many regions of the country, too black." This white flight indicated that cities scared off the very people they tried to re-attract with comprehensive urban planning that seemed to exacerbate the problems that made white people leave in the first place. On top of their aversion to black people, white people could now cite increased crime and filth as reasons to leave. When the government demolished Pruitt-Igoe in 1972, just 18 years after its opening, architectural historian Charles Jencks called it "the moment modernism died" (Marshall), leading to the realization that societal problems often stem from the decisions of those in power rather than the most disenfranchised. Finally, the government and the public acknowledged the problems with the cold detachment that defined modernism and nearly destroyed American cities.

Once unrest reached those in power, governments began listening, leading to the popularity of historical preservation and theories regarding the way a built environment can affect the strength of community. Political activist Jane Jacobs most famously summed up these themes in her 1961 book *The Death and Life of Great American Cities*, claiming that "there must be eyes upon the street, eyes belonging to those we might call the natural proprietors of the street. The buildings on a street equipped to handle strangers and to ensure the safety of both residents and strangers, must be oriented to the street," meaning that a strong, safe community comes from a built environment that allows for interaction. Set-back high-rises like Pruitt Igoe separated residents from the street, meaning the liveliness one envisions on the streets of a healthy neighborhood didn't exist, as streets served strictly for travel rather than gathering. Jacobs envisioned a neighborhood that didn't mushroom from the ground at once by people who would never experience it, but one that formed naturally around community spaces, where people interact with one another outside of their homes. Crime became prevalent because, with no one to look out for one another, people felt like they had no other choice than to turn to crime, and once they did, no one stepped in to stop them. Jane Jacobs concluded that dense neighborhoods lined with shops and gathering spaces lend to safety, regardless of socioeconomic status.

With this theory, Jacobs rallied support to stop the construction of Moses' Lower Manhattan Expressway, proposed in 1960, which would have destroyed much of Greenwich Village (Lawson), and soon after, New York passed its Landmark Law (Bryant), protecting historic structures and neighborhoods from further destruction. Only once Moses' plans affected an affluent neighborhood like Greenwich Village did those with a voice step in to stop him. While now, many cannot fathom how New York would feel without Greenwich Village, in reality, developers bulldozed communities all over the country, but because they were poor, today they are forgotten.

Despite clear correlation between car-centric urban planning and bleak conditions for poor city dwellers, blame continued to fall on the easiest target. The broken windows theory, devised by social scientists George

Kelling and James Wilson and popularized during the mayoral reign of the treasured Rudy Giuliani, details "the process whereby one broken window becomes many[. . . ,] that serious street crime flourishes in areas in which disorderly behavior goes unchecked." Kelling and Wilson, like Jacobs, acknowledge the effect of surroundings on crime, but use that theory to punish the petty vandals who supposedly degrade a community's relationship with the law. Instead of observing the larger conditions that lead to both petty and serious crime, this theory suggests that to prevent the serious crime, cities must prosecute the poor people of color who already lack opportunity before a criminal conviction, only making it harder to succeed and easier to turn to serious crime.

This practice only contributed to cops' sense of power, as where before someone had to be in a car to be searched, now cops could stop and frisk anyone they deemed worthy. While crime did decrease in New York under Giuliani, a UChicago Law Review study by Bernard Harcourt and Jens Ludwig finds this drop correlates with larger trends unrelated to policing, including the waning crack epidemic. They determine that serious crime, often stemming from lack of resources and opportunity, does not decrease with conviction of petty crime. This practice that meant to improve poor communities did the opposite by allowing police to act more easily on their racial biases, furthering the divide between the poor and the wealthy, whose petty crime went unnoticed. Today, despite the tacit understanding of the crimes of wealthy frat boys and businessmen, many still form stigmas around the criminals of necessity.

As social problems caused by car culture have become clear, many envision a future where cars become a shared resource, still allowing a sense of mobile freedom, but with greater access for those who can't afford a car. Because we cannot simply reform our cities for perfectly equitable transportation overnight, car-sharing forms a bridge that works with existing suburbs and developments. Nathan Heller, in "Was the Automotive Era a Terrible Mistake?", argues that

> The so-called golden age of the road makes clear that cars didn't construct American culture; American culture constructed cars. Auto manufacturers needed to re-stoke a market that had cooled during the Second World War." He paints the romanticization of the car, something manufactured for profit, as a violation of our American individuality, where outsiders control our emotional choices. When large businesses require punitive investment just so we can exist comfortably in the suburbs, freedom and property don't seem to coincide.

Heller continues that with this assumption comes "a belief that the true problem is *these other people*", where, because we separate ourselves into our personal pods, we can more easily separate and blame others on the road. This idea has societal implications, extending out to the blame people place on poor POC for the problems caused by the wealthy.

While the desire to blame others did not come from the car, the car certainly empowers us to do so. Heller envisions the car as a shared resource that potentially drives itself. By changing the perception of the car as an extension of ourselves to an appliance, we can break the emotional connection that blinds us to the problems the car's created. Forced to think more collaboratively, we will begin losing the *other people* problem and see the car's impacts more rationally. This solution doesn't mean that those truly emotionally connected to their car cannot keep one for themselves for Sunday drives, but even these car people can benefit, letting them own their impractical dream car while reaping the benefits of a shared system for everyday use. As long as many families each own two do-it-all SUVs, car-pooling and public transportation will remain purely voluntary for those with the means to avoid them. When the number of cars available match the number of cars needed, people will have no choice but to interact with each other to fairly share this resource, reconnecting people with the street that's become so distant in the suburbs. Cars as a public service will compete with existing transportation systems and force them to improve. As long as the wealthy can reject public service, public service won't meaningfully improve. The idea of these services as charity only meant for the poor only strengthens division and ensures that investment remains minimal. When we see these as amenities rather than aid, they become perks of a truly free society where all can enjoy comfort and convenience without huge investment.

Naturally, people fear self-driving cars. When we lack control, we feel greater risk, hence why a plane

crash strikes more fear than a car crash. Really, we deal with features of a self driving car already, such as turn-by-turn directions, cruise control, and automatic braking. Like with any new technology, people fear a dystopian future where suddenly we've lost all free will, but as we see cars gaining more and more assistive features, self-driving will normalize. This technology means that people won't need to go through the hoops of getting a driver's license, something difficult without a car in the first place. When we realize the mobility it can bring to the disabled and the elderly, we see just how much our fear deprives people of the right to movement that many take for granted. HAL-9000, the quintessential representation of the dangers of technology, only failed because of his most human trait, his inability to accept his mistake, to blame it on others as we've seen so many do in this essay.

Few argue against the car as a key part of American culture. It has influenced some of the greatest art of the era, even shaping the earliest rock and roll music (Historic Vehicle Association) and making possible classics like *Fear and Loathing in Las Vegas* or William Eggleston's photography. The best art, though, often responds to imperfection, pointing out the romance in our desire for vice. These high cultural works uncover the worst aspects of society, asking for change. Respecting the car's positive effect on mobility and comfort, we can move to bring those effects to all, creating a truly free society where each, regardless of wealth or race, has the opportunity for mobility, both in space and in society. Because we tend to maintain separation, we need a governmental push to collaboration, where, once our separate spheres dissolve, subjugation becomes emotionally difficult.

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MARIAN WALMER
Melting Away: How Does Climate Change Stand To Impact the Ski Industry?
1st-Year Shortform 1st Place

[Editor's note: this essay originally included photos of Arapahoe Basin and Breckenridge snowmaking; a photo of Aspen; and a photo of Jeremy Jones (POW's founder) in Washington, D.C.]

There really is nothing like it. It was one of those days—four inches on the ground when the chairs started spinning and it was nuking hard enough that another three had fallen by lunchtime. The place was almost empty, and the silence made me appreciate it even more.

This scene is one that many Colorado skiers know and love. From Summit County to Vail, to Steamboat and Telluride, Colorado is home to some of the best skiing in the country. This, of course, is no secret, with large resorts like Vail and Aspen holding immense brand recognition that draws a huge number of tourists every season.

The ski industry is undoubtably one of the most important pieces of Colorado tourism, identity, and of course, economy. At Vail alone, the average annual skier days (the number of total visits to a resort) were between 12 and 13 million, according to a study by Rudi Hartmann and Shelley Broadway. That's 13 million skier and rider visits, all of which have at least paid for a pass of some kind, and most of which will likely spend more money at the resort.

On a state-wide scale, the importance of the ski industry is even more pronounced. Colorado Ski Country and Vail Resorts jointly announced in 2015 that the ski industry provided $4.8 billion to the state of Colorado. This goes without mentioning the 46,000 year-round jobs, with wages totaling $1.9 million.

Despite the prosperity and excitement brought to the state of Colorado through skiing and snowboarding, an undeniable and inevitable challenge looms in the background, creeping into the picture slowly and silently. Climate change stands to pose a huge threat to the ski industry in Arapahoe Basin uses snowmaking to push forward their opening day.

Despite public consensus, climate change's impact will be more complex than lower snow totals. Kelly McCusker and Hannah Hess of the Climate Impact Lab, an organization measuring the economic impact of climate change, show that Breckenridge could experience 32 fewer days below 32 degrees Fahrenheit by 2080, and as many as 66 fewer days below 32 degrees in a high-emission scenario. This would not only contribute to lower snow totals, but also hinder resorts' abilities to combat those lower totals with artificial alternatives.

Even with an explanation of temperature differences, we still haven't fully shown how climate change could affect the ski industry. I talked to Mike Nathan, the Sustainability Manager at Arapahoe Basin Ski area, about the details of climate change and its possible impacts. A-Basin is a mountain known and loved by Summit County locals and Coloradans alike.

"We are very lucky here at A-Basin, being the highest ski area in the country and located along the Continental Divide, we get lots of snow and persisting cold temps long after most other resorts begin to see a shift to spring," Nathan emphasized. But climate change is even more complex than snow totals and temperatures.

"While most long-time employees, and our snow and weather forecasters here at A-Basin probably wouldn't say they've seen shorter seasons or less snow overall, I think they'd all agree that the timing and intensity of our winters is becoming very unpredictable." This unpredictability creates even larger headaches for executives and employees across the ski industry. Unpredictable winters prevent ski area operators from knowing when their next big storm will be – this unpredictability can cause a disparity in season length from year to

year. “While we still get close to the same annual snowfall, we might not be able to rely on heavy snows around Thanksgiving and Christmas the way we once did. Also, the last time we stayed open until July 4th (the 10-11 season, my first year working at the mountain) we followed that year up with one of our shortest in 11-12, closing with little notice on May 9. A month short of our expected early June closing.” Without a guaranteed season length, guaranteed income is more elusive.

While these erratic weather patterns cause headaches, snowmaking has been a band-aid solution for many resorts around the country. A-Basin covers 8% of their skiable terrain with snowmaking, and other resorts in Summit County rely on snowmaking on about 20% of their Breckenridge, the morning after its first snow of the season. A snow gun at Breckenridge helps prep for a long season. For resorts in Colorado, snowmaking provides a solid base, allowing for earlier opening days and elongated seasons.

One would think that snowmaking could be a feasible, comprehensive solution to low snowfall. After all, resorts in the Midwest rely on snowmaking for up to 98% of their skiable terrain. If natural snow becomes even less reliable, why not just cover an entire mountain in snow guns?

Well, it’s not that simple, Nathan explains. “Snowmaking helps us get a few runs open early in the season, and also helps to keep snow compacted and available to ski on late into the spring on those same runs and key areas of our mountain – which of course helps. Fortunately/ unfortunately, skiers and riders, especially in Colorado, have much higher standards when it comes to the conditions they want to ski… that I don’t think relying solely on snowmaking would get us very far in the long run.” Colorado is known for it’s deep powder and smooth groomers - manmade snow can have an icy, stickier feeling.

It’s obvious that something needs to be done to prevent major damage to the Colorado ski industry and economy. Despite a seemingly less severe potential impact on higher elevation resorts, mountains like A-Basin aren’t out of the woods yet. A frequently forgotten important element of the ski industry is skier development – something that stands to take an even bigger hit from climate change. “Very few skiers and riders start their lifelong pastime at a major ski area in the Rockies,” says Nathan. “Most start at these smaller local hills. We fear that climate change will severely impact these small ‘feeder’ areas and will eat into our broader skier and rider customer base.” This fear is echoed by Auden Schendler, an executive at Aspen Skiing Company, in an interview with Seth Boster of the Colorado Springs Gazette. “So, we see [climate change] as a clear and present danger to our business in the short term. Higher resorts like ours are gonna do better, but that’s no solace,” Schendler says.

However, people like Auden and Mike are taking these fears and turning them into action. Arapahoe Basin has received credit for their actions to promote a more sustainable message. “A-Basin feels that while it’s important for us to promote climate legislation, which we do very loudly and frequently, as well as pursue highly impactful greenhouse gas reduction projects, which we’ve also done well, it is equally, if not more, important for us to use our position to shift peoples’ behaviors to be more environmentally conscious,” says Nathan. A-Basin has been active on social media about their sustainable ideology, with their “Sustainability Sunday” series on YouTube outlining their actions and advice on keeping a sustainable mindset.

Other resorts and corporations, such as Vail Resorts, are making their own efforts. Vail is committing to net zero carbon emissions by 2030; Aspen is hoping to be at least 70% reliant on renewable energy by the same year. Along with this, Vail and Colorado Ski Country (and many other smaller organizations) have vocally supported and lobbied for legislation to fight climate change—for example, House Bill 1261. Bill 1261 passed in Colorado in 2019, with an aim to reduce statewide pollution from greenhouse gasses. These pieces of legislation are also being supported by organizations like Protect Our Winters. Founded in 2007 by Jeremy Jones, a professional snowboarder, the organization is working to de-politicize the discussion around climate change.

Overall, climate change is a complex issue. Everyone knows and agrees that it likely won't be solved easily—it will take action on multiple different levels, from companies and organizations across Colorado and around the country. But with positive strides being taken by resorts like Arapahoe Basin, the skiing world has years of good skiing to look forward to.

LILY SERGI
Decriminalization Can Only Benefit Sex Workers: Anti-Prostitution Laws Are Unsustainable and Washed Up—It's Time to Make Some Changes
1st-Year Shortform 2nd Place

Emily Kask

Drug addicts. Crackheads. Whores. Sluts.

These may be the phrases that run through your head when you think of a sex worker. However, sex work is a lot less black and white. Sex work can be used as a form of sexual liberation for some, a means of survival for others. Now, with modern technology, sex work takes many different forms. Cam girls, porn, sex hotlines; sex work now transcends traditional ideas of prostitution. Regardless of the circumstances, it is inevitable. According to the *Yale Law Review*, sex work has existed since the very beginning of modern civilization and will continue to exist. In fact, it is likely that you already support it.

If you believe in bodily autonomy, worker's rights, and even freedom of expression, you likely support sex work.

Amnesty International defines sex work as "the exchange of sexual services (involving sexual acts) between consenting adults for some form of remuneration, with the terms agreed between the seller and the buyer." It is, at its core, a victimless crime. As long as both parties are of age and able consent, no real damage is done. However, many countries, including the United States have laws banning sex work. These laws include prostitution while HIV-infected, pimping, pandering, soliciting prostitution, loitering with the intent to commit prostitution, conspiracy to commit prostitution, and keeping a house of prostitution. These laws harm sex workers, fining them and incarcerating them for doing their job.

"Labor is labor, no matter what sleeve in which we wear it," Said Becky Smith of the Chrysalis House, a program that works to support sex workers.

In the United States, these laws stem from the White Mann Act of 1910. According to History.com, congress created this law due to concerns that white American girls were being forced into sex trafficking my immigrant men. The Act, at its core, is extremely problematic. First of all, it is racist and xenophobic, since it was created to protect white women from immigrant men. The act also works under the assumption that women do not have the autonomy to go into sex work on their own accord.

As a country, we have advanced from this mindset but our opinion on sex work has not. The country is in need of a change. Sex workers are extremely vulnerable due to the criminalization of their occupation. They are more at risk for mental health issues and STDs, and they are more likely to experience domestic, sexual, verbal and emotional violence. Not to mention, sex work is an occupation that is disproportionately made up of marginalized groups; minorities, LGBTQ+, the homeless and the mentally ill. These issues largely stem to the

underground nature of their occupation. They cannot advocate for themselves due to fear of persecution. Because of this, we as a country need to protect these populations and respect the choices that they make. This is best done by the decriminalization of sex work; the removal of laws that penalize sex work.

The decriminalization of sex work may seem like an extreme take, but it has proven itself to be the solution that benefits sex workers the most. Countries such as New Zealand, Australia and Canada have all established decriminalization in their countries.

The benefits of decriminalization have been seen across the board, but one significant benefit is its effect it has on health. According to a 2015 study published by the *Lancet*, a female sex-worker working anywhere in the world is 13.5 times more likely to contract HIV than women in the normal population. In many countries, carrying condoms can be used as evidence for soliciting prostitution. Therefore, many sex workers avoid carrying protection in order to avoid prosecution, which means that many sex workers are having unprotected sex. Decriminalization would prevent this, as sex workers would not have to be concerned about being arrested, allowing them to carry as much protection and demand their partners to do so to without fear. A study published by the *Lancet* shows that the decriminalization of sex work would reduce the number of general HIV infections by 33% to 46% in the next decade. Not only would decriminalization of sex work affect sex worker health, but overall public health as well.

Decriminalization has also been shown to reduce violence in sex-worker populations. Sex workers are disproportionally affected by violence. According to a study published in *Reproductive Health Matters*, 36.3% of female sex workers reported experiencing violence related to their job. Some of this violence is even perpetrated by police. According to the same study by *Reproductive Health Matters*, 7.9% of female sex workers experienced sexual assault and physical violence from police. This is not only harmful to their physical health, but to their mental health as well. According to a 2008 study by the *Journal of Trauma Practice*, 68% of sex workers throughout the world have symptoms of PTSD, causing sex workers to be even more vulnerable. Decriminalization would give the sex workers rights to advocate for themselves to authorities, which would make them less of an easy target for violence. According to the Institute for the Study of Labor, sexual abuse and rape cases dropped by 30% to 40% after the Netherlands decriminalized sex work. Decriminalization could also help reduce human trafficking.

Decriminalization would also aid in getting rid of the harmful discrimination that surrounds them. This discrimination goes hand and hand with the laws that put sex workers in jail. The idea that their occupation is wrong and harmful to society reflects on the people themselves. Again, many sex workers come from marginalized populations, so their decision to partake in sex work can be from a plethora of factors. Sex workers are often discriminated against by authorities. It is especially common for people of color or transgender people to be accused of soliciting sex, even when they have no experience in sex work. Decriminalization gets rid of this discrimination, as authorities and others would have no reason to persecute or over-police these populations. A 2017 study by the British Journal of Criminology shows that sex workers in New Zealand, where sex work is decriminalized, experienced less discrimination from authorities compared to their experience working before the Prostitution Reform Act of 2003. For this same reason, decriminalization of sex work has also been shown to reduce human trafficking.

“I am a human trafficking survivor, and decriminalization is the number one way to combat this issue,” said Pepper Greggs, who works for Citizens of Bodily Autonomy.

Decriminalization will improve the relationship between sex workers and authorities, allowing victims to come forward without fears of arrest.

Studies have shown that decriminalization will not encourage sex work by any means. According to a study published by Sexuality Research and Social Policy, decriminalization does not correspond with an in-

crease in people paying for sex. This just goes to show that those who pay for sex will continue to pay for sex, regardless of the law. Retracting these laws will only make things safer for sex workers.

At the end of the day, sex work will always exist in some form, so it is imperative to sex worker populations that we protect them and their basic human rights through decriminalization. As of now, the criminalization laws are federally based. You can show your support for decriminalization by voting for decriminalization and calling and writing to your representatives to advocate for changes.

Right now, you can support sex workers by getting the conversation started. Regardless of their legal standing, sex workers will face a huge stigma around their occupation.

"Decrim itself is not going to help, it's a group effort and that's not something that's going to happen overnight, obviously, or we would've fixed it by now. I think the conversation is a good place to start." said Greggs.

Just by raising awareness, starting conversations and checking your own prejudices and biases, you can help destroy this stigma, and make the world a more survivable place for the modern-day sex worker.

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DANIEL GRIFFITH
No Minced Words
1st-Year Shortform Honorable Mention

In September of 2019, the Senate Climate Task Force, a congressional forum dedicated to raising awareness of and discussing issues surrounding climate change, invited several young environmentalists to speak. The activists put forward a sentiment of how lawmakers must do better to address the urgency of climate change. The most outspoken of these teens was Greta Thunberg, a 16-year-old student from Sweden. Thunberg gained fame only a year prior by inspiring an international movement of school strikes intended to raise awareness of climate change. During her time on Capitol Hill, Thunberg emphasized the necessity for immediate action to counter climate change, over discussion of whether or not steps needed to be taken. Her most famous quote of those two days solidified her view: "I know you're probably trying very hard, and this is not personally to any one of you but generally to everyone. I know you're trying, but just not hard enough. Sorry" (Johnson). Thunberg makes it very clear that direct action is what is needed to solve the issue of climate change. Yet many people found her statement controversial, calling into question her expertise or criticizing her seeming aggressiveness. Greta Thunberg's assertion, however, was not only valid, but was also entirely appropriate for the situation.

When Thunberg's detractors questioned her qualifications to discuss the issue of climate change, they failed to disqualify her from the conversation because the evidence she provided stood on its own regardless of her age and experience. Instead of giving a prepared speech as her testimony to the senators, she simply submitted the IPCC's 2018 Special Report on Global Warming of 1.5°C, as it contained all the evidence of climate change's ongoing impact she saw as necessary. "If you want advice for what you should do" she said, "invite scientists, ask scientists for their expertise. We don't want to be heard. We want the science to be heard" (Gambino). Thunberg's critics have called her out for not being a professional in the field of environmentalism. However, she put no weight on any kind of authority she may have pertaining to the subject. Instead, she simply presented the lawmakers with clear evidence that anyone could find with a quick Google search. One might call this approach disrespectful, showing a lack of real initiative for an important event. But rather, it makes her point very clear: the proof of climate change is readily available for anybody to find; surely members of the senate who are invested in the fight against climate change are cognizant of it. Consequently, any response apart from action is a waste of time.

Despite claims that Thunberg's comments were unnecessarily rude, her upfront attitude towards the senators was completely in line with the circumstance. She, as well as the other young activists who came to the forum, were invited to speak their minds on the subject of climate change and what ought to be done in order to remedy it, not to churn out bits of commonly known evidence. However, it seems that this is in fact what was expected of them by both onlookers and politicians. Much of the criticism aimed at Thunberg paints her as a falsely inspirational figure, being used to push an agenda. Comments from politicians, such as Senator Ed Markey calling her a "superpower," only served to worsen such a reputation. But it seems that Thunberg anticipated a response of Markey's sort (Gambino). "Please save your praise, we don't want it," she said. "Don't invite us here to tell us how inspiring we are without doing anything about it. It doesn't lead to anything" (Gambino). Thunberg did not come to Capitol Hill to deliver platitudes. Instead, she intended to make a real impact with the opportunity she was given.

It is understandable that many find Greta Thunberg's manner of speaking to be brash or even inappropriate at times; she does not mince words under any circumstances, not even for politicians. But it would be wrong to call her discourse at the Senate Climate Task Force inappropriate, when she delivered a series of insightful points concerning the attitude of lawmakers toward climate change. Instead of promoting cyclical discussions

on the reasons why climate change is harmful, politicians and lawmakers ought to follow Thunberg's example and undertake the steps necessary to directly confront and improve the status quo.

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MYA LILLIEMOEN
Opportunity
Multimodal 1st Place

https://youtu.be/eP-bAhpEHZ0

CHARLOTTE WHITNEY
The Walk
Multimodal 2nd Place

https://drive.google.com/file/d/1iS-mT9eAWojFxaCX6PAeIIumkfHoEk3b/view

REID FRIEDENBERG
Time Is of the Essence
Multimodal Honorable Mention

https://www.wevideo.com/view/2072885416

YUN-PING YANG
Perception of an Accent When Speaking Another Language
Multilingual Writing 1st Place

Introduction

Because of the mother language, it is very difficult for a non-native speaker to correctly pronounce the characters of a new language if they have not studied it since they were little. The phonemes that the mother language has will limit our ability to use different places of articulation. That is, for a Chinese speaker, it is hard to pronounce the /th/ sound in the word "there" since there is no interdental sound in Chinese characters. Moreover, by looking at the experiment that Lindemann (2002) did to test how native speakers in the United States interact with a non-native speaker, we can see native speakers tend to not believe in what non-native speakers say, and native speakers often think non-native speakers do not even know what they are saying, which most people do not realize. This is important because we have to communicate with people every day. As a non-native speaker in the United States, I am likely to have miscommunication with other native speakers. If native speakers do not understand this phenomenon, they often ignore what an accent can bring to us, and not be willing to communicate. This also leads to the other issue, belonging in the United States. I argue that the accent is one of the main reasons why people often hang out with people who speak the same language. Therefore, in this paper, I am going to address how an accent is formed from a linguistics perspective, and what accent brings to us, how it influences the interactions between a native speaker and a non-native speaker, from a sociology perspective.

Literature Review

Before writing the paper, I found an interesting paper that talks about the undergraduates' perceptions of non-native English in the United States. In the last essay (*More than studying with a different language*), I argued that the accent is formed with one's mother tongue. Therefore, it is likely that people in different countries will have different accents. Moreover, with the features of how to pronounce the characters of their first language, people can have different levels of accent. Looking at the description of the respondents commenting on different accents (Lindemann 2005), we can see that the Chinese accent is usually negatively evaluated. One of the negative descriptions is that Chinese speakers tend to have a hard time pronouncing the /l/ sound. I believe this is because that the phonemes of Chinese do not include a dark l sound. The dark l sound happens when "L" is at the end of a word (as in "ball") or the end of a syllable (like in "pillow"). To pronounce the sound, not only the tip of your tongue should be behind the top front teeth, but also the back of the tongue should lift up slightly towards the soft palate as well. Besides, we can see that respondents also mention Chinese speakers often forget to put plural "-s" on ends of words. I argue that it is also caused by the mother tongue. Since in Chinese, there is no need to put any additional characters after a word that is meant to be plural. For example, in Chinese, you can see that the word "píng guǒ (apple)" in "yī kē píng guǒ (one apple)" and "liǎng kē píng guǒ (two apples)" does not change no matter if it is singular or plural. Therefore, I think it is the reason why the Chinese accent has this feature. Overall, the Chinese accent is evaluated negatively, and some of the respondents even describe it as broken English. But when it comes to the French accent, most of the descriptions are positive. Being the same root as English (Indo-European languages), the French accent is often described as "poetic/romantic," "nice-sounding" by the respondents. By comparing the feedbacks of these two accents, we can understand that the mother tongue plays an important role when it comes to speaking a second language.

With the information from this paper, not only I can have a better understanding of how people think of different accents, but also I can try to analyze how an accent is formed with the result of scientific research. Moreover, despite the fact that there are many languages that I am not familiar with, the paper also contains the features of different accents, helping me to understand a new accent and enabling me to check if my arguments are correct or not.

Method

I did a survey that has questions about the linguistic features of English for Chinese speakers. The survey was written in both English and Chinese, and the respondents were all Chinese speakers. The survey focuses on the following points: the difference between long vowels and short vowels, the phonemes that English has but Chinese does not have. Although some linguistic features are hard to be tested with a survey, the point of the survey is to briefly examine a non-native speaker's awareness of pronunciations when speaking a language that has much difference from their mother tongue. Since Chinese does not have a long-short vowel difference, I use the words "feel" and "fill" to test if the respondents could find the difference between them. In order to test how an accented speaker pronounces the phonemes that Chinese does not have, I use the words "mountain," "flatten," and "fountain" to test the glottal stop, and also use the words "think" and "sink" to test the interdental sound. While asking a question about the difference between "think" and "sink," I ask the respondents where they put their tongue when pronouncing the dental sound.

Analysis

After collecting the data from 44 responses, we can see that although people usually start to learn English at an early age (see Figure 1), most of them often lack experience of speaking with a native speaker (see Figure 2). From my experience, in Taiwan, there are still some English teachers who teach their students how to pronounce English words with Chinese characters. However, Chinese characters could not show the linguistic features that English has. For instance, Chinese does not have a long-short vowel difference. Therefore, as you can see in Figure 3, about 20% of the respondents could not identify the difference between the words "feel" and "fill." Moreover, the spelling of a word can also lead language learners to pronounce words incorrectly. I did not expect this to happen since I intended to test if Chinese speakers are able to pronounce a glottal stop by using the words "mountain," "flatten," and "fountain." Although there are t's in these words, those t's are not pronounced like an alveolar sound. In Figures 4 to 6, you can see that a majority of the respondents have pronounced these words incorrectly. The same scenario also happened when I was learning Japanese in the United States. "ら" is a Japanese character whose romanization is "ra," but the actual pronunciation of the character is more like a /la/ sound. Hence, in the first-year Japanese class, there are a lot of people are pronouncing the character with the tongue forming a curled shape. I would argue that these mistakes are caused by the spelling of a word or how the word is taught. At the same time, since they have no access to a native speaker, they are likely to not even notice this. Moreover, the places of articulation that the mother tongue has can also influence the ability to use other places of articulation that other languages have. Although the survey failed to examine the glottal stop, the test on the interdental sound was successful. The result shows that about a quarter of the respondents are using a different place of articulation when pronouncing the phoneme that the mother tongue does not have (see Figure 7), and the language learners tend to use a similar sound to replace the pronunciation that they have no access. In this example, the /th/ sound should be pronounced with the tongue between the upper and the lower teeth, forming an interdental sound, but the speakers that could not pronounce in this way would use the /s/ sound (tongue behind the teeth) to replace the /th/ sound.

To sum up, I would say that an accent is formed by the speaker's mother tongue. When we are learning a second language, it is hard to not be influenced by the first language. Since linguistic features can be so complicated, if two languages do not share the same characteristics, language learners often forget or have no access to the differences and become an accented speaker. Having access to a native speaker is also important. There are so many grammar exceptions or pronunciation exceptions a language can have. Without speaking with a native speaker, it is hard to notice them. If you are going to learn a new language, you should be aware of these linguistic features to become a light-accented speaker.

Figure 1

When did you start to learn English?

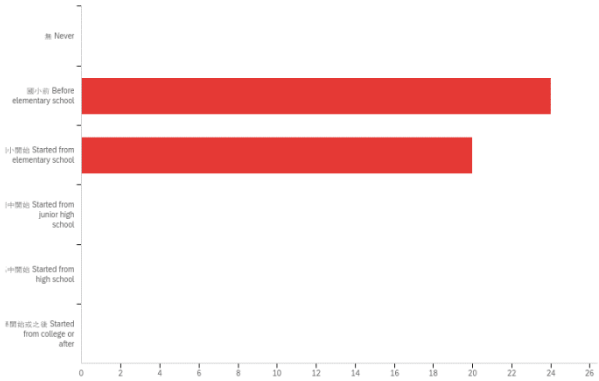


Figure 2

How often do you communicate with a native English speaker?

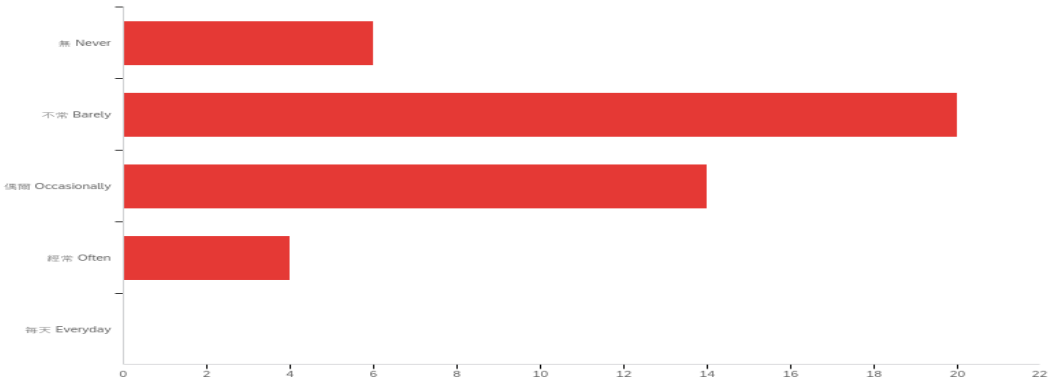


Figure 3

Can you identify the difference between the pronunciations of “feel” and “fill”?

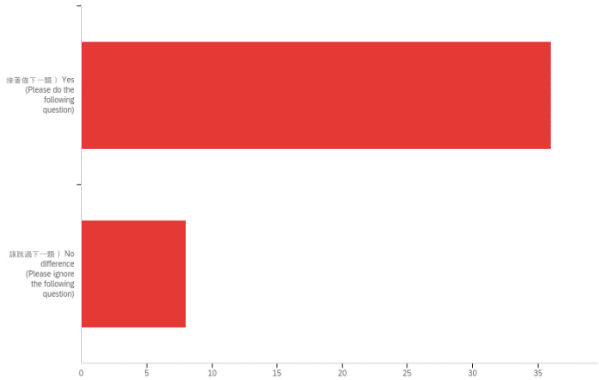


Figure 4

Would you pronounce the /t/ sound in “mountain”?

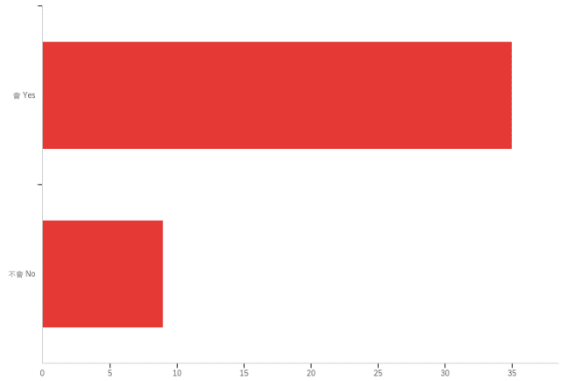


Figure 5

Would you pronounce the /t/ sound in “flatten”?

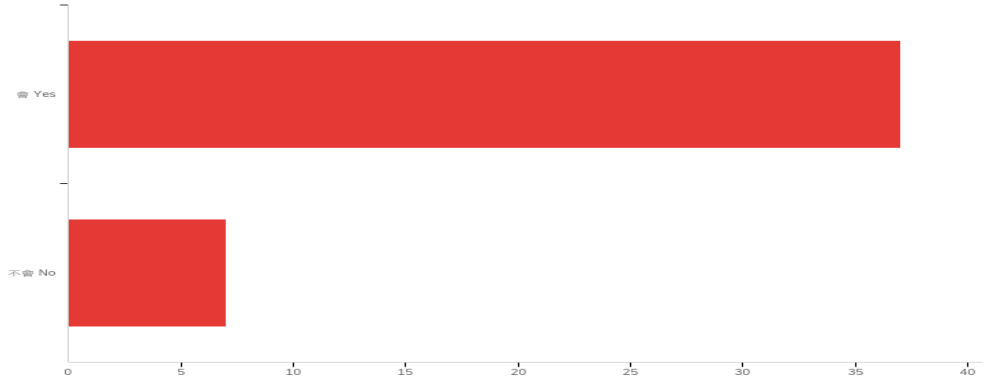


Figure 6

Would you pronounce the /t/ sound in “fountain”?

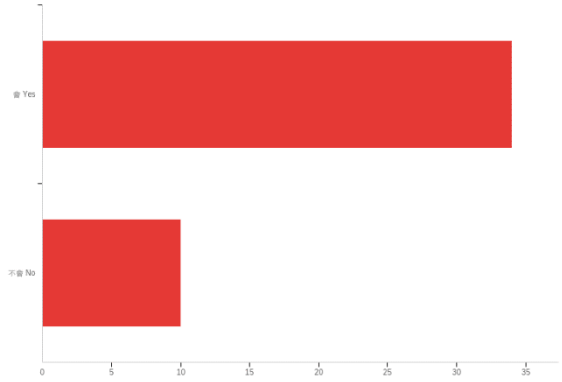
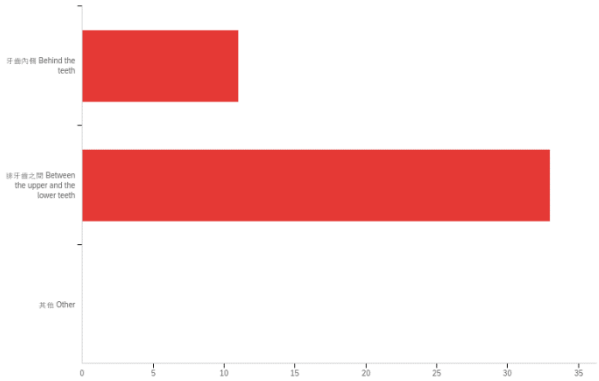


Figure 7

Where is your tongue when you pronounce the /th/ sound?



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In this paper, Lindemann does an experiment to test if the accent influences communication. By comparing two different groups (a group of native speakers having a positive attitude towards accented speakers and a group of native speakers having a negative attitude towards accented speakers by observing their conversations), the experiment shows that native speakers tend to use strategies (avoidance, problematizing partners' utterances, etc.) to deal with the accent that non-native speakers have. If native speakers have a negative attitude towards the accented speaker, the participants usually have disbelief in the accented speaker's words and often rate the result unsuccessful although the result is successful. Therefore, Lindemann believes that there is a direct relationship between attitude and perceived success of interactions.

Lindemann, S. (2005). Who speaks "broken English"? US undergraduates perceptions of non-native English1. *International Journal of Applied Linguistics*, *15*(2), 187–212. doi: 10.1111/j.1473-4192.2005.00087.x

In this paper, Lindemann collects how native speakers in the United States label the English-speaking ability of international students. By evaluating the level of English-speaking skills of international students, the result shows that where they come from also plays an important role. Lindemann lists the characteristics of different accents, showing that native speakers somehow have better impressions of certain accents while some accents are rated broken English.

SABRINA RUIZ
Queen of the Elysian People
Knowing Words Cover Art

KATHRYN ADAMS
From Housewives to Activists: How Silent Spring Helped Mothers Find Their Voice
Upper-Division Arts and Sciences 1st Place

When Silent Spring was published in 1962, the world was a very different place for women than it is today. In 1960, over half of all women aged 18-64 had young children at home, and nearly all of those women were married. In the current era, only 34% of women aged 18-64 have young children at home, and only 7 in 10 of these women are married (Caumont & Wang, 2014). In the 1950s and 60s women controlled their children, the household, and their husbands, yet they were often overlooked by society and treated as people that had no real power to make any sort of meaningful societal change. Carson recognized the power in the traditional role women held in the mid 20th-century as mothers and housewives and wrote with their concerns in mind in Silent Spring. Carson appeals to mothers in Silent Spring by utilizing three key strategies- providing anecdotes about the harm that insecticides have on children, discussing the pervasiveness of pesticides in everyday suburban life, and indicating the damage insecticides will have on future generations and the unborn. By utilizing these tactics, Silent Spring serves to bring mothers into the movement against pesticides without forcing them to abandon their roles or disturbing their mid-20th-century mindsets.

In order to understand how Carson appeals to mothers in Silent Spring, it is essential to have a clear understanding of what the rhetorical situation was and what the role of the mother was in the 50s and 60s. According to the rhetorician Lloyd Bitzer, "virtually no utterance is intelligible unless the meaning-context and utterance are understood" (1992, p. 3). The historical context surrounding Silent Spring is therefore important to understand the book and the tactics used by Carson to engage specific audiences. Bitzer goes on to explain that "the rhetor alters reality by bringing into existence a discourse of such character that the audience, in thought and action, is so engaged that it becomes mediator of change" (1992, p. 4). The audience of interest are mothers, and Carson works to engage them so they can become mediators of change. Therefore, one has to understand who exactly these mothers are, what concerns them, and what their daily lives look like, before one can understand what tactics Carson uses to engage the mothers and motivate them to create change.

One can call upon primary sources from the mid-20th century to get an accurate idea of how integral children were to a mother's identity in that time period. A story called "Amateur Mother" published in 1958 indicates the pressures placed on a mother in the 1950s. Although this a fictional story, it is obviously something that many women in the time period could relate to. The story outlines a housewife named Fay who finds out she is pregnant with her third child. Her husband suggests that she hire outside help, like a nanny, to help raise the kids when Fay is obviously overwhelmed by the thought of caring for three kids and the house, and Fay responds with resentment, "Do you honestly think I'd let some stranger have the fun of bringing up my baby?" (Ferard, 1958, p.87). This is a great insight into the pressures mothers of the time felt to take care of their kids and be present for them, even if it meant sacrificing other things in their life. Fay even talks to her children saying, "for your information whoever you turn out to be, I turn out to be your mother" (Ferard, 1958, p. 91). This indicates how, for many women, their children were the center of their lives and they saw themselves as mothers first and foremost. Two U.S surveys conducted between 1928 and 1951 showed that likely due to "the normative pressures during the baby boom with regard to marriage and child bearing" women without children and single women with children had lower wellbeing than those who were married with children (Koropeckyj-Cox et al, 2007, p. 299). In the mid-20th century, literature describes the presence of a "cultural system that renders childless women marginal" (Alexander et al., 1992, p. 618).

Because women during this time were defined by their children and were pressured to be extremely present for them, this led to almost complete, singlehanded control over their children's lives and activities. Mothers were the first point of contact for virtually all of their children's needs, as discussed in a 1961 magazine article titled "Occupation Housewife." The article describes women as "pediatricians, detectives, social directors, and master sergeants" for their kids (Bradford, p. 30). Mothers were there to monitor their children's

health, plan their days, and keep them in line. The life of the child revolved around the mother just as the life of the mother revolved around the child. A 1962 article described this phenomenon as the "overdependence of child on mother and overdependence of mother on child" (Gray, p. 181). This "overdependence" primed mothers for Carson's message about the dangers of insecticides for children and future generations and their prevalence in an everyday suburban life, and mother's control over their children and the home meant they could be real "mediators of change."

In Silent Spring, Carson utilizes the era's "overdependence of mother on child" to motivate mothers to become involved in the anti-pesticide movement by providing real-life stories of children who were made sick and killed by pesticides. As discussed, women at the time were extremely invested in their children's lives and well-being, so the anecdotes Carson uses are extremely important in engaging mothers with the issue in a meaningful way. Carson writes in detail about a one-year-old child who was made severely ill after his house was sprayed with insecticides due to a cockroach problem: "after that fateful contact with endrin, this normal healthy child became little more than a vegetable - unable to see or hear, subject to frequent muscular spasms, apparently completely cut off from contact with his surroundings" (1961, p. 27). The descriptive language Carson uses makes it easy for many of the maternal readers to imagine their children turning into "little more than a vegetable" from exposure to pesticides. This is not the only example of Carson pointing out the extreme damage insecticides can inflict on children in Silent Spring. Carson also writes, "there had been several sudden and unexplained deaths, not only among adults but even among children, who would be stricken suddenly while at play and die within a few hours" (1962, p. 2) Here she points out that children, the "most vulnerable among us", are unintended causalities in the indiscriminate war being waged with pesticides. This would concern mothers, who were hyperaware of their children's safety and health. Not only this, Carson discusses that there are differences between people of different demographics in developing severe symptoms from insecticide exposure, explaining that "there is some evidence that women are more susceptible than men, the very young more than adults, and those who lead sedentary, indoor lives more than those leading a rugged life of work or exercise in the open" (1962, p. 194). By pointing out that women and children are more vulnerable to pesticides than others, Carson appeals to mothers by demonstrating that exposure to insecticides is more of a threat to her and her children than others in the population.

Carson makes the environmental movement she was starting accessible for mothers by allowing them to join the movement in their traditional roles as mothers without forcing them to take on an activist role to be a part of the revolution. Mothers didn't have to dramatically change the way they viewed themselves in society to speak out about the dangers insecticides posed. This technique was important, as mothers of the time were a huge audience ready to mobilize and get involved in important causes they cared about. Coontz points out in A Strange Stirring: The Feminine Mystique and American Women at the Dawn of the 1960s that at the time Silent Spring was published "the typical American woman- the one for whom American society was "geared"- was thirty-five years old, had two children (but was hoping for a third) and was a full-time homemaker" (2011, p. 1). Not only was this group of women prevalent in the era of Silent Spring, but they had all the resources to advocate about issues that concerned their family and their children's' futures. Vandenberg-Daves writes about mothers and political activism in the mid 20th century, stating "Navigating rigid gender role prescriptions and a crescendo of mother-blame by the middle of the twentieth century, mothers continued to innovate new ways to combine labor force participation and domestic responsibilities" (2014, p. 5). Mothers have throughout history demonstrated their "vast resourcefulness in providing for and nurturing their families", and therefore Carson pointing out pesticides as a real and present danger to families at the time meant the mobilization of thousands of mothers ready to advocate for environmental change and pesticide regulation.

Throughout Silent Spring Carson emphasizes that pesticides are so pervasive that they can make their way into a suburban home and into children's bodies, thus ensuring mothers would view these poisons as a present danger from which their families would need protection. When Carson writes "The common salad bowl

may easily present a combination of organic phosphate insecticides" (1962, p. 32), she indicates to mothers that the food they serve their children might be coated in harmful insecticides. In the mid-20th century, it was overwhelmingly mothers who bought the food at the grocery store and prepared it for the family. Women were not only the ones most likely to feel responsible for ensuring that the food on the table was not coated in poison; they were also the ones the most able to change grocery buying habits to ensure that food items were pesticide free. Carson also gives a nod to the link between pesticides and gardening, a common activity for a housewife and mother: "Gardening is now firmly linked with the super poisons. Every hardware store, garden supply shop, and supermarket has rows of insecticides for every conceivable horticultural situation" (1962, p. 176). This would almost certainly have been alarming to mothers, since every time they sprayed her gardens with weed killer they were being exposed to harmful chemicals. Even worse, every time their kids played in the backyard, they were rolling around in grass coated in poison. Carson's strategies situate the issue of insecticides much closer to home for a mid-20th century mother and housewife.

Another important aspect of the rhetorical situation that made mothers of the time especially ready to hear Carson's concerns about pesticides in Silent Spring was the thalidomide crisis of the 1950s-1960s. Thalidomide was a drug used widely in the United States to treat nausea in pregnant women and was considered to be extremely safe by virtually all health care providers. It became clear in the 1960s, however, that "thalidomide treatment resulted in severe birth defects for thousands of children" (Kim & Scialli, 2011, p. 1). Millions of people across America, especially mothers, were outraged that this drug that was proclaimed to be safe caused horrific harms for thousands of children that were born to mothers to whom it had been prescribed. The Thalidomide crisis taught the public to respect the vulnerability of fetuses and children and made clear that the "greatest value of all [should be placed] upon the health and wellbeing of children" (Alderman, 2015, p. 3). Advocates argued that "pharmaceutical products should be systematically tested for developmental effects prior to marketing" and through their activism they changed the way that drugs are tested and distributed in the United States (Kim & Scialli, 2011, p. 6). After this tragedy not only were mothers hyperaware of their children's safety, both before and after birth, many had just successfully advocated in the public and political sphere for pharmaceutical regulation change, paving the way for them to advocate against insecticides after reading Silent Spring.

Another example of an organization created by mothers that shaped society by drawing upon the maternal roles in the1960's was the Women Strike for Peace. On November 1st 1961, the year before the publication of Silent Spring, between 12,000 and 50,000 women from across the world came together to protest atmospheric nuclear testing (Britannica, 2018). This demonstration led to the formation of the organization Women Strike for Peace (WSP), whose members protested throughout the 1960's and whose maternal voices remained significant in the peace movement until the 1990's. This organization was composed primarily of mothers who feared the effects of the era's nuclear expansion would have on the short-term and long-term health of their children. The group's slogans and rhetoric leaned heavily on their duty as mothers to protect their children from the dangers of nuclear weapons and warfare. According to the accredited Professor of History Lawrence Wittner, the organization "lacked a feminist consciousness" prevalent in many of the movements by women at the time (2000, p. 198). This group embraced the norms of the era; mothers were able to protest an issue that affected their children without abandoning their traditional roles. Women's Strike for Peace was a massively successful organization and by "connecting women's potential motherhood to their "natural" roles as nonviolent peace advocates," WSP constructed an image of American and Vietnamese womanhood that would convince the American public and politicians to demand that the United States end its war in Viet Nam" (Fraizer, 2012, p. 340). WSP not only set the stage for mothers to be engaged by Silent Spring, but it also helped empower mothers to meaningfully and successfully protest against insecticides, just as they were doing for nuclear weapons.

Finally, Carson describes the impact of insecticides on future generations and the unborn child, an especially effective technique in the wake of the Thalidomide crisis and during the Women Strike for Peace movement. Mothers are inherently future focused, as they want to ensure a safe and happy future for their chil-

dren, and by indicating the continuing effects of the indiscriminate spraying of insecticides Carson appeals to this forward-looking tendency. She explains how pesticides threatened the continuance of humanity even at the genetic level: "Along with the possibility of extinction of mankind by nuclear war, the central problem of our age therefore has become the contamination of man's total environment with such substances of incredible potential for harm- substances that accumulate in the tissues of plants and animals and even penetrate the germ cells to shatter or alter the very material of heredity upon which the shape of the future depends" (Carson, 1962, p. 8). Here, Carson nods to the idea that not only is the widespread use of pesticides going to harm future generations directly, it might prevent their ever being born by disrupting the reproductive process. Mothers who had brought new life into the world would be very concerned with the idea that this process could be drastically changed or even prevented by pesticides. Not only did chemicals have the potential to penetrate or alter the genetic material life depends on, chemicals had already found their way into the body of the mother and the unborn child. Carson explains that "they [chemicals] occur in the mother's milk, and probably the tissues of the unborn child." (Carson, 1962, p. 16). Carson points out that these chemicals could have horrible consequences for the child, much like the thalidomide that caused extreme birth defects for thousands of children. She also appeals to mothers by pointing out that future generations would not condone the extreme use of pesticides, and that they would need people to advocate for them in the present and to protect their future-, "Future generations are unlikely to condone our lack of prudent concern for the integrity of the natural world that supports life" (1962, p. 13). These themes throughout the book of the unknown but potentially catastrophic future impacts of insecticides serve to mobilize women to fight against pesticides for themselves, their children and their children's children.

By understanding and catering to the traditional role mothers held in the mid-20th century when Silent Spring was written and published, Carson successfully appeals to mothers of the time by tapping into the hopes and concerns that came along with that role. She recognized the power that the traditional mother held and successfully engaged this group of women to start and fuel an influential and successful environmental movement. Ultimately, Carson used traditional values to expose a modern issue and ignite a progressive movement.

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SABRINA RUIZ
Something Broken
Upper-Division Arts and Sciences 2nd Place

Almost every little girl goes through a stage in their childhood where all they want is a pony and everything revolves around horses (and sparkly glitter unicorns, obviously). My "horsey phase" began when I was around five or six years old. The thing is, that it was never just a phase, but rather a budding passion that grew stronger and stronger as I got older. I used to live near some highly renowned riding stables where a lot of professional and prestigious riding instructors would train Olympic level horses and riders. I was fortunate enough to have very supportive parents who enrolled me in lessons after seeing me sneak over to catch the smallest glimpses of the stable hands shampooing the animal's coats to silky, shimmering perfection.

As I grew up, both as a person and as a rider, this environment pushed me towards an exceedingly ambitious path of competing in various events and shows. As a younger girl, I enjoyed the thrill of the competitions and the ambitious, cutthroat setting. For me, it was all about the tailored breaches and the freshly pressed blazers, the matching-colored bows tied to the bottom of every girl's hair-sprayed braid, and the perfectly groomed and well behaved horses. As time moved forward and I gained some valuable life experience, I began to notice a darker side to the equine industry that I had never seen before. I was especially concerned about certain "sketchy" methods and processes that I became aware of in relation to training a "green" horse. Green is the term used for a young, untrained, inexperienced, or "tender-footed" horse. I began to notice how harsh the bits that were put in the horse's mouth were, I began to realize how much financial corruption was behind the shows, and the exploitation of the students and the horses. I even heard one of the instructors from another barn talk about the severe chemicals that were rubbed into the animal's coats in order to achieve the maximum physical aesthetic for the judges.

Now, I would like to preface this story a little by mentioning that I consider myself to be a very sensitive person and I am often faced with challenges in life where I struggle to not be so affected by certain situations. Especially when it comes to animals or other people, I feel like my sense of compassion and empathy is hyperactive and has potential of upsetting or overwhelming me. This may be a reason why I am vegan, why I find peace in fictional and fantastical stories, and why the following situation may have had such a large impact on my life. It moved me so deeply that even looking back on everything now makes me shiver with repugnance.

Traditionally, going all the way back to western cowboy times, when a horse is trained or taught to be rideable, a very typical method is used called "breaking" the horse. The first thing that pops into my mind when I think of "something broken" as a loose description of something, is the process of breaking a horse and the first time I witnessed it myself. When I was around thirteen years old, the barn manager at my stables hired an old-school, hot-shot cowboy to break in a new two-year-old horse. He invited my friends and I, who had just finished riding in the cross-country course, to come watch as he did his first session with the little gelding. As we gathered around the dusty arena, he smirked nastily and told us that the first day was the most important day because it was when you would "break him and his spirit, and take it all away." He confidently told us that it would all "be ok" because he would be the one that would give the horse back his freedom and regain his trust afterwards. I became skeptical and uneasy as soon as they brought in the young horse because he realized that I had seen him sitting alone in the farthest pasture, stranded for a few days since his arrival. The cowboy, let's call him Hank for the sake of the story, told us that the gelding was less likely to fight him too much during the process because he hadn't been getting any water or grain for the past few days. He went on to say that he needed to "teach the animal some manners by showing him who was boss" as he slipped on a halter tied to a long rope onto the adolescent horse's delicate and smooth face. Hank forcefully yanked down his head and quickly wrapped the rope around his front legs, causing him to kneel down to the ground and flail in attempts to get up. Hank took the opportunity to finish constricting the rest of the horse's legs and tightening the rope taut, until he was in a compressed ball on the ground. This horrifying image was so gripping that has been burned into the

back of my mind forever. Always seeing horses as the most majestic and beautiful gentle giants that stand tall and muscular in comparison to this writhing, helpless being on the ground is a visual that I think I will carry for the rest of my life.

I watched them in the arena, Hank blabbering on about bomb-proofing the horse while rubbing a large tarp on top of him. To me, this whole thing was preposterous and could be easily seen as abuse and torture. Bombproofing is what people in the horse world use in reference to desensitizing your horse to external stimuli in their environment that would otherwise be scary to them. In order to produce a trustworthy and reliable horse, it makes sense to get horses comfortable around a variety of different objects and sensations early on in their training. The young horse cried out in despair and anxiety as Hank sprayed him with the hose, basically water-logging him. He jerked and wiggled on the ground in attempts to stand up, but every time he would roll onto his knees, Hank would violently thrust his dirty boot into the horse's neck and press him into the sand. Eventually, a very exhausted and defeated little gelding stood up and let Hank put on a saddle on him and ride him around the arena without putting up much of a fight. I was in complete and utter astonishment that a person, especially one who claimed to "love horses and animals" could treat one in that violent and detrimental manner. Frankly, I not only found it hypocritical of him to start off his presentation by saying that, but I also found it disgusting. I ended up leaving that barn shortly after having witnessed this event, along with other reasons that affected my decision. I took a short break from riding and focused on school and playing sports but realized that my life didn't feel fulfilled or as happy as when I was in contact with horses. It was almost as if a small part of my heart had been chipped off and lost somewhere in the past.

Being a person who believes that everything happens for a reason, I believe that finding my current trainer, Deidre, was somewhat a work of fate. She has sort of been in my life since I was fairly young. She first became friends with my mom because both their sons played on the same YMCA basketball team. I later found out that she had also been a part of the community at the barn that I was a part of for such a long time and unknowingly, we had been at the same place at the same time without realizing it. Sometime later, as I was looking for another barn to ride at, I found a website with the most beautiful black and white photographs that just radiated the most magical energy and it really captivated me. It turns out that she, like me, got a degree in the Arts at CU Boulder and is a talented visual artist. She shares a lot of beliefs and values with me such as the respect for human rights across the globe, political views, taste in movies, and many more things. But above all, one of the reasons I believe as to why we clicked so profoundly is our sensitive and compassionate heart and love for animals. She is a brave and strong empowering woman that I have grown to admire and adore.

Along with being an artist and a great person, Deidre is also a certified therapeutic riding instructor and is specialized in something called natural horsemanship. This is a method of training horses that is based off of the scientific observation of natural behavior in herds of wild horses and takes a gentler route to educating a green horse. It rejects abusive training processes and focuses on building a rapport and a bond with your horse. I became deeply interested in both therapeutic riding and the power and influence that horses can have on a person, and the anthropomorphic practice of natural horsemanship as well as energy healing work through equine essence. I decided to take a year off school and become a sort of apprentice to Deidre in order to learn as much as I could about all of these topics. A lot of her therapeutic riding sessions were confidential, so I am technically not supposed to talk about them, so I will not share too much personal information. However, some of the more meaningful moments that I got to be a part of involved a young teen girl struggling with growing up with autism. She was coming in to participate in equine occupational integration therapy. I saw her grow more engaged and focused as well as calmer and more centered. She fell in love with her horse (who, funnily enough, was also named Sabrina) and gained important muscles as well and social tools to help her function in society. Another impacting moment that has stuck with me was a session that I got to sit in at with a retired war veteran suffering from PTSD. Diedre handed his case a little differently; she had him sit in a chair across from her in the middle of the arena. They essentially just talked, she listened while he told her his story. But while all of this

took place, she had one of her horses just roaming around the area, munching on some hay, and pacing around the arena. When the man began to talk more in depth about his experiences and his fears, he became agitated, and the horse began to feel his energy and started running around and freaking out. Eventually, after some time, he stopped talking and let out a shout, the horse stopped everything it was doing, came up behind him and laid his big head on his shoulder as if to reassure him. The man began to weep and shower Deidre and the horse with thank yous. Apparently, his life had been changed forever.

After working with her for several months, Deidre, my parents and I came to a sort of agreement that would involve the opportunity to lease one of Deidre's new horses in exchange for the freedom to experience a green horse personally and get the chance to train her all by myself with all the techniques that I had been learning for the entire year. Though my parents were concerned for my safety, they reluctantly agreed, and the journey began. The horse that I was fortunately blessed to lease was the most magnificent dapple-grey thoroughbred with dark slate colored mane/tail and the most unique silver coat you could ever imagine. Her name was Goose, named after grey goose vodka, because her skin resembled the icy bottle and logo design. She had such an elegant and luxurious look about her and she carried herself in a very grandiose and impressive manner. Her musculature was stunning from both a visual and scientific standpoint and her proportions were almost textbook perfect. All of this being said, Goose wasn't actually perfect. Though she was only three years old when I got her, she was sold to Deidre by a very aggressive and crude woman who told her that Goose was a bad, poorly behaved animal that was better off being put down. She said in a heavy southern accent, "that horse may not be broken in riding wise, but she is definitely broken." It pains me to say that she was a believer in the western traditions of breaking horses just as much as Hank the cowboy was. She had tried to train Goose by using a water hose to spray at her when he was misbehaving and would use a riding crop to whip her when riding. Goose had unfortunately reverted back to square one and wouldn't let anyone near her unless she knew it was strictly to feed her.

Goose was scared of almost everything, but above all else, she was deathly afraid of water. Speaking about things that were meant to be and fate, I believe that the universe aligned itself in its timing. When I first started leasing Goose, it was the beginning of what was going to be the hottest summer I can remember. Most people would take this to be a bad omen, but to me it couldn't be more perfect, even looking back now, because we were able to work with water and stay cool. The process of gaining Goose's trust was not a quick and uncomplicated one. It took several weeks of persistent yet patient waiting. In order for Goose to familiarize herself with me, I would go two to three times a day to her pasture, and just sit there for hours at a time, sometimes reading, sometimes just looking out at the green fields and meditating. I found myself taking this time to gain knowledge about myself and look back on my past with different colored lenses. I also learned about the power that silence has and how unplugging to media and the outside world and connecting to Mother Earth can greatly change your outlook on life.

Goose eventually got used to the idea of her daily visitor and we progressed to participating in various exercises revolving around water. Instead of using harsh and intrusive methods of forcing her to cope with getting power sprayed whilst being helpless on the ground, I took a completely contrasting approach. I gained her trust by teaching her that I would never put her in danger. I always walked through the puddle first, wet my own boots with the water can, and then lead her to follow in my footsteps. She gained confidence and trust as well as assurance and bravery when it came to dealing with things that made her anxious. Patience was a key element during this process, I would spend hours upon hours letting her smell the water, allowing her nerves to cool off, and become used to the idea that we weren't going anywhere. I would let her graze on sweet wild grasses while I played with the hose near her. She would never take her eyes off me but would make herself busy with the hay. Goose would sometimes freak out, right when we were making the most progress, and it was at times like these that my patience was put to the test. The vigorous dedication and the lengthy hours spent under the scorching sun made my skin boil with frustration. I think the most important lesson that I learned in all of this was that

I could be a leader and get to my goal by being firm without being aggressive, by showing her that it was all going to be ok, but her attitude or lack of trust towards me was unacceptable. Horses, much like humans, sometimes have days where they feel off, sassy, or perhaps just lethargic. When training a horse (or when building any relationship at all), it is important to listen to the needs of the other side of the equation.

Goose overcame her fears and during the process, I learned many important things about myself. We created a bond between us that was so strong that it mended any sort of damage that we had in us as individuals. I taught her and helped her develop into a rideable and brave horse. I showed her trustworthiness and leadership and in contrast, she filled in the void I had without horses in my life. She taught me the important lesson of patience and consistency. We became a very powerful team and ended up competing in a few shows.

At the end of the day, I realized that it was never about "breaking the horse" and becoming dominant by deteriorating and diminishing the horse's spirit, but rather about forming a connection and mending any damage with compassion and productive willingness to be patient. The idea of something broken may have a negative stigma attached to it but in mine and Goose's case, I think that sharing that commonality was one of the reasons that we shared such a powerful relationship. I believe that we live in a society where individuals are urged to build up walls and protect themselves. Men obligated to be put in positions of power, strength, in masculine stereotypes. Women are taught to hide their emotions, to suppress their opinions and thoughts, to go about their days without diving too deep into any relationship, without unveiling the true connection the creatures of earth have the potential of being a part of. The people who have the courage to open their hearts are the ones that will experience the true beauty of unconditional love. The people that have the courage to shed their skin and expose their tenderness, are the ones that make real authentic connections. Though we are conditioned to see sensitivity as a weakness, empathy and compassion is our salvation.

NATHAN J. BOWERSOX
Alcohol Industry's Advertising Exploitation of the COVID-19 Pandemic
Upper-Division Business Writing 1st Place

Abstract

A large number of alcohol brands have used the COVID-19 pandemic as a business opportunity. The advertising industry has devised new marketing and branding tactics to further the consumption of alcohol during this public health crisis. In addition, these brands have been continually pushing out their advertising to consumers and if they haven't, it has been due to fiscal concerns. Advertising plays a large role in our society's consumption habits and the majority of these brands have ignored the consequences that their products can cause during a time of unprecedented uncertainty. Major public health organizations and officials have recommended that alcohol should not be consumed and can further exacerbate the physical and mental health problems that are facing our society. Regulators that handle advertising in the United States have done little to combat this issue due to the alcohol industry's economic stronghold that deters regulators from acting in the public's best interest. The issue of advertising alcohol during a public health crisis is often overlooked, due to the normalization of drinking in our society coinciding with the defiance of public health recommendations. A simple and temporary regulation of alcohol's advertising needs to be implemented, both in content and in scale to help get us through the pandemic. Alcohol conglomerates are extremely powerful and are currently using that influence to further compound an already complicated national health crisis. On the other hand, these brands have the opportunity to use their power positively by being socially responsible and putting public health at the forefront of their intentions.

Introduction

The advertising industry has been hit hard by the pandemic. Brands are in crisis, trying to learn how to navigate through the rushing waters of a rapidly changing society. Some of these brands have successfully been able to use effective brand messaging by presenting empathy, care, and consideration for what their consumers are going through. Many others have not. One of the largest sectors of advertising that has been incredibly tone-deaf to the situation lies with large alcohol corporations. According to the Foundation for Alcohol Research and Education and the Cancer Council of Western Australia, the industry has been using the global pandemic as a "marketing opportunity" (Foundation for Alcohol Research and Education [FARE], 2020, p. 1). A multitude of alcohol companies have been creating messaging tactics that promote drinking during the pandemic. Thematic coding from the report displays alcohol's brand messaging urged consumers to drink alcohol during the COVID-19 pandemic, choose 'healthier' alcohol products, get easy access to alcohol without leaving your home, buy more, save money, and even use alcohol as a way to cope, survive, or feel better (FARE, 2020, p. 4). Alcohol advertising during the pandemic has also been both relentless and constant. That same study noted that on one social media account, an alcohol advertisement was shown to the user about every 35 seconds (FARE 2020, p.3).

Marketing alcohol during the pandemic has major consequences for our society at large, being that the increased advertising will lead to increased consumption during a time where coping with substances may be a dangerous option for many; we are already in a public health crisis. The World Health Organization has proven "Alcohol consumption is associated with a range of communicable and noncommunicable diseases and mental health disorders, which can make a person more vulnerable to COVID-19. In particular, alcohol compromises the body's immune system and increases the risk of adverse health outcomes. Therefore, people should minimize their alcohol consumption at any time, and particularly during the COVID-19 pandemic" (WHO, 2020, par. 4). The science states we shouldn't be drinking during the pandemic due to major health concerns both physically and mentally. Brands disregard these recommendations and continue to push their advertising to the population, deferring to fears of suffering income statements and balance sheets. Regulators of the alcohol industry's advertising such as the Federal Trade Commission have made no effort to restrict this messaging and

are continuing to allow it to happen. Aside from personal health concerns, there are also more risks that this advertising creates. Alcohol is connected to defying the recommendation of avoiding social gatherings and parties, while people should be social distancing to avoid transmission. Even if those involved in drinking alcoholic beverages are social distancing, the paring of isolation and intoxication can bring major consequences.

Health Concerns and Recommendations: Alcohol Consumption and COVID-19

Figure 1. WHO: Alcohol and COVID-19: what you need to know

It is pivotal to preface the concerns of drinking during the COVID-19 pandemic by analyzing what public health organizations from across the globe are recommending our society to do. Without this background information, it is difficult to see the major consequences of the alcohol industry's advertising due to the normalization of drinking in society. Alcohol consumption has been normalized, viewed as socially acceptable although it can be incredibly dangerous and made exponentially worse during this time. A study by the Addiction Journal notes that alcohol is a risk factor for the severity of COVID-19 (Saengow, 2020). The World Health Organization (2020) has created a list of what we should know about alcohol and COVID-19. The report (see Figure 1) states to "Avoid alcohol altogether so that you do not undermine your own immune system and health and do not put the health of others at risk" (WHO, 2020). Their data prescribes to the fact that alcohol is detrimental to our physical wellbeing. The infographic (see Figure 1) also emphasizes the mental health consequences of alcohol consumption during the pandemic. It states, "Do not use alcohol as a way of dealing with your emotions and stress as isolation and drinking may also increase the risk of suicide" (WHO, 2020). There are plenty of other recommendations that the infographic provides, but those two emphasize the harm that alcohol can do to both physical and mental wellbeing.

While science and recommendations are helpful to understand, it is important to consider that society at large is not following them. Even if they are complying with social distancing, isolation and drinking can cause major harm. Research by the Addiction Journal (2020) noted that "Social distancing and/or lockdown-type measures have led to increased stress, which is directly associated with alcohol use, and alcohol-related harms typically correlate with drinking to cope" (Callanan, 2020, par. 4). The case by Callanan (2020) highlights how many people are following social distancing measures. This may sound positive, yet people are isolated while drinking which can cause a slew of issues. Alcohol is a depressant and the feelings associated with depressants be worsened when tied to isolation. It can also be detrimental to not have someone to help regulate your drinking, leading to alcohol poisoning or eventual addiction. Our society's mental health is suffering and drinking could only worsen the problem if it is happening in an isolated environment.

Outside of that concern, many are defying the physical distancing orders and pairing social gatherings with drinking. Being that I attend university at one of the top party schools in the nation, I see the association of drinking and partying continue despite the circumstances. Visiting campus and nearby neighborhoods reveals an often occurrence of drinking and gathering amidst the university guidelines which prohibit the reckless behavior in an effort to stop the spread of COVID-19. Fraternity parties, house parties, and other social gatherings (often paired with drinking) are still occurring despite the university's and local public health official's regulation

efforts. Since the beginning of the fall 2020 semester through November 2, 2020, there has been a total of 504 instances where "Students currently or have been under investigation based on reports of public health order violations related to COVID-19" (The University of Colorado Boulder, 2020). Most of these cases have occurred in the association of drinking and partying, which is constituted as a gathering of ten or more people.

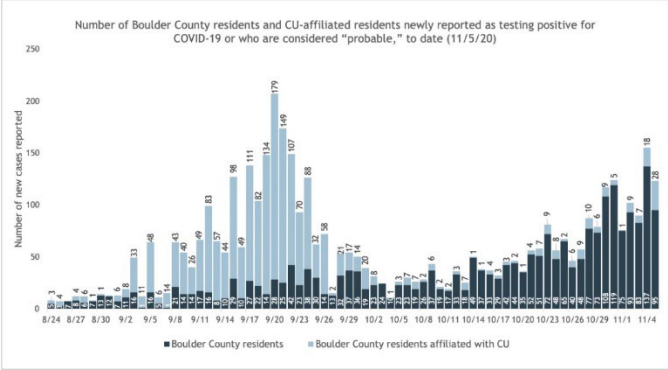

Figure 2. Boulder County Public Health Positive Case Count

The amount of positive COVID-19 test cases from CU-affiliated residents has seen a significant cycle of increase and decrease over the last few months (see Figure 2, Boulder County Public Health, 2020). Most of these positive cases correlate during times where there aren't strict lockdowns. On the other hand, during the September 24th to October 19th Stay-at-Home order (see Figure 2) those in the 18-22-year-old age range saw positive test cases at its lowest due to the strict guidelines prohibiting socializing and gathering (Boulder County Public Health, 2020). Outside of that period, cases have skyrocketed and much of that is due to the neglect to continue controlling social gatherings associated with drinking. Even though college students are primarily safe from the higher risks of COVID-19 due to their age and ability to heal quickly, they cause much of the spread which can lead to the detriment of older age ranges. Understanding what public health officials and organizations are trying to get our society to do can emphasize why alcohol advertisers are complicit in making this public health crisis worse.

Alcohol Advertising During the COVID-19 Pandemic

The advertising of alcohol has been disputed for decades over a multitude of reasons. Most notably, advertising of alcoholic beverages can lead to increased consumption by the public. According to Nelson (2001), "Advertising of alcoholic beverages is a potential public health issue if it can be shown that advertising has a direct and material effect on alcohol consumption or that advertising as a direct and material effect on alcohol abuse outcomes (generally or for specific populations)" (par. 5). Many populations become highly affected by these advertisements, leading them to drink. One of the most extensive areas of research links increased consumption rates of minors when exposed to alcohol advertisements. A study conducted by Grenard (2013) notes, "The relevant theories and empirical evidence from the current prospective study and previous research are consistent with possible causal effects linking alcohol advertising to underage alcohol abuse and alcohol-related problems" (p. 374). Additionally, advertising of alcohol can affect others, such as heavy drinkers who may increase their consumption and the sober community who may be influenced to relapse (Stautz, 2017; Bosque-Prous, 2014).

The history of alcohol advertising leading to consumption is pertinent to the current times. It showcases this brand messaging does impact the consumer's decisions. The pandemic has made advertisers intensify the measures of their marketing tactics to reach the consumer. The study by FARE (2020) notes, "There have been reports of spikes in [our society's] spending on alcohol during the COVID-19 pandemic" (p. 3). It is impossible to state how much the alcohol industry has spent on advertising in 2020 because the year isn't over, but the study by FARE (2020) has shown that alcohol advertisers have relentlessly used this pandemic as a marketing opportunity by continually pushing their agenda (p. 2). This is largely due to the new pandemic-specific marketing strategies that are being created. One thing of importance to consider is the ease of how these adver-

tisements can arrive to the consumer. New technologies such as social media are avenues for alcohol brands to advertise, leading to a purchase. FARE (2020) highlights that social media allows for plug-ins for instant online purchasing. It has been shown that seeing these advertisements can trigger a person to go grab a drink from their fridge or purchase a drink immediately if they have the opportunity (Stautz, 2016). Advertising has a direct effect on impulsive decision making which can be costly, especially when consumption is marketed as a necessity to the consumer.

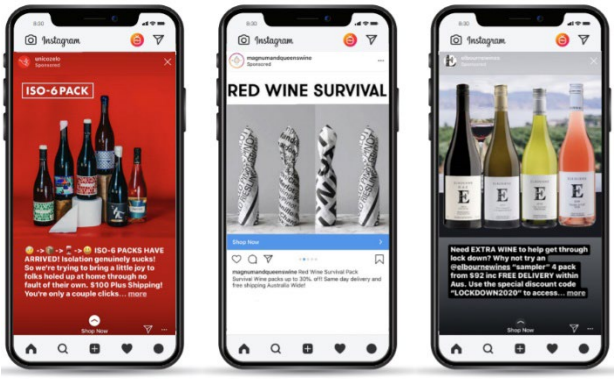

Figure 3. FARE: "Use alcohol to cope, 'survive', or feel better"

There are many examples regarding the concerning messaging alcohol advertisers are using. The study by FARE (2020) provided multiple examples from which the thematic coding emerged. They note, "On the evening of Friday 17, April 2020, sponsored alcohol marketing was monitored on a personal Facebook and Instagram account. Each alcohol advertisement identified was noted and a screenshot taken. Over a one-hour period 107 alcohol advertisements were displayed. This equates to approximately one alcohol ad every 35 seconds" (FARE, 2020, p. 3). Probably the most jarring theme that emerged from the study was sponsored advertisements telling consumers to "Use alcohol to cope, 'survive', or feel better" (FARE, 2020, p. 9). There were many examples provided showcasing how winemakers used that type of brand communication (see Figure 3). Overall, this is highly concerning due to the mental health consequences highlighted by WHO (see Figure 1). Other advertisers simply told consumers to "Drink alcohol during the COVID-19 Pandemic" and stated that "Twenty-six advertisements referred to drinking alcohol during the COVID-19 pandemic. There were 25 explicit references to the pandemic, including 6 advertisements that specifically mentioned 'COVID-19' and 19 references to COVID-related terms such as isolation (or #iso), lockdown, or confinement" (FARE, 2020, p. 8). Even with these concerns from public health officials, advertisers continue to push their agenda with alcohol production and purchasing. Therefore, regulators must provide a solution to these habits, including curtailing excessive advertisements in a public health crisis.

Alcohol Regulation: Recommendations for this Issue

Zero regulations have been put into place regarding alcohol advertising during the COVID-19 pandemic. The Federal Trade Commission (FTC) is the regulator of advertising across the United States. Historically, they have done very little in terms of government regulations over alcohol advertising, which may be a factor in how much power the alcohol industry wields. This industry continues to have influence on these regulators, like the FTC, due to their strong lobby tactics and extensive financial means. The American Addiction Centers (2020) explains, "The First Amendment allows for a lot of freedom of speech in general and therefore limits how much the federal government can regulate advertising, even concerning alcohol. In general, advertisements of alcoholic products must be truthful and without deception" (Editorial Staff, par. 6). Alcohol advertisers are not being transparent, nor truthful because they are not telling their consumers about the health consequences that may arise when drinking during the pandemic. The First Amendment is treated as a blanket license to allow alcohol corporations to continue their agenda. This is clear because this issue has not been taken into the courts and reg-

ulators are avoiding to amend this issue. This situation harkens back to the advertising regulation of cigarettes once they realized that they were detrimental to public health. I believe if regulators were able to enact laws prohibiting some advertising of tobacco products, then it would only make sense to do the same temporarily for alcohol during the COVID-19 pandemic or least require messaging to follow public health recommendations and reduce the frequency of these advertisements.

Messaging, communication, and branding of alcoholic beverages need to follow public health recommendations. They must not infer that alcohol should be used as a vice to cope, survive, or feel better (FARE, 2020). Brands need to be transparent during this time, creating a warning of the use of alcohol; it compromises the body's immune system which could lead to poor health and the ability to contract the coronavirus or further the negative effects once contracted (WHO, 2020; Saengow, 2020). Being transparent would omit the messaging where brands are encouraging people to drink during the COVID-19 pandemic. Further, advertisers need to emphasize mental and physical health concerns of consuming alcohol during a global pandemic (see Figure 1). The sheer frequency of these advertisements is detrimental to the public health of our nation. Society is being constantly bombarded by alcohol advertisements during this pandemic and these brands are not letting up. I want to emphasize that I do not believe that the sale, production, or distribution of alcohol should be regulated or limited. Many people are dependent on alcohol, which could put additional pressure on the health care system due to withdrawals (Stockwell, 2020). Alcohol dependency explains why liquor stores were considered essential businesses during Colorado's Stay-at-Home order. Our nation's history also shows the problems that can occur when the government attempts to prohibit the manufacture, sale, and transport of alcoholic beverages. This is why a simple and temporary regulation of the advertising of alcohol is warranted to ensure the public health of our nation, helping us get through the COVID-19 pandemic.

Reuter (2020) cites the World Health Organization's explanation that a complete ban of advertising is one of the five most effective policy interventions to curb alcohol use during this time (par. 2). We know that banning or regulating alcohol advertisements are effective, so action must be taken. Lastly, it is important to note that some of these alcohol brands have been shifting their efforts to aid our society during the pandemic. Hefler (2020) has noted some alcohol companies have aided in the manufacturing of hand sanitizer because of its shortage. This shows that alcohol brands have the ability to assess public health needs and adjust their resources. However, in the entirety of the alcohol corporations' pursuit of market share over public wellbeing, we certainly see that they have not adapted for the better. Alcohol advertising continues to be promoted through a variety of mediums in 2020, which predominately neglects to recognize the global pandemic. As the alcohol corporations dismiss public health needs – physical and mental – of citizens, it is the role of institutions, like the FTC to regulate advertisements of these products. It is inevitable the country will enter a second wave of infections, as it is inevitable for these alcohol companies to continue to be unregulated; legal precedent is necessary.

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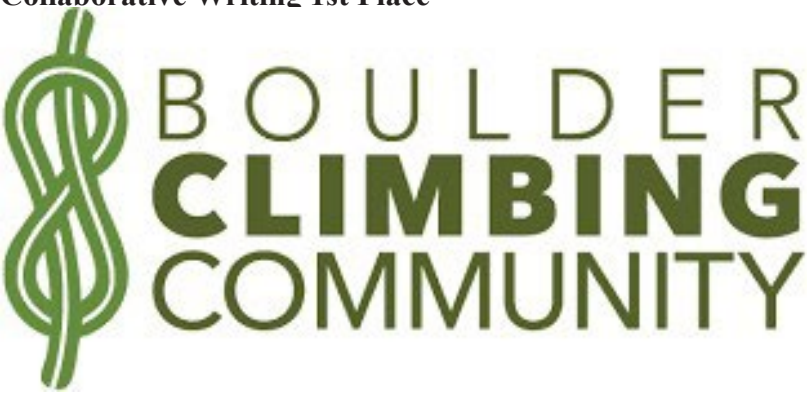
NYIKA CAMPBELL, DEVIN SHARPE, ALEX RAYMOND, AND JAMES WONG
Boulder Climbing Community: Impact of COVID-19 on Front Range Climbing Area Visitation
Collaborative Writing 1st Place



Contents

Introduction

Background and Importance

Study Design

- Research Questions
- Methods
  - Survey
  - Other Considerations

Results: Land Manager Data Analysis

- City of Boulder Open Space and Mountain Parks
- Colorado Parks and Wildlife
- Boulder Country Parks and Open Space
- Rocky Mountain National Park

Results: Survey

- Overall Survey Results
- General COVID-19 Impacts
- COVID-19 Impacts on Climbing Frequency by Location
- Gym Climbing
- Free Responses
- Data Analysis Notes

Takeaways

People

- CU TEAM

BCC Team

Land Managers

Colorado Pars and Wildlife/Eldorado State Park

City of Boulder Open Space and Mountain Parks

Boulder County Parks and Open Space

Rocky Mountain National Park

References

Appendix

Additional Graphs

Included Documents

INTRODUCTION

Outdoor Climbing as a sport has been growing rapidly in the Front Range and understanding the trends in visitation to outdoor areas is critical both for environmental stewardship of these areas and for building constructive relationships with land managers. COVID-19 has had a significant impact on the day-to-day routine of many Front Range climbers, likely impacting the frequency of visitation to common climbing areas. **This project aims to quantify the changes in land usage at common Front Range climbing areas due to COVID-19.**

BACKGROUND AND IMPORTANCE

During the COVID-19 pandemic messaging about what activities are acceptable has changed frequently. Since March local and state governments have issued numerous safety directives and frequently changed guidelines (Figure 1). These guidelines, along with people's sensitivity to the danger posed by COVID-19 have impacted outdoor recreation across the country.

In April 2020 Leave No Trace (LNT) conducted a survey to understand the impacts of COVID-19 on the amount of outdoor recreation in various areas. This study found a strong correlation between CDC guidelines, the official open/closed status of recreation areas, and the amount of time that people spent outdoors. Stricter guidelines correlated with less time spent outdoors in the months following the announcement of the pandemic. (Rice et. al, 2020, p. 3, 7). **LNT found that overall participation in outdoor recreation from April 9th to May 22, 2020, was lower than expected based on previous years.**

Initial research in March confirmed the possibility that the virus could be spread by touching surfaces that may have been contacted by others, even outside (Aerosol and Surface Stability, et al. March 13, 2020). In response, major climbing media recommended that climbers avoid climbing in outdoor public locations (Burns, 2020). Climbing gyms closed on March 17, leaving little opportunity for climbers to practice their sport safely (State of Colorado, 2020). This impacted the local Front Range climbing community, likely contributing to the decrease in the number of people recreating outside observed by LNT.

However, since May, the end of the LNT study period, dominant messaging from local and state governments in Colorado stopped discouraging outdoor recreation (Figure 1). Many local stay-at-home orders, including the one implemented in March in Boulder, CO have lifted or loosened (City of Boulder, 2020.). In June Governor Polis's "Safer At Home And In The Vast, Great Outdoors" order specifically encouraged outdoor recreation, a marked change from previous orders encouraging residents to leave their homes only for essential travel (State of Colorado, 2020). The Boulder Climbing Community (BCC) believes, based on preliminary observations from trail counters and feedback from land managers, that since the conclusion of LNT's study in May usage of outdoor climbing areas has increased and is now higher than would be expected based on previous years without COVID-19.

The goal of this study is to provide the BCC with information about how COVID-19 has impacted the frequency of visitation to Front Range outdoor climbing areas during the summer of 2020. Quantifying the changes that are occurring will help land management organizations, and partner organizations like the BCC, secure additional funds to protect the environment from this heavy usage, as well as providing information to start conversations about the environmental impacts of COVID-19 and outdoor recreation**.**

Figure 1. COVID-19 Guidelines by Time Period, Colorado

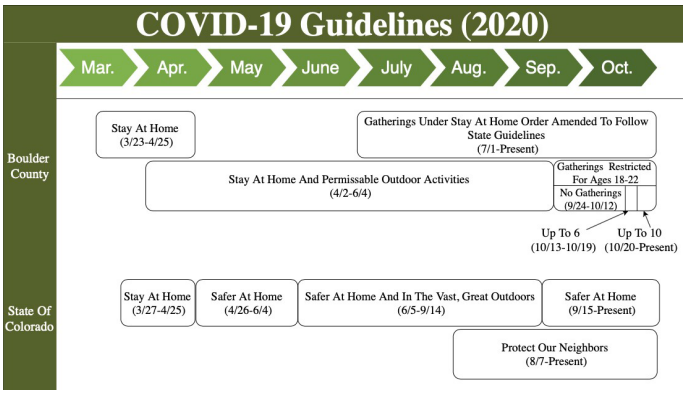


Figure 1. *During the COVID-19 pandemic messaging about what activities are acceptable has changed frequently. Since March local and state governments have issued numerous safety directives and frequently changed the guidelines for acceptable activities. The above Timeline shows COVID-19 guidelines in both Boulder County and the State Of Colorado for March through October in 2020.*

STUDY DESIGN

To provide the BCC with information about how COVID-19 has impacted the frequency of visitation to Front Range outdoor climbing areas, we identified two major research questions.

Research Questions

How has the frequency of visitation to outdoor climbing areas changed during COVID-19?

Is some part of this change due to climbers shifting their gym sessions outdoors?

Methods

To answer these two questions, we decided to distribute a survey to the local climbing community collecting data on the frequency and timing of visitation to various Front Range Climbing areas, as well as gym membership and indoor climbing frequency. To inform the creation and analysis of our survey we also decided to analyze data from local land managers to examine how recreation usage has changed in 2020.

Survey

The survey was developed using Google Surveys and consisted of mostly quantitative questions asking users to rate the frequency with which they climbed particular places during particular time periods. A key part of our survey was breaking the spring and summer 2020 season into distinct time periods based on state guidelines regarding COVID-19. This allowed us to control for the changing messaging in our analysis of climbing frequency. We also included in our survey some more general questions about how COVID-19 has impacted respondent's decision-making process surrounding climbing, and where respondents get information regarding COVID-19 and climbing. See Appendix for a copy of the survey questions and raw results.

We distributed the survey through the Boulder Climbing Community's emailing list and also on the social media accounts of the BCC and several University of Colorado (CU) Climbing clubs. This distribution began on October 29th and was open for just under two weeks, closing on November 10th. An incentive to enter a raffle for a night's stay at the Adventure Lodge in Boulder, CO was graciously donated by Asa Firestone to increase the response rate.

Land Manager Data Analysis

To inform the creation and analysis of our survey we decided to analyze data from local land managers to examine how recreation usage has changed in 2020. We reached out to six Front Range land management organizations/agencies: *Boulder County Open Space, City of Boulder Open Space and Mountain Parks, Colorado Parks and Wildlife, Jefferson County Open Space, Rocky Mountain National Park,* and the *US Forest Service Boulder District.* We asked each agency whether they kept data on climbing, trail usage, or visitation and whether they were willing to share it with us, looking specifically for 2020 data and 2019/recent past data to use as a baseline metric. We heard back from *Boulder County Open Space, City of Boulder Open Space and Mountain Parks, Colorado Parks and Wildlife,* and Rocky *Mountain National Park.* See the *People* section for more detailed information about contacts within these agencies.

We worked with land management agencies to find the relevant data and compiled our results to form an understanding of recreation usage changes that have taken place in the Front Range in the past few years. This data helped us inform our survey conclusions by providing a more objective snapshot than respondent's memories of Front Range recreation usage changes in the recent past.

Other Considerations

Some assumptions that were unavoidable during this project. For this analysis we assume that our survey was at least fairly representative of the Front Range climbing community as a whole. We acknowledge that as our analysis of the survey results is limited by the number of responses we received.

It is important to note that individuals submitted many frequency responses, one for each possible climbing location and each time period included in the study. To account for this we average frequency responses for each individual, compare the total number of responses across all locations, or group data by location where possible. Figure axis are labeled accordingly

Because the messaging from climbing groups about the acceptability of outdoor climbing varied significantly as the pandemic progressed and new research emerged, we grouped 2020 response data by Time period. These changes in messaging undoubtedly impacted the decisions respondents made about climbing so where possible we group responses into time periods based on the dominant messaging.

Finally, the overall growth in climbing as a sport has been rapid. We will consider this as we search for differences in climbing frequency during COVID-19. The American Alpine Club (AAC) 2019 *State of Climbing* report notes a 6% rise in the number of participants climbing in America from 2018 to 2019 (American Alpine Club, 2019). If this trend were similar from 2019 to 2020, we would expect a 6% increase in climbing participants without the impact of COVID-19. We assume that if COVID-19 had not happened the usage of trails and climbing spots in 2020 would be similar to 2019, plus around 6%. Our data are highly regional and doesn't track the number of participants climbing, only the frequency with which survey respondents climb in certain areas. For this reason, we cannot separate changes we observe related to COVID-19 from the overall rise in climbing. When considering our findings it is important to keep in mind that such an increase is occurring.

RESULTS: LAND MANAGER DATA ANALYSIS

To gain better insight on our survey's results we contacted several land management organizations that collect usage data. They provided information about usage before COVID-19 as well as reference information about usage during COVID-19. It is important to note that none of this data can establish causation between COVID-19 impacts and park visitation. It should be interpreted simply as background information to help inform an understanding of visitation changes in various areas during this period, and to highlight trends that could merit future study.

City of Boulder Open Space and Mountain Parks

The City of Boulder Open Space and Mountain Parks provided an overview of their Long-term Visitation Monitoring Program. The program implemented two batches of trail usage monitoring, one in 2017 and the start of 2020. The 2017 data collection was from 70 TRAFx model trail counters to monitor the number of visitors to various trailheads. The 2020 data collection switched to Eco-Counter model trail counters. The trail counters were installed and calibrated starting April 2019 and were fully operational as of January 1st, 2020. The following data shows the usage each month for selected trailheads in 2017 and 2020 (Figure 2). Only trailheads accessing climbing locations are shown below. While this information is not strictly counting climbers it shows general trail usage and outdoor activity and highlights the need to maintain these resources.

Examining the March-May period, when COVID-19 guidelines were in effect we see similar or higher visitation across months and areas in 2020 and 2017, with the exception of Chautauqua Park (Figure 2). It is impossible however to discern from this data whether increasing numbers are due to COVID-19, a long-term trend toward increasing outdoor recreation, or seasonal weather conditions (Colorado SCORP et. al, 2019, p 20-25). Notably, visitation at Chautauqua Park in March and April was lower in 2020 than in 2017. This could be due to unseasonably warm temperatures in March and April 2017, the average temperature for March 2017 was 7.4ºF higher than usual and April was 1.7ºF higher than usual (US Climate Data). Another notable difference between years was that visitation was noticeably higher at Sanitas in March 2020 than March 2017. Dakota Ridge also saw a lot more visitation in May 2020 than in 2017. Overall, we cannot determine from this data whether there is an increase in outdoor recreation frequency due to COVID-19, but it does suggest at least that there has not been a major decrease in visitation to these areas during COVID-19, as compared to 2017. Further conclusions are difficult because the baseline data are 2017 rather than 2019, meaning that lots of variables in the intervening three years could have impacted visitation.

Figure 2 Boulder Open Space Visitation

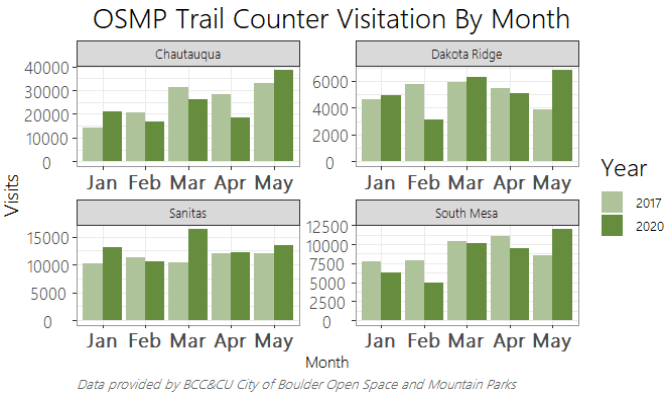


Figure 2.1. *A graph of the visitation numbers collected by trail counters at Chautauqua, Dakota Ridge, Santias, and South Mesa in both 2017 and 2020. Overall trail usage appears similar between 2017 and 2020. Usage varies by month and location with no clear trends between years.*

Colorado Parks and Wildlife

Colorado Parks and Wildlife manages all Colorado state parks. Both Eldorado Canyon State Park and Staunton State Park have established rock climbing and are located in the Front Range, our area of study. According to annual visitation data collected by Colorado Parks and Wildlife, January-September visitation at Staunton State Park rose 68% from 156,008 visitors in 2019 to 229,004 visitors in 2020. While this traffc is not exclusively climbing traffc it supports the hypothesis by BCC that usage of outdoor recreation areas has increased during the COVID-19 period.

At Eldorado Canyon State Park, the total number of inner canyon hikers was higher in 2019 during every month except May. This could be partially the loosening of COVID-19 guidelines during May 2020, or it could be due to other factors such as nicer weather since the average temperature in May of 2019 was 6.4ºF lower than usual (US Climate Data). Increases in visitation from 2019 to 2020 varied depending on specific trail locations (Figure 3.1). Most trails saw about the same visitation in 2019 and 2020.

Notably, the Streamside Trail, which is most used by climbers as access to Wind Tower, Whale's Tail, West Ridge, and the Red Garden wall areas saw dramatically decreased visitation in 2020 compared to 2019 (Figure 3.2). This may indicate that while COVID-19 had little impact on the frequency of hiker visitation in Eldorado canyon state park, climber visitation decreased during the COVID-19 period.

Figure 3.1 Visitation at all Locations in Eldorado SP

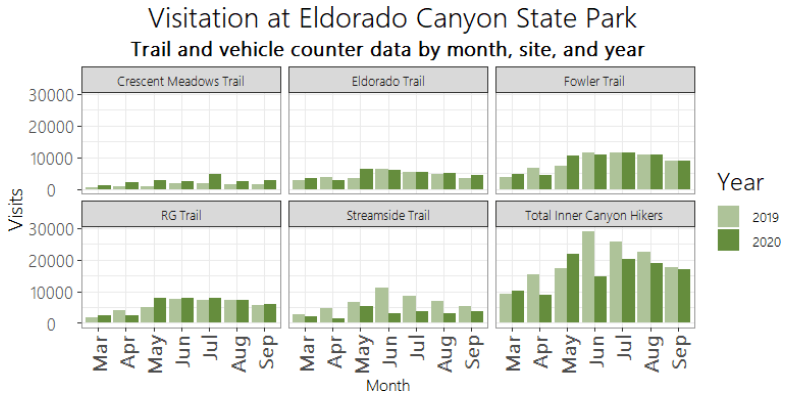


Figure 3.1 *Visitation to Crescent Meadows, Eldorado, Fowler, RG, Streamside, and Total Inner Canyon trails in both 2019 and 2020. Visitation was generally similar between 2019 and 2020 for all locations except the Streamside Trail, which is most used by climbers.*

Figure 3.2 Visitation to the Streamside Trail in Eldorado SP

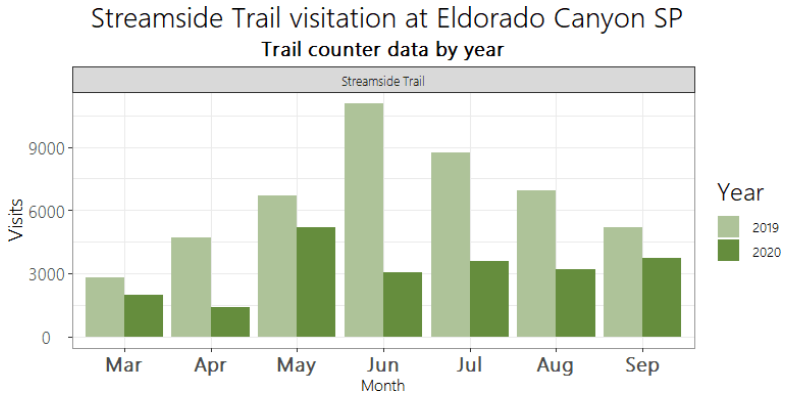


Figure 3.2 *An enlarged graph of the visitation to Streamside Trail at Eldorado Canyon in the years 2019 and 2020. Use of this climbing trail was much higher in 2019 than 2020.*

Boulder County Parks and Open Space

Boulder County Parks and Open Space (BCPOS) manages parks in Boulder County. There are many climbing areas that are under their jurisdiction in our main area of study. BCPOS tracks usage through reporting by paid and volunteer trail monitors who collect data and talk to visitors when physically present at parks. In all the parks managed by BCPOS trail monitors recorded interactions with 37, 692 people between January 1st and October 1st in 2020. In all of 2019 staff and volunteers observed 26,077 visitors. While these numbers show over a 40 percent increase in 2020 it is important to remember how this data were collected. These numbers only reflect the visitors seen by BCPOS staff and volunteers. This means there is a lot of variability in the times people were actually monitoring visitors and lets other factors such as weather and the day of the week greatly impact when monitoring would occur. That being said, the data are not inclusive of all people using the trails. The process of collecting this data are also not consistent from year to year due to the external factors such as

the ones mentioned above. Due to lack of inclusivity and consistency, the observation data are not the best data point to base any conclusions off of. However, that is the only data released for 2020 so far. Solely based on this and keeping in mind the flaws with the data collection process, it seems as if park and open space use has increased significantly. It will be best to wait however until BCPOS releases their minimum estimate on visitation numbers for all of 2020 before any conclusions are reached. In 2019 they estimated a minimum of 1,470,032 visitors which was an 11 percent decrease from the previous year (2018). This estimate suggests that the observation data accounted for less than 2 percent of all visitors in 2019. For this reason, the current 2020 data available for Boulder County Parks and Open Space is not suffcient enough yet to support any claims on the impact COVID-19 has had on visitation and park usage.

Rocky Mountain National Park

Rocky Mountain National Park keeps extensive trail counter data on popular trails, including some trails accessing popular climbing areas. However, this data are confounded by the implementation of a timed entry system which decreased 2020 park visitation overall. For this reason, we chose not to analyze data from Rocky Mountain National Park in this report.

RESULTS: SURVEY

Overall Survey Results

We had 239 responses total to our survey and kept it open from October 29 to November 11th. The survey was distributed by the BCC to their email list as well as promoted on the social media accounts of several college climbing clubs and organizations. This distribution method is reflected in our age demographics where 32% of respondents were between the ages of 18 and 25, and another 42% were between 26 and 35. Only about 11% of respondents were over 45 (Figure 4). Besides a somewhat higher response rate among 18-25 year-olds, the distribution of ages we found was very similar to the demographics of the larger climbing community as found by the American Alpine Club's First *State of Climbing* in their report (American Alpine Club,2019).

Figure 4 Age Breakdowns: AAC Data vs. BCC Survey

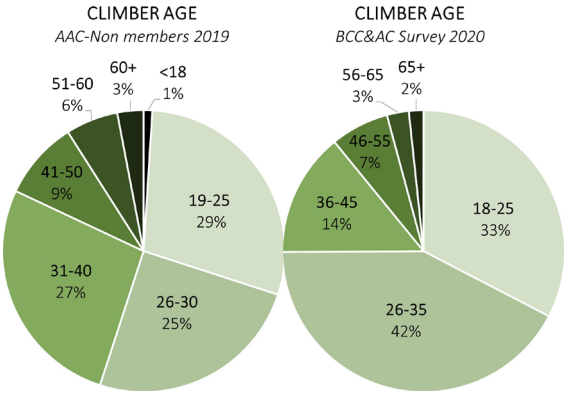


Figure 4 *The left-hand chart shows the distribution of ages amongst non-members of the American Alpine Club, according to their 2019 survey (American Alpine Club 2019). The right-hand graph shows the distribution of ages amongst respondents in our 2020 survey examining climbing in the Colorado Front Range during COVID-19. While biased towards the 18-35 age range respondents to the survey have a similar age distribution to the climbing community at large, as compared to 2019 data from the American Alpine Club.*

About 45% of respondents were sport climbers, 30% identified as trad climbers, and 10% identified as primarily gym climbers. The rest of the respondents were distributed among top ropers, bouldering, and write-in responses. Generally, the largest percentage of respondents, 40% or 93 out of 235 who answered the question, thought that the crags where they climbed were a little busier. In the next largest category, 28% of respondents said they

saw no change, 20% thought crags were a little less busy, but only 2% chose a lot less busy, compared to 9% who thought crags were a lot busier (Figure 5).

Figure 5 Perceived Crag Business Compared topPre-COVID-19

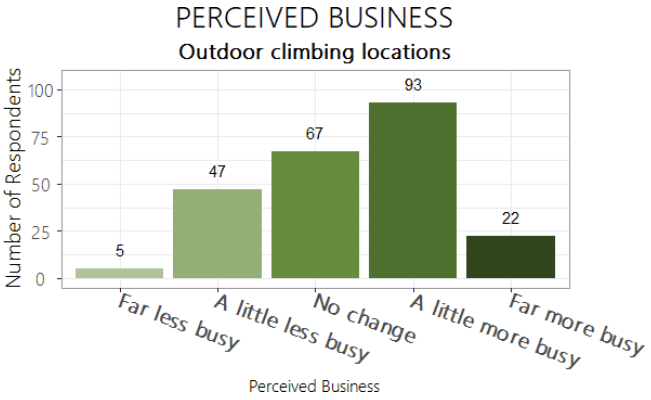


Figure 5 *A chart of survey respondents answers to the question, "How busy are crags now compared to pre-COVID-19? Most respondents think crags are a little more busy.*

General COVID-19 Impacts

Respondents got information about climbing and COVID-19 regulations primarily from social media, climbing organizations, media outlet websites, offcial sources, and friends and family (Table 1). Although social media was the most common source of information many people still got their information from other more legitimate sources.

Table 1 Information Sources Regarding Outdoor Recreation Guidelines During COVID-19

How do/did you hear about new rules, regulations, and guidelines regarding outdoor recreation/climbing?	
Social media	72%
Information from climbing organizations or media outlet websites	62.8%
Offcial sources (e.g. from local government websites)	51.9%
Friends and family	44.8%
News Broadcasts	17.2%
Bulletins at my gym/gym website	11.3%
I have not heard of any changes in rules or regulations	5.9%
Posters or publishings at the crag	0.4%
Mountain Project	0.4%

Table 1 *Sources where survey participants got information on rules/regulations regarding outdoor recreation and climbing.*

Interestingly the sources where respondents got information about climbing and COVID-19 regulations differed from the sources and methods they used to decide whether it was acceptable to climb. Most respondents, 73%, based this decision off local guidelines with. Nearly sixty percent also said they took state guidelines into con-

sideration (Table 2). Besides offcial guidelines personal research and discussion with family and friends were the most common ways respondents decided where to climb. These tables provide valuable information about how climbers have been making decisions about where to climb.

Table 2 Information Sources Impacting the Decision to climb

How do/did you decide how much, and where it is acceptable to climb during COVID-19? (check all that apply)	
Local guidelines (City, county, etc)	73%
State guidelines	59.8%
Personal research/assessment	53.6%
Discussion with friends/family	52.3%
Recommendations from climbing organizations or media outlets (BCC, Access fund, Outside Magazine, American Alpine Club, etc)	49.8%
CDC or WHO recommendations	40.2%
National guidelines	30.1%
Scientific papers/studies	23%
The opinions of well-known climbers	17.2%
Recommendations from climbing gyms	11.7%

Table 2 *Table showing what information survey participants used to determine where it is acceptable to climb during COVID-19. Most people use offcial state and local guidelines in their decision making process.*

The clearest overall impact of COVID-19 was on the frequency with which people climbed during various time periods. Pretty much all respondents said they climbed once between march and october 2019, which is expected since we surveyed climbers specifically, but the numbers were markedly lower for 2020 (Figure 6.a). Whether respondents also appears to be tied to the time period and could be associated with the strictness of state and local guidelines at that time period. Climbing was lowest in March-April 2020 during Colorado's *"Stay at Home"* guidelines when only 51% of respondents said they went climbing (Figure 6.b). After this. The percent of people climbing crept back up with 59% of respondents climbing in May during Colorado's "*Safer at Home"* period (Figure 6.c). By the June-November period when Colorado was under "*Safer at Home and in the Vast Great Outdoors"* guidelines 95% of respondents said they had gone climbing (Figure 6.d).

Figure 6 Climbing Frequency During Various Time Periods

In answer to "*I usually climb at least once during a typical, non-COVID-19 March-October season"*

Figure 6.a In our sample size, nearly all participants climbed in a typical season. This shows that we surveyed primarily active members of the climbing community.

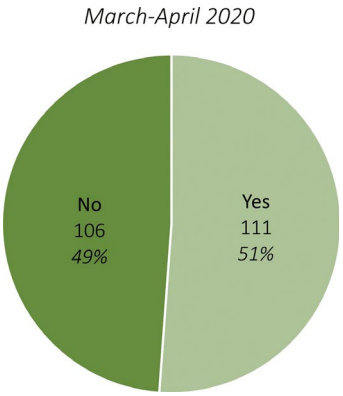


Figure 6.b This graph shows the drastic change due to COVID-19. It shows that nearly half of the participants didn't climb at all during this two month period in which they likely would be climbing. This time period corresponds roughly to both Boulder County's and the state of Colorado's *"Stay at Home"* guidelines.

Figure 6.d Here you can see that during the state of Colorado's more lax "*Safer at Home"* guideline period more people were climbing. This, however, could be the result of multiple factors. After two months of *"Stay at Home,"* people may have become fatigued to the risk of climbing. Additionally, the weather was nicer.

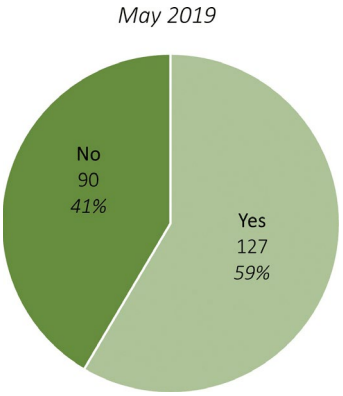


Figure 6.c Since June and the beginning of the state of Colorado's "*Safer at Home and in the Vast Great Outdoors"* guideline period nearly all survey participants have begun climbing again despite the ongoing presence of COVID-19.

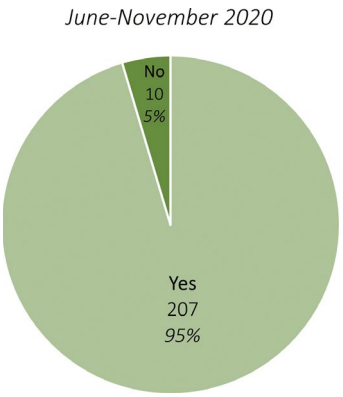


Figure 6 *Charts of the tendency of survey participants to climb during different time periods in 2020. Overall, these* figures *show that participation in climbing decreased dramatically during COVID-19, particularly in March-April when regional guidelines were strictest. Since then climbing participation among survey respondents has largely bounced back.*

COVID-19 Impacts on Climbing Frequency by Location

Our land manager data analysis hinted that climbing in 2020 may be down compared to 2019 or pre-COVID-19 levels, and our survey supported this (Figure 7). Comparing the entire spring and summer season March-October for 2019 and 2020 we see that climbing frequency was slightly lower in 2020 than in 2019.

Figure 7 Frequency of Climbing Outdoor by Year

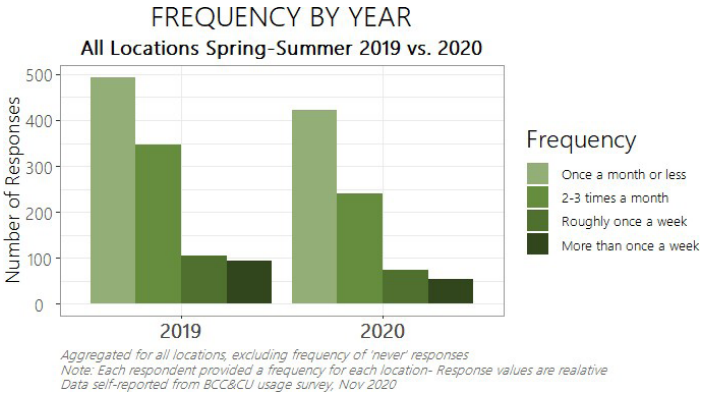


Figure 7 *Frequency of Climbing Outdoor by Year. Responses have been standardized by responding individuals. 2020 data shows the average frequency one respondent climbed at each location over all time periods. 2019 data shows the frequency each respondent climbed at each location. One "response" represents one respondent's answer for a specific location.*

After examining the trends in frequency and time for each location individually we determined that the trend of lower frequency in 2020 held true across all locations. Graphs frequency by time period for each location individually can be found in the Appendix *Additional Graphs*. Looking at more specific time periods to assess the impact of COVID-19 guidelines we observed climbing frequency plummet during the beginning of the pandemic and rise slowly as time progressed, reaching levels slightly lower than 2019 by October 2020 (Figure 8).

Figure 8 Frequency of Climbing Outdoor by Time Period

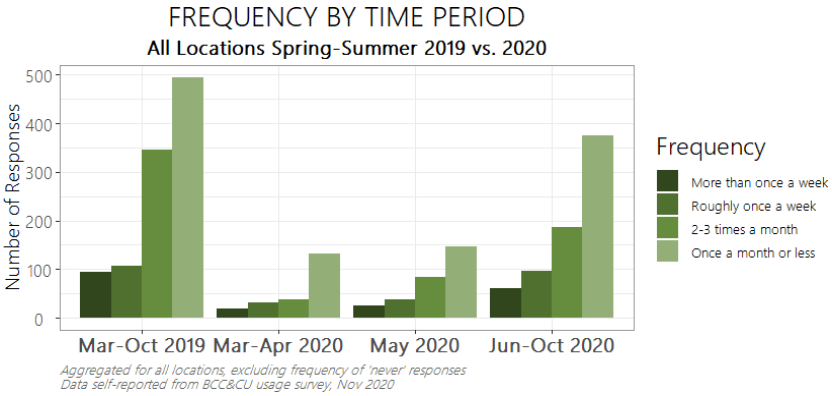


Figure 8 *Graph of the frequency of outdoor climbing during certain time periods in 2020 compared to the normal climbing season in 2019.*

Although the frequency changes over time were similar, some locations saw significantly more use overall than others. Notably though the time period did not change which locations were popular. *Boulder Canyon, Clear Creek Canyon, Eldorado Canyon, Flagstaff* and the *Flatirons* were highly popular areas in 2019 and remained highly popular in 2020 (Figure 9). In these locations most people visited more than once a month, with roughly the same number coming weekly or more often than weekly as those who came once a month. In all locations from March-April 2020 the number of people who did come more than once a month was greatly reduced. Only Boulder Canyon still had people come more than once a month during March-April 2020 but the number of individuals who did was greatly reduced.

Figure 9 Popular Outdoor Climbing Locations

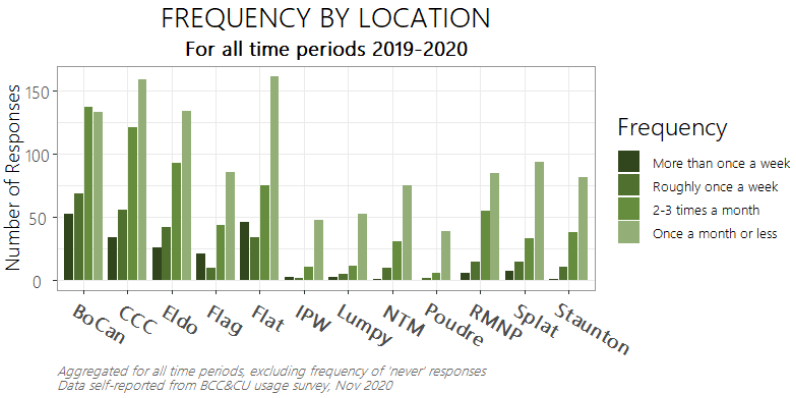


Figure 9 *Graph showing the frequency of climbing at specific locations for all time periods between 2019 and 2020. Boulder Canyon, Clear Creek Canyon, Eldorado Canyon, Flagstaff and the Flatirons are highly popular.*

Gym climbing

Gym climbing dropped dramatically in March 2020, when many COlorado climbing gyms closed. Since March, the numbers of people gym climbing have crept back up, but not nearly as quickly as outdoor climbing numbers have bounced back.

Figure 10 Popular Outdoor Climbing Locations

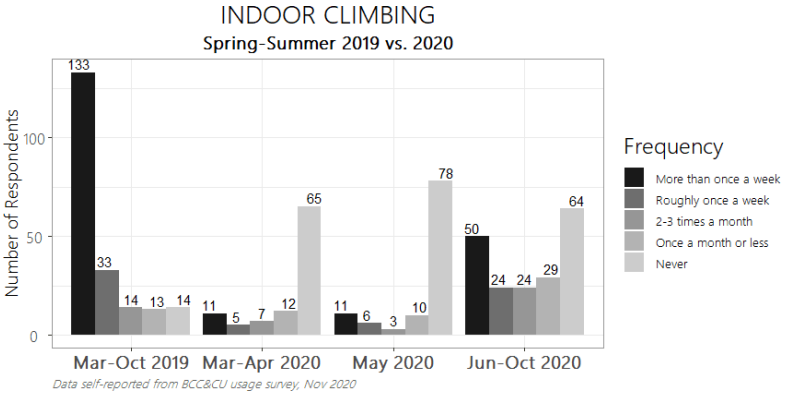


Figure 10 *Graph of the frequency of indoor climbing during certain time periods in 2020 compared to the normal climbing season in 2019.*

In our survey about 10% of respondents identified as gym climbers specifically, however 80% said they had gym memberships for some part of 2019 or 2020. Glimbers who either identified as gym climbers or had gym memberships showed the same trends in time and location as those who did not. Self identified gym climbers did not climb outdoors more frequently than those who did not identify as gym climbers.

Figure 11 Gym membership in 2019 and 2020

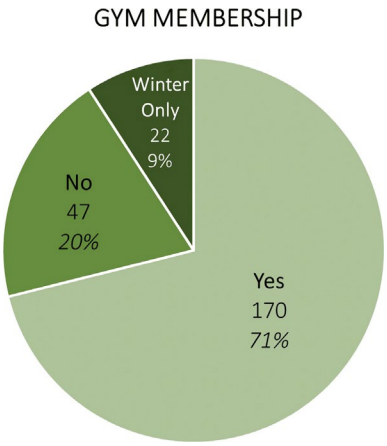


Figure 11 *Percentage of survey participants with gym memberships in 2019/2020.*

Free Responses

We had 39 comments from the open-response section of our survey. The full list of comments can be found in the "Open Response Comments" tab in the survey data spreadsheet. Most of them focused on the fact that they found other outlets in the outdoors to express themselves and be in nature, in a manner that was safe and more inclined to the regulations that were expressed in the regulations that were put forth. A couple of people analyzed the situation at the crag that they normally went to, like how many people were there, this is simply due to the times and increased awareness of their surroundings. A couple of people cited not just COVID-19 as the main reason that they didn't go to their main crag, rather the forest fires in the area. It was also evident in this section that people went to further away places in order to get away from the crowds in the Front Range, combined with having more free time due to COVID-19.

Data Analysis Notes

Because each person submitted multiple responses, one for each location the raw data are not independent, and therefore must be analyzed using more advanced statistical models. Our group does not have the expertise to statistically analyze this data for significant effects, but we can provide some advice on analysis that may be useful to someone analyzing this data in the future.

Accurate statistical analysis of this data would need to include *Respondent* as a fixed effect to satisfy the independence assumption of most statistical tests. The response variable in this dataset is an ordered categorical variable, *Frequency*, with five levels indicating the frequency with which respondents climbed. We recommend using a linear mixed model to analyze this data and including *Time Period* and *Location* as fixed effects with a random effect of *Respondent*. Because all factors in this study are categorical determining equal variance will be diffcult. We have included with this report the raw data from the survey as well as clean long-format data, and an R Markdown file for graph creation. See the Appendix *Included Documents* for a full list of included documents.

TAKEAWAYS

From the results of the survey, it is clear that climbing has, without a doubt, been impacted by COVID-19. Between March and May of 2020, climbing has been significantly down across all climbing locations in the Front Range. This period was also the time when city and state ordinances, orders, and mandates were the most strict. Ultimately this suggests that climbers were following the guidelines regarding closures and acceptable activities. According to the data, climbing started to rebound during June through October in accordance with outdoor activities becoming more acceptable by both Boulder County and the State of Colorado. That being said, climbing does still seem to be at lower levels than in 2019 even after the rebound seen in the later summer months. As for location impacts, this trend was consistent amongst all locations meaning any conservation efforts should be focused on the more popular ones. This trend is further exemplified with the graphs provided in the appendix. Climbers with gym memberships who identify as gym climbers contributed to the same trend with gym climbing as was seen with outdoor climbing. The only difference is that it seems gym climbing did not rebound nearly as much as outdoor climbing did in the later summer months. This is likely due to the more hazardous nature of indoor activities versus out outdoor activities during the COVID-19 pandemic. Overall, despite the lower levels of climbing activity during 2020, the rebound from June to October suggests that climbing is still a growing sport in the Front Range. It is, therefore, reasonable to blame COVID-19 for the lower numbers in 2020 and assume that growth in the sport and higher visitation to climbing locations will continue to happen as has been in the last several years. All this being said, it remains critical to continue to improve conservation efforts in climbing locations so that others can continue to enjoy the sport of climbing in the beautiful Front Range.

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.pdf

Report Appendix

Impact of COVID-19 on

Front Range Climbing Area Visitation

A collaboration with CU's Fall 2020 Technical Communication and Design Class

Authors: Nyika Campbell, Devin Sharpe, Alex Raymond, James Wong

ADDITIONAL GRAPHS

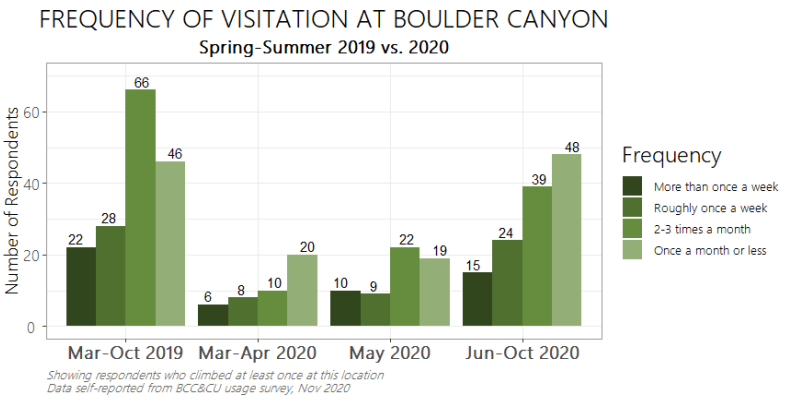

Figure 4.1. Graph *showing the frequency of visitation at Boulder Canyon during certain time periods in 2020 compared to the normal climbing season in 2019.*

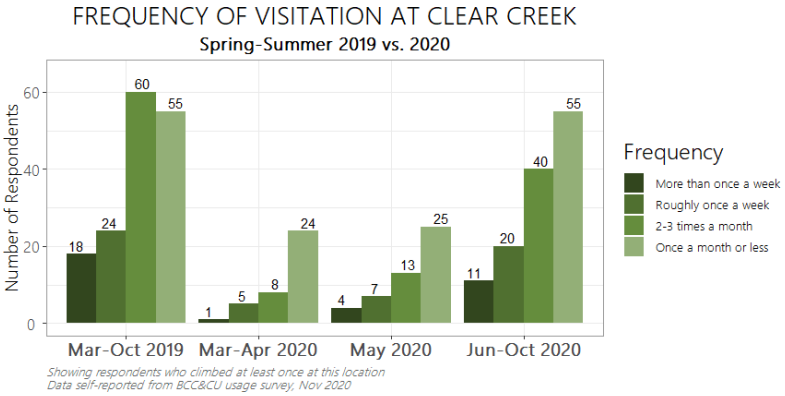

Figure 4.2. Graph *showing the frequency of visitation at Clear Creek during certain time periods in 2020 compared to the normal climbing season in 2019.*

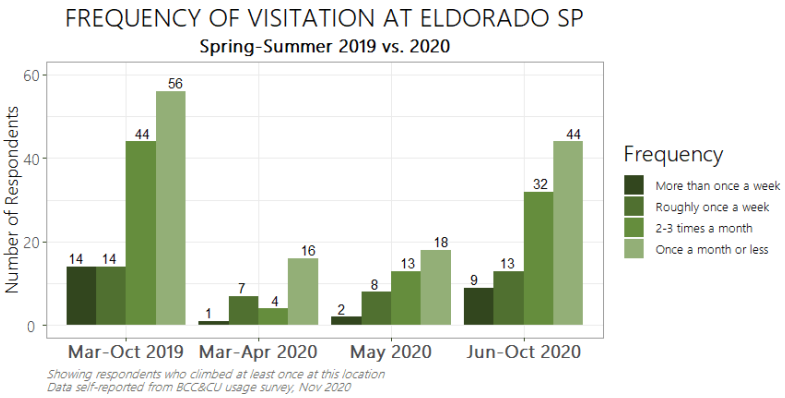

Figure 4.3. Graph *showing the frequency of visitation at Eldorado SP during certain time periods in 2020 compared to the normal climbing season in 2019.*

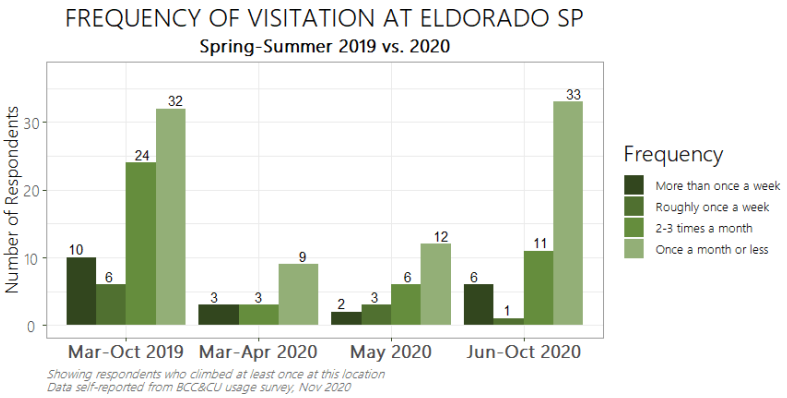

Figure 4.4. Graph *showing the frequency of visitation at Eldorado SP during certain time periods in 2020 compared to the normal climbing season in 2019.*

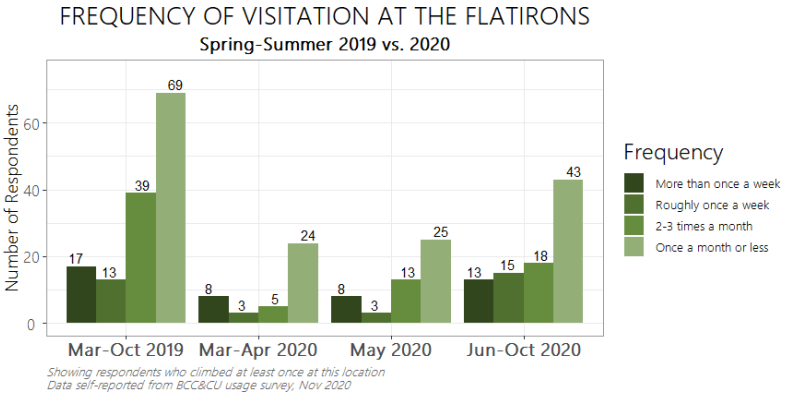

Figure 4.4. Graph *showing the frequency of visitation at the Flatirons during certain time periods in 2020 compared to the normal climbing season in 2019.*

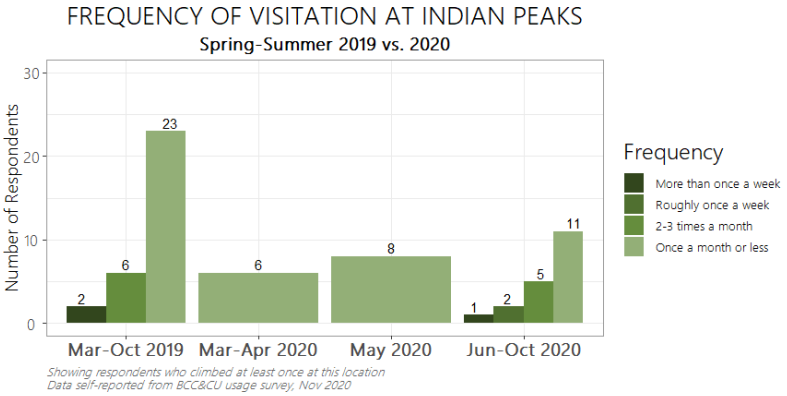

Figure 4.5. Graph *showing the frequency of visitation at Indian Peaks during certain time periods in 2020 compared to the normal climbing season in 2019.*

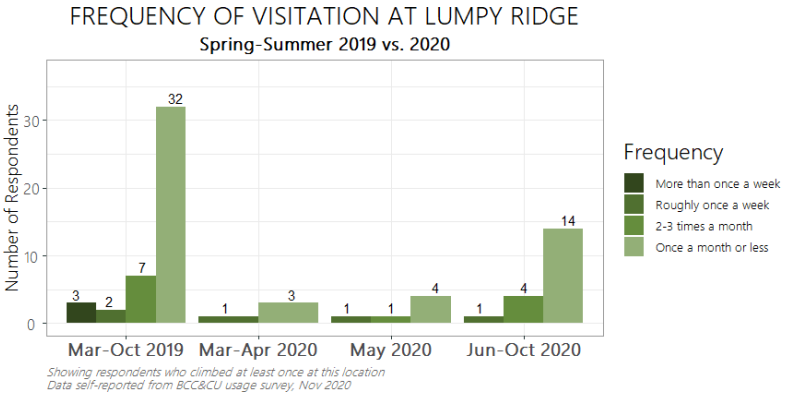

Figure 4.6. Graph *showing the frequency of visitation at Lumpy Ridge during certain time periods in 2020 compared to the normal climbing season in 2019.*

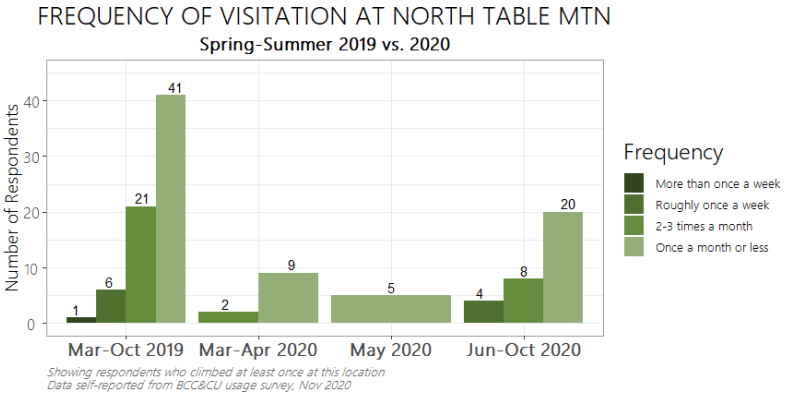

Figure 4.7. Graph *showing the frequency of visitation at North Table Mountain during certain time periods in 2020 compared to the normal climbing season in 2019.*

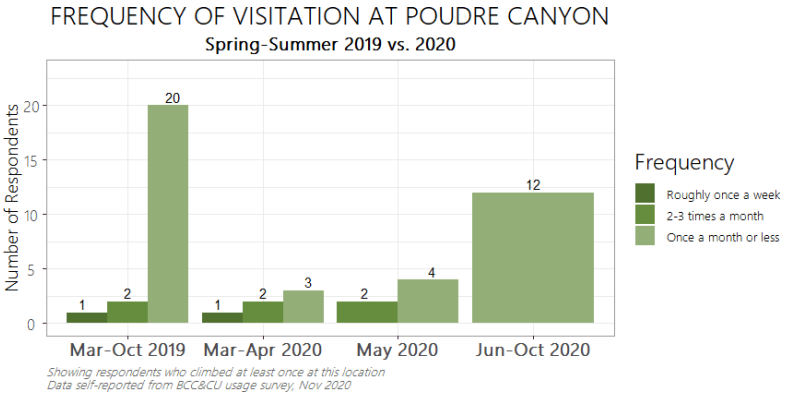

Figure 4.8. Graph *showing the frequency of visitation at Poudre Canyon during certain time periods in 2020 compared to the normal climbing season in 2019.*

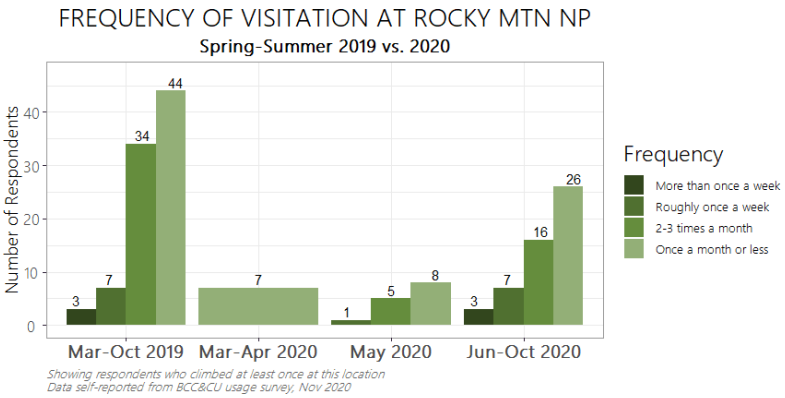

Figure 4.9. Graph *showing the frequency of visitation at Rocky Mountain National Park during certain time periods in 2020 compared to the normal climbing season in 2019.*

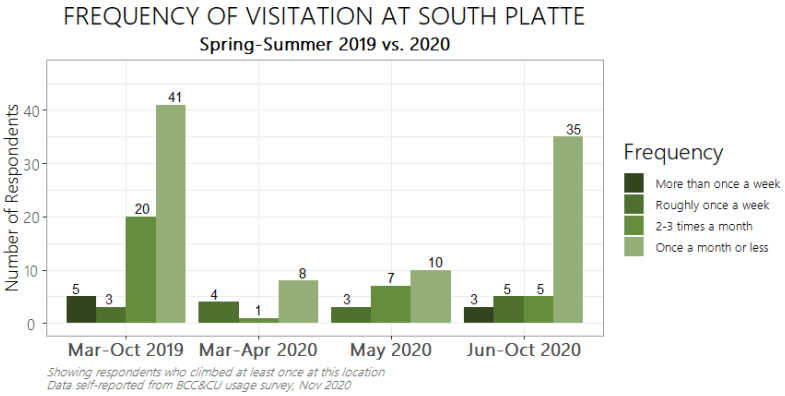

Figure 5.1. Graph *showing the frequency of visitation at South Platte during certain time periods in 2020 compared to the normal climbing season in 2019.*

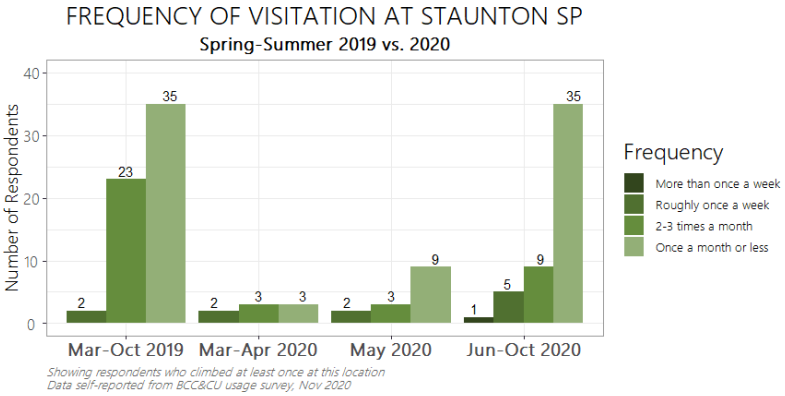

Figure 5.2. Graph *showing the frequency of visitation at Staunton SP during certain time periods in 2020 compared to the normal climbing season in 2019.*

INCLUDED DOCUMENTS

The following documents are included in the folder shared with the BCC and provide further information on this report.

Deliverable: BCC Final Report on the Impact of COVID-19 on Front Range Climbing Area Visitation

- PDF file
- This document, details survey results and other analysis

Deliverable: Usage Survey

Boulder Climbing Community Usage Survey

- Active editable google form
- https://docs.google.com/forms/d/1e7xxl6_9NTHAhSl5Qlfhn7Zq15QTFd19AE7Fps5v-8k/edit?usp=sharing
- The survey we sent out, editable for future use

Boulder Climbing Community Usage Survey - Questions

- PDF file
- The survey as we sent it out in October 2020

Boulder Climbing Community Usage Survey - Raw Responses

- PDF file
- The auto-generated response graphics from our initial survey results

Data for Future Use

2020 Raw Climbing Usage Data

- .xlsx File
- Excel file containing the raw data from the survey as well as tabs for cleaned data, frequency only data, list of questions. Additionally this sheet contains a tab for open response comments.

BCC_Long_Format_Data

- .csv File
- The long format data for use in statistical analysis and with the below R Markdown file

BCC&CU Usage Survey Analyses

- .rmd R Markdown File
- PDF File
- The code (and readable PDF version) that was used to generate graphs. This file is written in the programming language R and can be used to further examine the data and create more graphs.

ABDULAZIZ ALABDULRAZZAQ, DENNIS WINDHAM, AND JEREMY BALDERRAMA
Dumb Friends League Market Research Recommendation Report
Collaborative Writing 2nd Place

Table of Contents

Project Members

Project Summary

Background

Project Goals

Methodology

Overview

Analysis

Result / Analysis

Demographics, Awareness, and Social Media

Inspiring Communication

Pet Adoption

Supporting the Cause

Recommendations

Appendix A: Survey Questions

Project Members

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Project Summary

Background

This project was a collaboration between the Dumb Friends League, a nonprofit animal shelter / humane society, and the Technical Communication and Design course under Prof. Pieplow at CU Boulder. The project's main workforce consisted of three students enrolled in Technical Communication and Design. Additionally, four employees of the Dumb Friends League were responsible for overseeing the students' progress and providing timely feedback on deliverables. Each student contributed roughly 30-40 hours towards the completion of the project throughout the Spring 2020 Semester.

Project Goals

The purpose of this project was to collect and study data related to the younger generations' opinions on the combination of the following matters:

- Dumb Friends League and their cause
- Incentives for pet adoption
- Incentives for charity

The final deliverable of this project was agreed to be a recommendation report on the ways to engage younger audiences in the Dumb Friends League's cause through donations and pet adoption. The target demographic of the survey was to include younger people, primarily 18-30 years old.

Methodology

Overview

The first part of the project involved designing a list of survey questions to be asked on behalf of the Dumb Friends League in order to collect information regarding the target demographic: young people aged 18-30. The students performed a general genre analysis for surveying and came up with a comprehensive list of questions, which were reviewed and refined with the input from the groups's Dumb Friends League collaborators. See Appendix A for the finalized list of survey questions.

The students then designed a Google Forms survey using the questions and, similarly, adjusted it based on client feedback. The survey consisted of a total of 15 questions. There were 10 required questions, the last of which asked if the respondents were willing to receive emails. If the respondents agreed, they were asked to input their email in a new required question. Four of the questions were optional. Nine of the questions on the survey were multiple choice, four were checkboxes, two were short answers.

Afterwards, the students started survey distribution through available means. The students were mainly surveying through social media accounts, class connections, personal relationships, and the CU student bulletin board. Additionally, their Dumb Friends League collaborators agreed to distribute the survey using their mailing lists. With that said, the distribution stage overlapped with the CU Boulder campus closure due to the then-ongoing COVID-19 epidemic, so the students had limited access to other campus resources for survey distribution. Finally, the students collected and analyzed the data and prepared this recommendation report for the client.

Analysis

For questions with discrete, numerically expressed responses, the analysis comes down to an observation of trends. Questions with "short response" sections were analyzed through short interpretative essays with respondents quotes when appropriate. The collected data was graphed using LibreOffice where necessary to enhance the analysis. Because the client specifically wanted to explore the opinions of respondents aged 18-30, it was decided to exclude every other age group from the analysis with the exception of the discussion regarding age distribution of the respondents. As such, *Figure 1* is the only visual that includes data from all the survey respondents.

Results / Analysis

Demographics, Awareness, and Social Media

The project group was able to collect a total of 186 responses from all demographics. Of the 186 people who completed the survey, approximately 44% fell well within the target demographic aged 18-30 (*Figure 1*).

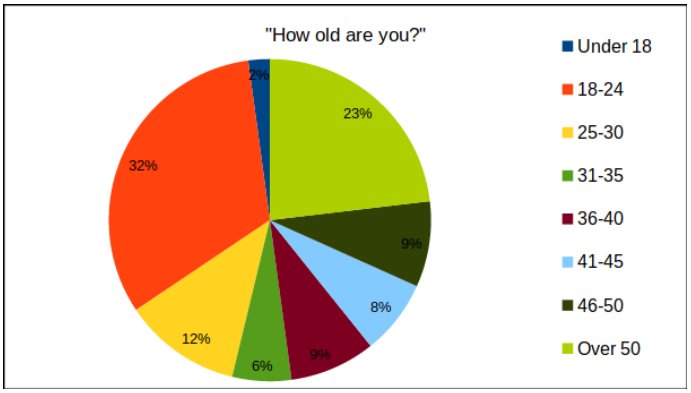


Figure 1: Age distribution of respondents.

Upon analyzing the response dates, we noticed that the survey saw an influx of people from older demographics after the Dumb Friends League sent out the survey link through their channels, whereas the responses by younger people were mostly collected through the students' effort. It follows that the current supporter base of the Dumb Friends league is largely not within the target demographic of this research.

More than half of the respondents from the target demographic indicated that they had been aware of the Dumb Friends League prior to taking the survey (*Figure 2*). It follows that the strategies employed by the Dumb Friends League may already be reasonably effective at reaching younger people. With that said, results indicate that younger people learn of the Dumb Friends League primarily through word of mouth, as opposed to the organization's online presence (*Figure 2*).

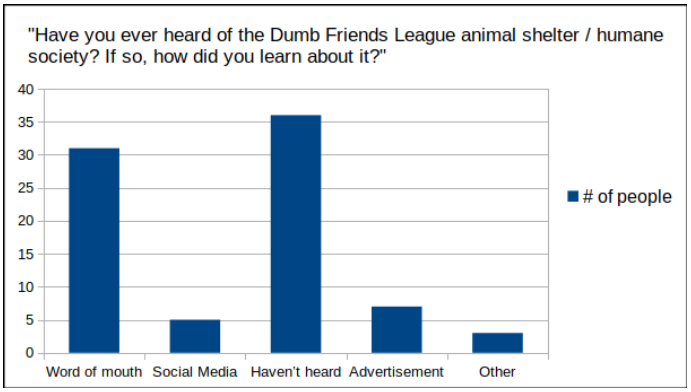


Figure 2: Respondent awareness of the Dumb Friends League by the target demographic.

It is clear that Social Media use is a possible area of improvement for the Dumb Friends League. Closer analysis reveals that the target demographic of the survey almost universally uses some sort of social media (*Figure 3*). YouTube, Facebook and Instagram appear to dominate preferences of the demographic, far exceeding the remaining competition (*Figure 4*). Surprisingly, TikTok, which has attracted a lot of attention in recent years, sits relatively low within the target demographic's preferences. It's important to note that, while it didn't appear to be as relevant as the other options, Snapchat was not included as an option in the survey but was written in by a number of people in the free response section.

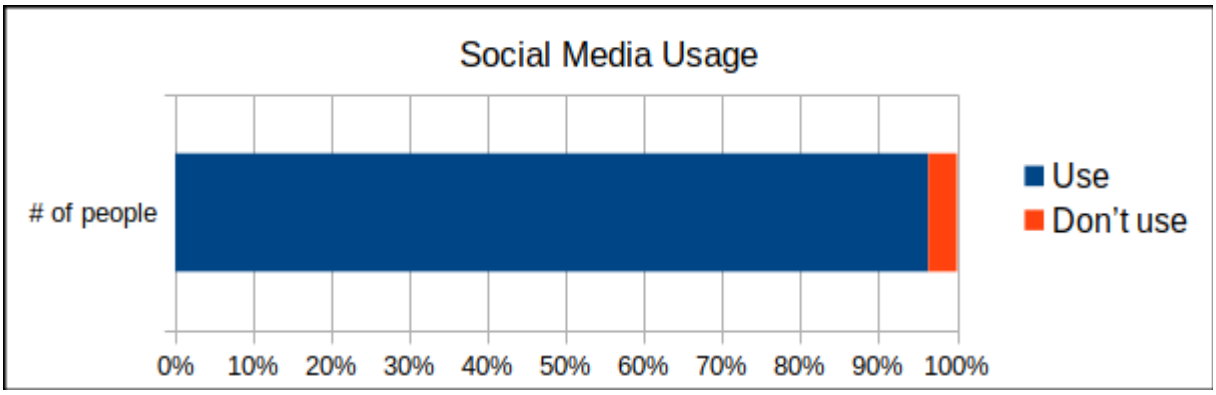


Figure 3: Social media use by the target demographic.

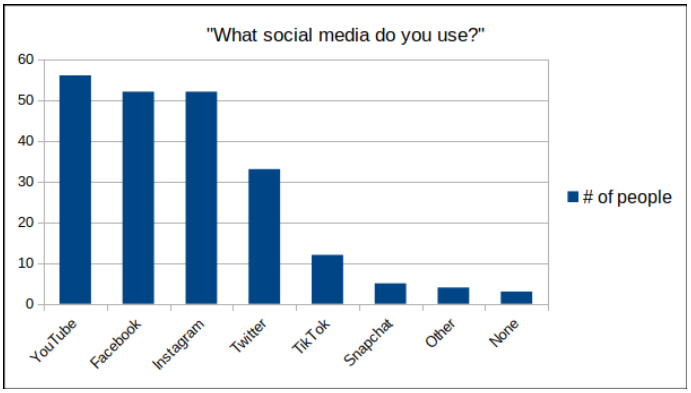


Figure 4: Types of social media used by the target demographic.

Inspiring Communication

Almost half of the surveyed individuals indicated that their preferred method of communication was "Articles / stories on social media." Note that the "News Coverage" option on the survey clearly indicated social media as one of the news sources, yet only 18% of the respondents picked news coverage as the most engaging method of communication (*Figure 5*). The implication of this discovery is that even though social media is almost universally used by the respondents (*Figure 3*), it is still not widely accepted as a viable news source.

The overall prevalence of "articles / stories" as a preferred option and the fact that social media use is almost universal heavily indicate that the target demographic favors the types of engagement that feel personal. One of the key traits of the "stories on social media" genre is that it features a down-to-earth narrative about concrete individuals and is incredibly easy to access for most people.

Closer analysis reveals that the vast majority of respondents finds success stories about animals on social media to be the most inspiring kind of messaging (*Figure 6*). "Help / need" stories were also picked by almost half of the respondents, clearly indicating general success of the "stories" genre in raising awareness of the Dumb Friends League cause.

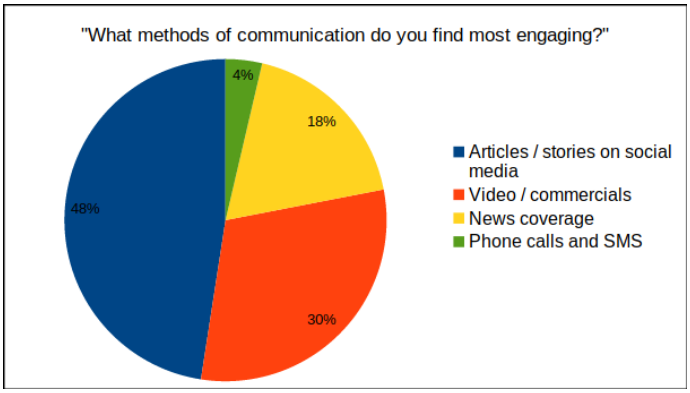


Figure 5: Preferred methods of communication by the target demographic.

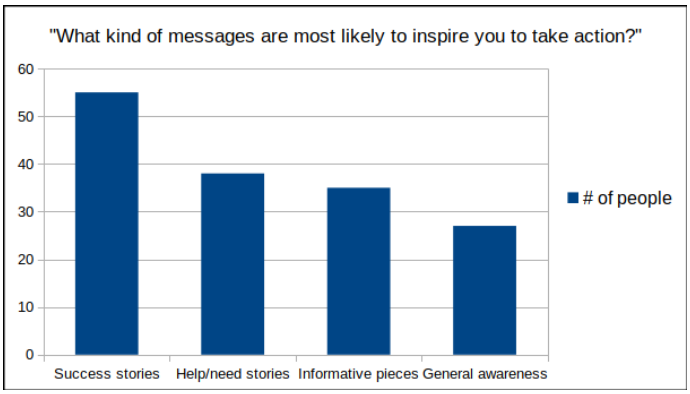


Figure 6: Message inspiration by type by the target demographic.

Pet Adoption

One area of interest for the client was whether the target demographic had adopted an animal in the past or was planning to adopt an animal in the future. Survey results show that the majority of the surveyed individuals had, in fact, adopted a pet from an animal shelter at some point in their lives (*Figure 7*). While not specifically mentioned in the survey, it's believed that the majority of the respondents likely adopted pets while living with their families due to the nature of the targeted age group.

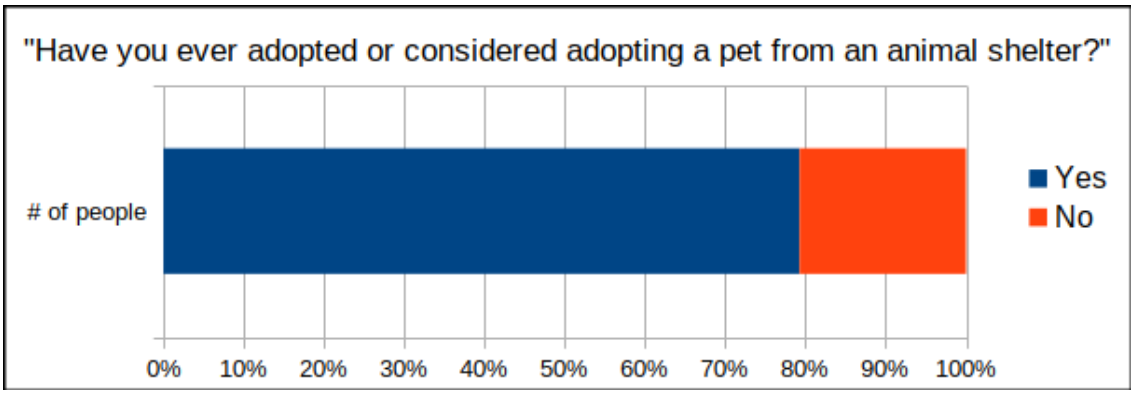


Figure 7: Rate of pet adoption within the target demographic.

When prompted to describe their future plans for adopting an animal, the respondents expressed general uncertainty. Most of the respondents indicated that they were planning to either adopt within their lifetimes or adopt within 2-4 years (*Figure 8*). Very few respondents were committed to adopting an animal within a year. There are two possible explanations for the data:

1. The targeted demographic, consisting primarily of college students, prioritizes their academic performance, graduation and job-hunting over pet adoption. Moreover, many students reside on Campus grounds and may not be able to provide a pet with a sufficiently comfortable living environment.

2. The economic instability that comes with being at an age where most people are just beginning to build a career dissuades the target demographic from animal adoption. Due to the ongoing COVID-19 epidemic, this lack of motivation may also stem from the general uncertainty that comes with a pandemic. Further research after the pandemic may be necessary to establish whether adoption plans within the target demographic change.

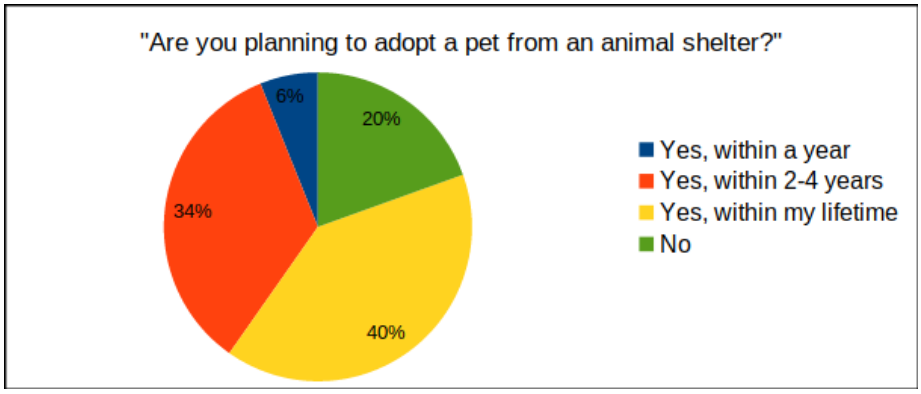


Figure 8: Plans for adopting a pet from a shelter by the target demographic.

Supporting the Cause

In order to study the donation preferences of the target demographic, it was decided to formulate two questions which would inquire about how the respondents arrive at the decision to donate and determine what factors would further incentivize donations. Survey results have revealed that the most important factor in deciding to donate is an individual's opinion of the cause (e.g., "I like it"), and not family connections or successful marketing (*Figure 9*).

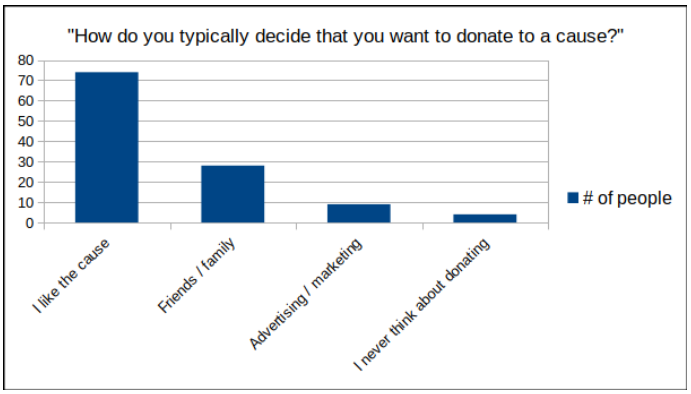


Figure 9: How the target demographic decides to donate to a cause.

When prompted about incentives, the target demographic provided a peculiar set of responses. Data suggests that younger people don't really care about tax incentives, "thank you" gifts, or bragging rights. The most important factor that stimulates donations among the target audience is personal satisfaction (*Figure 10*).

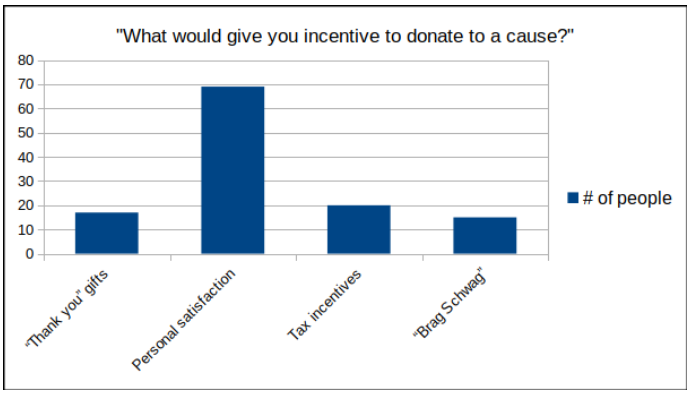


Figure 10: Incentives for donation by the target demographic.

Analysis of the target demographic's donation patterns indicates that while younger people care about nonprofits' causes, they typically cannot donate large amounts in regular intervals. More than half of the respondents within the target demographic stated that they typically donate under $25 (*Figure 11*). Moreover, out of the people who indicated donating any amount of money, three quarters said that they donated money at random (*Figure 12*). From this insight, we can conclude that even though the target demographic is, on average, financially dependent and therefore unable to donate regularly, they still try to support the causes that they feel personally invested in.

We discovered that, when asked about whether donations to support a particular animal or the general

cause were preferable, 60% of the respondents indicated caring more about the general cause than individual animals (*Figure 13*). This particular question called for a deeper analysis with a larger data pool, so it was decided to separately count the responses out of all age groups. Inclusion of the older demographics suggests that most people do, indeed, prefer to support the general cause, as indicated by 72% of all collected responses across all age groups.

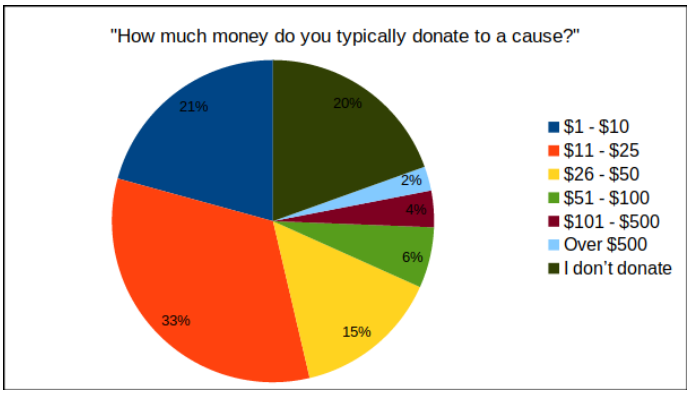


Figure 11: Amount donated to causes by the target demographic.

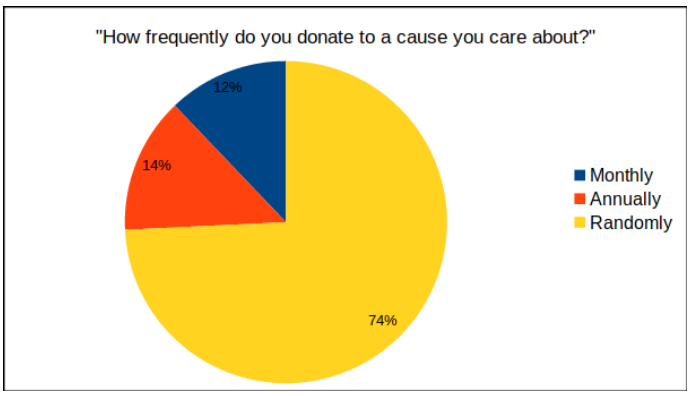


Figure 12: Frequency of donations to causes within the target demographic.

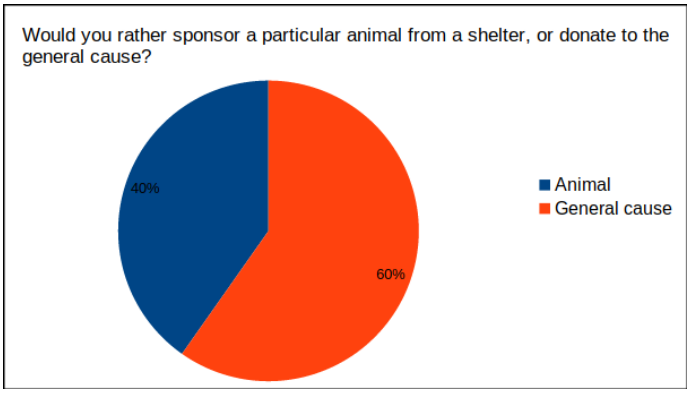


Figure 13: Sponsoring an animal vs. sponsoring the cause for the target demographic.

Finally, it was decided to inquire about whether people supported the causes they cared about in ways other than donations. The respondents were to provide a free response, ideally in the form of short stories.

Roughly half of the respondents indicated volunteering as their way of supporting their favorite causes.

"I donate more than anything. My schedule is usually obscenely full during the school year and then I'm trying to make money during the summer."

"I would love to volunteer with you all but haven't had the opportunity yet"

Some of the respondents from the target demographic indicated that they were too busy with their schoolwork to spend time on volunteering. One quarter of the respondents indicated that they did not support causes in ways other than donating or refused to provide an answer.

Recommendations

As seen in *Figure 2*, most of the responses indicate that the people that had heard about the Dumb Friends League found out about it through word of mouth, as opposed to advertisement or social media. This result indicates that the current offline and online presence of the DFL does not cater to the target demographic. From *Figure 3*, it's clear that most people within the target demographic do, in fact, use some form of social media, with YouTube, Facebook and Instagram being their portals of choice. As such, one of the first recommendations we would make is for the client to increase their efforts to reach out to the demographic aged 18-30. We believe that this could be done by establishing or increasing their presence on those social media outlets and growing their social media following by prioritizing the publishing of success stories.

Based on that line of thinking, our second recommendation is to refrain from using sad need-based stories as a means for communicating their message, despite "Help/need stories" being chosen by 38 of the respondents. This is because need-based stories, in general, tend to focus on specific animals and their difficulties or needs, but, as can be seen in *Figure 13*, the majority of respondents prefer to support the cause rather than specific animals. Additionally, as seen in *Figure 10*, most people donate for personal satisfaction, so we believe that the target demographic will have a better response to a more positive and uplifting message as opposed to seeing "sad" animals in need of help. With that said, we believe that further research should be warranted in order to determine what the target age group would best respond to specifically in need-based advertisement. The goal would be to design a new format which better appeals to the target demographic without alienating the client's current supporter base.

Our last recommendation is to set up more fundraising events at or near colleges and other places frequented by the younger audiences, such as shopping centers. As seen in *Figure 11* and *Figure 12*, respondents tend to donate at random and in small amounts, so we believe that directly presenting the DFL cause to the target audience could be the most effective way to stimulate these "random" donations and participation from the younger audiences. No incentive would be necessary for such events because most people would participate for their personal satisfaction. That said, demonstrating that the people's contributions have an impact on the Dumb Friends League's cause will be crucial to an event's success. We believe that the aforementioned demonstration could be effectively achieved by bringing some "animal representatives" to the events or showcasing the projects funded through donations.

Appendix A — Survey Questions

1. How old are you?
    a. Under 18
    b. 18 - 24
    c. 25 - 30

d. 31 - 35

e. 36 - 40

f. 41 - 45

g. 46 - 50

h. Over 50

2. Have you ever heard of the Dumb Friends League animal shelter / humane society? If so, how did you learn about it?

a. I haven't heard of DFL

b. Social Media

c. Word of mouth

d. Advertisement

e. Other [Specify; free response question]

3. What social media do you use?

[multiple choice / select all that apply]

a. Facebook

b. Twitter

c. Instagram

d. YouTube

e. TikTok

f. Other [Specify; free response question]

4. What methods of communication do you find most engaging?

[select only one]

a. Articles / stories on social media

b. News coverage - TV, papers, other news outlets (including their social channels)

c. Video / commercials

d. Phone calls and text messaging (SMS)

5. What kind of advertisements are most likely to inspire you to take action?

[multiple choice / select all that apply]

a. Success stories - how contributions have helped animals / the cause

b. Help / need stories - showcasing animals who are in need of help
c. General awareness of the Dumb Friends League
d. Informative pieces on the services and programs DFL provides

6. Have you ever adopted or considered adopting a pet from an animal shelter?
    a. Yes
    b. No

7. Are you planning to adopt a pet from an animal shelter?
    a. Yes, within a year
    b. Yes, within 2-4 years
    c. Yes, within my lifetime
    d. No, I don't plan on adopting

8. How do you typically decide that you want to donate to a cause?

[multiple choice / select all that apply]

    a. I like the cause
    b. Friends / family
    c. Advertising / marketing
    d. I never think about donating

9. What would give you incentive to donate to a cause?

[multiple choice / select all that apply]

    a. Participation prize / merchandise ("thank you" gifts)
    b. Personal satisfaction
    c. Tax incentives
    d. "Brag Schwag" - "I donated" stickers / t-shirts
    e. Other [Specify; free response question]

10. How much money do you typically donate to a cause?
    a. Zero / I don't donate money to organizations or causes.
    b. $1 - $10

c. $11 - $25

d. $26 - $50

e. $51 - $100

f. $101 - $500

g. Over $500

[If the respondent indicates that they donate in Question 10, go to Question 11. Otherwise skip to Question 12.]

11. If you do donate, how frequently?

    a. Monthly

    b. Annually

    c. Randomly

12. Do you support causes in ways other than donations, such as volunteering? Please explain. [Specify; free response question]

13. Would you rather sponsor a particular animal from a shelter, or donate to the general cause?

    a. Animal

    b. General cause

14. Would you be willing to receive emails from DFL animal shelter/humane society?

    a. Yes

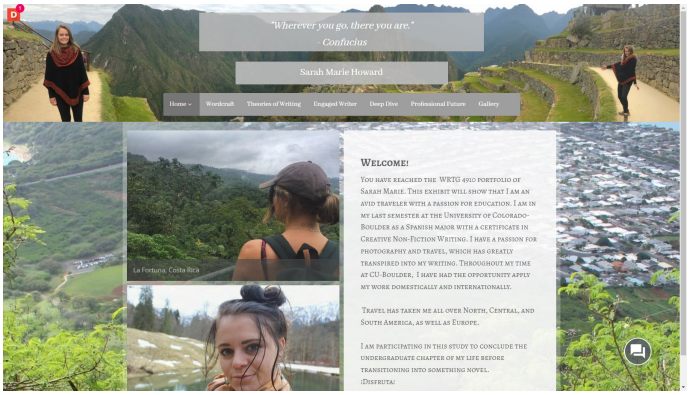
    b. No

[If the respondent picks "Yes" in Question 14, go to Question 15. Otherwise skip Question 15.]

15. Please enter your email to receive more information about Dumb Friends League. [Specify; free response question]

[End of the survey.]

SARAH MARIE HOWARD
Writing Certificate Portfolio 1st Place



[Editor's note: this portfolio originally was presented with a variety of photographs.]

Welcome!

You have reached the WRTG 4910 portfolio of Sarah Marie. This exhibit will show that I am an avid traveler with a passion for education. I am in my last semester at the University of Colorado-Boulder as a Spanish major with a certificate in Creative Non-Fiction Writing. I have a passion for photography and travel, which has greatly transpired into my writing. Throughout my time at CU-Boulder, I have had the opportunity apply my work domestically and internationally.

Travel has taken me all over North, Central, and South America, as well as Europe.

I am participating in this study to conclude the undergraduate chapter of my life before transitioning into something novel.

¡Disfruta!

Wordcraft

My writing is unapologetic, unfiltered, and raw. Personal thoughts and experiences are public knowledge for me, I have never had a problem being open and that transpired into my writing. During my undergraduate career I have been taught to embrace and acknowledge the fact that life is not always roses, there are countless thorns that vary from person to person. In my writing courses I have learned to "let my freak fly" in the way that the initial composition of my creative writing publications are written with my hands struggling to keep up with my rapid thoughts.

I start with a brief outline to guide my mind, but it almost instantly turns into pages of random thoughts and memories that relate to the topic at hand. My brain I love to listen to piano music while I brainstorm, meditation and quiet walks also help my brain artistically string together the scrambled ideas into a melodic composition of writing.

Theories of Writing

My theories of writing vary greatly, I have a passion for research and persuasive compositions as well as a love for creative non-fiction. The work titled "Toward Abolishing Linguistic Discrimination: Monolingualism, SAE, and U.S. Society" was submitted for my final in Linguistics 1000 and demonstrates an example of my research and persuasive compositions. This paper was very personal to me, as a Spanish major pursuing a master's degree in TEFL/TESL (Teaching English as a Foreign/Second Language) I had a lot to share about linguistic

discrimination, specifically in regard to monolingualism in the United States. This paper demonstrates the extensive research in which I am academically approaching a topic in a persuasive manner.

On the other hand, creative nonfiction has opened up a world of expression that is addictive to me. I spent much of my prerequisites for this certificate enrolled in courses where I was able to submit various publications of creative nonfiction. This work, "Things I've Lost", was written for my EDUC 4131 course. In portraying a reflection on the progression of life, I find relatability and that is what I attempted to portray in this work. We all have moments such as these, naïve moments of importance that progress into deep philosophical thoughts on a certain topic. I prefer creative nonfiction writing, the expression and relatability of personal experience is something that I will forever pursue and treasure from other writers in the field.

In general, my writing style is very artistic, and I struggled greatly as a Journalism major my sophomore and junior year of college. I would submit my article to the *CU-Independent* office or my intern supervisor at the *Loveland Reporter Herald*, and they would pick it dry until nothing was left but bone. I struggled for a very long time and took it very hard when I couldn't fully express myself in writing. I felt like I had too much to say, too much to relate to my readers that couldn't be communicated adequately with less words. I knew after several classes of creative nonfiction writing it would be my passion. Whenever I write, the artistic part of my brain takes control. I love to have all of the senses enlightened, my words decorated in vibrant colors and scents imaginable to the reader. In my travel writing, I love to try to put the beauty in experience into words. I think that reading is so much more enjoyable when you can lose yourself in the work, to envision yourself in the shoes of the protagonist and travel from safely inside your blanket cocoon.

Engaged Writer

As a Spanish major, I have come to develop a passion for Spanish literature, as well as an acknowledgement for the protest of human rights in the fight against gang violence and narcotrafficking in Mexico. This semester I have become more aware of the atrocities committed on behalf of both the drug cartels and Mexican government.

In this report for my SPAN 4180 Latin American Literature class, I analyze the book *Antígona González* by Sara Uribe. This book is powerful, and to me demonstrates the influence presented by published writing and how it brings together communities of loss and tragedy to demand a call for action. That is the case with this book, and in the essay I analyze the factors that make her writing able to shift political perspective.

Something that I have come to understand through my studies in Spanish Language and Literature is politics in Central and South America. I have been able to learn about the corruption in governmental relations and how that affects both the poor and minority groups. It is so interesting to me to apply what I have learned specifically about the indigenous communities and their rights to land and effects of displacement. It is so important to acknowledge the effects and fights for recognition that are happening at this moment in time, and I got to understand that in-depth when I travelled to Cusco, Peru for a service project.

In Peru I got to learn a lot about the culture in that particular region of South America, and there is rich history tainted by colonialism and bloodshed that led to displacement. In my SPAN 4220 course this semester I learned a lot about displacement and its effects on indigenous communities. In this essay to the left, I wrote about the effects of colonialism on traditional medicinal practices in the mapuche culture, specifically of the machis. I also spent a lot of time researching and studying about land and resource displacement, including the border problem with indigenous communities that no longer have access to natural resources that their ancestors relied on, as well as the corporate problem of mining in other regions of South America as well.

I have come to better understand and appreciate the indigenous culture of various communities in Central and South America, and moving forward with my masters, I will strive to advocate for this land loss and aid in a demand for acknowledgement and justice. It is so important for me to provide English/Spanish instruction so

that monolingualism no longer puts minority communities in the dark about legal processes and or access to resources.

Deep Dive

I grew up in a very conservative town, with extended family members whose whole lives were centered around religion and conformity. My entire life was black and white, there was no color until I came to one of the most liberal cities of Colorado for school. I was caught off-guard, while I thought of myself as progressive in comparison to my family and friends back home, I found myself grossly uneducated about diversity, specifically that of the LGTBQ+ community. Sexual identity was not talked about or acknowledged, let alone celebrated where I'm from.

After joining the CU Independent I was hungry for stories as I strived to get a summer internship with the Loveland Reporter Herald. I was striving for a degree in Journalism at the time (I am now concluding my studies with a bachelor's degree in Spanish Language and Literature), and any opportunity I had to write I took. When our director Lucy Haggard asked if anyone wanted to cover Sexpressions, an event in honor of Sexual Awareness Month, no one volunteered. I was busy with classes and stressed about work, but I was free that night and was looking for brownie points in the group and more experience writing so I volunteered. I had no idea what this event had in store, but it ended up being just what I needed to wake-up and get educated.

I arrived that night wearing my stereotypical journalist's outfit; tan jeans, a brown fleece button-up and knee-high brown boots. I walked in with a giant cross around my neck, not afraid to show my identification as a non-denominational Christian but I have to admit it made me stick-out like a sore thumb from the moment I walked in.

After speaking with Lucy for a while, I found a seat towards the left side of the stage and settled in. I was quiet as the lights dimmed and completely, TOTALLY, unaware of what the night would bring me. Before I knew it, there were individuals dressed up as priests sexually caressing themselves and rubbing the Bible on their privates. I just about died of mortification and lack of comfortability. I was dead quiet, tensed and on alert as a person on stage asked if there were any Christians in the room.

I'm not proud of it, but instead of proudly raising my hand and laughing it off with the rest of the room I sheepishly raised my hand. But then I heard the testimonies of various members of the LGTBQ+ community as they rotated on stage, some with the most awful stories about how they were verbally and physically assaulted by members of the Christian faith. It broke my heart, I knew that there was severe discrimination due to my faith but I didn't want to acknowledge it at the time. I was struggling with the same aggression in my search for a progressive church at the time and spent more nights than I'd like to admit sobbing myself to sleep because my Bible study group condemned and chided me for my transgressions. I spent the rest of the event acutely listening to every performance, opening myself up to truly understand and appreciate the culture instead of just saying I'm an ally. Honestly, as uncomfortable as it was, the event was beautiful. There was drag, poems, dances, competitions...and while I most certainly felt out of place I was so thankful to share their emotions and experiences. I have spent a lot of time since that event listening.

Please note that the final publication was edited and published by Lucy Haggard, and all of the photos on this page are hers as well and are attributed to in the captions. The link with the article is published by Haggard as well but there is credit to myself at the bottom of the article with contact information. The attached document on this page is my own work without the edits of Haggard. This was a school-approved event and all of the photos were approved by the editor and coordinator of the CU-Independent. The link to this article can be found below:

https://www.cuindependent.com/2018/04/26/sexpressions-celebrates-sexual-health-identity-expression.

Professional Future

It is hard to believe I am at the end of my time at CU-Boulder. Everyone says that you blink and years fly by, but I never understood the gravity of that warning until now. It feels like just yesterday I was eating at the C4C with my freshman group of friends, all of us immature and naïve in our anticipations of what college would bring. I close my eyes, and I'm back in my dorm room with my roommate Hannah, gossiping over ridiculous boy drama and idealizing on what our futures would hold. If my undergraduate studies have taught me anything, it's that life is not a sitcom—it is messy and complicated but that is what makes it so beautiful.

On reflection of the past three and a half years here at the University of Colorado-Boulder, I am so grateful for my continuous pursuits in writing. My professors have been unbelievable, and the experiences have been invaluable. The hours upon hours in the classroom working through a research paper or article finally have paid off.

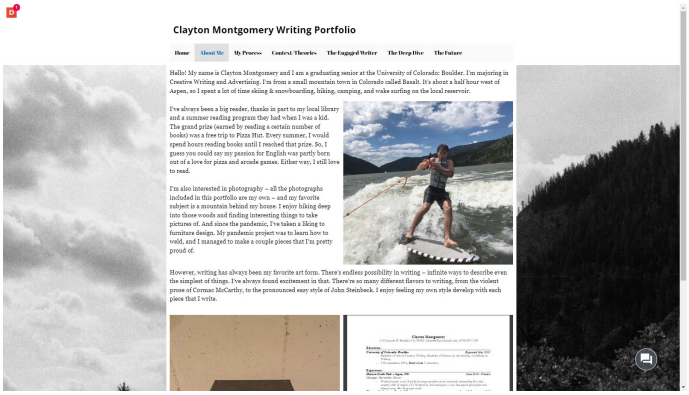
With the coming of the new year of 2021, part of me fears and dreads what graduating in December will bring. The question of success and happiness still haunt me at night. It's terrifying to graduate. The academic cocoon I've enthralled myself in the past fifteen and a half years is unraveling, and I can feel the brisk air of adulthood chill my bones. Adulthood seems dark and unforgiving, especially in the midst of a global pandemic.

But even with the implications of COVID-19 on my academic and professional career, I have never felt so alive. In all the chaos my undergraduate career has brought me, I find myself more ambitious than I have ever been, striving now for a master's degree at Colorado State University. Adversity has made me stronger, and that is a trait I will cherish for the rest of my life.

I have really grown into myself as a writer, and it has become meditative for me. Sitting alone in a café typing on my computer for hours will forever be my therapy and will forever be a friend of mine. In the continuance of formulating my self-identity it will aid me in organizing my rambunctious thoughts and sentiments. I would love to publish a book, to be a renowned travel writer in some shape or form. Regardless I will continue immersing myself in both writing and literature, and that passion I developed in and of itself is irreplaceable.

CLAYTON MONTGOMERY
Writing Certificate Portfolio, 2nd Place

[Editor's note: this portfolio originally was presented with a variety of photographs.]



Home

Welcome to my portfolio! I'm excited to share a bit about my progression as a writer at CU, and I'm glad to finally have some of my favorite projects all in one place. I hope you enjoy, and don't hesitate to reach out with any thoughts, comments, or questions! Thanks!

About Me

Hello! My name is Clayton Montgomery, and I am a graduating senior at the University of Colorado / Boulder. I'm majoring in Creative Writing and Advertising. I'm from a small mountain town in Colorado called Basalt. It's about a half hour west of Aspen, so I spent a lot of time skiing & snowboarding, hiking, camping, and wake surfing on the local reservoir.

I've always been a big reader, thanks in part to my local library and a summer reading program they had when I was a kid. The grand prize (earned by reading a certain number of books) was a free trip to Pizza Hut. Every summer, I would spend hours reading books until I reached that prize. So, I guess you could say my passion for English was partly born out of a love for pizza and arcade games. Either way, I still love to read.

I'm also interested in photography – all the photographs included in this portfolio are my own – and my favorite subject is a mountain behind my house. I enjoy hiking deep into those woods and finding interesting things to take pictures of. And since the pandemic, I've taken a liking to furniture design. My pandemic project was to learn how to weld, and I managed to make a couple pieces that I'm pretty proud of.

However, writing has always been my favorite art form. There's endless possibility in writing – infinite ways to describe even the simplest of things. I've always found excitement in that. There're so many different flavors to writing, from the violent prose of Cormac McCarthy, to the pronounced easy style of John Steinbeck. I enjoy feeling my own style develop with each piece that I write.

My Process

It begins with an idea, an idea which I write in the notes app on my phone. Most of the time it's something small—a word, a phrase, a scene that I envision in my mind. Here's some of the ideas that never found their way to paper (yet, at least): "story about man with permanent hickey on his neck." On second thought, maybe I will use that one. I also have, "flash fiction about someone who has the sun their eyes during church." Also, "poem about feeling something in your pulse?" Most of the notes are vague and largely useless, but you never know when you'll find a use for an idea, so I like to keep everything. I use the notes app because these little moments of inspiration strike me at strange times. Right before I fall asleep. Sitting in a bar with my friends. If I sit

down at my desk and tell myself okay, time to write now, my mind turns into a desert waste. I keep these notes as a way for me to always have something to work on, with the hope that one of them could lead to something great.

From there, the idea moves to paper. Something about having a pen in my hand makes my mind move faster. My outlines on paper are messy – very messy. I tend to scribble things out, make notes in the margin, and even make little sketches on occasion. When it comes to the planning process, a word document is just a bit too rigid for me. In its infancy, an idea should be allowed to go any which way it needs to, and I've found that paper is the best medium for that.

After I barf all my ideas onto paper, I begin the process of typing them out in a word processor, and hopefully sharpening them along the way. I either create a more rigid outline, or I just start writing the actual piece. If I'm working on creative nonfiction, I usually want a more defined outline to work from, but if it's fiction, I generally just start writing. After I have the first draft down on a word document, I let it sit for a while. My WRTG 2020 professor, Jay Ellis, taught me the importance of multiple drafts. A piece of writing is a living thing, and it requires change in order to get it where it needs to be. It's oh-so rare for it to be that way in one shot. In between drafts, I like to forget about the piece. I like to let it breath and come back to it with a fresh mind. Most of the writing that I'm genuinely proud of has taken at least three drafts to get it to that point.

Context/Theories

Good writing has an ability to capture a moment in time—as cliché as that sounds. It grounds a reader in a certain place at a certain time. In order to do this, one must use poignant details in their writing. One of my WRTG 3020 professors, Dr. Holman, emphasized the importance of this in his class. In the class, we read Dharma Bums by Jack Kerouac – a novel filled with stunning details that brought the world of northern California to life. The class especially taught me how to use sensory detail in order to make the reader feel like they're really in a place. To do so, all senses must be captured. And perhaps most importantly, I learned what the right amount of detail looks like, because there is definitely such thing as too much. I feel like by the end of the class, I understood how to use detail in such a way that the reader won't be overwhelmed, but instead, left with the feeling that they really experienced a moment in time.

One of the documents I've included is a descriptive essay from Dr. Holman's class where I describe the area surrounding my family cabin in Colorado. The essay is just two pages long, and its only purpose is to ground the reader in that specific place. There's no plot and no characters to speak of. It's just details. From the looming snow-dusted peaks to the piles of mining tailings dotting the landscape, my goal with the essay was to create a setting so vivid that it allows the reader to slip away from their reality and into the one that I create.

Another important context which I think my writing is in, is the tradition of research. Obviously, before I write a piece of, say, academic nonfiction, I do a ton of research before I start writing. Of course, essays like that require citations and are largely focused on research, but I do the same type of exploration before I begin any writing project, no matter the genre or discipline. Even when I'm writing fiction, I like to do as much inquiry as possible so that I can best understand my subject. No matter what the subject is, I feel the need to understand everything adjacent to it. If I do so, I also have the ability to include much better details in the writing.

Sarah Massey-Warren instilled this approach in me during the WRTG 3020 and 3040 courses I took with her. The assignments for the classes were demanding in that we often had to create arguments about topics that we might not have much understanding of. I've also included an essay from that 3020 class where I explore the importance of density when planning cities, and how the American West can create better cities. Urban planning has always been something I've been interested in, but it took a massive amount of research to sound even mildly informed on the topic.

The Engaged Writer

After writing my essay on urban density, I found my love for cities rekindled. Like I mentioned in that paper, cities are where many of us are born, raised, and live out the entirety of our lives. But despite this, the planning and development of cities can feel entirely out of our control. It's why so many cities fall prey to the same mistakes. In my WRTG 3040 class, we were tasked with writing an Op-Ed on an issue we care about, so I figured I would use that rekindled interest of cities to make an argument about the development of Boulder.

An Op-Ed is a tricky document. They oftentimes have a very strict word limit (750 words in this case), which means that all arguments have to be incredibly concise. It's certainly not easy building an effective argument in that short of space. And while I've always considered my writing to be fairly succinct, I still struggled with constructing proper context and argumentation in the Op-Ed. My original draft came out at nearly a thousand words, and as I read it over, I didn't think it would be possible to cut down to 750. But I had to try. Over the course of multiple drafts, I whittled away at the word count. I scrapped whole paragraphs and re-wrote them. Long wordy sentences got cut down to their sharpest versions. Any and all fluff was deleted. And eventually, the bloated essay found its 750-word form – a leaner version of the original with a surprisingly stronger argument.

The Op-Ed was an exercise in sacrifice. In order to achieve the best possible product – in the case of the Op-Ed, an article that has wit and snap delivered in a bite-size portion – I had to forego all the material that was eventually deemed unnecessary. It was challenging because many of those sentences added to the rhythm and flow of the essay, and sometimes I just liked how they sounded. By cutting them, it forced me to find that same rhythm and flow when creating my argument and outlining evidence. I had to make the argument itself sound beautiful. It definitely wasn't easy, but it's a process that I'm sure I'll use again in the future.

The Deep Dive

This was tough. I have a lot of projects that are near and dear to my heart, and I had some trouble picking just one. After some consideration, though, I decided on an essay titled "Rapid Oxidation" and some of the writing that led to it.

Before I talk about this essay, I should first provide some context. In the summer of 2018, my hometown of Basalt, Colorado came under siege by a large wildfire which came to be known as the "Lake Christine Fire." It started on July 4th and wasn't fully extinguished until the first snowfall that fall, months later. It was a harrowing experience. My family and I were forced to evacuate our home for a few nights as the fire grew ever-closer. Luckily, firefighters and homeowners alike were able to keep the fire from our neighborhood. Our house was saved. We got incredibly lucky, but for my family and I, the events that summer were fairly traumatic. Through writing, I was able to process the events that happened that summer. I didn't submit any of these essays to any of my classes; they were just important for me to write. They helped me make sense of things.

My writing on the subject began with an essay called "Indian Summer." It outlined my personal experience throughout the fire, from its beginnings on July 4th, to the night we were forced to evacuate, to the day we were allowed to return home. It was definitely an emotional experience writing this essay in that conjured some tough memories, but in the end, it made me feel a lot better. I was surprisingly proud of the essay, so I decided to submit it to a few publications and competitions. It ended up receiving an honorable mention in the Center of the American West's Thompson Awards in the memoir category. It felt great to have both my writing and my experience recognized in that way.

About a year later, I wanted to revisit the essay. I felt it was unfinished in a way. This feeling had arrived after yet another devastating summer of wildfires – most of which were in California. After watching the complete destruction of entire towns in California, I felt like I needed to reexamine not only my experience with wildfire, but also the worrying pattern of wildfires in the American West. That's when I started writing "Rapid Oxidation."

This time around, I began with re-writing much of the personal experience I had with the Lake Christine Fire. I tried to make the sentences more interesting, along with finding a better rhythm in the writing. Once that was finished, I started on the research. I wanted to frame the essay within the context of climate change and how that might contribute to future wildfire cycles. I had to learn how to access NOAA weather/climate data from various data collection sites around Colorado. I then used my findings to analyze whether or not climate change potentially played a role in the Lake Christine Fire. Then I looked at the findings within the context of the West, and what climate change will mean for future wildfire seasons.

The essay ended up being the piece of writing of which I'm probably most proud. It was immensely therapeutic to write, and I felt really happy with the final product. Once again, I decided to submit the essay for publication, and it got second place in the first contest I submitted to *Journal 2020*'s sustainable writing competition. After finishing the essay, it felt like I had said all that I needed to say about the events. And I could finally put the experience behind me.

The Future

The writing certificate has been a massive source of inspiration and motivation throughout my time at CU, and I'll definitely use what I've learned throughout my future. As of now, my plan is to move to Spain in the fall to be a teaching assistant in English classrooms in elementary and middle schools. The program is attractive partly because I would have a lot of free time during the week and weekends. It would give me the chance to be out of my comfort zone, live simply and cheaply, and devote myself completely and utterly to my writing in the free time. I want to build my portfolio and hopefully keep submitting to all sorts of publications and competitions in the meantime. After Spain, I have plenty of goals, both short and long term, that I hope to chip away at through the years.

Mostly, I just want to keep writing. And I know how obvious that sounds, but I think it's easier said than done. The path that I want to take – that of a working writer, whether it's as a novelist or a magazine editor or a freelancer—is not always so easy to break into. Writing isn't always lucrative. And it can often be forgotten about in a life that often requires other jobs to pay the bills. It's easy to go months or years without any sort of successes, and thus, writing can be all too easy to give up on. That's why I just want to keep writing no matter what. Whether or not I'm working one of those dream jobs, I don't want to lose the love I have for writing. I certainly don't plan on it. And that's why I'm grateful for the writing certificate and CU's English department for showing me a million different ways to enjoy writing, along with the million different contexts it can be useful. And as for success as a writer, I guess I'll cross my fingers. I like to think I've set myself up fairly well for it throughout my time in college, but only time will tell. But no matter, I'll just keep writing.

To show some of my thinking when it comes to the future, I've included a document of some of those goals/ideas, along with a cover letter to *Outside Magazine* that I might send in one day. I've also attached a short piece of fiction that was featured in CU's Walkabout in their Spring 2020 edition. I used to be afraid of writing fiction, but now I've begun to really enjoy it. Writing fiction is something I definitely want to pursue after I graduate.

DEEDEE NGUYEN
The Road Ahead
1st-Year CNF 1st Place

My parents always told my brothers and me that we were their American dream. As refugees from the Vietnam War, they immigrated to the United States to ensure that we would never experience the hardships that they did. They did everything in their power to provide us with opportunities to succeed. All they asked for in return was for us to make them proud. Like all stereotypical Asian parents, they wanted us to do so by studying hard and becoming doctors. To them, this was the ultimate American dream. As the only girl in my family, I faced the highest expectations to fulfill this dream. Throughout my childhood, my parents celebrated every academic achievement. However, with every accomplishment, the expectations grew higher. What my parents didn't realize was that, in my desperate attempts to make them proud, I sacrificed my sleep, my social life, and, most importantly, my mental health.

I knew that I was depressed since I was 15. I suffered in silence for two years before I finally gathered the courage to tell my parents. I remember sitting at the dinner table with my head hanging down, unable to make eye contact with my parents. All I could focus on were my split ends. I picked at them relentlessly, pulling the broken ends apart to distract myself.

My dad scoffed, "What could you possibly be depressed about? When Communists took over Vietnam, I fled to Thailand by boat. I left my home and my family behind. We sailed for a week without food or water before we reached a refugee camp. I watched people die around me. My family didn't even know if I was still alive. I was only 15.

"What do you know about hardship and suffering? Have you moved to a foreign country without your family, belongings, or any way to make a living? Have you taught yourself another language or worked 12 hours a day to survive? Have you gone to bed hungry, slept without a roof above your head, or shivered through a cold winter without heat? Have you experienced the atrocities of famine, war, or poverty? Tell me. How could you be so ungrateful and claim to be depressed?" he finished, his face red from anger and eyes full of disbelief.

I sat in silence, desperately pulling at my gnarled and twisted split ends as my vision blurred with tears. By invalidating my feelings, my dad's words made me reflect on how to cope with depression. I realized that life doesn't stop even if you have a mental illness. I have to keep moving forward. As a result, instead of finding healthy ways to manage my depression, I diverted my thoughts and energy into the future lying ahead.

By the time I started college, I felt like I was stuck in a car with no brakes. My life was dictated by the next exam, the next job, and the next checkbox on my resume. Every day became a blur. I lived a constant cycle of work, school, and sleep. With college came more responsibilities and setbacks: increasingly difficult courses, a serving job to pay for rent, more friends and social circles to maintain, a research job far away, a fallout with my best friend, and an abusive relationship. The building pressure and stress only worsened my depression. However, I didn't have time to seek therapy. I couldn't just stop the car and put everything on hold because I knew that these years would determine whether I am accepted into medical school. In other words, I was in the final lap. Taking a break would prevent me from crossing the finish line. Life keeps moving forward, and I had to keep up.

When the first wave of COVID hit, like so many others, my mental health plummeted. Two pandemics dominated the world -- one viral and one mental. As millions around the world died from the novel coronavirus, we sacrificed our normal lives to protect ourselves and each other. Yet, in our attempts to do so, mental illness skyrocketed at home. In June of 2020, the CDC conducted a survey regarding mental health. Over 40% of respondents reported one or more mental or behavioral health conditions, including anxiety, depression, trauma and stress related to the pandemic, and substance use to cope (JoJack, 2021). We were already experiencing one of the lowest points in human history, but it was exacerbated by higher rates of mental illness across the globe.

Before quarantine, I was able to avoid facing my depression by focusing on the millions of other daily tasks I had. When dark thoughts creeped into my mind, I simply volunteered more, worked harder, or made plans with friends. I eagerly took any opportunity to occupy my mind and exhaust my body. Without realizing it, I became dependent on the stress of daily life and the people around me to ignore my mental health. However, quarantine eliminated all my existing coping mechanisms. Work was put on hold. Social gatherings were out of the question. When summer break came, I didn't even have schoolwork to immerse myself in. For the first time in years, every defense I had against depression was obliterated by COVID. Left completely alone with my thoughts, I felt as if I was drowning in my own mind. It seemed like things would never get better. We still don't know when all this will end. However, human nature drives us to live. In unprecedented times, we find new ways to cope.

Two months into quarantine, I moved back home. I couldn't stand to be alone any longer. I feared that I might even hurt myself. After months of isolation, I slept in my bed surrounded by the comforting smell of home. The next morning, I woke up to the smell of Vietnamese coffee. My mom knocked on my door and asked me if I wanted to join everyone for breakfast. As I ate banh mi with my family, I found myself savoring every texture and flavor -- the crispy baguette, the sweet pork, and the tangy pickled vegetables. I couldn't remember the last time I had time to eat breakfast with my family. We talked about birthday plans for my youngest brother, who was turning 11 in just a few days. It seemed like only yesterday I was still changing his diapers and heating his milk. My dad cleared his throat and gruffly mumbled, "it's good to have everyone home and healthy." I didn't even notice the tears in my eyes until they fell onto my banh mi. No one said another word. We kept eating, but we all ate in silent agreement. It *was* nice to have everyone home, and we were so lucky to be healthy.

Because of COVID, normal life was at a complete standstill. For the first time in years, I had a break from the constant cycle of work and school. I had time to reconnect with my friends and bond over our shared experiences of boredom and loneliness. I had time to sleep. I could wake up feeling at ease, knowing that I had no obligations or plans for the day. I could spend time with my family. In doing so, I found beauty in things I never appreciated before. I discovered how peaceful it is to hear the sound of birds chirping in the morning. I realized how refreshing it is to be outside, breathe in the sweet summer air, and feel the sun's warmth radiate throughout my body. I felt my parents' and brothers' unconditional love -- something I neglected to appreciate in years because I was constantly working or studying. I found reasons to love living. I encountered happiness, and it weakened depression's grips on me.

Though I initially cursed COVID for robbing me of the distractions I used to keep my depression at bay, the pandemic forced me to reflect on my life. In isolation, I realized that the life I led was not sustainable. I was constantly burdened by stress, the pressure to be perfect, suffocating responsibilities that I didn't even find fulfilling, and the overwhelming fear that I would fail and disappoint my parents. I held onto these negative stressors in my life because I thought that letting go would mean sacrificing my future. By reflecting on my life before COVID, I realized how much I was missing out on because I was always focused on the destination ahead. However, life isn't just about the future -- life is happening *now*. COVID helped me realize that it's okay to get out of the car. It's okay to take time for myself and rest. It's okay to make time to connect with the people I care about. It's okay to simply enjoy life and live in the present moment. Thus, the chaos of COVID ultimately provided me with inner-peace and helped me see the world in a completely different and brighter way. And I'm not the only one.

Despite the initial devastating blow that isolation and the pandemic dealt to people's mental health, hope began to flourish over time. We learned to use Zoom not just for work and school, but also to talk to our friends and family, hear their voices, and see their smiling faces. We started to manage stress in a myriad of ways. With our daily lives on hold, some sought solace in meditating and breathing (Grantham, 2020). Others found joy in smelling the roses and watching as the sky progressed from sunset to dusk (Ibarra, 2020). Regardless of the method, we were given the chance to enjoy the small, beautiful things life has to offer. In this terrible time, life pushes us forward, "reminding us to breathe as others' breaths are leaving" (Bardsley, 2020). We learn to relish in what we have because, once life is gone, we can't get it back.

Times of crises can take a toll on mental health, yet they can also offer relief from the daily stresses of life. Furthermore, the way we cope and move forward can ultimately invigorate us and give us a newfound appreciation for life and its small silver linings. COVID showed me that I can take back the wheel. I can roll down the windows and feel the wind blow through my hair. I can smell the rain and hear it fall on the pavement. I can step out of the car and feel it on my skin. And when the rain stops, I can see the sun peek out from behind the clouds, illuminating my surroundings in a prism of colors I never noticed before.

I'll probably always be depressed. However, COVID forced me to acknowledge my mental illness and learn to cope with depression rather than ignore it and allow it to consume me. COVID also taught me how precious life is. It helped me discover the beauty and happiness in the little things. In doing so, I learned that life isn't just about the destination. It's also about every experience you encounter throughout the journey, no matter how big or small. The world will keep spinning, and it'll take us all with it. But the world will also give us gifts along the way. Sometimes we just need something big to happen in order to truly appreciate them. Although the road ahead remains uncertain, I believe the pandemic has shaped us in profound ways and given us hope for what lies ahead. We can't help but be excited and plan for a future without COVID. When this is all over, we will eagerly leap forward, "ready to seize and savor the moment" (Ibarra, 2020). However, the lessons I've learned during COVID will push me to enjoy life more and make every moment shine brighter.

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LILY SERGI
July 7th
1st-Year CNF 2nd Place

Every year, I celebrate July 7th. The date is written around my room—jotted in the drawers of my desk, carved into the wall behind my bed, and marked on my calendar with a scrawled-out heart—just to ensure that I never forget. I really don't need all the reminders, as I haven't forgotten for a single moment, ever since July 7th, 2013.

July 7th, 2013, was the day of the final production of "The Little Mermaid," put on by the local children's theatre. All the chairs were taken in the tiny little green room that was awash in headache-inducing fluorescent light. The "green" room wasn't very green at all—the type of green that a florist tries to recreate in her bouquet of fake flowers. It was the kind of artificial life that is achieved through powdery flower foam and rubbery stems. I was uncomfortable. The world seemed to be contradicting itself.

I sat on the floor, tucked up next to the wall. In the chair next to me sat a boy named Luke. He was slung over the chair, limbs splayed out as far as they could go, if only to emphasize the fact that he got there first. This behavior came naturally to him. He never had to *try* to act like an asshole—it was in his demeanor. He exuded a sense of effortless confidence, as if he was in competition with the world, and winning. He spoke without thinking in a world full of nuances, and somehow, he was always right. He was the purest form of type-B I'd ever met, and I'd been trying my entire life learning how to become type-A. His mere existence made me want to roll my eyes in a dizzying continuous fashion.

I couldn't dwell on him much longer. He always seemed to take up an annoyingly large portion of my mind; almost like he was lounging, legs dangling, in my psyche. But now, I had to focus. I went over my lines in my head. Although crowded, the room was the quietest room in the building. It was buzzing with a nervous energy, bubbling over in anticipation of our last show. However, something felt different. I didn't want to leave that room. Not because I was nervous to go on stage, but rather because once I left, I had to leave this moment behind. In front of me, a girl was reading *Tuck Everlasting*. Her eyes scanned the pages in a fervent manner, as if she couldn't absorb the words quickly enough. I felt the need to roll my eyes once again. Who would put themselves through a story like that? Just a love story filled with air and false promises, like the rest of them.

Luke pointed at the cover, which depicted a distressed looking Tuck.

"He's wearing eyeliner, is he gay?" he blurted. The girl simply turned away and continued reading. He then looked to me, his green eyes searching my face for some sort of positive reaction. I felt another urge to roll my eyes once again, but in order to do that, I had to stop looking. His eyes were beautiful, a small part of me admitted. Unlike the rest of the room, they were big, bright, and full of boyish life—enhanced with a line of black stage makeup.

"Look in the mirror." I panned. He laughed. I lit up.

I had long believed that love was just a complication. A mix up of primal instincts and natural emotion. It wasn't real, a facade perhaps. Life had taught me that to be loved, I had to be hurt. That to love, I had to give more than I had, and nothing was ever going to be worth the pain that I felt. Romance baffled me, it seemed derived. It followed me everywhere—in every movie, every song—and I was convinced it was the universe attempting to get me to change my mind. Yet, all I could see were two confused people, fighting for a cause that didn't exist.

Except, when I saw Luke onstage that day, I knew that I had everything wrong.

I stood behind a curtain, out of sight, but I could still see him. He stood proudly on stage, shouting his lines with all the prowess of a professional actor. The audience couldn't get enough of him. He looked my way.

My stomach turned to a rock and plummeted to my feet. It was like my heart was a lever and he was tugging it, sending my internal organs into a jumbled frenzy, buzzing with an energy that flowed over my chest. It burned. I felt more alive than I ever had been. I understood.

He was looking at me. In a room full of people cheering for him, he wanted to see my reaction. Mine! I admired him. The world gave him a brilliant hand and seeing his eyes flash towards mine beneath the stage lights, I could see why. He loved something he could never have, and now I understood that I did too. There is something beautiful in that—loving something that you can never have. It's painful, but a pain you never want to go away.

The thing that surprised me the most was that love was an actual physical feeling, an addicting feeling. You feel like you've just been hit, like you're falling, like you're on the verge of death- but you only want more. At that moment I knew that I would be chasing this feeling for the rest of my life.

I sat on my bedroom floor, listening to the radio. Demi Lovato's "Heart Attack" came on. My heart felt like it was caving in on itself. There it was again—that feeling. I played the song on repeat, just to feel it over and over. The lyrics captured everything so well. No matter how many times I listened, the feeling never faltered, never died. If anything, it just got stronger.

From that point on, I became obsessed with love. I consumed as much as I could. Movies, books, TV shows, songs. It was like I had opened a whole new section of my soul. I had been seeing in black and white my entire life, and now everything was in vibrant color, and I couldn't stop looking around. The world felt like it was alive. For the first time, I understood that I wasn't just a character subjected to fate, but rather a dynamic human who was as alive as the world itself, experiencing the same emotion that made my parents fall in love, that caused Jane Austen to write, that caused Adele to sing those songs. I was no longer on the outside looking in on things I didn't understand. I was enthralled.

The priorities that I once taught myself were skewed. All I wanted was a conventional job, success, and money. Maybe I would take a few trips along the way. I would own plenty of clothes, especially pearl jewelry. I wanted to learn how to play the saxophone, speak French—goals that I would achieve all on my own. I always believed that independence was bliss, that the only means of survival were found on my own. On July 7th, my whole perspective changed. I realized that there is so much depth to life that I have yet to discover. There are spectrums, prisms of thoughts and feelings that I have yet to indulge, and my connection to others is more powerful than I could even imagine because I am not alone. Most importantly, I learned that I didn't want to go through it alone, not when people like Luke existed.

I never did see Luke again, but that didn't mean I didn't think about him. For an entire year, I thought about him before the memory slowly faded. Looking back, it wasn't love, just a mere infatuation. It probably was just a set of hormones that made me feel so strongly, but it cured me. I had a whole new perspective on life. Just looking at him made me realize that nothing in this life could be that bad because as long as I could feel that tugging sensation in my chest, there was a reason to keep going; if only because the rest of my life would consist of these feelings. It taught me that there is more to life than the outward success, the physical affection, but rather the range and depth of emotion that I could feel, and that I could find this emotion about anywhere; like in an obnoxious, 12-year-old boy. I learned that no matter who I was or what happened to me, that I deserved my own love story.

My perspective on love has changed a lot since July 7th. I have been hurt a lot through the years. Since July 7th, my life has consisted of unrequited crushes, shitty high-school boyfriends, dating app upon dating app—but never have I ever doubted what I felt that day. I may have been 12, naive, and full of hormones, but that day put everything beautifully in perspective.

Now, I wait. Wait for someone to come along and make me feel like I'm 12 years old once again, for the world to come alive before me.

TESSA STIGLER
I Used to Love My Grandparents
1st-Year CNF 3rd Place

I used to love my grandparents.

I'd spend two weeks with them every summer. Pack my bright red suitcase days in advance, chatting with my parents about all the fun we'd have. Boat rides, mini golf, microwave pancakes. I was so happy there.

My grandma was the sweetest, most innocent lady in my mind. She could be firm and cold at times, but I still found comfort in our conversations over breakfast. Our talks were surface level but still enjoyable, often ranting to each other about the republican party, bad food, and the weather.

My cousins were always closer to her than I was, as they lived right down the street and was five states over. She would be at every baseball game and swim meet. Brunch every Sunday after church, and hosted family dinner at least once a week. My cousins would often spend their free time at their lake house, to them it was a second home. I would watch my grandma rub their backs every-night as they went to sleep. They felt so safe with her. So did I.

My grandpa was a little intimidating but warm at times. He still works into his late 70s out of boredom and fills his free time with tennis and gardening. Your typical grandpa.

My cousins had a lot traditions with him. "Do you want to ride with us to McDonalds?" "Do you wanna play golf with us after church?" "Do you wanna go fishing on the lake?" The answer was always no. Something about spending extra time with my grandpa had always felt unnecessary.

My cousins would confide in him in school drama, sports mishaps, and just about every other problem under the sun. I'd watch my cousins curl up with him late at night to watch TV, they looked so safe. I never felt as safe around him.

When I was six my mom sat me down to have a serious conversation. I watched her from the floor, fidgeting as I always do, while she sat above on the couch.

The conversation went something like this:

"When I was your age I had a neighbor, and he wasn't very nice." She explained.

"He would touch me without asking, in places that I didn't like being touched."

"What did grandma and grandpa do?" I replied.

"Well, the neighbor told me that if I told on him, he would get me in trouble. So, I kept it a secret."

"That's not fair," my innocent voice questioned.

"No, it's not. If somebody ever does that to you, promise to tell me alright?"

"I promise," I replied.

I didn't fully understand what she was saying at the time. This was my first introduction to the idea of sexual assault, but I knew what the neighbor did was wrong.

That story stuck with me for years after hearing it. As I grew older, I saw what that trauma did to my mom, how it haunted her to this day. I watched her withdraw from our relationship, her marriage, family. I watched her struggle to look herself in the mirror.

When my parents got divorced, I blamed the neighbor. "If he hadn't touched her, she would've been happy enough to stay married," I reasoned to myself. I blamed the neighbor for a lot of things.

When I got older, I revisited the topic with her:

"Did you ever tell grandma and grandpa?"

"I told grandma at my graduation, but she told me I was lying."

My stomach turned.

"She told you you were lying?" I questioned, secretly hoping I misunderstood. My grandmother didn't seem as innocent anymore.

The older I got, the more I questioned the story she told me. Who was this neighbor? Why isn't he in jail? Why didn't my grandparents do anything? I never understood why she wouldn't go after the guy that ruined her life. I fantasized about confronting him, hurting him, killing him.

One night over dinner my mom decided to tell me the truth:

"Remember the story I told you when you were little? Well, it wasn't the neighbor who touched me. It was grandpa."

I fell silent. I didn't want to believe it, but my gut knew. I grew more and more silent as she went into detail about the abuse. Her words blurred with the background noise of the restaurant:

"He was drinking a lot at this time—he didn't know what he was doing."

"Liar," I thought. "He knew what he was doing."

I started to hyperventilate and rushed out of the restaurant to my mom's car. I sobbed and I screamed. Trying to wrap my head around what I had just learned:

"I knew it was him," I mumbled to myself.

My mom returned to the car after giving me some space to process:

"I'm sorry I shouldn't of told you."

"No, I needed to know," I replied.

“This isn’t your trauma to carry. He didn’t know what he was doing, he doesn’t even remember.”

“He knew,” I thought. “He remembers.”

“I know it’s hard, but I hope you can forgive him.” She pleaded.

“I won’t,” I thought to myself.

My world came crumbling down. All the memories at their lake house: boat rides, mini golf, microwave pancakes. All tainted by him. The grandfather I once loved turned into a monster. And my grandmother, a complacent witness. I was furious.

I cried on and off for days after learning the news. It broke me.

After watching me withdraw more and more from reality, my family attempted to comfort me:

“This happened a long time ago, she could’ve remembered wrong? Don’t let this define you,” they blindly suggested.

“She didn’t.” I replied, offended they would diminish my trauma to a blurry memory.Their judgements scared me.

What would they say if I remembered a similar story? Would they believe me? Would I believe myself?

I thought about confronting my grandparents, but I couldn’t bring myself to do it. I didn’t want to worsen my mom’s relationship with her parents, although in my eyes there wasn’t much worth salvaging. Part of me could’ve still loved them, or maybe I was scared my grandmother would accuse me of lying like she did my mother. I just couldn’t bring myself to do it. I just couldn’t confront them.

That’s the thing about family: when they do fucked-up things, you stay silent. Your silence is replaced with words like *love* and *forgiveness*. But it’s just silence. Just that.

I want to scream at him. I want to tell him what he did, what his actions did. How much of a monster he is.

I want to make him question everything he knows, the same way he did to my mom. I want to make *him* cry. I want *him* to live with the trauma. I want *his* relationship to fall apart. I want *him* to have the nightmares. I want *him* to have the triggers. I want him to pay the price my mom did.

I know I’ll never do these things. I won’t talk to him about it. I won’t talk to my grandmother about it. I’ll keep their secret.

And that’s what predators do. They make *you* spare their feelings. They make *you* feel like the monster. They make *you* live with their guilt.

They make your fear feel like love.

But I don’t love my grandparents anymore. I don’t think I ever will.

ALLISON ELKINS
The 26 Letters I Was Taught it Takes to Spell Woman
Upper-Division CNF 1st Place

A. Ambrosia salad: a lawless misnomer. It's not anywhere near a salad. It's marshmallow, some form of whip, mandarins and pineapple (both of which are often sourced out of a can of fruit chunks and sweet syrup). It was wildly popular in the mid 1900s and usually made appearances at BBQ's and holiday potlucks after being made by the wife in the family. The wife was and is expected to be a woman who dresses like one and a mother. I think the color and consistency of ambrosia salad fall short of appeasing, so am left to wonder when I'm a wife what side dish I'll have to learn the recipe of. I dress unlike a woman and am uncapable of having children so am left to wonder there too what kind of garments I will have to shop for and if I will ever adopt.

B. Body hair: Before family vacation and after a year and a half of growing out my body hair, I was berated by my sister and mother for the 'uncleanly' appearance for three straight days. I kept my arms down at my sides until the fourth day home when I caved in and shaved. Going home weakens my will until I've returned to a feeble state and leave my legs shaven smoothly. I fly out of O'Hare back to Denver after the holidays feeling alien. In a day or two my body will house prickly hairs that feel like craters in my skin that were formed by the impact of others' definitions of femininity.

C. Correct form: As a woman, being *slim* is always encouraged. To be a woman is to live with the expectation that you are always in the process of *slimming*, be it via diet or exercise. Or at least to be in the process of making yourself *smaller*, be it via speaking less loudly or with less self-assuredness.

D. Data on contributions of labor don't account for hours spent cooking dinner or packing lunches or doing laundry for people other than yourself. Women who do these things are unsung, unrecorded. The average married American woman in a heterosexual relationship spends 24 more hours every week doing housework than her husband (Bird).

> It's the day after the wedding and already she's picking up water glasses he left behind on what feels like every side table in the house. Frankly, she's annoyed that he never uses a coaster. But alas, this is what she signed up for, isn't it? It's what her mother did and presumably what her daughter will someday do too.

E. Exercise: If you have never opened a Woman's magazine: I'll spare you some time and summate their glossy pages: He does/doesn't love you based on his texting habits, you can change every part of your face into parts that look better with makeup, and the best exercises are the *slimming* ones. Make women slimmer, make women smaller. Make more room for men.

F. Feminist punk bands gave some women permission slips to stop shaving and dress loudly. *Hole* plays in my earbuds as men rubberneck out their car windows while I walk home from tenth grade. Courtney Love, Kathleen Hanna and Clem Crevvy gave me motivation to spit at their cars: their voices served as backup vocals for when I cussed them out for their perversion with an extended middle finger. I'm listening to *Hole* as I write this essay.

G. Gay and Bisexual men: According to the National Eating Disorder Foundation, over half of men with an eating disorder are gay or bisexual when only about 10% of the male population is gay. Often, people think of eating disorders as a woman's issue. I propose instead the theory that they're an issue that plagues those of us born unfortunate enough to desire male sexual attention.

H. ~~Housekeeping~~ Housework: I do the bare minimum in any housework category. My mom throws out the "how will you ever find a husband?" with a smile and a joking tone to cover up the genuine concern buried shallowly beneath the question.

I. Immanence: the state of being inherent or exclusively existing within something (*Merriam-Webster*). Feminist philosopher Simone de Beauvoir sees being a woman as operating exclusively within what men have defined womanhood as. We are someone's wife, daughter, sister. We are only women because we are not men. And men have created the options of the type of women we can choose to be. Simone would argue that even the feminist movement has been defined by men since its creation in response to the society men have created.

J. Joan Jett: "Women playing rock 'n' roll seems threatening. I guess [it] implies owning your own sexuality, and you're in control of it. I don't know why that would be threatening" (Joan Jett). Audre Lorde, a contemporary feminist, defines the erotic in her work *Uses of the Erotic: The Erotic as Power* as a tool, a resource. Women's ability to stifle the callings of this resource has long been encouraged and equated to strength for if women were to use the resource of the erotic, their truest passions in all aspects of life would be realized and their sexual desires would not be satisfied by five minutes of missionary. Women collectively would embrace the word *slut*, flipping the double standard around by having multiple sexual partners. That's why owing your own sexuality is threatening.

K. Kamala Harris: The vice-presidential debate in 2020 was critiqued by Fox News. They said Kamala Harris was too mean. In the news segment they didn't use quotes from the debate to back up this 'mean' evaluation: They simply showed shots of her face throughout the debate and her reactions to some of Pence's answers. Biden, during the presidential debate, told Trump to "Shut up, man." After the presidential debate, Fox News didn't call Biden mean.

L. Lipstick: Today, my lips are a purple. I like to pretend that it's because the mixture of innocence and nervousness that's baked into being a young woman is so sweet that it crystalized into sugar and honey in my stomach, attracting insects. Butterflies have moved on so now bees have made a home inside of me. They bite my tongue and lips when I try to speak my opinions, bruising them (my lips and tongue but maybe the opinions too) into a swollen, submissive shade of purple. I stole this lipstick color from Walgreens. I won't pay for makeup. That shit's oppressive.

M. Makeup: The average American woman spends $300,000 on makeup in their lifetime. Wearing makeup is not *really* by choice either; a woman who chooses not to wear makeup to a job interview or to work is denoted as unkempt, unserious, unmotivated, unprofessional, undone. So, women are left no choice but to wear and spend 100s of thousands of dollars just to be taken seriously.

N. *No Doubt* is such an underrated band. Gwen Stefani fucking rocks. Their song "Just A Girl" made its way into the soundtrack of *Clueless* and the Billboard Hot 100 in 95'. The lyrics are sarcastic and serve as a hard-hitting exploitation of how women are treated and viewed by men and society at large. Gwen's lyrics alongside my interpretations:

> "Guess I'm some kind of freak" [for speaking out against sexism]
>
> "Don't you think I know exactly where I stand?" [as a girl in a patriarchal society]
>
> "What I've become [a girl who loudly calls out sexist bullshit] is so burdensome"

O. Other half: In tenth grade, I learned about that Greek myth that proposes that all humans once had eight appendages total (unless we count the head as an appendage in which case humans had ten). Zeus supposedly split humans down the middle which is 'why' now we only have the head, two arms and two legs. The modern-day version of this myth is the idea that someone can be "your other half" or "the missing piece to your puzzle." Okay, so, I'm sitting here thinking about what my puzzle is, right? It's made up of these wonderful pieces that I've spent my life finding and adding. Does this metaphor of my lover being a missing piece mean that I'm supposed to reserve a space for them? Or should I go on and fill in my puzzle on my own only to come across this missing piece and have no spot for them? What then? Do I make a new puzzle centered on the piece? Or will I

have to get rid of other pieces to make room for it?

P. Pussy Riot is an anti-establishment, feminist punk band that, in 2012, took the Cathedral of Christ the Savior in Moscow by storm. In protest of the church's support of Putin, they ambushed a service, each in a neon ski mask interwoven with the powerful feminine divine and sang at the alter "Drive away Putin" and "The Lord's shit."

Q. Quilting: My grandma taught me how to quilt when I was 12. Quilting used to be taught to young girls like that all the time. They were taught to start practicing their quilting and save their best works for when (not if) they became a mother and wife.

R. Riot grrl culture is the Vixen-promoting culture spawn of the band Bikini Kill**.** It's a pro-girl punk movement that says girls can do whatever the fuck they want (including taking over the world) and fuck you if you aren't on board.

S. *Strawberry Shortcake* was so fucking girly. So was *Barbie* and so were *Bratz Dollz* and the members of the *Winx Club*. Every doll I had, every show I watched represented only the girliest of girls, leaving me confused. I didn't fit with those representations of women. I settled at being a "tomboy." The term "tomboy" is so irksome to me. It's like, we can't accept girls who aren't girly as being girls so must label them as partially belonging to a whole other gender.

T. Table manners: "Sit like a lady," my dad says to me from across the table. Me: a teenage girl just learning about the riot grrl scene, tells him to go fuck himself in my own way: "What does that even mean?"

> "Your preoccupation with my appearance is concerning." We fight and I'm stubborn. I'm stubborn and I'm right. I'm right and I'm here (as I was there) to take up space.

U. Unworthy: a woman who doesn't wear makeup or doesn't dress nicely might just be unworthy of love. Or at least less worthy of love. After all, there are millions of women who bend over the bathroom sink and paint their faces into a feminine dream as part of their daily routine. Wouldn't they be considered the worthier ones?

> My mom tells me we're going to see her family this weekend. I'm sixteen and she tells me to 'look nice'. I'm thinking back and wondering if I've ever not looked nice before. I'm slightly offended so she specifies: "just put on a little bit of makeup; it'll look nice."

V. Vixen: *n.* A spiteful woman. How are women expected to not be spiteful in this world?

W. Wife swap: we are such a progressive society, aren't we? America: the land of equal opportunity. We don't treat people like property (anymore). The show Wife Swap aired on ABC and was about trading and using wives, as you would an object, for a week.

X. Xanax: One study on benzos included, in one sentence, with no expansion: "[Xanax] dependence was significantly more prevalent among women who were housewives" (Chavez et. al). It's a lot of responsibility to be a mother, obviously. Mothers, much more so than fathers, are the ones at the other end of a pointed finger when things are untucked and messy. Mothers historically have been blamed for their child's schizophrenia, autism, homosexuality. Freud was the one who pushed this theory: that the mother's own wounds were infectious. Her pain, her trauma is never exclusively her own. It rubs off on others, holds her children and her husband hostage, allowing them to throw their hands up in surrender. Giving them an excuse, a permission slip, to be the worst versions of themselves. It's a lot of stress to be a mother. Which is why the Xanax sponsored escape makes sense to me.

Y. Youth is valued so highly in women. It's pressure on women to be different than nature intends (like makeup or excessive cardio or juice cleanses). Maybe it's because there's a limited supply of ovaries. Does the pressure to change having reasoning in biological objectivity make the fact that it's pressure to change any less shitty?

Z. Zero is a weird number. It represents the absence of amount, doesn't it? Zero is the absence of significance in a way. Simone de Bouvoir would argue that a woman's most distinguished quality is that they do not have a penis. She claims women are the 'second sex': that only out of the absence of a penis are we made women. We're kind of like the number zero in that way, aren't we?

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REBEKAH ARNOLD
Connecting
Upper-Division CNF 2nd Place

BFFLs

When you're young the universe is confined to a bubble of space that is the immediate present. A tetherball rope's reach into the nearest past and future, spinning and circulating giddily around the present moment, unaware of anything larger or more pressing than who likes who and recess. Passing notes back and forth with my closest friends in class, "BFFLs" doodled all over each in juvenile cursive and within our closing signatures. Silver necklaces with heart-half pendants that joined to spell "BFFs" when you fit the halves to form a whole. First sleepovers, Paul Frank shirts and sidebangs, friendship bracelets and cartwheels on the grass at lunch. Interesting how distorted "for life" and "forever" were within my tetherball rope's vision of space and time. With each orbit I complete around the Sun, wandering Earth's surface, my scope of vision seems to stretch slightly. The more years that pass the less I believe it's possible for a thing to truly last an entire lifetime, let alone forever. (What is forever?)

It's written in the DNA of this world, and possibly the universe, for things to come into being, grow, develop, die, and decay, oftentimes all silently and simultaneously.

The Umbilical Cord

In sexual reproduction, new living organisms are created by "combining genetic information from two individuals of different types (sexes). In most higher organisms, one sex (male) produces a small motile gamete which travels to fuse with a larger stationary gamete produced by the other" (Oxford Languages). This fusion between the male's sperm cell and female's egg produces a zygote, which becomes an embryo, then a fetus. It continues to develop within its mother's uterus until eventually it's released from her body and into the world in a feat of impossible pain, joy, suffering, and beauty. The umbilical cord, which until this point has allowed the mother to transfer nutrients to her child, is snipped clean. The child still relies on its mother as a source of food for some time after leaving her body, but from the moment it is exposed into the world, it begins to need her less and less to survive biologically. After a certain point, a majority of the connection between the two is ultimately maintained by choice.

"Don't talk to strangers"

The first time I remember hearing this phrase was on a Carebear show when I was around six years old. It was different than all the other episodes, instead of following a plotline it was simply safety rules for children animated by the bears. The only two rules I remember were "don't drink poison," a blue bear reaching for a bottle high on a kitchen shelf with a skull and crossbones across the bottle's front, and "don't talk to strangers," a shadow of a man waving a lollipop out of his car window, the care bear wandering towards him, getting snatched up into the car and whisked away.

It feels ironic that college culture seems based squarely on breaking these two rules. Poisoning your body with various toxic substances to alter your sober state of being. There's so many different ways to intoxicate yourself. Most people I know have a drug of choice, or a favorite combination. Everyone seems to have forgotten, or at least in the moment, that drugs aren't safe for your body, even the legal ones rot your organs, they can numb your heart and infect your mind. But they can also give you confidence, help you like yourself, ease anxieties and help you connect. Suddenly it's acceptable to hug one another, express how much you care about each other, have conversations for hours about the things that matter, things we'd never bring up sober.

Drinking, doing drugs, and dating apps. The entire premise of the dating app field is based on swiping through pictures of strangers, who may or may not be who they appear in their pictures. If you both swipe their image to the right, you're urged to start a conversation, in hopes you'll meet in person and either end up naked with them in your bed or fall in love and get married.

Sometimes I wonder how people sought human connection thirty years ago- was it less dangerous?

I wonder if the software developers ever feel guilty about the way they manipulate the reward systems in peoples' brains, prey on their desperate desires for connection with other humans, to be liked and wanted and validated. I wonder if the heads of the Big Tobacco companies or the alcohol industry ever feel guilty about the way they profit off of peoples' mental and emotional weaknesses, their desperation to find comfort and stability.

Fahrenheit 451

I don't think the term "social media" will ever sit exactly right with me. People interacting through glass screens, with friends and acquaintances and strangers, through symbols and numbers and labels. Tapping and typing and swiping as an alternative to sitting across from another human and speaking, laughing, touching, connecting within the same small circle of space and time. People are forgetting how to speak, laugh, touch. Eye contact has become painful, but my head no longer hurts from gazing into a screen, blue-light portal where the mind and soul flatline, for eight-plus hours a day. We're endlessly connecting but increasingly to things, less and less to people.

Connecting…

Please wait one moment while we connect you...

There've been connection issues all day…

I have a drawer in a dresser in my closet full of cords, I don't know what they go to. Sometimes, every couple months, I'll end up discovering a thing that needs a cord and I'll fish through the drawer and try jamming each metal rod/rectangle/prong into the item at hand until I find its match, sometimes I do and sometimes I don't. We plug things into cords into walls, until they buzz and glow and muster enough of an electrical current to engulf us back into our dizzying blue portalworld. Every day I feel my reality slipping closer and closer into the dystopian blue-light parallel reality of Ray Bradbury's *Fahrenheit 451*, where everything is burning and the faces on the screens on the walls won't stop talking. We own so many devices that we need 6-outlet cord extensions to plug into the two-outlet wall connections. At this point I think I have more things that need charging than humans in my life with whom I have real trust and intimate connection.

The Good Dinosaur

Marvin and Alexis were my best friends for the summer I turned twenty. We cleaned cabins at a summer camp for disabled children tucked away in the Los Gatos Hills in California for court-mandated community service. I spent my whole summer there. Eight hours a day, six days a week, from June through August so I could finish my days in time to return to Boulder for fall semester. When my lawyer told the judge I would be doing six days a week, with Sundays off, one of the other defense attorneys in the courtroom turned to me in disbelief; "*Six* days? Are you sure?" I smiled hesitantly, appreciative of this recognition of my willpower but simultaneously second-guessing how high I had set the bar for myself. You're allowed to skip three days, which you still have to make up at the end. If you miss more than three, they put out an arrest warrant, book you back into the county jail and give you another court date to re-decide your sentence.

My first day of working at my assigned site, it was only myself and Marvin. Our main supervisor was a man in his seventies named Bob who wandered the campsite each day smiling and trying to fix things, telling his life stories to anyone willing to listen. Our secondary supervisors were a group of high-school-aged boys

who spent each day driving around the site in a golf cart, checking in on us briefly and then speeding away up into the hills to smoke weed. Marvin became one of my best friends. He had been doing his community service there since January, and taught me where everything was, how everything worked. English was his second language, and he had a heavy Spanish accent, but we spoke slowly and generally understood one another. Marvin moved to the US from Mexico by himself when he was seventeen, and had two children who he had recently lost custody over. He swore to me he was a good father, admitted that he had a problem with drugs but that he always made sure to tell his children he loved them because his own dad never did.

Alexis became my other best friend that summer, even closer than Marvin. He was six years older than me but we grew up in adjacent neighborhoods, and had gone to the same high school though he was transferred to an alternative school after his freshman year, and then another after he was expelled there. The first week I worked with Alexis during our lunch we watched *The Good Dinosaur* together on the old tv in the corner of our break room shed. He hadn't brought a lunch so I gave him a snack pack I brought with cheddar cheese cubes, almonds and cranberries while I ate my sandwich. He told me about all of his tattoos, explained how the three dots on his inner elbow used to be his favorite because he had to earn them, but that now he was debating getting them removed because he didn't resonate with it anymore. Over the weeks we worked together he told me about his childhood, Mexican culture and expectations, what life was like as an active gang member, his time in San Quentin and his newly adopted pet bunnies.

Dominoes

I'm a strong believer that the people who end up impacting your life the most enter it through what seems like pure chance. Completely unexpected but so influential in shaping the direction your life has taken since them that it must have been the universe's doing. The universe has a way of aligning everything, like a perfectly spaced string of dominoes winding through people and space and time. Sometimes there's blind corners, and it's painfully impossible to tell why the dominoes fell the way they did until the bend breaks, and then you can look back and see how one thing led to another and it all had to happen as it did.

The conception of each human being is nothing short of a miracle. Out of all the sperm cells and all the eggs floating in our parents' bodies, the chances that we came to fuse into the living, feeling beings we are today is mind-boggling. The chances of our parents, two out of seven billion people on Earth, meeting and bonding and creating us, exactly one sperm cell out of millions and one egg out of thousands within them, our survival through the womb and into the world and through childhood, to exist as we are today. My creation appears to be nothing short of pure chance. I could have never expected my own creation, did not even physically possess the brain to anticipate my mother. And yet my relationship with her has been by far one of the most influential in shaping who I am today. She brought me into the world, nurtured me into becoming my own independent being, and is the reason I exist. But she has also given me more than life; she has given me softness, taught me how to listen, and has instilled a deeply-rooted nature within me to care and feel for others. Without these things I would not be who I am.

I can't remember how I met most of my best friends from elementary school and haven't stayed in contact with any of them. I still have the friendship bracelets, birthday cards and classroom notes they made me, stored in boxes under my bed. We like one another's social media posts, but nothing more. I still care deeply about each of them, and every time they post a picture, I find myself hoping my "like" notification will carry more weight with it than it is capable of; *I don't know you anymore, but I still care about you, hope you're doing well, hope the best for you.* I've learned that after someone phases out of your life you have to leave them there, along with the memories. You can hold onto what they taught you but need to let them go, forcing connection and reconnection is counterproductive. If the dominoes led them out of your life you need to trust and move forward.

In my typical daily life, social norms and the demographic structuring of the bubbles I move through would have likely prevented me from ever knowing Marvin and Alexis. Twenty-year-old white girls from rich white suburbs typically do not associate with, let alone befriend, Mexican-American men in their late twenties of more disadvantaged socioeconomic backgrounds. But these men, and these relationships, opened my eyes to human connection and the structuring of society in a way I don't think I ever would have been able to grasp without them. They were able to indirectly teach me things about strength, respect, and my privilege that I would not have been able to learn the same way from anyone else.

Life is a perpetual rhythm of connecting, disconnecting, and reconnecting. Like waves, we grow together, then break apart, and new waves form, and then they break as well. People enter our lives, help us grow, and then leave our lives. When we allow ourselves the emotional vulnerability to connect with others, we're permitting a sort of invisible umbilical cord to take root between us, providing us with the nutrients we need to grow. Umbilical cords, both physical and emotional, are snipped once an organism has developed to the point where the cord is no longer useful towards its growth. Although I no longer have a lot of the people in my life who have shaped me into who I am, each of them has left behind a bed of nutrients within me, allowing me to grow in ways that never would have been possible without them. Lessons I never would've learned, character I never would've developed, strength I never would've realized I had, and I will always owe part of who I am to them.

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NATHAN J. BOWERSOX
Notification
Upper-Division CNF 3rd Place

On January 26, 2020, I woke up to see horrific news of a hero and his sweet daughter being taken away from this world far too soon. My eyes darted through the influx of articles and my thumbs began to quickly tap and swipe, cross-referencing the sources. The phone notifications kept coming in at a rapid pace and I quickly drank freshly brewed black coffee to try to wake up. Despite giving myself a burnt tongue as I was trying to get down as much coffee as possible, the caffeine wasn't hitting my system and I couldn't wake up from this inconceivable dream. My stomach quaked inside from the coffee's acidity stirred with hopelessness. He was a seemingly invincible man, both on and off the court. How could the death of a man that I didn't even know make me feel utterly deflated?

Confusion and despair fought within my head. While they battled, my body told me to run. I jumped in the shower and prayed that it would give me some silence from the outside world. I closed my eyes and let scalding hot water cling to my slim frame, but more notifications kept buzzing throughout my brain. They yelled, "HOW . . . WHY?!" To try and erase them I scrubbed my body with an overwhelming soap scented with spicy clove and citrus. That did nothing so I shocked myself with ice-cold water but that only made me feel more frozen. I slumped out of the shower and began to vigorously towel-dry my dark brown hair. As a last ditch-effort, I did an aggressive shake to get the water out of both of my ears hoping the notifications would release from my head like the water. They didn't.

Notifications are often puzzling because they can be good or bad, anticipated or unanticipated. Oftentimes, they work in tandem with each other and only a slight tweak of the combination can change its effect on you massively. An anticipated or unanticipated good notification is always welcome. Sometimes it is even better to be surprised with a good notification. An anticipated and bad notification is typically okay. Even though the news is unpleasant you have more time to prepare yourself physically and mentally. On the other hand, a bad and unanticipated alert is easily the worst. Like a black mamba, it strikes quickly and pierces you with its deadly venom. Its toxicity flows through your veins and puts you in an instant paralysis with little time to react. The report of the helicopter crash that killed the self-proclaimed "Black Mamba" on that Sunday morning had me in shock.

2020's alerts began far away from me—I felt safe. There was a lengthy amount of distance from the source to me, a 20-year-old college student at The University of Colorado Boulder. I read worrisome articles of a deadly virus emerging in Wuhan, China. I scrolled through shocking photos of blazing fires in Australia. I watched appalling security camera footage of police brutality in Minneapolis, Minnesota in the wake of George Floyd's death in police custody. But despite this outside terror during the first few months of the year, I could still function in my own little world. I was still able to do my daily tasks of going to class, putting in time at the gym, and enjoying the company of my friends. In what seemed like minutes, the notifications began to get closer to me. Coronavirus had swept the nation and made its way through the states, arriving in Colorado. Emails let me know my classes would transition to remote instruction. My world became upended, and I packed my things to move back into my parent's home. Colorado went into lockdown and it seemed that the only thing I was allowed to do was look at the notifications.

For weeks I didn't leave my home. I felt helpless, tied to my room not being able to do anything. My phone shouted at me to look at what was going on outside of those walls. As I peered through the blinds, I saw people's faces being covered by light blue masks. Cracking the window gave an opening for smoky rocky mountain air to crawl into my room. I could hear echoes from a nearby city calling for police reform to end the needless shootings. Then, the notifications hit my own inner circle. I received a text from a close friend relaying his symptoms, "I haven't been able to leave my bed. My whole body is in pain, and I have the worst headache." Thankfully, he recovered. Others I knew didn't make it to 2021. I got a phone call that my Great Granny passed

away after we thought she had recovered from the virus. Another friend of mine took his own life after the compounding depression 2020 had put on him. All of this noise consumed me. I had felt the perils of crippling anxiety before, and it began to knock on my door again.

I know this is going to seem crazy because of the trauma that accompanied 2020, but in some ways, the year has been shockingly valuable for me. I have even had the thought that it may have been my favorite year yet. I feel guilty for admitting this, but my gratitude is rooted in clarity of what I do have and what I can be. All these things that happened at the beginning of the year forced me to change my habits. In order to escape everything, I let things that I loved come back into my life and became open to letting new one's form. When I am confronted with anxiety, I know that it is time for me to adapt and make changes in my life. That's exactly what I did. I muted the notifications and put in the work to find things that could make me happy.

I longed for comfort and had the realization that I could turn to things I had loved as a child. I wanted to go back to a world when I didn't have an electronic device letting me know everything that was going on. I remembered that I loved building Lego sets as a kid. At age eight, I used to sit on the carpet floor in the basement of my childhood home for hours, embracing the endless possibilities to make whatever I wanted with those little plastic bricks. Even though there were traumas going on around me, such as my parents' divorce and my mom's battle with lupus, it didn't matter because I was lost in creativity. That kind of bliss was something that I needed. The first set I bought in 2020 was Anakin's Jedi Starfighter and as I assembled, I felt my smile increasing piece by piece. In that moment, all I had was the table, my hands, the little instruction booklet, and the bricks. Over the course of the year, I built seven different sets and my hands touched thousands of pieces. While I was in a world of my own creation, nothing else mattered.

Building that Lego set reminded me that I used to love watching Star Wars. It was something that I thought I simply grew out of. Countless times I curled up on the couch and became immersed in another world away from the chaos when I saw the words appear on the screen, "A long time ago in a galaxy far, far away. . . ." I did more than just watch all of the films. I carefully analyzed every scene and quickly became a true Star Wars fanatic, something that I am extremely proud of. Star Wars opened my imagination and allowed me to be my creative self. I made it my mission to watch every piece of the franchise's content that there was to offer. Something that I never got the chance to watch as a kid was the TV shows, but now I had more time than ever due to the lockdown. The finale episodes of the Clone Wars and Rebels had me in tears. I wailed when Kanan sacrificed himself for his crew and wiped tears from my face with a fuzzy blanket when Vadar held Ahsoka's lightsaber in the snow. I was so emotionally invested and the weight of real-life fell off me when I was transferred to the imaginary.

I knew that I couldn't stay inside forever; my body desperately craved the sunshine. So I decided to pick up the game of golf, something I didn't think I would play until later in life. My interest was piqued after stumbling across a video series called "Adventures in Golf." Their mission was to reverse the common perception that the sport is unwelcoming. I binged every season until there were no more, realizing that I needed to give it a try for myself. For hours on end, I would hit balls at the range over at a local golf course, trying to get to the level of consistency where I could keep up with my Dad and Grandpa. Dad always used to tell me that the reason why golf is great is because of its ability to allow you to forget everything that is going on outside the course. He couldn't have been more right. Even though I was terrible, the golf course became an oasis for me. The course was filled with so much beauty from the lush grass, sweeping trees, and breathtaking views. The air was always crisp and fresh. Aside from its beauty, It was a game that humbled me every time I stepped on the course. Each round I would only hit a couple of great shots but that dopamine rush made me want to come back for more. I became addicted to golf and have found something that I want to do for the rest of my life.

A place that has always brought me happiness and excitement in times of crisis is Lake Powell. I always look forward to our annual trip to Bullfrog, Utah. It's always one of the greatest weeks that I have in any given year. To people who have never been to Powell before, I usually describe it as the Grand Canyon filled with water. Red rock captures dark blue water from the Colorado River. Although it catches the water from Colora-

do, it feels so far away from the place I call home. Powell also has this incredible ability to give you days filled with adventure. Usually, it starts with breakfast on the houseboat, my grandpa's specialty. We fill our bellies with crispy waffles drowning in maple syrup and get hyped from a few cups of coffee, preparing us for a long day out on the water. Most of our daylight is spent on a wakeboarding boat, baking in the sun, and taking turns doing various watersports. After our shenanigans, we'd reconvene at the houseboat, eat dinner with our closest family and friends, and update our grandparents of the various activities we did throughout the day.

Like camping, we are completely disconnected from the outside world at Lake Powell. In prior years, I always found myself itching to take a boat ride back to the marina every couple of days to get phone service. I felt the need to check the accumulating notifications being blocked by my disconnect. This year I didn't. I had 168 hours of pure silence, pure freedom from the outside world. Just like golf, this disconnect allowed me to spend more time making memories with the people that matter to me most. But, the last evening of our Lake Powell trip my hands started to shake and I broke into a sweat. I was tearing apart my suitcase trying to find my L-theanine as my dad walked into the living room of the houseboat.

"Everything okay?" He put his hand on my shoulder.

"Not really," I sighed. "Having some anxiety."

"Let's go outside."

I grabbed two non-alcoholic beverages out of the cooler for my dad and me and we sat on the front deck of the boat, looking out into the distance. I conveyed my stresses to him. It was easy to get away from the notifications at Lake Powell, something that was much more difficult to do back home. I was so scared to go back to the commotion. A world where I had to implement a strategy to avoid the notifications. There were only a few hours until my phone would explode with messages. I didn't want to see what was happening. My dad consoled me, letting me know that he feels the same way whenever we disconnect on our trip. We witnessed a symbol of comfort midway through the conversation; a good notification. My grandpa lit the most beautiful firework I had ever seen. It shimmered and lit up the cove around us. Dad and I sat in awe and closed our conversation, reminding ourselves that our stresses were out of our control. The moment also made me realize that I had so many great things to look forward to back home. Even though it was more difficult to avoid the notifications in my day-to-day living, it helped me realize that challenge was well worth it. If there was something that Kobe taught us all, it's that hard work pays off. He once said, "Great things come from hard work and perseverance. No excuses."

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NEIL RAY
A New Look at the Nacirema
Diversity Writing 1st Place

Horace Miner's work on the Nacirema is interesting and shines a light on an often overlooked (in the Anthropological field) tribe. Its study of the customs of the tribe is thought provoking and horrifying in equal measure. However, the study is outdated. It has been 65 years since the Nacirema were last studied. Much has changed about the society of the Nacirema since then. The social progress the tribe has made in this time has been astounding, and as a result, it hardly looks the same. It is time to dive into this unique tribe once more and to change the focus of our study. There are more important things to the Nacirema culture than body ritual.

But, before the discussion of the Nacirema's modern practices begins, it is important to set some background. The Nacirema have, as stated, made strides in social progress. If we are to have a solid foundation to compare the modern day Nacirema tribespeople to, it is necessary to remind ourselves of how they wre before. To this end, let us now take a look at Miner's foundational study of the Nacirema.

Miner's work, "Body Ritual Among the Nacirema" focuses on but a singular aspect of the Nacirema culture, that of health rituals. This is not a bad thing; keeping the study focused upon a singular aspect of Nacirema culture allows for an in-depth exploration (which this paper hopes to do too). However, the body rituals of old have begun to lose their importance. While some aspects of Miner's study still hold surprisingly true after 65 years, such as the ritual healing practices at *latipso*, others have lost their pervasiveness in the culture. An emerging example of the changing times are the mouth rituals. Some tribe's members have lost their faith in the holy-mouth-doctors, and some progressives have even gone so far as to forgo the mouth-rites entirely. This is, unfortunately, still a fringe movement and those who are a part of it are actively ridiculed. Perhaps it would be prudent to study the response of Nacirema culture on fringe groups such as these, but that is beyond the scope of this paper. Instead, we will note a movement that has caught on. The charm-boxes as discussed by Miner are nowhere to be seen. During my time with the Nacirema, I did not see a single one. Instead, the charms were placed in more convenient locations so that they may be used for early morning rites. Rather than keeping old charms that have lost meaning, new charms are constantly bought to replace old ones that have "lost their powers." To better illustrate the scale of this change, while more mature members of the tribe remember the charm boxes of old, the younger ones (including some adults) have never seen a charm box that is still used. The point of this exploration of Mayer's work is to show that the Nacirema exist in a constantly evolving culture. A new cultural focus has drawn the attention of the Nacirema away from the body rituals Mayer discussed, and that shall be the main focus of this study. That of the magic boxes worshiped by the Nacirema and the trance like state they enter to access something called *enteret*.

A set of magic boxes has become of much importance to Nacirema culture in the recent years. They permeate the everyday lives of the Nacirema and are the focus of many rituals that have become popular among the Nacirema. The boxes themselves are unremarkable. They resemble stones that have been cut into a rectangular shape of various sizes with a single size polished. The larger of the boxes are said to have more power in ritual, but the biggest are so big they are impossible for a single tribesperson to carry around. As such, it is popular to carry a smaller box, similar to a charm for shorter ritual during the day leaving the major rituals when one returns home. The boxes are extremely expensive, but the rituals are believed to increase safety in daily life, so many Nacirema enter debt just to have one of the boxes. The main ritual the boxes are used for is to access a spiritual domain called *enteret*. In order to do this, a set of rituals must be performed in accordance with the box used. The necessary rituals vary in length and intensity with shorter rituals preformed on recently sculpted boxes, and more lengthy and complex ones used to revere the more ancient ones. The rituals are constantly changing but only work for the newest boxes, leading to a constant need to replace them. The rituals all culminate in the entrance of a trance like state that apparently allows the Nacirema to enter *enteret*.

The Nacirema, when asked, were surprisingly open about what happens to them when they enter the trance and *enteret*. Responses on just what *enteret* is, however, vary wildly. Some Nacirema told me it allows them to access information they otherwise wouldn't have known, similar to asking an expert. Others answered that it allows them to gossip about current happenings such as the weather and what meals they have had recently. Still others responded that it was a way to blow off stress. All of them stated that they used it almost constantly throughout the day (Roser, Ritchie, and Ortiz-Ospina). It is notable that none of the Nacirema I asked knew what *enteret* actually was, instead choosing to respond with what they apparently did with it. Further questions about specifics of the responder's interactions with *enteret* were very enlightening. Those who said they gossip and socialize through it seemed to have very distorted ideas of those they interacted with, believing them to have much better lives than that individual actually did. What's worse, it seems to be a self-perpetuating issue. There seems to be a need to constantly commune to the *enteret* and update the best aspects of one's life, and only the best aspects. There is a lack of clarity in how the Nacirema present themselves through their apparent interactions in the *enteret*. Those who said the *enteret* is a place for information often held inflated opinions of truths, or even just directly believing falsehoods. There seems to be some sort of shared delusions that come with communing with the *enteret* because often there were those who shared the same delusions in communities that normally don't interact with each other. Every time such a Nacirema enters the *enteret*, they come back with an even more strongly held belief and an even more baseless grounding for that belief. There is a phrase amongst this type of Nacirema that illustrates this rather well: "If it's on the *enteret* it must be true." Lastly, the group that use the *enteret* to blow off steam often do so in excess, spending most of the day (sometimes all of it) communing with the *enteret*. While the average Nacirema might spend a few hours a day in ritual connection with the *enteret*, doing normal daily activities in between ritual sessions, these Nacirema focus their entire lives around the *enteret* rituals. Rather than work and provide for themselves and the tribe, these individuals instead choose to remain in their houses in ritual trance sometimes for entire days, and sometimes without sleep. They do not provide for the tribe, they do not wash themselves, sometimes they do not even eat. One particular Nacirema I saw apparently had been in his house for weeks without leaving, and I was lucky enough to be there when he left to gather the necessary supplies for another long ritual. I asked him what possessed him to spend so long in ritual. He responded that it did not even feel that long—a day or so at most (Ruston). Even when those who practice such intense ritual leave and interact with other tribe members, the only thing they seem concerned with is what happened in ritual. It is their whole lives. *Enteret* is not solely a reductive force on Nacirema culture.

Allow us to explore the positive impact such a focus has had on the Nacirema culture. One such surprising effect is the inclusion of the disabled in jobs. Since the boxes have become such a ubiquitous part of Nacirema society, they have been attempting to include them in all parts of the society. For example, farmers will hire individuals to preform specific rituals with the magic boxes that are supposed to enhance the harvest. What is bizarre is that the rituals aren't supposed to increase the yield, instead they are supposed to help with the process of storage and movement of the supplies. Since the rituals are usually preformed stationarily, this has opened positions for tribe members with physical impairments to help with the harvest. This is just one example. Truly, the magic boxes have affected all aspects of Nacirema society. The demand is so high for these positions that even fully functioning individuals are often sought to fill these positions. There are even cases of buildings that fit an entire town of Nacirema all preforming rituals with the boxes. These conglomerations of ritual are sought after by local shops for their blessings, in return, ordering shipments of supplies to go to the mass ritual site. While these mass ritual sites have always reportedly existed in the past, the introduction of the magic boxes has rapidly grown the scale of these operations (Wardynski).

The Nacirema continue to evolve and develop as time goes on. New rituals have shifted societal focus and caused previous norms to fall out of fashion. One such major shift in recent times is that of the magic boxes which now permeate Nacirema society. They distract and confuse them while also allowing for new opportunities and growth. There is still more to learn about the Nacirema, a culture that can be changed so drastically by a single new thing deserves more study.

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AUSTEN SWINTON
New Horizons
Diversity Writing 2nd Place (tie)

Stepping on to CU Boulder's campus and it's like you are back in your high school overhearing what party the popular kids went to that weekend. But replace popular kids with sorority girls and frat boys on the hill where every night of the week is a nonstop party. The hierarchy between students makes it impossible to make friends if you're not part of the "in" crowd. The campus itself shows off Colorado's natural beauty as it is centered in the Flatirons which glow under the setting sun.

Stepping into the University of Wollongong's campus, you notice the Australian heat immediately as the palm trees beckon you in making you feel as if you have been transported to a natural park with lush greenery than a college campus where Sydney, one of the biggest cities in the country is just an hour away. The visual comparisons of each campus are drastically different, and so are the people. Last February I embarked on the adventure of a lifetime and within the first week in Australia I noticed a lot of differences between American college students and Australian college students. The first one being Australian students don't say college, they call it University, or Uni for short. I will be comparing the differences in the college culture, academics, and the countries social dynamics and how they correspond to the Hofstede Insights, and how the two cultures differ in the areas of risk taking, indulgence, independence, and living in the moment.

College Social Dynamics

The Uni culture at the University of Wollongong (UOW) is very different from CU Boulder and I noticed this when it came to social interactions with my peers. The first thing I noticed was there was no odd hierarchy of popularity between students. At CU Greek life is a huge part of the student experience along with the parties that come with being in Greek life. This shows how American students group mentality rather than being independent. At UOW there isn't any sorority's or fraternities, so the social hierarchy is not present in university life. One thing I noticed immediately in comparison to American freshmen is their lack of an obsession with alcohol. Australian's do have a heavy drinking culture, but First-year uni students are already of legal age to drink as their drinking age is eighteen, so there isn't the need to sneak alcohol in the dorms to be busted by RA's. The newness of drinking has tapered off a bit once you start uni. This ties into the countries sense of independence as there isn't this draw to follow the crowd and have an obsession with drinking that we see in American college culture.

This brings me to my next topic, Student Leaders which are the Australian equivalent to an RA, there is no awkward hierarchy between the two of you as they are also college students and are not trying to get you in trouble. This makes it easier to create a and ask them questions about the school and the city of Wollongong.

Another big difference I found was language. When having conversations with my new friends there would be slang and words that I didn't know and vice versa. I remember getting coffee with a friend and in the mall and the song *Fifteen by Taylor Swift* started playing, and my friend turns to me and goes "What does freshman year mean?" I was slightly confused thinking that grade levels here were broken up the same way they were in America with freshman, sophomore, junior, and senior year. When it dawned on me that this was an American way of doing things. I explained that it's your first year of high school or college. She laughed and went "Oh this song makes more sense now!" This interaction made me think of Amy Tan's "The Language of Discretion" and the differences between cultures and how you bring the two together. Her example is English and Chinese. In this article, she showcases being caught between two cultures. At first, you are unsure how to behave and carefully watch those who are from the country you are in. Evaluating their mannerisms and terms of speech, you study it like it's a complicated dance that you have to perform if you want to have any part in this new social circle. This piece allows the reader to look outside their own culture and see the differences and how

what might be commonplace in their tradition might be very different compared to another culture. The weaknesses in this piece are that sometimes there isn't a way to perfectly link two cultures, so you sort of find yourself in the crack between the two.

By breaking down years of school through Year 7 and so on, Australians are living in the moment as it feels less permanent than saying that you are a freshman, or sophomore which is more rigid and strict and makes students look far in the future of their education to see what is next. Whereas Australians live in the moment with their grade level defined by a number. This relives the pressure of the future. While I was there, I was technically a freshman, but no one really cared which also relates to that lack of a social hierarchy that we see in the U.S.

Another large aspect of college culture is housing. No matter where you go to college you usually are moving away from home for the first time and experiencing independence. My accommodation was called Marketview. I really enjoyed it as unlike an American dorm, where you have to go to floor meetings and had access to the dining hall, MV prepares you for the real world in the sense that you have independence. You cook your own meals, have your own room and bathroom, and had to pay rent like you would for an apartment. I found the process of applying for housing in Wollongong to be nothing like CU. Where if you want housing owned by the university you have to apply months ahead of time, which ties back to Americans constantly looking to the long term, where you have to fill out tons of paperwork and then placed in a lottery so everyone gets a chance, and hope that you get a spot.

Unlike CU trying to get a university housing wasn't that difficult. The university had multiple options for international students and each one you had your own bedroom which was surprising to me as American's often have roommates and share a room during their first year of college. Upon telling my Australian friends this they were confused and (probably) a little horrified at the idea of sharing a room with a stranger. When looking at the list of housing for UOW I originally picked an accommodation called Campus East where most American students stay and where you have roommates. I soon regretted my choice not knowing if I wanted a roommate since I was so far from home, so I contacted the university prepared to divulge my medical history, as I've had two kidney transplants and was ready to explain this in order to switch to Marketview. I emailed the university and asked, "Can I switch accommodations?" To which the university just said, "sure" and gave me my first choice. My accommodation was previously a hotel that had been converted into student housing and was right in the middle of the city giving me easy access to the mall that was across the street, with a grocery store located in the mall, and the food trucks that were out on Thursday nights.

Academics

When picking my timetable (what they call a class schedule) I was surprised to see that I wouldn't have classes every day. Unlike CU, the classes at UOW are two hours long versus the regular 50 minutes or slightly longer classes on Tuesdays and Thursdays. Classes still had recitations which were called tutorials, a difference in the Tutorials versus recitations at CU is that the tutor for your class was only at the university on the day of your tutorial, which made it difficult to schedule an office hour with them. Despite the longer classes and less in-person contact through office hours and multiple classes a week, I feel the courses set up students for the real world and for life once they graduate college where things aren't as easy and a linear path such as going to the same class multiple times a week (as maybe you have a work from home day or something comes up so you don't need to be in the office all the time) there is no hand-holding with students. While this is helpful, it's also a bit difficult to understand fully the work you are expected to do. This points toward uncertainty avoidance where you deal with the problems as they occur, here Australia and the U.S score similarly. Australia is 51% and the U.S is 46 % (*Hofstede insights*, 2020)

Geographical Environment

Another way the University encourages independence from their students is in the environment. You can go to the uni bar, the botanic gardens during breaks, or to the beaches on a day off. CU is located at a higher elevation, with the only natural scenery being the Flatirons mountains in the distance of buildings that feel like a concrete jungle. The University of Wollongong is full of palm trees and all the buildings were numbered and each of them are pretty close together so you don't have to run across campus wondering if you will be late for your next class. Due to the closeness of the buildings, not many people ride bikes on campus as a way to get around which was surprising and a relief as I didn't have to worry about getting hit by a bike. There was also a lot of wildlife on campus particularly ducks, rainbow lorikeets, cockatoo's and if you were lucky could maybe hear a kookaburra in the trees. On the UOW campus, there is the Uni bar which has beer, wine, chips "fries" and chicken schnitzel (which was often called a schnitty for short and is very popular in Australia) The Uni bar also holds events such as concerts and comedy nights as well. Being in such as visually stunning location leads to levels of relaxation. I found wasn't as stressed and on the grind which is drilled into American's from an early age, and that everything is slowed down here. When I say this, I mean Australians are indulgent with their time in relaxing and are not constantly rushing to get to their classes and can just relax outside with friends.

To get to campus every day you can take the UOW shuttle which is like the buff bus, and has an app telling you it's location. Often I took that bus when I didn't need to get to campus right away, as it was the long way due to driving through the nearby neighborhood. But if I needed to get to campus quickly I took the Wollongong shuttle which was essentially the free city bus that did a loop of the whole town and ended at the campus and was free. In comparison to the buff bus which is internal to the CU campus and was available to only students and staff. It was cool as not only uni students took the shuttle but anyone in town could use it, and this gave me independence in interacting with the community by gaining access to it and being in the real world.

Repeatedly after getting off the bus I'd cut through Wollongong Central, (which was the mall) to get to Marketview. My accommodation was a fifteen-minute walk from one of the two beaches in Wollongong, City beach and North Gong, which has cafes and such. Right across from the university is the Wollongong botanic gardens where students go to take breaks between classes and is definitely a stress reliever looking at all the flowers and the dense tree groves, which are reminiscent of a walk in the bush, with lots of foliage and vines on the ground that you have to carefully walk around to not get caught in them. The campus itself is like a natural park filled with lots of flora and fauna.

Lastly, I want to share a story which is the perfect example of Australian risk taking.

I'm a big fan of an Australian band called 5 Seconds of Summer. Prior to me leaving I heard that they would be home and would be preforming a show in Sydney, which was an hour away from

Wollongong. I texted my friend whom I met at CU while she was on exchange. I explained how I really wanted to see this band but had no one to go with and didn't really want to take the train to Sydney alone. Later that evening I get a message that she knew someone who is camping out to see 5 Seconds of Summer and wouldn't mind if I tagged along. Knowing this opportunity would not be something to happen again I said yes and camped out in Sydney CBD (Central Business District) in the rain to see a band I've been listening to since I was fourteen. Something like this would never have happened in the U.S (and it was one of the best mornings of my life and something I will remember forever) and the fact that I was just like oh sure! And my now new friend was so willing to let me tag along is definitely an example of Aussies and their willingness to take risks.

After returning home from Australia I began to look at America differently and how American culture is based on productivity and always looking ahead in life and never taking a true moment to breathe, which also has to do with capitalism and how rooted it is in our society. I found Hofstede Insights to be very accurate when it came to risk taking, independence and living in the moment as I experienced how Australians live up to these

traits and also how they differ from Americans in these areas such as, being more independent in setting students up for the future, more indulgent with their time and going out to have fun, and living in the moment.

Upon examining both cultures I feel more included in Australia over America as not having this sense of hierarchy and a more independent culture rather than a group mentality. I also found while abroad I could just be an American abroad and my race was not the first thing people judged me on. I found myself heavily reflecting on this during the protests that occurred that summer in the U.S over the death of George Floyd and how I didn't fear police abroad the way that I do here. I found myself disconnected from American culture while I was there, the racism and the entitlement that came with "being American" I shrugged it off the moment my plane landed as I didn't want to be associated with that. What does that say about multiculturalism in America vs Australia, they have a greater independence and by having university life removed from adult life in location and Greek life and clubs like CU does doesn't allow students to fully grow and become members of society as there is that learning curve they must get used to in being in the real world versus Australia where university students are integrated with the city, thus making the university and it's students more inclusive and the U.S can learn a lot from the Australians.

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BRENDAN THOMPSON
What the Poor Man Says Is Not Listened To
Diversity Writing 2nd Place (tie)

"What the poor man says is not listened to." Coming from a country where 55% of the population lives in poverty, many South Africans hold close to their heart proverbs such as this one. Does this mean that 55% of the South African population is not listened to? That their wisdom is shunned based on claims of discredibility? "What the poor man says is not listened to." If this is true, how did Uganda's "Ghetto King," Bobi Wine, rise from poverty in the slums of Kamwokya, and continue on to become one of the nation's most notable and inspirational leaders? "What the poor man says is not listened to." If my father had agreed with this, he would not have survived his ten years living in one of the poorest regions of Tanzania. From the slums of South Africa, to the Ugandan ghetto, to the lone mzungu living in Tanzania, we see patterns of knowledge and trends of credibility. And so the question arises: who and what determines the credibility of another person, and is their perception of credibility affected by affluence?

(Nelson Mandela: South Africa)

A poor man seeks to empower a nation, while a rich man seeks to take power from it. Prior to Nelson Mandela's presidency, during a period of apartheid, rich white men were the only kind of men to hold the position of president in South Africa. Who better to tell their nation that "What the poor man says is not listened to," than a rich white man. Mandela sought to progress the diversity of South Africa. In conjunction with the African National Congress, Mandela protested against Apartheid; he represented the millions who had never been represented, the disenfranchised majority. However, when this poor man finally gained a voice, he was charged with conspiring to overthrow the state. What the poor man said was heard, but it went against what the rich men wanted to hear. While Mandela was sentenced to life in prison, racial tension in South Africa continued to grow. How could a felon rise to rid a nation of apartheid? Ask any of South Africa's underrepresented communities, and they will tell you: Mandela's only felony was fighting for representation, fighting for equality.

What made Nelson Mandela fit for president? The fact was, Mandela had something that no president before him had: experience. He had experienced the negative effects of apartheid, poverty, and under-representation; he could relate to every South African who had experienced the same things. The 76% of the population that was black saw that he was too; the 55% of South Africans living in poverty saw that he had too. This is where his credibility came from; his experiences were those of the people. He had to continually prove that what the poor man said was worth listening to. To truly end Apartheid, South Africa's former president, de Klerk, worked alongside Mandela in an uneasy partnership. Together they turned Mandela's words into action. Creating a diverse South Africa involved cooperation, and open ears. Listening to the poor man allowed change to happen. We can see many stories similar to that of Mandela's in our current world as well.

(Bobi Wine: Uganda)

Spotify's new podcast "The Messenger" sees Dreamville rapper Bas interview Ugandan pop star turned politician Robert Kyagulanyi (better known as Bobi Wine) in his bid for president. They discuss his childhood, his family's ties to politics, and his upbringing. Bobi's family supported the overthrow of Idi Amin, Uganda's prior president, who was known for his authoritarian style of leadership and lack of regard for Uganda's people and environment. Although Bobi's family supported his unseating, they were skeptical of the insurrectionist-Uganda's new self-proclaimed president: Musevini. The podcast then turned to Bobi's childhood. His father passed away when he was young, leaving his mother destitute and with the only option of moving to the slums of Kampala. This is how Bobi Wine gained his popular name of "Ghetto King." He began making music and immediately rose to fame; his music directly related to the people around him. Following in his familial footsteps, Bobi became interested in politics and began making more politically charged music. He continued to rise in popularity, leading him to run for president. After what seemed to be a very successful campaign, Wine did

not win the popular vote. According to Rodney Muhuzuma of ABC News, Wine's Team is now disputing the vote. Wine could not be contacted for comment, as since the election, he has been held under siege in his household.

Much like Nelson Mandela, Wine has experienced poverty and corruption. Wine, who is 39 years old, lives in a country where 77% of the population is under the age of 25, and where Musevini has held the position of president for 35 years. Leading up to the election, I had the opportunity to talk with many Ugandan citizens; I was able to ask them questions regarding the election as well as their opinions on Bobi Wine. For their safety, all names will remain anonymous. "We do not expect Bobi Wine to provide us jobs or money, Ugandans are willing to work for themselves. We do not need handouts. We are grateful for everything Museveni has done for this country, but we need new leadership, new development and jobs. He (Museveni) has become corrupt." "Many young Ugandans have only known this country with Museveni as president; they have only seen Museveni as a greed-filled, authoritarian ruler." To many of these young people, Bobi Wine is the new representation they need; as Bobi Wine actually represents the people and all of the hardships they have faced.

Bobi Wine came from a slum of Kampala, but his voice has reached an entire nation. In a government where affluence determines publicity, "What the poor man says is not listened to" only reigns true because the poor man is not given a platform to speak. In the case of Bobi Wine, the poor man is not listened to because he is actively shut down. Tear gassed, arrested, sieged; Museveni has made countless efforts to prevent Bobi Wine from defying this proverb, and in doing so he has further shown that Wine is all deserving of his respect. Ugandan youth face oppression from the government every day, but Bobi Wine's direct opposition to Musevini's government exacerbates the antagonization he faces. He has thus become a face for the campaign against the current government. Bobi Wine had to earn his credibility, and in doing so is now a voice for the people.

(My Father: Tanzania)

What does it take to be considered knowledgeable? In the United States, employers seek out college graduates; the more years of school the more qualified an applicant. So how did my father, a man with a Master's degree from one of America's most prestigious schools, end up being the least knowledgeable individual in his town? Well as the lone mzungu (literally translated "white person"), he found that no amount of school could have prepared him for the lessons he would need to learn in order to survive as a resident of Kilimatinde, Tanzania. Speaking no Swahili, and having no knowledge of self-sustainability, he learned that to survive he would need to learn how to relate to the community around him.

"When you're a stranger in another culture, all you have to do is ask for help. The local people have figured out a solution for every problem they have encountered." This is the solution my father came up with for any troubles he faced; understanding that other people have knowledge that you don't is essential when adapting to a new environment. For him, the questions began when he was given a chicken from a local villager. "African culture is much more hospitable than other cultures; after being invited to dinner, I was given a gift just for showing up." But what does one do with a chicken? Again, all my father had to do was ask. After bringing his new chicken home, he asked his neighbor how he should care for it. She told him to lay out some grain in his storage room (the room where all rice and water was kept), and to let it stay there overnight. The next morning, he asked again, what do I do with the chicken now? He was told to open the door and to just let it go; he questioned her, asking "will it not just run away?", but she insisted that it would come back in the evening. The chicken ran off, and my father thought that it was gone for good. Sure enough, though, before bed the chicken had returned; it stood in front of the storage room waiting for the door to its new home to be opened. "I was the only mzungu living with the locals; I may have been the first white person they had ever met." If my father hadn't asked for help, he would have never learned something as simple as how to care for a chicken. "There's life stories to be learned all the time." It's important to know that they can be learned from anyone.

As he continued to live in Kilimatinde, my father continued to learn from the people around him. As the only person in the village with a car, he held a status of privilege, and thus favors were always being asked of him. On one occasion, a Tanzanian friend asked for a ride in order to go hunting. My father agreed to drive as long as the friend collected the hunting permits. So that's what they did; they drove off into the middle of nowhere, into the arid climate created by the six-month long dry season. They hadn't seen anyone for two days. This prompted my father to ask "what happens if we were to break down, how would we find water?" Naturally, the Tanzanian man had an answer; he responded "well here's how you find water… catch a baboon and tie a rope around its neck, give it some salt and when it's thirsty it will take you to its source of water." There was just one problem with this plan . . . "How do we catch a baboon?" Well luckily enough, another experienced resident of Kilimatinde had already imparted this knowledge to my father. "All you have to do is find a dry gourd with a narrow neck. When you see the monkeys, you place peanuts in the bottom of the gourd. Monkeys are very curious: they will discover the nuts in the gourd and try to grab them. When their hand is in a fist, they cannot get it out of the gourd. They are so obsessed with nuts that they will not let them go. That's when you run over and catch them." A story like this further proves that the lack of conventional education does not equal a lack of practical knowledge.

Even after these lessons, there was still more to be learned. People in the developed world have learned to weed their gardens, but when my father did so in his Tanzanian garden, his neighbor would intervene. With every weed he pulled, she would say, "No no no, Mchicha." This continued until he learned that Mchicha is a valuable resource that is used to compliment Tanzanian meals. Mchicha, which is similar to spinach, was first introduced in Kenya in order to make meals go further. This is referred to as Sukuma Wiki, which means "to stretch the week." When people have no more food, they use Mchicha to make it through to the end of the week. My father's neighbor taught him that the man with the least resources learns to be the most resourceful.

One of the most crucial realizations he discovered was the importance of asking "can you show me?" In Kilimatinde, everyone builds their own houses using handmade bricks. These bricks were built by mixing mud and water, then pouring the mix into a brick-sized mold. This mold must then be burnt over a fire for three days straight, day and night. These bricks served as the foundation for schools and hospitals. Unfortunately, there was not enough funding to plaster the walls. One builder chimed in, saying "we can use Kilimatinde cement." As recounted by my father, "Upon asking what this cement was, the man grabbed my hand and took me into the bush. We came to a patch of white ground, contrary to the usual beige tone the dirt held, I was told to mix it with water and use it as plaster. I asked him to show me how. Sure enough, it worked just as well as regular plaster, and it was totally free." He then was able to pass on this knowledge of Kilimatinde cement to other locals. From merely asking "can you show me", my father was shown countless amounts of knowledge which he would otherwise never have been exposed to. He learned to truly understand a culture, you have to be willing to understand it.

(Conclusion: Trends of Credibility)

The most wisdom is gained by experience; the most knowledge acquired by those who have lived it. To say "What the poor man says is not listened to" discredits vast amounts of knowledge and wisdom. To truly understand the world and the plethora of cultures that comprise it, we must listen to everyone. Everyone has wisdom that we can learn from. During apartheid, Nelson Mandela was convicted for sharing his wisdom; now he is seen as one of the world's most influential leaders. Bobi Wine was denied his ability to voice his beliefs, but they still reign inspirational for a hopeful Ugandan youth. The locals of Kilimatinde, Tanzania taught a helpless mzungu how to survive in a new environment. If the poor man was not listened to, the world would not see change. If the poor man was not listened to, countless amounts of knowledge would remain unheard.

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MARK SHOREY
Gender Discrimination and Sexism on the Jobsite: An Ethical Report
Mackison Fall 2020

(Cover Letter)

December 1, 2020

Board of Directors

Associated General Contractors of America

2300 Wilson Blvd., Suite 300

Arlington, VA 22201

Dear AGC Board of Directors:

I am writing to you today to suggest the development and implementation of a gender discrimination standards board for your member contractors. The AGC should require a gender discrimination standards board to be in place for each member contractor and provide guidance and support in their establishment. The benefits of such boards would be numerous to our industry and may help bring us closer to true gender equality in our field. In the attached report I will outline my ideas for this type of standards board and argue my point from an ethical and professional perspective.

In recent years, it is undeniable that our field has made tremendous progress in gender equality on construction sites. However, anyone who has spent considerable time on a construction site would probably tell you that we have a long, long way to go. On the front lines of a jobsite, as few as 1 out of every 100 people working are women, and only 2.5% of tradespeople are women nationally. This means that the construction industry is missing out on the talent of nearly half the workforce- and that half of the workforce is missing out on the tremendous opportunity in the construction industry.

Women often face barriers on construction sites. Nearly all gender discrimination victims in the construction workforce are female, and 73% of women in the industry feel they have been passed over for roles because of their gender. They also suffer from poorly fitted workplace safety equipment that have predominantly been engineered for men, and nearly half the women in the construction workforce say they have never worked for a female supervisor. Many construction companies would tell you that their culture is such that you have to prove yourself in order to gain respect, but this notion is obviously untrue for one gender. The fact is that women face barriers when they enter the construction industry that their male counterparts do not.

As a man in the construction industry, I plainly have not experienced this gender discrimination, and will not ever know what these sorts of barriers to my success will feel like. I have, however, been subjected to disrespect, verbal abuse, and general nastiness by suppliers, subcontractors, and even company tradespeople on the jobsite, especially before I had "proven" myself competent. One way that I have fought through these challenges is by talking with my managers, being listened to and respected, and them having a talk backed by actions with the offending party. In one case a supplier who had repeatedly disrespected me and other interns working on our jobsite was told that he wouldn't be making sales to us anymore. A management culture of being heard and respected combined with a willingness to make change helped me and many other newcomers like me tremendously and allowed me to prove my credentials while contributing to a job well done.

When it comes to women on jobsites, we have to be intentional in building the sort of culture that allows female workers to thrive and show their value. Women hired onto the jobsite in either construction management or trade roles often face discomfort and vaguely discriminatory messages and jokes from fellow workers. Sometimes, women are unsure whether they need to speak out about these things, because they do not want to get people in trouble for something they view as a small deal. However, behavior like this is anything but a small deal. It drives talent away from our workplaces and reinforces a toxic good-ole-boy culture that our industry is only starting to emerge from. Women need to have somewhere to go when they experience sexism in the workplace, no matter how mild. If we want to be serious about gender equality there needs to be true consequence for people who repeatedly step out of line.

Such a standards board needs to have the power to fire workers over repeated discriminatory remarks or end contracts with subcontractor companies who cannot uphold a culture of mutual respect. There also needs to be a clear, intentional protocol for women to go through when they feel disrespected. While some people may insist that things will never change, clear standards and consequence for unprofessional conduct has the potential to make women more comfortable on the jobsite. Diverse perspectives and leadership always benefit operations, and companies who are able to employ talented women because of positive, respectful culture will simply leave behind those who refuse to change.

Some have concerns that such a board might go too far in firing someone for what they perceive to be harmless jokes. However, I would say that no matter the intent of these jokes that this behavior is unprofessional. For an industry that so values a 'sink or swim' culture, we should have no problem getting rid of those who cannot uphold a professional standard at work. This is as much of a business decision as an ethical one, and the creation of a culture that respects women in construction does the most good for everyone in our industry.

In this report I will show that women in construction have undeniable barriers to their success because of their gender. I will describe why the creation of a culture that respects women is not only a professional benefit, but also an ethical one. I will refute the argument that things like sexist jokes are not a big deal. Finally, I will argue why an intentional standards board is the best way to forward as compared to an informal acknowledgement of the problem.

Sincerely,

Mark Shorey

(Report Text)

The Facts of Gender Discrimination in Construction

It is undeniable that construction is an industry of opportunity. More than 10 million people are employed in construction today, with many of those making livable and middle-class wages, and many enjoying hard-fought union benefits. In 2015, The Bureau of Labor Statistics projected that the country would need 1.6 million more construction workers by 2022 ("Breaking Down Bias in the Construction Industry"). As America looks to keep building, we have to solve the labor shortage that is increasingly making it more difficult to do so.

One source of labor that the industry seems to neglect is the female workforce. Of the more than 10 million construction industry workers, only slightly less than one million are women. Even fewer work on the jobsite in the trades, with women representing only 2.5 percent of these positions. On the surface it is difficult to see why our field has difficulty attracting women. After all, according to the BLS, the gender pay gap is considerably smaller in construction, with women earning on average 99.1 percent of what men make, far outpacing the national average of 81.1 percent ("Statistics of Women in Construction"). So, what barriers are stopping women from representing a higher proportion of the construction workforce?

The answer is multifaceted; unfortunately, women suffer from many barriers large and small. Some, like ill fitted personal protective equipment, are merely engineering problems that can be solved with the purchase of better-fitted PPE. However, nearly half of women in construction haven't had a female supervisor, and nearly three quarters of women in the industry feel they have been passed over for promotions because of their gender (Zitzman). These are systemic barriers that our industry must overcome if we are to truly maximize the potential of female labor. Even beyond all of this, one of the largest, most notable problems concerns sexism on the jobsite. If we solve this problem, we will see improvements in many other areas for women in our field.

The Ethical Problem

A case study given by the Markkula Center for Applied Ethics sounds all too common to many people in the industry. On a visit to a construction site a female intern is subjected to pervasive condescending treatment and disrespectful comments based on her gender. She knows that she is being treated disrespectfully because of her gender but doesn't bring it up to her supervisor because the workers making the comments were all subcontractors. These subcontractors are not employed directly by the general contractor she works for but are employed by a different company who the general contractor is paying to complete a specific scope of work. Moreover, she feels it wouldn't be right to get someone in trouble over "small" comments like these and worries that complaining would affect her long-term success in the industry. It is easy to feel helpless in such a situation, and our industry is not currently set up in a way that can adequately address this issue.

The Law Regarding Sexism in the Workplace

Sexual harassment and gender discrimination have been illegal in the United States since the passage of the Civil Rights Act of 1964, Title VII. Federal enforcement of these labor laws comes from the U.S. Equal Employment Opportunity Commission (abbreviated as EEOC) and they apply to all companies of 15 employees or more ("Sex Based Discrimination"). Different states often have stricter laws and enforcement, but for this analysis I will focus on the federal laws and enforcement, since AGC members come from across the country.

A document published by the EEOC defines sexual harassment as conduct which "creates an intimidating, hostile, or offensive work environment." What makes this a challenging ethical situation is that the line between sexual harassment and simple teasing is not always so clear. Although the intern in our particular example may feel that the comments don't amount to much, it is very clear that under these comments are out of line. The EEOC goes on to say that while simple teasing and isolated incidents are not illegal, they can rise to the level of sexual harassment if they are repeated and create a hostile work environment. The document says that "The harasser can be the victim's supervisor, an agent of the employer, a supervisor in another area, a co-worker, **or a non-employee**." This quite clearly shows that even if the harasser is an employee for a subcontractor, the general contractor still has the legal and ethical responsibility to foster a workplace free of sexual harassment. Although sexual harassment is taken seriously by many employers, currently there isn't a dedicated, clear protocol for women to be listened to when they experience comments they perceive as out of line, but don't necessarily rise to the level of prosecutable sexual harassment. This report aims to offer a solution to this problem, viewed through the lens of applied ethics.

Ethical Analysis

Below I will provide options for action based on five ethical frameworks to view this problem from. Afterward, I will explain the decision I have made in terms of the ethical analysis and provide relevant evidence to support my decision.

(1) The Utilitarian Approach: Produce the most good; do the least harm. Good and harm are somewhat unique to try to define here. The good outcomes we are looking for are respectful treatment of all female employees and broadened access to the field of construction by women. This also avoid the harm of sexism experienced by women. However, one harm that may

be avoided is the loss of job for someone who harasses a woman. Taking this approach would probably only result in a stern talking to for the offending party. While for minor incidents and isolated comments a talking-to would likely curb the specific incident, it does almost nothing to help the broader cultural problem of the construction industry in which these minor cases are so pervasive.

(2) The Rights Approach: respecting the rights of all involved. It is clear that women have a right not to experience harassment in the workplace. More complicated rights involve work or union contracts for affected or offending workers. However, even in states with strict laws about hiring and firing, sexual harassment is just cause for termination of employment. In most states any employee can be let go for any reason as long as that reason is legal, as all employment is at will unless specifically stated. Therefore, a solution to stop the harassment while respecting the rights of those involved might be a one-time firing of an offending employee. The right to a harassment free workplace is very obvious, but there isn't an obviously clear right to work. However, we have to be careful not to break laws unjustly firing someone, and this can be a difficult line to walk when the comments may or may not rise to the level of sexual harassment under the law.

(3) The Justice Approach: treating people equally. I believe this framework gets to the heart of the case. As things stand now, it is sometimes impossible for women to be treated equally in the workplace. Judging by the statistics of low female employment in the construction industry, it is clear that a culture change is required across the industry. Such a culture change has to be intentional and start from the top down. If a culture were already in place of preventing these instances of sexism, the female intern would have no questions about what to do. With such a culture, she would have already gone through the proper channels, been listened to by management, and a solution to the sexist comments would be reached. In fact, maybe with more anti-sexism measures in place, the situation would never have come to this, and sexist employees would have already been rooted out of the workplace.

(4) The Common Good Approach: what serves the community best. I believe that for this case the common good approach ties closely to the justice approach. A culture that allows for the widespread employment of women in the construction industry benefits women in making available more well-paying jobs, and it gives the construction industry the benefit of a wider talent pool. Not to mention the almost one million women currently employed in construction today, an already-existing community that would greatly benefit from such a culture.

(5) The Virtue Approach: acting as the sort of person I want to be. Although my experience of sexual harassment as a man is very different, I have been present for so-called "locker room talk" among fellow male workers. I've heard coworkers make comments about women who were not around that clearly crossed a line, but in such situations, I have frozen and did not know what to do. If a channel had been established where I could have reported such a thing and been listened to by management I would have. As I can personally attest, pushing back on such comments only has effect from a managerial position. Harassers often do not respond well when called out by peers, and even when called out they believe it is unimportant because it didn't come from someone higher than them. Therefore, a standards board with actual power and protocol would enable people to keep their coworkers accountable and professional.

The Ethical Decision

I believe the Justice Approach primarily informs my recommendation in this case, with close ties to the

Common Good and Virtue Approach. I think the Utilitarian and Rights approaches are not adequate to solve the problem of sexism in our industry. My ethical recommendation is, based on these approaches, to implement a gender discrimination standards board and grievance process. The AGC needs to provide its member contractors with binding guidelines to develop their companies' protocols concerning sexism, harassment, and gender discrimination in the workplace that go beyond the basic common-sense sexual harassment training already required at all workplaces. Failure to do so ought to result in loss of membership in the AGC. If a company cannot conduct itself like professionals, then it has no place in our organization.

This conclusion is well supported by the recommendations of the EEOC. Going further into this document from the EEOC reveals the suggestions the agency has regarding the control of sexual harassment:

> Prevention is the best tool to eliminate sexual harassment in the workplace. Employers are encouraged to take steps necessary to prevent sexual harassment from occurring. **They should clearly communicate to employees that sexual harassment will not be tolerated**. They can do so by providing sexual harassment training to their employees and by **establishing an effective complaint or grievance process** and taking immediate and appropriate action when an employee complains.

Many major instances of sexual harassment are promptly dealt with by systems as described above, while most minor comments do not go through such a process. On a surface level this makes sense, as there is a clear difference between something like requests for sexual favors and teasing. Adding up all these small comments, however, might be part of why so few women work in construction. If these comments really prevent some women from entering the industry, then the sum of these minor issues rises to the level of a hostile work environment. Therefore, the creation of a standards board aimed at rooting out these comments is well covered by the EEOC's suggestions to combat sexual harassment. Such a board can aim at reform and awareness first for minor offenders. Minor offenders will stop when they are presented with why their actions are hurtful, while harassers will not. Repeated failures to uphold a professional culture after intervention does, therefore, rise to the level of sexual harassment, and termination is justified.

These are the baseline steps we must take in order to build a culture of zero tolerance for sexism on the jobsite. It is only once we have successfully implemented such a culture that our industry will retain all of the female talent we have the potential to, and it is clear that change must start from the top. Management culture must listen to women and follow through with firing offending workers, subcontractors, and others on site who contribute to these barriers. This is an issue of professionalism and ethics. It is only once we have a truly level playing field that construction can become the industry it believes it is: one based on mutual respect for competency, and ever-present teamwork to get the job done. Succeeding in building great structures is difficult enough as it is, it is time to replace the toxic good-ole-boy culture that permeates parts of our industry.

Employees also ought to feel comfortable bringing things up to a board without fear of retaliation. Retaliation for such claims is unlawful under Title VII. It is clear that the female engineer should say something about the sexist conduct of the subcontractors, but in many cases one might feel like they cannot, or if they did they wouldn't be listened to. This is what such a standards board would aim to change.

Conclusion

I, like many in the industry, recognize that we have a long way to go toward true gender inclusivity in our workplaces. This should not stop us from doing our best to change the culture of this industry from the top down. Culture changes slowly, yes, but it *does* change. Implementation of these standards at each company will seem harsh at first. However, if it is paired with genuine sexual harassment prevention training and taken seriously by management, pretty soon people across the industry will start to understand expectations. It is important not to create a culture of fear, otherwise these changes will fail. This is about professionalism and fair treatment, about the end of rude comments, not punishment.

These reforms actually hold true to the ideals of this industry. We believe that anyone who can hang with the challenge can build great things. We believe in a sink or swim culture because building great things is hard. We believe that people ought to be able to prove themselves capable of rising to the occasion. Therefore, we also ought to rise to the occasion of changing our culture permanently, and for the better. Together we can ensure just treatment of women on the jobsite, we can foster the common good of our society, and we can do right by each other. We can't shy away from change because things have always been a certain way, because our industry changes our world for the better every single day.

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JULIA BENDORF
The Rhetorical Life of Scientific Fact: From Viral Variants to Bat-ting for a Cure
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Introduction

It is no secret that quite a bit of understanding can get lost in the translation of scientific discoveries from the academic to public domain. However, in the article "Accommodating Science" Jeanne Fahnestock argues that much more can be lost in this conversion of the scientist's original work to a popularization. According to Fahnestock, a fundamental shift in genre, information, and address of stasis theory occurs.

Going off of Aristotle's three modes of persuasive speech, Fahnestock establishes this genre shift by highlighting the tendency of scientific papers to lean towards forensic speech and popularizations to lean towards epideictic speech. In other words, scientific papers tend to focus on establishing validity of their findings among their colleagues whereas popularizations tend to focus on pronouncing the value and meaning of the findings. Fahnestock details that a shift in information between these two domains can primarily be characterized by Bruno Latour and Stephen Woolgar's taxonomy of statement types. This taxonomy characterizes statements as most certain (type 5) to least certain (type 1), with more certain statements being more likely to appear in popularizations and less certain statements being more likely to appear in scientific papers. Fahnestock further illustrates how this shift in domains moves the content through stasis theory to further contribute to these changes in genre and information. Scientific papers usually remain in the first stasis dealing with what and how questions. Contrastingly, popularizations move to the next stases dealing with the why and to what effect questions.

Though much has changed since Fahnestock published her paper in 1986, most of her conclusions are still very valid. With the coming-of-age of the internet and new social networks, our media has become supercharged to provide us a plethora of information at our fingertips at every moment of the day. With this new accessibility comes a competition for the everyday reader's attention. Hence, many scientific popularizations have taken on even more severe genre, information, and stasis shifts since Fahnestock's time in an effort to monopolize the reader's attention. In this paper, I will employ these methods to analyze the differences between the original scientific report, *Selection of Viral Variants During Persistent Infection of Insectivorous Bat Cells with Middle East Respiratory Syndrome Coronavirus* by Arinjay Banerjee, Sonu Subudhi, Norren Rapin, et. al, published in Springer Nature and its popularizations found on Science Daily and The New Indian Express.

The Scientific Paper

The original scientific report was submitted to Springer Nature Scientific Reports on November 20, 2019, and was later published after peer review on April 29, 2020. The paper attempts to characterize the mechanisms by which coronaviruses that cause severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS) may be maintained within populations of bats. The paper is easily identified as a scientific research paper by its inclusion of a variety of complex figures as well as adherence to the typical scientific paper structure of abstract, introduction, results, discussion, methods, and citations. The paper remains largely foren-

sic in its speech by adhering to first stasis questions throughout the abstract, introduction, and results sections. Here, the authors focus on identifying prior research dealing with the paper's subject, summarizing what experiments were performed, and highlighting the results. There is very little speculation as to what the significance or value of these results might be within these sections. In doing so, the first stasis questions of "Does a scientific problem exist?" and "Did an effect [in the experiments] really occur?" are answered clearly and unbiasedly, lending the authors credibility amongst potentially skeptical peers within their discipline.

Looking more specifically at the report's abstract, the authors begin with a relatively suppositional level one background statement, "Coronaviruses that cause severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS) are speculated to have originated in bats." In doing so, the paper makes a rather uncertain claim which actually forms the factual basis for the entirety of research and hypotheses made within the rest of the paper. The word "speculated" gives the authors' credibility among others in their discipline by acknowledging scientific debate and counter arguments within the field in respects to viral origins while also pointing to newsworthiness by contributing to this ongoing debate. However, to the casual reader this may seem to weaken their closely following primary hypothesis: "That bat cells and MERS coronavirus (CoV) can co-exist *in vitro*," giving a likely route for persistent infection of bats and disease-shedding to other animals. The abstract then follows the typical format of any research paper: it identifies a gap in knowledge, forms a hypothesis, and briefly summarizes experiments and results. In doing so, the abstract provides a brief preview of the paper while leaving out the actual interpretation of the paper's findings. This allows for researchers to easily get a good preview of what the paper is about before reading it. However, there is nothing particularly eye-catching or wow-inducing within this overview and in fact it would likely discourage casual readers with its lengthy title and immediate use of hyper-specific language such as "*Eptesicus fuscus*," "type 1 interferon," and "ORF5 MERS-CoV" within the abstract. The dry nature of this abstract typical to most research papers makes the paper relatively inaccessible to the casual reader.

Within the paper's introduction, the authors elevate statements to the second and third suppositional levels with the frequent use of citations in order to more rigorously establish a background and gap in knowledge for their research to fill. Almost every sentence within this section contains at least one citation, illustrating the rigorous approach the authors took to couching their paper within the present scientific situation. Phrases and words such as "speculated," "not well known," and "has not been extensively investigated" are littered throughout the introduction. These serve to highlight the uncertain nature of this field of research and again grants credibility to the authors in respects to their peers for their recognition of this. The detailed overview of current knowledge within the field provides a justification for the authors chosen topic of research and hypothesis. This gives the paper significance to technically versed readers within the field; however, it would likely further discourage the casual reader with its use of technical jargon.

Like many other recent research papers, the methods section was withheld until just before citations in order to enhance the paper's readability. Instead, the prominent results section follows the introduction. It is organized by listing each brief finding from the experiments followed by the most notable data supporting the finding. Rather than referencing outside sources, the results are heavily laced with references to complicated figures illustrating important data (see figure 1). The writing in this section adheres primarily to type 4 statements, simply stating what was found uncontroversially. This maintains a dry and forensic writing style, granting further credibility to the author's results, however creating barriers to casual consumption as the results require readers themselves to closely interpret and draw their own conclusions.

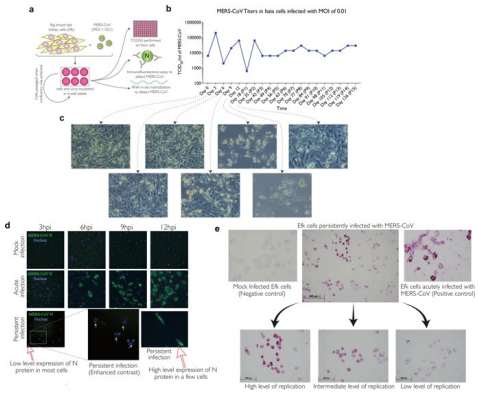

Figure 1: Experiments and Data Depicting How Bat Cells can be Persistently Infected by MERS-CoV.

The report follows these lengthy results with a moderate discussion section. Here, the authors continue to remain primarily within the first stasis of questions, however dabble within the later stases in order to suggest possible interpretations and further applications of their findings. As noted in this snippet, the discussion shifts mildly between lower and higher stases: "While we have not clearly established the molecular mechanisms that render the persistently infected cells resistant to superinfection, our results indicate that down-regulation of DPP4, the cellular receptor for MERS-CoV (Fig. 5c) in the persistently infected cells provide an explanation." In doing so, the authors revert back to type 1 and 2 statements in order to hedge their findings within the citations of other relevant findings, to suggest sources of error, and to point to further research needed. Each of the major findings from the results section is restated and further developed to support the paper's final claim or to create new hypotheses to be later investigated. The paper's final claim is brief and contained: "Unlike human cells, where infection leads to death of all cells, MERS-CoV establishes a persistent infection in a bat cell line." The authors only briefly extend this claim and these results to touch on how this persistent infection may actually spread to other species, simply stating, "We hypothesize that the protein [MERS-CoV ORF5] promotes ER-stress induced apoptosis," without further elaboration and with a heavy emphasis on the need for further investigation. Near the end of this section, the authors highlight a series of uncertainties and possible sources of error within their experience and, rather than making a stronger claim, take a typical path to call for further research into the subject. Thus, the overall purpose of this paper is maintained and validated in the discussion: to further the scientific discussion of this issue and to suggest possible hypotheses to be further investigated. This purpose not only legitimizes the authors' work in a scientific context, but also aligns their paper with scientific ideals.

The Popularizations: *Science Daily*

Though this scientific paper is very in depth and accurate to the experiments conducted, its adherence to the typical form and function of a scientific paper put up barriers to the general public. Popularizations by many news outlets have adapted the genre and information contained within this paper to better inform the public, however this sometimes comes at the price of scientific validity. Beginning with the most well-done popularization, *Science Daily* presents an article titled "Bat 'super immunity' may explain how bats carry coronaviruses, study finds." The stark difference in language between this popularization and the original scientific paper is evident even in just their titles. Whereas the research paper's title is loaded with technical language such as, "viral variants," "insectivorous bats," and "Middle East respiratory syndrome coronavirus," the popularization condenses these ideas into simpler terms familiar to the average reader. The use of "super immunity" in the title shifts to a more epideictic form of speech by applying a "wonder" appeal to the study, as was noted in Jeanne's article. This term immediately links the findings to a sort of super-hero fascination within the general public, thereby implying a positive connotation and validation. Though "super immunity" may not be completely accurate to the scientist's findings, this title does well to summarize the study's basic idea in an appealing and simplistic manner without going too far in its level of certainty to overstate the findings. Also contrasting to the

original paper, this article begins with its sole image of a basic flying big brown bat (see figure 2). This image allows for the readers to visualize and better connect to the species at hand while also further developing a wonder appeal due to a human fascination and fear of bats who often bring to mind their mythical counterpart: vampires. Unlike the series of complicated illustrations and figures throughout the scientific paper, this image conveys little additional information; however is friendly and familiar to any reader.

Figure 2: Big Brown Bat (Adobe Stock Image)

The popularization then provides a brief overview of the paper's major findings and background. Throughout this section, the popularization tends to utilize type one and four statements. For example, the article summarizes the paper, "A University of Saskatchewan (USask) research team has uncovered how bats can carry the Middle East respiratory syndrome (MERS) coronavirus without getting sick--research that could shed light on how coronaviruses make the jump to humans and other animals." The first half of this summary solidifies the scientific paper's findings into a much more definitive type four claim whereas the latter half of the sentence maintains the epideictic form of speech with an emphasis on "application" appeal, but still admits uncertainties as to the real significance of these findings with its type one statement nature. Similarly, the brief background provided by this popularization admits uncertainties in the scientific knowledge surrounding this subject: "Coronaviruses such as MERS, Severe Acute Respiratory Syndrome (SARS), and more recently the COVID19-causing SARS-CoV-2 virus, are thought to have originated in bats." The phrase, "are thought to" restrains this background information to a type 1 statement, similar to how it was presented in the scientific paper. The mention of "COVID19," which came to prominence in world news after this paper was submitted in November 2019 to *Springer Nature Scientific Reports*, once again tends the popularization to an epideictic application appeal by providing relevance for this study to major problems in the general public's lives today.

The following portions of the article utilize a series of quotes by the researchers to attempt to further apply the results of this research to solutions for the COVID19 pandemic. This focuses on answering later stasis questions addressing the applications and significance of the research through the use of type four and two statements. Fahnestock illustrated that use of these techniques often adds importance to the research for readers of popularizations. For example, the article comments further on COVID19, "SARS-CoV2 is thought to operate in the same way," and even ends with "This information may be critical for predicting the next bat virus that will cause a pandemic." These type two statements provide a reason for modern day audiences to care about the research. Though the actual mechanisms of how viruses may jump from bats to humans is only very briefly speculated on in the research paper, here, the article places an emphasis on this concept. A quote from a researcher states, "When a bat experiences stress to their immune system, it disrupts this immune system-virus balance and allows the virus to multiply." This type four statement is much more definitive than the weaker claim made near the end of the research paper's discussion. Typical to popularizations, the use of a quote by the researcher within

a popularization allows for the researcher to make much more broad and wide sweeping claims than would have been accepted within their paper amongst the strict peer-reviewers. Overall, the simplification of language and concepts as well as confident connections of the research to the world today make this article accessible to the general public. While more certain statements deviate a bit from the research paper, the usual adherence to type 1 and 2 statements allow the article to avoid overstating the research and making factual errors.

The Popularizations: *The New Indian Express*

A shorter article on *The New Indian Express* titled "Bat-ting for a COVID-19 cure" takes a more confident approach to sharing the research paper's findings. This article's title deviates completely from any of the information presented within the research paper and instead utilizes a pun to create an epideictic applicational appeal, proclaiming the value of the research. This title is very far-reaching considering that the original paper made no mention of cures, COVID-19, or even a definitive method of transfer for disease between bats and other species. This popularization begins with an imaginative illustration of a smiling bat flying towards the viewer (see figure 3). Like the previous article, this serves to familiarize the reader with the species at hand as well as provide a wonder appeal. The addition of the unrealistic smile to the bats face applies a further positive and friendly connotation to the research, emphasizing the possible solutions which this paper believes the research will bring. This anthropomorphizing projects emotions onto the bat and consequently onto the content presented within this article.

Figure 3: Imaginative Illustration of a Bat

The article then provides its primary claim as to the relevance of the research paper, "Researchers, mostly of Indian origin, from the University of Saskatchewan (USask) in Canada, have unraveled how bats carry the Middle East Respiratory Syndrome (MERS) and Covid-19 virus, SARS-CoV-2, without getting infected themselves." The mention of the researcher's origin as well as Covid-19 makes the research relevant to this news platform's typical audience. The term "unraveled" skews the certainty of the scientists' findings to a type 4 statement based in the later stases, where they have completely and definitively solved this mystery. Though this choice of vocabulary enhances the wonder appeal of this article, it is rather misleading because the scientific paper actually only presented a possible theory of how this might occur and suggested the need for further research. In addition, the research paper only investigated MERS, and did not make any definitive claims on SARS-CoV-2, whose epidemic in China began after the paper was submitted to its research journal. SARS-CoV-2 is mentioned repeatedly throughout the rest of the article.

Skipping any further background, this popularization then moved to a short description of the paper's results with primarily type four statements. Here information within the scientific paper cited from a different study is referenced nonspecifically. This causes confusion and inaccuracies within this section as the article seems to imply that the other paper's findings were in fact found within the scientific paper being discussed. In discussing the actual findings of this paper, the article uses a metaphor for a "long-term relationship" and the hyperbole "'super' immune system" to explain the bats' persistent infection with MERS. Though the relationship metaphor is very effective in communicating the researcher's findings in simplistic language, the "'super' immune system" is a bit misleading similar to the previous popularization. The article ends in a similar, application-based fashion to the previous article, "This information could be critical to predict the next bat-borne virus, researchers said." Overall, the serious emphasis on application, lack of background, discombobulated references to the scientific paper, and certain nature of statements in this article remove much of the actual science and make unsupported claims. Though this popularization seems interesting to read, it takes a lot of liberties to attract an audience and thus sacrifices accurate and complete information.

Conclusion

After applying Fahnestock's treatment of the modes of persuasive speech, taxonomy of statement types, and stasis theory, it is clear that a significant shift in genre and information occurred in the transfer of ideas from this scientific research paper to its popularizations. Though the scientific paper is extremely accurate to the actual research carried out and to the ideals of the scientific community, its use of technical jargon, complex figures, and dry writing make it relatively inaccessible to the general public. Science Daily does a fine job of summarizing this research in more lay terms while emphasizing possible applications to draw audience interest. Both this article and the article appearing in the New Indian Express make more brazen claims regarding the research's findings and significance. The New Indian Express goes much further to exaggerate the applicability of this research and in doing so makes factual errors while leaving out important information. This evaluation clearly indicates that today more than ever, with the development of new communication technologies and more complex scientific findings, popularizations are important to spread scientific information to the general public. The key to effectively doing so is a skillful balance of providing accurate and complete information while also captivating audiences in the translation of ideas. Going forward into what will likely become an even more technically advanced and connected world, it is important that sensationalism not come to outweigh accuracy in the communication of scientific ideas to the general public.

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Alternative Education in Computer Science
Mackison Spring 2020

Introduction

The Software Engineering industry is growing at a rapid rate, projected to have around a 21% increase in new jobs by 2028 (US Bureau of Labor Statistics, 2020). Colleges are under-producing the raw number of Computer Scientists needed to fill those jobs, so alternative education has emerged as one solution to help provide qualified talent to the industry. Many colleges offer completely online bachelor degrees in Computer Science, and others such as MIT and Stanford offer their entire computing course catalog online for anyone to self-study at their own pace. Bootcamps have popped up in and around Tech Hubs, promising an end-to-end understanding of topics like web development or data science for those looking to switch careers. MOOC (Massive Open Online Courses) companies are surging in popularity, offering a plethora of freemium courses for anyone to study in their free time. Alternative Education in Computer Science makes the great appeal that it's possible to learn Computer Science without a traditional degree. Software companies have become more accustomed to hiring self-taught and bootcamp software developers, so it seems an enticing opportunity to take a trade-school like approach to enter the field instead of paying the hefty cost of attending College.

Additionally, Computing suffers from a diversity issue. The stereotype of the nerdy, antisocial, ill-dressed brainiac being the perfect Computer Scientist is harmful and turns people away that would otherwise excel in the field. Males comprise 80% of the undergraduate enrollment in Computer Science at CU according to the Office of Data Analytics (2020). In 2015, women received 18% of all awarded bachelor's degrees in Computer Science (US Bureau of Labor Statistics, 2020). This number is down from 1986, where women received 26% of awarded degrees (US Bureau of Labor Statistics, 2020). Recent improvements have been made to combat the problem, but the gender gap is still one of the major issues computing faces. Bootcamps specifically market towards underrepresented groups in Computer Science, giving them another chance to enter the industry. This push has led to a 40% enrollment from female and non-binary participants, significantly more than what typical degrees have achieved (Course Report, 2016). Alternative Education aims to make Computing careers more accessible to underrepresented groups.

The "rags to riches" dream that Alternative Education unlocks sounds wonderful, however it's important to understand how the education from these sources differ from a college degree. A degree is not required to enter the Software Engineering field, but most employers still prefer college educated graduates, even when that degree is not directly applicable (Thayer & Ko, 2017). Those that succeed through alternative education often have some other significant experience to level the playing field. Depending on personal circumstances, this can make Alternative Education more or less viable. It's important to understand what place Alternative Education has in the overall computing industry as it becomes more popular.

The Appeal of MOOCs

MOOCs (Massive Open Online Courses) initially surged in popularity around 2012 when a Computer Science Professor at Stanford University, Sebastian Thrun, cofounded *Udacity* after the major success of it's pilot course, *Introduction to Artificial Intelligence* (Corbeil et al., 2019). Since then, a plethora of other similar companies have popped up, all providing MOOCs for Computer Science and other subjects. A typical MOOC is a smaller, self enclosed course, expecting 2-3 hours of work per week for around 10 weeks. Some platforms offer focus areas that suggest a few similar MOOCs to teach a broader subject, acting as a sort of mini-degree (Corbeil et al., 2019). Some MOOCs act more ambitiously, implying that the entirety of a bachelor's in computer science could be learned for free from their online courses. The primary audience of MOOCs are college graduates filling gaps in their education or learning specific technologies for their jobs (Beştaş, 2017). MOOCs

have shifted from general education to offering training for specific workforces (Corbeil et al., 2019). A holistic Computer Science degree focuses little on specific languages and technologies, opting to cover much more theory than would be applicable to a typical software engineering job. This theory, while important to teach problem solving, soft skills, and provide a glimpse into academia, does not cover many important technical skills needed on the job. MOOCs are great to fill this gap. MOOCs also work well to provide a quick introduction to a topic of interest. One of the benefits of my internship last summer was a premium account on one of these MOOC sites, which I used extensively. It helped me get a crash course in the technologies I was working with and got me interested in other subjects of CS which has since affected which classes I have chosen to take.

Where MOOCs Fail

One of the main problems with MOOCS is their low completion rate, ranging from 0.7% to 36% from a selection of courses (Khalil & Ebner, 2014). Obviously that statistic is somewhat misleading, as many who sign up for MOOCs were not intending to complete it in the first place, but there's still a significant number of people who try and fail to learn from the course. The students that tend to finish these courses are older and already have a degree (Guo & Reinecke, 2014). MOOCs are typically entirely self-paced, with no incentive for a student to finish the course other than personal gain. MOOCs suffer from the fact that they don't compare well to normal college courses (Spieler et al., 2019). MOOC courses are not accredited. There's incentive for students to finish college courses as they're receiving credit from an institution for it, while MOOCs have no such backing. It's an entirely different statement to say you've taken Operating Systems through a college than to say you've taken Operating Systems as a MOOC. It's hard to verify that a MOOC teaching similar content reaches the same academic rigor, so programmers that teach themselves through MOOCs lose a bit of credibility. Using popular course quality review tools, a case study done by Lowenthal and Hodges (2015) found that all 6 of the MOOC courses they analyzed would not receive "high quality" grades (Lowenthal & Hodges, 2015). Completion of a MOOC course shows interest in a subject, yet does not guarantee a strong understanding in the topic as a college course would.

MOOCs offer paid certificates upon completion of a course as an attempt to gain credibility. While these certificates have been shown to improve completion rate, there is no supporting evidence that employers view applicants with MOOC certificates differently than those without (Heath, 2017). Additionally, it's been found that the majority of students awarded with a certificate already hold a bachelors or postgraduate degree (Guo & Reinecke, 2014). The higher completion rate could be explained by the fact that the students seeking certificates are already more experienced and have developed better study habits. While the certificates themselves don't hold much value, MOOCs have been shown to be a good study tool for tests or certifications that do hold value, such as Advanced Placement tests (Riddle, 2012). In these cases, MOOCs are simply a tool to help pass more important tests.

MOOCs like to market themselves as a way to change careers and be qualified for better jobs, some going as far as to say one can learn the entirety of a Computer Science degree from MOOCs. Various sites offer study guides for ordering MOOCs with the promise that anyone starting with no previous computer science knowledge could get the equivalent of a degree through self-study (Computer Science Zone, 2017; Open Source Society University, 2020). One of these guides, Open Source Society University, stresses that the courses should be completed in a project focused way (Open Source Society University, 2020). As there is little verification for the quality of the classes, projects are the only thing an employer would be able to use to assess the qualifications of someone who completed them. This may work for some, but it takes immense dedication to even complete the courses, and those projects have to really stand out for employers to seriously consider a candidate with no formal verified education in the topic.

MOOCs, while being a free source of education, have serious drawbacks. Because their content isn't easily verified and they rely on a self-study model, they are not good for learning critical subjects of Computer Science. Candidates with only MOOCs for a Computer Science education can be seriously flawed. MOOCs are a wonderful choice for getting a quick introduction to a topic of interest, to learn specific languages or technologies, or as a study tool for other tests. They work well to augment education from other sources, but as a standalone option, they leave much to be desired.

Bootcamps

Around the time I was applying to Colleges, I had the opportunity to tour the Galvanize campus in Denver. Galvanize, along with offering office space for startups, is a bootcamp company that teaches cohorts of Software Engineers and Data Scientists. Their classes currently cost $17,980 for a full time 13-week curriculum (Galvanize, 2020). These classes directly teach "hard skills", focusing on specific modern technologies used in the area. This curriculum leads the graduates to only be qualified for specific jobs that relate directly to their bootcamp experience. For some companies that produce a high-volume of relatively basic software, these bootcamp graduates can be ideal (Burke et al., 2018). Knowledge of recent technologies is valuable, and the mathematical background colleges provide can be unnecessary for certain jobs. Some industries, such as the more mathematical side of Computer Science or any sort of academic research, are totally inaccessible to bootcamp graduates (Burke et al., 2018). These jobs require an academically rigorous background that can't be recreated in the short bootcamp curriculum. Bootcamps are an industry-focused source of education.

Bootcamps are open for all to enroll in, but are better tailored towards those already holding a college degree (Burke et al., 2019). One of the main failings of bootcamps is the lack of soft skills in their courses. While employers do consider specific languages and technologies that an applicant knows, the majority of a hiring decision is based on soft skills (Burke et al., 2019). Applicants with an unrelated degree, loosely applicable work experience, and a bootcamp education are vastly more competitive than applicants with only the bootcamp certificate. Most students who find success from bootcamps already hold an undergraduate degree (Burke et al., 2019), meaning bootcamp enrollment right out of highschool is likely a bad idea. Bootcamps are not trade schools, and their certificates do not replace a degree. Employers value the soft skills taught in a degree highly. While it is possible to find entry level jobs without a degree, advancement opportunities will be extremely limited.

As bootcamps are most successful for students already holding a degree, many students considering a bootcamp education should also consider a professional master's degree instead. Many masters programs will accept students with no prior experience in Computer Science. Choosing a 2-year accredited degree over an unaccredited bootcamp has a higher financial and opportunity cost, but the accredited degree will be much more general and won't pigeonhole graduates into a very specific area of software engineering. Additionally, many companies expect higher degrees in order to transition into senior or management positions. While a bootcamp education could get entry into a software company, advancement with no computing degree will be much more difficult. The impression many have entering a bootcamp is that the industry views them as the equivalent of a trade school, and that everyone will accept their qualifications afterwards (Thayer & Ko, 2017). The reality is that bootcamps are privately run, not accredited, and vary greatly in effectiveness, so interviewers will look at bootcamp graduates with more scrutiny. Because bootcamps focus so heavily on recent technologies over general skills, bootcamp certificates quickly depreciate. Many bootcamp graduates feel a stigma against their certificates (Thayer & Ko, 2017), the industry as a whole typically prefers traditional degrees.

Graduates also face massive financial obstacles after their bootcamp. Bootcamps pose as the quickest way to enter the software industry, but it still takes a third of graduates more than 90 days after graduation to find a job (Course Report, 2016). Four months of unemployment and a median tuition cost of $12,000 (Course Report, 2016) puts bootcamps out of the financial range of many who would benefit from them. For this reason,

most people enrolled come from middle- or upper-middle-class households and need to rely on the financial support of others to complete the camp (Thayer & Ko, 2017). Students enrolled in bootcamps accept a large financial risk that their education may not pay off, and many are surprised at the expected unemployment duration (Thayer & Ko, 2017).

Bootcamps seem attractive to those looking to enter the Computing industry as they initially appear equivalent to trade schools. That analogy breaks when considering that bootcamps are most beneficial to those already with a degree. A standalone bootcamp education is not enough for most to enter the field. Bootcamps are good for college graduates looking to switch careers, provided they can afford around four months of unemployment. A lot of care should be taken when choosing which one to attend. Sentiments from graduates have ranged from considering it the best professional decision they've made, to talks of organizing a class action lawsuit against the bootcamp for their biased and misleading statistics (Thayer & Ko, 2017). The reality is that learning any subject in such a short time frame is incredibly difficult. Students struggled with completing the camp and preparing for interviews all while discovering the stigma against their certificates and dealing with the longer-than-expected unemployment. Bootcamps could be vastly improved if the industry absorbed more of the risks and costs students accept when they enroll, but as they stand bootcamps are only a good option to the very small proportion of people who can accept those risks, provided they already hold an undergraduate degree.

Job Search and the Interview

A major challenge anyone attempting to enter the computing industry faces is getting and passing job interviews (Thayer & Ko, 2017). Interviews for entry-level software engineering jobs focus heavily on data structures and algorithms, often requiring candidates to write code by hand on a whiteboard, giving them the nickname of "whiteboarding" interviews. These interviews are structured to see if candidates have any obvious deficiencies in their programming ability. They typically require either a good grasp on theoretical computer science topics or sufficient self-study on the types of questions to pass. These interviews are fundamentally the same for everyone, but college graduates certainly have an advantage with them. Many companies if given enough college graduates to choose from will not even interview candidates from bootcamps (Burke et al., 2018). A Computer Science degree has classes that build critical thinking skills that directly apply to answering whiteboarding questions, while Bootcamps and MOOCs focus on skills that apply on actual work, but don't translate well to these sorts of problems.

Burke et al. (2018) conducted a case study focusing on the difficulties bootcamp graduates face after graduation. Bootcamps often assist with whiteboarding preparation, but many of their graduates still express difficulties passing them and needing to use additional online resources to study. The bootcamp graduates expressed feeling a stigma against their certificates while interviewing. Additionally, many bootcamp graduates felt that in order to land a full-time job, they had to "get a foot in the door" by first looking for internships or contracting work (Burke et al. 2018). This can be difficult as internships are often biased towards college students. This means that bootcamp graduates often have to compromise on their initial jobs, accepting more volatile contracting work instead of a full-time job. Bootcamp graduates without a college degree can face additional difficulty, as many companies will only hire applicants with a college degree regardless of other education (Thayer & Ko, 2017).

The bright side to interviewing is that the skills needed to pass one can be self-taught. The internet has many great resources for interview preparation. Most applicants, college students included, take advantage of websites like LeetCode and HackerRank which offer online versions of popular whiteboarding questions. Whiteboarding questions can be studied for, so the main challenge Bootcamp graduates face is simply getting the interview in the first place.

Diversity and Alternative Education

Computing suffers from an identity issue. Stereotypes around what the ideal programmer looks like pushes those away that would otherwise be well suited for software engineering. These stereotypes misrepresent what work in the software industry is like. Male dominated workplaces can create unwelcoming environments that make others feel as if they don't belong (Paul et al., 2018). More than 45% of women who choose computing as a career leave the field in less than 10 years, a rate double that of men (Paul et al., 2018). Developers across the industry express feelings of "imposter syndrome", a phenomenon where they feel as if they don't belong when they are perfectly competent. Girls often feel like they don't fit in with the male dominated field, citing Computer Science stereotypes, which contributes to them questioning whether their abilities and interests are in line with the field (Spieler et al., 2019). With all this in mind, it is incredibly clear that change needs to be made to the industry as a whole to promote more inclusion. Alternative education is one front where effort has been made to make careers in computing more attractive to underrepresented groups.

Bootcamps have made significant progress in encouraging more underrepresented enrollment. Some bootcamps are structured to only accept female and non-binary applicants, and bootcamps as a whole currently average a 40% enrollment from female and non-binary students (Course Report, 2016). This is significantly better than enrolment statistics for undergraduate degrees. Disappointingly, female enrollment in computer science MOOCs is consistent with their enrollment in undergraduate Computer Science degrees (Guo & Reinecke, 2014). This tells us that the solution to this problem isn't simply making resources accessible, but creating a more inclusive culture. It will take systematic change to bring in more currently underrepresented developers.

As has been shown previously in this paper, bootcamps are not an ideal source of Computer Science education. Students enrolled in Bootcamps take on large risks for an education that has no guarantee to pay off. It is not good for the software industry that the groups they want more representation in the field are often relying on a worse source of education. This educational gap contributes to the fact that women are disproportionately in junior roles, assigned more menial tasks, and see less frequent job advancement opportunities (Paul et al., 2018). It is no surprise that a higher proportion of women leave computing as they become more pessimistic about their career opportunities. If bootcamps were able to address these issues better and take on more of the risks their enrolled students face, they could contribute to the eventual solution of this diversity problem. However, as they stand students are much better off pursuing traditional degrees.

A more productive solution would be to encourage more diversity in college degrees. One approach focuses on understanding why teenage girls begin to show disinterest in Computer Science (Spieler et al., 2019). Spieler et al (2019) created a MOOC course with the explicit goal to get more teenage girls interested in Computer Science. Their course attempted to combat the existing stereotypes by having all the explanations given in the course by women, and including discussion on famous female Computer Scientists (Spieler et al., 2019). Having visible female role models helps spark interest in computing careers from women (Buhnova & Prikrylova, 2019). Another proposed way to increase female enrollment in the Computer Science major is to treat introductory Computer Science courses more like courses that lay the foundation for other subjects (Spieler et al., 2019). The additional exposure to Computer Science in a more inclusive environment can help change perception towards computing careers.

Conclusion

Alternative Education is here to stay, and we need to understand how to best utilize it. Bootcamps have been shown to be successful for those already holding an unrelated degree and some other significant experience, but it's important to thoroughly vet the program and understand that bootcamps are not trade schools. The reputation of the individual bootcamp is important to how the industry will view their certificates. MOOCs are a great way to find a quick introduction to a topic of interest but hold extremely little value by themselves. They can be used as a way to get a crash course in a specific language or technology for a job, or as a study tool for interviews or important tests. MOOCs should never be the centerpiece of a Computer Science education.

For everyone not already holding a degree, a college education seems to be the best pathway to enter the computing industry. Bootcamps are extremely risky for their cost and their certificates do not hold value over time. MOOCs are almost completely unverified and have not shown to be an effective way to learn the content required to get employed in the computing industry. MOOCs do not effectively address the diversity issue, and while bootcamps have shown promise in getting more underrepresented enrollment, the flaws in their education subject the very same students to a costly and risky education for worse credentials than their peers. The solution to the diversity problem in Computer Science should focus on diversity in college degrees. Steps have been taken in that direction, but much more still needs to be done to make Computing an inclusive field.

As interviews for entry level positions typically follow a whiteboarding style, anyone can self-study and pass them. While it can be more difficult for students in alternative education without the critical thinking classes that a Computer Science degree offers, self-taught and bootcamp developers have been able to succeed in initially finding jobs. Many of the issues alternative education has don't appear in this initial payoff, but in the long term career opportunities. Companies prefer degrees for job advancement, and there simply isn't any replacement. Alternative Education has a permanent place in how Computer Science will continue to be taught, but their flaws mean that we should still consider a traditional degree to be the best and most consistent way to learn Computer Science and enter the Computing industry.

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