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Argumentative- English 1010

1st Place Winner: Sean Harker, "Will Sooner Be Safer? The Launch of Autonomous Cars"
For Professor Natalie Johansen

Imagine yourself needing a taxi. You're in New York City without a car, so you wave down a friendly gentleman in a cab to take you back to your hotel. Driving through these busy streets full of chaos would have been a pain anyway, so it's a good thing you don't have to worry about it. Fifteen minutes in, you lean forward to ask the driver how close you are to home when you realize his hands are not on the wheel. In fact, there is no steering wheel. This is a self driving car, you realize, and how do you feel? Do you feel safe? Betrayed? Amazed? Unsure? Before you can continue, the driver explains confidently that these cars have been proven to be 10% safer than the average human taxi driver and that there is no need to worry (and, he adds, he doubts you felt unsafe ten minutes ago). Is this information enough to trust this taxi service? And stranger yet… would it be worth it to consider purchasing one of these cars for yourself?

Fully autonomous cars are not yet on the market. In other words, no commercially available vehicle is capable of, in every road condition, able to drive itself from point A to point B at the skill level of a normal driver without human aid. Simply put, they are not far enough in development to be released to the public. There are safety concerns, the public's opinion, and technological advances that must be made. Now, given where these vehicles are heading, when will, and when should, all drivers gain the opportunity to own a self-driving vehicle of their own? The timing is important, and I propose that these vehicles should be made available upon two criteria: their driving capabilities have surpassed that of the average human driver, and they are implemented as early as possible.

First, a definition of what an autonomous car is would help us understand what we can expect from them. The Society of Automotive Engineering defines driving autonomy as having levels that range from zero to five, where autonomy level zero is an ordinary car with no assistive features. At level one, a car may make corrections to a car's speed or its steering, and at level two, a car is able to take control, effectively, of the pedal and the steering wheel simultaneously as long as a driver is still in the driver's seat (Pearl). An example of a level two car would be a Tesla vehicle with the Autopilot feature. At level five, a car can drive in any and all situations without any input from a driver; this would be the car you rode in the theoretical situation at the beginning of this article. However, there is currently no prediction as to when the production of level five cars will become achievable. For now, the limited run of level four autonomous cars on streets today are still required to have a steering wheel and the capability to be taken over by a human at any point in time. In fact, pedestrians are able to try them out for themselves through services like Waymo, a taxi-like service that shuttles customers through the city of Phoenix, Arizona (Antoine). They are different from level five in a significant way: "[They] 'can operate only in certain environments and under certain conditions.'" (Pearl). This means companies like Waymo need to factor in weather conditions, the difficulty of the terrain, and other possible hindrances before they can place their cars onto the road. Not every area is suitable for a level four autonomous vehicle, but regions with flat roads and minimal climate change could see these cars popping up sooner. That is why geography should be considered individually for the implementation of these cars, and this is also why we will consider the "autonomous car" to mean a car having level four autonomy from here on out.

For an autonomous vehicle to be permitted on the road, it needs to be proven safe. After all, an unsafe car would endanger not only the passengers of the vehicle, but everyone on the road around them as well. According to several people (including Elon Musk and Hetherington) making comments around the year 2018, automation in vehicles either will or already have met the driving skills of a normal human driver (Nees). This is promising because frankly, a car on the road driving as well as the average human should not change how safe the road is already. This by itself would result in a self-driving car being okay for public consumption, but the bar is not set there. One of the most well-mentioned safety expectations can be found within a research study performed by Gambino & Sundar, where "the acceptance of self-driving cars increases when the AI driver is expected to show better performance than human drivers" (Hong et al. 1). In other words, the car is not as safe, but is safer than the average human driver. This bar has been talked about so often that it has been given its own acronym: SHDC, or the "safer than a human driver criterion" (Nees). If autonomous cars are permitted before this criterion is met, the roads become a more dangerous place. If autonomous cars are permitted once this criterion is met, you instead have a situation where the roads are safer than they were before. There may even be a day where, for the safety of the public, these cars become a required substitute for human-driven cars in general. However, that is beyond the scope of level four autonomy.

One of the obstacles the autonomous industry needs to overcome is the acceptance of the general population. There has been a lot of news coverage and advertising recently about the advances of autonomous technology in cars, but that includes the bad side of things. For instance, there is the often-rehashed instance of an accident resulting in the death of a pedestrian crossing the road in front of a self-driving Tesla vehicle (Wakabayashi). With safety being a top concern especially with the prevalence of the SHDC, cases like this raise concerns. If the industry is to thrive and if these better drivers are to be put onto the road to save lives, they need to be trusted once the statistics are met. Mechanical engineer Heui Peng, referring to the Waymo level four self-driving shuttle service in Phoenix AZ, pointed out, "Phoenix has no snow, very little rain… it's hugely different, a much simpler environment." Though the cars are classified as level four, he continues, "We choose to operate the [Waymo] shuttles as Level 3 vehicles so the community and riders feel more comfortable" (Antoine). Because of the lack of trust on the population's part to fully embrace the possibility of level four automation, the technology had to be held back in this service. This may not be a bad thing now since the technology is new, and that is not to say it won't change in the future. It will simply need to be a change that people as a whole will embrace if this technology is going to move forward.

It has been mentioned before that self-driving cars have the potential to have an edge over the standard human driver. To explore that further, consider what we know computers are able to do that a person is not. They can keep track of multiple sensors to see in all directions at once, such as the Tesla models containing Autopilot (Zsolnai-Fehér). They have a faster reaction time than the human's ~0.25 seconds and can combine that with its knowledge of its complete surroundings to avoid collision. If these vehicles can be made to behave in a very careful manner, they can not only keep the roads just as safe as they are now but can improve the safety of the roads due to these factors.

It is because of these and other benefits that these cars should be implemented as early as possible: as soon as the SHDC is met within a region the car can drive safely. One common thought, which I believe is influenced by the public's general distrust of autonomous driving, is waiting until a very significant safety improvement is made (such as 50% or 80%) over the average human driver before autonomous cars are implemented into society, just to be on the safer side; best to avoid any death at all if it is

possible. While this is a reasonable thought, this restriction of waiting until larger improvements are made may prove to be more harmful than good. According to Kalra and Groves, it has been estimated that "widespread deployment of highly automated vehicles that are even somewhat (i.e., 10%) safer than the average human driver would save many lives (up to half a million, depending on various factors) in the decades following their introduction." The source then concludes that the most rational course of action to save drivers would be to encourage all of them to use these cars the moment their automation becomes even slightly safer than the average human (Nees). According to a similar analysis made by reporter Emily Stewart on research performed in 2017, "the sooner highly automated vehicles are deployed, the more lives will ultimately be saved [in the long term], even if the cars are just slightly safer than cars driven by humans" (Stewart, emphasis added). In the end, there is no need to wait for the perfect vehicle; lives can be saved with marginal improvements. There will still be accidents, but they will be fewer and farther in between than they are now, and once the public understands that, these cars will thrive and lives will be saved.

What has been done to make sure these vehicles are safe, and are they at the point they can be implemented now? That is still in debate, but much progress has been made to reach towards the safety bar already. It is indeed possible it has been reached or will be reached in the near future as recent developments have proved. For instance, an innovation known as Artificial Intelligence is already present in the decision-making process of Tesla vehicles (Zsolnai-Fehér). In short, this technology is used to give the vehicle the capacity to react to circumstances that it has not been directly programmed to handle. Unusual circumstances can range from extremely sharp turns and oddly-shaped intersections to foggy weather and objects obstructing the road. Information gathered from other cars, including those with human drivers, is automatically analyzed and "learned" from in order to improve this judgement, meaning it will naturally get better over time (this is yet another benefit to releasing cars as soon as possible). Tesla has been using physics simulations to train these cars in addition to real-world driving data samples (Zsolnai-Fehér), accelerating this process of improvement. As a final improvement that has not yet been put into effect, a system conceived by graduates from multiple colleges including the University of Michigan and Cornell University could be implemented to assist drivers while the models are being trained. This system would establish "designated drivers" as those who would be able to assist in the driving process. When these unusual circumstances come up, a designated driver would be able to give instructions to the vehicle (such as what to avoid or what path to take). The car would obey the instruction (Hampshire et al. 2-3), replacing the need for the person in the vehicle to ever take control. One designated driver would be able to, if 10% of cars supported this driverless capability, replace 14,840 human drivers on the road (Hampshire et al. 1). With a system such as this one in place, less sophisticated (but still just as life-saving) autonomous vehicles can hit the road sooner.

To sum everything up, it is important that highly autonomous cars are introduced in a way that improves the safety of everyone driving on the road. Even a marginal safety improvement will save lives, so they should be implemented as soon as they surpass the better than the average human driver criterion (BHDC). Despite the fact that these cars may not be able to handle certain conditions of the road up front, precautions can be taken that will allow drivers everywhere to reengage control of the vehicle or to rely on a system of drivers that can take that control for themselves. As car autonomy improves and progresses, our roads can be made safer and more convenient for everyone, but it is our job to stay informed and ready to accept them once the life-saving benefits are realized.

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2nd Place Winner: Charadee Williams, "So Gross, but So Interesting: The Role of Maggot Debridement Therapy in the Healing of Chronic Wounds"
For Dr. Julia Combs

Wriggling, writhing, and squirming. These may not be words that one might think are associated with wound care, but they are. For centuries physicians have utilized insect larvae for the treatment of chronic wounds. The larvae of choice are, if you couldn't guess it, is maggots. Chronic wounds occur when a wound can't move past the inflammatory stage. It becomes stuck in a cycle in which dead tissues breed bacteria, and bacteria damage living tissues. Debridement removes this dead tissue, which stops the cycle of bacterial growth and further tissue damage. Maggot Debridement Therapy helps to move wounds past the inflammatory stage so that they can advance through the healing process. (Pettican 27-28) These tiny creatures have the capacity to clear away dead (devitalized or necrotized) tissue from a wound bed to potentially save a limb, or perhaps even a life. So, where did it come from and how long has it been around?

According to Maggot Debridement Therapy: From the Battlefields and Soldiers to Today's Clinical Trials, Maggot Debridement Therapy was first mentioned in the Old Testament of the bible. It has also been found to have been used by primitive civilizations in Australia, Myanmar, and Central America. The earliest recorded application of this therapy was to soak bandages in bovine blood and leave them in the sun for flies to lay their eggs on. Once hatched the larvae would be applied to the wound. The first to describe the positive effects of this treatment was French surgeon Ambroise Paré in the 16th century. One patient that Paré utilized this treatment for proved to be a very important case. The patient had a very deep head wound and Paré was able to observe the actions of the maggots on the bone. Baron Dominique-Jean Larrey was Napoleon's battlefield surgeon during the Napoleonic Wars and was credited as the first to discover that the maggots only cleaned away dead tissue but left healthy tissue unscathed. He also took note that the use of maggots benefitted healthy flesh and bone, as the larvae seemed to take care of it. Despite his staunch support of the treatment, Larrey was reportedly repulsed by the fact that maggots proliferate and grow in size so rapidly. American Civil War Surgeon William Williams Keen utilized MDT to treat gangrenous wounds. He noted that the results occurred quickly and only the necrotized flesh was cleaned away. (Meimeti 788-790)

During World War I MDT suffered a bit of a setback as it was used unsuccessfully to treat osteomyelitis (an infection of the bone which is often caused by infection of the surrounding soft tissue.) However, an important discovery was made by orthopedic surgeon William Stevenson Baer. Baer discovered the importance of using sterile maggots to successfully treat wounds. He also theorized that the maggots played a role in restoring and revitalizing the tissues. His work continued into the 1920's and he, along with some of his colleagues, developed a method for sterilizing fly eggs and producing sterile maggots for application to wounds. (Meimeti 790-791)

The popularity of the treatment waned during World War II. Advancements in antiseptics and widespread use of antibiotics meant that infections were less common and more easily treatable by other means. However, the 1980's saw the emergence of antibiotic-resistant bacteria such as MRSA (Methicillin-resistant Staphylococcus aureus.) Due to the newfound discovery of drug resistance coupled with the fact that antibiotics do not remove necrotized tissue, another treatment option was sought, and attentions were again turned to MDT which not only removes the necrotized tissue, but also eliminates

many strains of bacteria. Ronald Sherman and Edward Petcher lobbied for its reintroduction to the American health system in 1990. In 2004 the U.S. Food and Drug administration received a patent to breed maggots for pharmaceutical purposes. (Meimeti 791)

So, what can we use this therapy for? Maggot Debridement Therapy is useful for wounds containing a lot of dead tissue. Some of the common forms of dead tissue associated with the therapy are slough, necrosis, and gangrene, all of which are caused by reduced blood flow to the area. Maggots can quickly clear away these tissues, leaving behind clean granulating tissue. Granulating tissue is tissue that has begun to rebuild with new connective tissue and blood vessels. Research also suggests that they can ingest and eliminate many types of bacteria.(Pettican 29) Basically these little larvae clean house by taking out the trash and clearing out the riffraff, allowing for the space and clean environment the tissues need to be able to regenerate.

How do these baby insects clean out wounds? Both mechanical and chemical means of cleaning chronic wounds are utilized in MDT. Maggots have mandibles which they use to locomote. This action is thought to massage the tissues as they move about. (Pettican 29) Maggot's bodies are somewhat spiny, so the action of them moving about assists with debridement. The chemical means consist of dissolving the necrotic tissues by secreting and excreting enzymes, and by excreting ammonia. The enzymes work to liquify the targeted tissues so that they are easy for the maggots to ingest. The increased ammonia levels due to the maggots' excretions create an alkaline environment which discourages bacterial growth and encourages regeneration of tissues. (Meimeti 788) All in all the maggots use enzymes to break down and ingest the dead tissues without damaging any surrounding healthy tissue, stimulate blood flow with their movements, and create an environment that is unappealing for bacteria, all of which prove beneficial to the wound's healing.

Whenever the topic of MDT arises with friends or coworkers, the question they always ask is how the maggots are applied to the wound. A few people thought that maybe there was a bucket full of maggots that the patient plunged their limb into. That sounds like a big mess. The actual application process is really very tidy. When administering the larvae, a dressing is placed all around the wound site to define a border and protect the surrounding healthy tissue. The larvae are placed on sterile gauze, which is inverted onto the wound bed, then tape is applied to the edges of the gauze in order to contain the larvae. Additional layers of gauze are applied to the outside of this containment area in order absorb any drainage from the wound and can be changed as it is soiled without disrupting the treatment. The larvae are removed after 48-72 hours by peeling back the gauze in which they are contained and gently wiping them away with dampened gauze. The wound is then flushed with saline to ensure complete removal. Finally, the larvae are disposed of as biohazardous waste. (Pettican 30) It seems like a tragic end for this hard-working little cleaning crew, but it is understandable considering they have spent their whole lives eating dead tissue. If they weren't gross before they're definitely gross now, and we don't need them flying off spreading diseases as adults.

Once the maggots are removed the wound is assessed and the decision is made if the wound will need another treatment, or if the treatment was successful or unsuccessful. If there is still a significant amount of devitalized tissue to be removed, the treatment may be repeated. If the majority of the devitalized tissue is removed, and granulating tissue begins to form, it is deemed a success. On the other hand, if the devitalized tissue is removed but granulating tissue isn't formed it may be deemed unsuccessful. (Pettican 30) Since granulating tissue is new, pink tissue with a restored blood flow it is

important to look for this as a sign of success. If granulating tissue is not forming it might mean that there is some other problem that is preventing the wound from healing, so the treatments stop.

Although this therapy is appropriate for most wound treatments there are some instances where it may not be the best option. One such instance is in patients who have a severely reduced blood flow to the affected area, as the change in PH in the wound bed may cause pain. Caution should also be exercised when the wound is in a vital area, or if the extent and depth of the wound is not known.(Pettican 29) For example, if a patient is suffering from an infection such as Osteomyelitis, it would be wise to be cautious about utilizing MDT as a treatment option. The wounds caused by Osteomyelitis may be quite deep, even reaching the inside of bones. (Lazzarini 2305) Since there is no way to indicate to the maggots which devitalized tissues they should or shouldn't ingest, or to tell them when or where to stop, it could be dangerous to treat a wound in this manner. There are also certain types of bacteria that the maggots cannot ingest without the aid of antibiotic therapy. (Pettican 29) The maggots are very good at their job, and we want to make sure that they are not doing such a good job that they put the patient's health at risk. Likewise, they sometimes need help to do their job. Administering antibiotics while the maggots are applied can weaken bacteria, allowing the maggots to ingest and digest types that they may not be able to handle on their own.

Three hospitals in Singapore participated in a study of MDT from February 2010 to March 2011. (Pettican 29) In this study fourteen cases involving the therapy were observed until the researchers either saw a clean wound bed with granulating tissue or it was determined that the wound bed would not regenerate or was not viable due to underlying complications. This treatment was used after other methods of debridement proved unsuccessful. It is considered the last resort before amputation must take place. Of the study's 14 total participants, cases were deemed a success. Twelve of the 14 were diabetic, and of these 7 had successful outcomes. The overall success rate was about 64% in this study, while the success rate among those who were diabetic was around 58%. (Pettican 30-31) Still, this is not the only study on the topic. There have been several studies conducted over the years.

An article was published in 2018 which gave an overview of MDT research studies from 1995 until 2018. Four studies were examined for the writing of this research essay and the results showed that MDT was at least marginally more effective in all four studies. A 2002 study showed that on average MDT produced granulating tissue and healed wounds faster than conventional treatments. MDT healed wounds in 12 weeks, while conventional methods took 13.4 weeks. In 2003 MDT was shown to reduce necrosis by 50% after 9 weeks and produce 56% granulation after 4 weeks. Conventional treatments took more than 29 weeks to see the same reduction in necrosis and only produced 15% granulation in 4 weeks' time. A study published in 2005 showed that MDT had a 57% healing rate and only a 10% amputation rate.

Compare this to the conventional treatment which showed 33% in either category. The fourth study examined for the writing of this research essay showed that MDT provided a chance of healing that was 7.7 times higher than conventional treatment, and that it was cheaper to administer. MDT treatments cost $292.82 for each treatment, while conventional treatments cost $490 per treatment. (Gieroń 328-329)

Although the idea may be off-putting and the treatment may not be appropriate for every wound, Maggot Debridement Therapy is beneficial to those with chronic wounds because it helps wounds progress through the healing process without doing further damage. Furthermore, it accelerates and

increases rates of healing, reduces instances of amputation, and is often more affordable than conventional wound treatments. Perhaps if more people could get past the "maggot" part and focus more on the "therapy" part we could save a lot more limbs and lives.

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2nd Place Winner: Chloe Starr, "Effects of Religion on Mental Health"
For Professor Natalie Johansen

Religion, or an organized system of beliefs that typically relates to one's faith and trust in a higher power, is a defining characteristic of the way many people live their life and make decisions. According to goodtherapy.com, "only 22.8% of Americans declare themselves to have no religious affiliation". That leaves 77.2% who are religious, and because the majority of America is religious, many issues arise that are often swept under the rug and disregarded. Similar to everything in life, religion will have its pros and cons and these will have an affect on mental health.. Christianity, the dominant religious group in the United States, is based on the belief that Jesus Christ is the savior and a separate being from God. Christianity has a wide variety of beliefs and children are often expected, but often forced, to participate in selective worship throughout childhood and into adulthood. Growing up in a strict Christian household can cause a culture of restricted thinking and perfectionism because of weaponizing teachings, having kids follow teachings without explaining why they are doing it, and viewing different opinions as right or wrong.

It is true that having a solid foundation in religion from a young age can provide a sense of purpose, create a community for those involved, and make a direction for those to follow as they grow up and become adults. Religion of course offers this, and does for many of the Americans that are involved in an organized religion. Affiliating oneself with a religious group can offer peace of mind, purpose, and direction. Daniel K. Judd is a member of the Church of Jesus Christ of Latter Day Saints, he currently works at Brigham Young University in the Ancient Scripture Department. In Daniel's book Let's talk about Religion and Mental Health he discusses his severe anxiety and depression as a kid and still deals with it today. He grew up in a small town in Utah and did not have access to the necessary health care to help him with any of the issues that he was dealing with. He says during that time he "found answers to many of my personal questions and concerns. I learned of my inability to overcome my physical afflictions and emotional burdens alone, which allowed me to discover the love of God". For Daniel, having an organized religion helped him deal with what he was working through and find peace in his own life. This is a very common story and applies to many religious members. It is one example of many that show how religion can be a positive in one's life and mental health overall. While religion has many good aspects it is important to talk about the issues that are often overlooked and ignored.

The relationship between religion and mental health is complicated and often difficult to trace back to one specific issue, because there will not be one defining issue. There are many factors that play into mental health and this can have an affect on how religion is playing a role in someone's life and mental health. A common issue that comes up with religion is when those in positions of power weaponize the teachings. What this means is using the teachings for their own personal gain or to use fear to enforce the teachings. Everyone is human and will have their own personal bias, no matter how high a position of power they are in. It is easy for corruption to take part in religious teachings, and this can result in them trying to force their own personal agenda on those who are there to worship. A more extreme example of this is told by Shawna Kay Rodenburg, who was raised in Christianity from birth. She says, "[The pastor] declared any criticism of former president Donald Trump to be the work of demonic powers". This is a dramatic example of someone in a position of power using the teachings to push their own personal agenda. By weaponizing teachings they are using fear and guilt to get their point across. This is extremely harmful to mental health and can cause severe cases of scrupulosity, a form of

obsessive compulsive disorder (OCD) in which moral contamination replaces the more common symptoms of OCD. Dr. Greg Popcak, a certified psychotherapist comments on this vicious cycle saying, "for the religious person, scrupulosity is actually (and, perhaps, ironically) a sin, in that it separates us from an experience of God's love and mercy". Guilt and fear is used to teach and those feelings themselves are often shamed in a religious setting, which causes the harmful cycle. Scripture, religious texts, and other material can be presented and used only to push an idea that they want to get through and when this happens it is damaging to mental health.

Andrew was raised in Christianity from birth. All of his family and extended family were Christians and participated heavily in their church, most of whom were in positions of leadership. Being raised in the church, Andrew was expected to follow the teachings faithfully without questioning any of it. He was told that this would save him after death from eternal damnation or hell and would be a deciding factor in life after death. Andrew after discussing the milestones that he participated in as a child says, " I concluded that I was not saved during those early years and I objected to the practice of child evangelism". This is an extremely common situation for most kids raised in Christianity, blindly following the teachings that they were taught with the only reason being that it is all that they have known. Tradition says that age decides spiritual readiness, but do children really understand the major steps that they are taking? Andrew after struggling with his identity and relationship with God, left his religion that he had been a participant of since birth. The effect that this did on Andrew's mental health was detrimental. Being told that he had to participate in the traditions of the church left no room for him to understand what he was actually doing and caused him to have issues with his identity. At what age is one ready to make decisions such as the ones Andrew took part in? For some this could be earlier, for others it could be much later in their life. For him this was too early and he felt as though he had been tricked into believing that his salvation was on the line. This is a lot of pressure to put on a child. In the long run it did more damage than growth to Andrew. This severe amount of pressure does nothing helpful towards one's mental health and changes the way that people process and think.

Growing up in a Christian religion will have a dramatic effect on one's social and human relationship skills. This can be both negative and positive when looking at how it can affect one's mental health. Canadian psychiatrist Wendall Watters says, "Christian doctrine and liturgy have been shown to discourage the development of adult coping behaviors and the human to human relationship skills that enable people to cope in an adaptive way with the anxiety caused by stress". Social skills and human relationships play a big role in mental health. The more supported one feels typically the better the mental health. This is because there are outlets for one to turn to when needed. Having low social skills, poor human relationships, and undeveloped adult coping behaviors are shown to be an extreme factor in declining mental health. Specifically depression and anxiety skyrocket when one has a lower level of development for those everyday interactions. This can be caused from the stress of everyday life, identity issues, and other factors. This is not the overwhelming consensus as Wendall continues to explain, " of 34 studies… only 4 found that being religious was associated with more depression". Many concluded that being religious actually had very positive effects on their depression and anxiety. While this is true, the four studies whose findings were the opposite had extreme results. Depression and anxiety were severely heightened when introduced to a religious environment. This could be for many different reasons but overall it is due to the fact that everyone will have a different reaction depending on what they have previously experienced. This severe reaction of the different groups noted the effect

that it had on their mental health and the reports were of overwhelming rises of depression, anxiety, and other mental illnesses.

Religion plays a big role in many people's lives. It is the tiebreaker for decisions and the guiding hand to show the way to best live one's life. Harold G. Koenig, a professor of psychiatry and behavioral sciences and an associate professor of medicine at the Duke University Medical Center, has spent thirty five years of his life researching the exceedingly complex relationship between religion and mental health. Different life experiences are going to change how involved you may feel with religion, Koenig says, "If negative life stressors are severe and long lasting, symptoms of distress often persist over time despite religious or spiritual involvement and may result in a turning away from religion, and sometimes a complete loss of religious faith due to the protracted suffering." When the stressors are more short term religion is often turned to, but when it becomes a long term stressor religion is often turned away from. A reason for this is that from a young age, kids are taught the natural order of things. Prayer, fasting, scripture study, etcetera are how your problems are solved. This can be difficult when the issue goes on for extended periods of time with no solution in sight. When the issue has been going on for years with no solution, many feel abandoned in their time of need. Without the foundation of a wide lense view of thinking many find themselves with their one solution not working out, which only further causes mental health to decline due to the combination of the already difficult situation and the foundation that they built being unstable. This can be changed by teaching children how to look at all their options instead of putting all of their faith and hope into one direction. This is not to say that those are the wrong way to go about dealing with situations such as those, because studies have shown that they can have significant effects on one's mental health in a very positive way. Having an open mind for different ideas on how to live your life brings in options for your mind to go to. It creates outlets that decrease depression and anxiety. This teaches essential life skills on dealing with difficult situations.

Religion is not the cause of the issue but in fact it is how the religion is being taught and enforced. Something specifically parents can do to fix the issue of restricted thinking culture in childhood is communicating with their children clearly and explaining what they are participating in, having them develop a sense of what they are actively being a part of, and having them explore multiple options when making decisions. Having open conversations and revisiting certain topics can be educational and helpful for those involved, and will help mental health by having a safe place to talk about what is going on in their life. Religion should never be enforced by fear but instead an open and understanding point of view. Making these changes will change the outcome of how religion is received and can be more beneficial. Parents should be aware of what their children are being taught in class and stay involved in their lives.

Religion is a very personal experience that will be different for everyone and can even change overtime. What works for one person, will not work for another and in the end it just comes down to personal experiences, personality, and the environment that is going on when participating in an organized religion. Currently it is extremely common for religion to be taught and then handed down to children in ways that are harmful to their mental health. Religion should never be enforced by fear, ignoring other opinions, or used to push a personal agenda. The way things are going now big issues are often overlooked and ignored, but this can change. Mental health in relation to religion can be improved by changing the overall set up of how things are run and having open and honest conversations with whoever is participating.

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Expressive- English 1010

1st Place Winner: Robert Longfellow, "Communication Is Key"

For Dr. Rosalyn Eves

There I was, no where to go decisions had to be made.

There I was on the streets of Kabul. I can still smell the air; it was hot and reeked of trash and tarnished smoke. We had just completed Phase 3 of our operations for that night, and we were on to Phase 4, the return to base. This was textbook routine stuff. Plan, execute then Evaluate, normal Kabul city night mission. You see, we ran combat logistics patrols, otherwise known as an armed escort service. By this point these types of missions have become routine, which is bad. There's a thing called complacency, and well it is said in the military that complacency kills. Nothing had me fully prepared for what happened that night.

What got me here? Well, that's a very good question, one which I had asked myself a couple of times. It was a culmination of things throughout the years of my service to my Country. The year was 2012, on a vast open base in Fort Hood Texas. The land served many purposes, training troops and it also held free roam cattle. Sometimes training would get called off due to these free roam cattle getting on the range; Yes, you would have to wait on a modern day cowboy to come move them. For if one got killed on a range well, that's a ten thousand dollar charge to whoever fired the round.

I only mention these cattle because they are a part of my memory of when I learned a couple different dialects of language to include Dari and Pashto. It was a hot Texas summer; we were staged up outside of a mock village. This village was fashioned to represent the streets of Afghanistan. The makeshift roads riddled with old tires, trash, oil jugs. Bounds of villagers with outside stands selling everything from foot bread to meats, even some of the fore mentioned cattle. The mission, was to go into the village in search of the local Elder or Sheik to talk about the area. I had a small amount of nervousness inside me; I mean it still was just a training scenario, but I had no prior experience in speaking or even knowing any other languages; So yeah I was a little bit unsure of myself, but I lead on. At this time, I had an interpreter attached to me, this helped facilitate the conversations.

As we had traveled through the streets we had arrived to our mock village; All though it appeared anything but mock, very realistic. I had positioned our four armored vehicles to provide us a three-hundred-degree security stance, as well as blocking all high avenues of approach. Ahead of me to what would be my twelve o'clock position was gun truck one. To my three o'clock position sat gun truck two, scanning its sector of fire. Behind me to my six o'clock position was gun three. And finally rounding out the security formation was gun truck four. With me I had a four-man team on foot, we always left a gunner and driver with the vehicles, in case of a critical incident. We made our way into the village asking questions along the way about the surroundings, have you seen anything out of the ordinary, seen anyone digging, seen any known terrorists, basic questions. As we made our way through the mock village you could see people on their phones, and even video taping; All though this could seem normal, one of their tactics was to video tape our movements, try and learn our operating maneuvers. I key in on all of these elements and control my team to monitor the developing situation around us.

There was our point of contact dressed in the typical perahan tunban, a long top and loose trousers; wrapped around his head sat a chador (head scarf). This was the village Sheik: as we approached, I reached out my hand to initiate a handshake, the Sheik reached out and our hands touched. I gave a solid handshake, firm but not aggressive. Surprisingly to me this offended the Sheik, he stepped back and shouted things that I did not understand in any capacity. Apparently, this was my first mistake in understanding a foreign land and their culture. My first lesson, firm handshakes are seen as rude. Their culture has more of a soft handshake, long and embracing. This was definitely not something that I was used to, lesson learned.

That was the moment I fully realized I had a lot to learn, not just of the spoken language, but also of customs and body language and the complete differences in them. We sat and the elder offered me some tea, I politely accepted; another lesson learned. I learned through this exercise that it is more common to politely refuse a few times, as a sign of respect; Something I would have never expected, I thought I made the right decision. I quickly realized how tough my mission would be if I did not have a great understanding of not only the language, but the customs of the people in these different regions. Luckily for me the military thought that exact same thing, so off to more training I went.

So, what all did I have to learn, what could be so much different? Well back to the training buildings I went, to answer those questions. So back at base I sat in a refreshingly cool room, unlike most of my other training; which consisted of humping 45 plus pounds of gear and weaponry. This cool embrace of air came with a downfall though, we called this death by power point, slide after slide of prudent information. One slide showed to Afghanistan locals greeting each other with their right hand over their hearts, with a thought bubble above their heads, with a text that said 'As-salâmo 'alaykom'. This meant peace be with you. This is a very common greeting, however with this I also learned you do not greet a woman. Greeting a woman wed to a man would be seen as very disrespectful.

There I sat slide after slide, scratching notes into my notebook. Things that I felt were crucial to know, there seemed to be so much. Never shake with your left hand, this never even crossed my mind as I am right hand dominant and always have shaken with my right. The reasoning shocked me, as it was the complete opposite of my culture. The left hand is believed to be unclean, as it is common for the locals to use this hand to wipe after defecation. Slide after slide I learned more and more about a culture that was so opposite of my own, all though I realized the importance of it all. Oh yeah never forget that different regions have different dialects as well.

The instructor writes a phrase down on the whiteboard, this was the first of many. I see it vividly still in bright red letters, 'Xoshâl Šodom az molâqâte Šoma'. I stare at it sounding it out inside my head. I peer around the room and it was as if we were cloned; everyone of us babbling to ourselves as to how we thought this sounded. Something so simple, it's meaning (pleased to meet you). Word after word we sat there feverishly annotating these phrases into our notebooks. Never did I know that even showing the sole of your boot is something that would be seen as very disrespecting. Would we really need these one day? Would they really send us on a mission without an interpreter to communicate fluently? I learned the answer to my question a mere weeks later.

We wrapped things up with all of our pre-mobilization training, accounted for all of our items, and off to Afghanistan we went. I had plenty of time on that trip. We left from Fort Hood, on none other than a C-17 Globemaster aircraft; this behemoth had a payload of 164, 900 pounds, with a range of 2,400 nautical miles cruising at 450 knots. Looking back we were exactly that. Cargo, human tools off to

complete our mission. I'll never forget the seats, picture a hard metal basic structure with a small cloth seat, essentially a cot folded up. I get settled into my makeshift seat as the flight crew finishes strapping down the pallets with all of our gear. In a mere 30 hours all of our lives are about to change. I reach for my notebook and start to thumb through my notes. We flew to Ireland, to stop for fuel. While the plane got refueled so did, we. I grabbed an MRE and went with a few of my leaders to go over the things we had learned. Back on the plane for the final leg of our journey. Hours later we made a combat landing at the HKIA airport.

After a couple hours we were boarding a CH-47 Chinook helicopter loaded up with all of our gear and off to our final destination, our new home Camp Phoenix just outside the downtown area of Kabul. I found my rack, and made contact with the team we were replacing. That very night I met the guys that were going to be our interpreters. My first exposure to Afghan civilians in their own country. I reached for the first guys hand, his skin had a dark complexion as well as his hair. His face was shaven and he donned a smile on his face. I reach my right hand out to him for a handshake, I held a soft grip and I spoke the words 'As-salâmo 'alaykom'. He grabbed my hand softly, with a strange embrace ad said back to me 'salâmo 'alaykom'. I ask his name using the phrase 'Nâmêtân cist'? He responds in English Nang, I respond back to him in English, very nice to meet you, my name is Rob.

I turn my attention to the other man standing there and extend my hand to him as well 'salâmo'. He reaches back shakes my hand and says to me "my name is Fawad". He was a much smaller in stature compared to Nang. We talked about the city their families and how they came to be interpreters. These two lived in the outskirts of Kabul, and rarely saw their families. They stayed in a secure area on base, this was where all of the locals stayed. We wrapped up our introductions to each other and went our separate ways, them to their compound and me to my TOC (tactical operations command). It was time to start planning my missions. I sat at a makeshift plywood desk with a phone, and computer, the window openings lined with green burlap sandbags. Dust lined almost every square inch of this workspace; a whiteboard riddled with marks stained on its surface from others who have planned their missions there prior to me.

 Weeks later in Afghanistan, I was preparing my team for another mission outside the confines of our base, in Kabul (known as going outside the wire). Little did I know on that day that had I not understood some basic Dari language, this particular night could have ended deadly, a catastrophic event, not just within our area of operations and my team, but for the Country of Afghanistan itself. I cannot share all details of this mission, due to security reasons, but we were providing secure passage of dignitaries to the Embassy in Kabul. Phase one through three of this mission went smoothly. We provided gun truck security for the safe passage of our individuals from Camp Phoenix to the Embassy. The fourth and final phase proved to present some issues. In our travels back to base my truck turned a corner and ran into a traffic jam. It is to be understood in that time we controlled the traffic. We had sole priority and command over the travel along the roads. When my truck encountered this we crossed over to avoid the back-up, as we rounded the corner we encountered a roadblock. We have never encountered this in the many missions we had already executed.

This scenario set us up to be in what we call a kill zone. Blocked by vehicles with various weapons, AK-47s, RPGs; all this a mere feet away, held by ruthless individuals who you could see in their eyes they had zero problem executing their mission either. Not to mention we were pinned in by stand still traffic beside, behind and around us. This was worst case scenario. No real place to maneuver around and or through. What does a leader do in this scenario? Push through and hope for the best with minimal

casualties? No, my decision was to get on the ground and assess the scenario, so I radio my gunner, 'you got me, right?' he responds, 'you know I do'. I open my door, step outside and grab my rifle and clip it to my vest, my hand firmly on my chest where I kept my service pistol; I walk towards the most boisterous man to address what's going on. Mind you I now realize my radio headset battery is not working so I am alone with no communication with my team aside from my driver and gunner watching me and mere hand signals.

This man is screaming and yelling at a pace that I did not understand, even with all of my training. You see you try and not use the interpreters if you do not need to, as the opposition has bounties on their heads. I tried to calm this man down to deescalate the situation. I'm asking him things such as ' yâ Šumâ englisi yâd dâren' (do you speak English).

He continually yelled responses that I did not understand. I tried to tell him 'Man nami dâtam' (I don't understand). The man continued to yell and wave his arms wildly as the people and trucks around pointed their weapons in our direction, literally seeing the whites of their eyes filled with anger; we were not liked across most of the country, inside they wanted bloodshed, so I make the decision to go to my truck and get the interpreter out. That night it happened to be Nang, he dons his face covering, because remember they want to kill him too; Then I bring him to the man and have him explain to him we are not going to stay here; they need to lower their weapons and move out of the way. The two argue back and forth as I am now shouting orders for him to tell him, with my hand on my handgun, angered at the situation. Noticing how dire the situation, being blocked in, possible vehicle borne explosives and being face to face with RPGs and other weaponry, I have to make a decision. I yell Ne (No), it comes out as aggressive as possible, and I told Nang to tell him we are coming through period, as the men yell and motion to my gunners to move their weapons, I yell back to them absolutely not we are not moving our weapons.

The whole situation was an intense standoff in which we were in the worst-case scenario, I had about 3 different plans of execution running through my head, depending on what happened. This situation finally came to an end when we come to the conclusion that none other than Hamid Karzai the President of Afghanistan was returning to his palace. How was this missed in my intel? Following this information, I stated to the man 'Fahmidam' (I understand). This was the President's detail, the Afghan equivalent of the US' Secret Service; Again, how this was missed in my intel remains a mystery. All the while we sat in the most compromising positions. President Karzai got back home safely and we continued mission. The final known task was to navigate and control the traffic that had been held back, so that we could RTB (Return to Base) safely. I took command and directed my gun trucks, gunners and truck commanders to control all flow of traffic by any means necessary. We navigated our route with extreme prejudice, through the choke point traffic circle; Then we secured our entrance back to base. This caused no loss of life, no international incident and a successful completion of mission. So that night was when I realized the importance of knowing and having a decent understanding of the Afghan culture and language, and also happy that I had a brave interpreter to bridge any gaps in the language barrier.

I have never really written anything beyond letters. I am in a foreign land just as I was overseas. I do not know if I am heading down the right path or even executing my assignments correctly. I expect to learn and perfect my craft and have a solid understanding of what is expected, as well as the structure of how writing goes. I feel like my writings are okay, but really have no idea. Any feedback is always appreciated. Sometimes you have to fail to learn, that part of improvement.

2nd Place Winner: Amber Perkins, "Dropped Out Before Giving Myself A Chance"
For Dr. Rosalyn Eves

This story is of a girl that never gave herself a chance. She was defeated before she even knew what the word meant.

It was the summer of 2005, and a girl was laying beaten by her choices wanting the world to end. A girl desperate and drained of anything hopeful, opened her eyes in an unfamiliar room. The light creeping in through the shaded and covered window was like looking at the sun with open eyes. The room was a cream color with bland pictures on the walls. The room had three beds and only one of them was empty. The bland carpet next to the dreary blankets seemed to go on like they were connected. A girl didn't want to be awake and wished she could close her eyes for good. The girl didn't get out of the unfamiliar bed for what seemed like forever until she got hungry. A girl slowly rolled out of bed and felt like her clothes were painted on and cracking as she moved. This was the first day of the rest of her life and she didn't even know it.

The girl got showered as instructed, put on what clean clothes she had, went into the kitchen, and had something to eat. The girl's eyes opened a little more each day and every day she felt a little more hope. The girl's first experience with writing truthfully was when she wrote her story. The story was of pain and destruction that was her life up until she was in the strange home. The girl was introduced to a book and was instructed to read the first 164 pages. The girl didn't like to read, it was confusing. She thought if she could read it to herself, she might be okay. While reading the book, the girl started to realize that they were talking about her, her painful life, and destructive thoughts. How could they know what was in her brain?

Before I can tell you about the girl's success, I first must tell you about the beginning. My parents divorced when I was very young and my mom, sister (Stefanie) and I made our permanent home in Lubbock Texas. It was us three girls against the world or so I thought. I experienced some childhood trauma and the more I learn the more I understand that there are many paths to follow. I happen to choose a destructive one as that is all that was modeled to me.

I don't ever remember liking to read or to look at books. My "out" was watching tv and playing video games. This is going to date me but when Nintendo first came out, we got one and I played it as much as I could. Things like that helped me to escape reality. The first project I ever remember writing was a paper in fourth grade. I don't remember the school as I went to two different grade schools for fourth grade. I failed it the first time and had to retake it. I was a very stubborn kid and only did the things I wanted to. Probably one of those kids your parents forbid you to hang out with. The project that I enjoyed was a paper on Leprechauns. I was able to bring things into the paper that I like to do and places I have been. After that I didn't do much around reading or writing. My sister Stefanie was always the smart, pretty one. In the words of Arya Stark "I was never going to be as good as lady as you, so I had to be something else." I remember my sister had to memorize the Gettysburg Address; she had it down in a week. Still to this day I only remember "four score and seven years ago." I felt stupid and worthless. So instead of immersing myself into academics I went a different way.

I dropped out of high school the first two weeks of my freshman year, it was too hard and "I had other things to do," at least that's what I told myself. It wasn't until later in life that I learned the reason school

was difficult is because I didn't learn like other people do. Sometimes I would read things backwards, and just reading something silently one time my memory of what I just read was not there. Always considered myself less than, so instead of doing something to challenge that so I could learn, I just didn't do it. I was able to go back to high school after I became pregnant. Because of the activities in public schools, I was pushed to go to an all-girls school. Even trying my best, I would never get good grades, so I stopped trying. Going to New Directions helped me to get my high school diploma. After graduation, we moved to Utah to be closer to family. I wasn't a big reader and the only books I read were children's books; kids didn't make fun of me when I read to them.

I worked in childcare nurseries for quite some time. I would see co workers going to school and making something of themselves. So, I decided to try college as well. I knew I didn't want a university because it would be too difficult. I decided to go with a massage therapy school, not a long time for school and thought I would make a ton of money. The classes were harder than I thought and about 10 weeks before graduation, I dropped out. "I never made good grades anyway", at least that's what I would tell myself. I did that with another school a little later. My thoughts were always, why try, never going to make it anyway.

I made some choices that didn't make my life or others around me very easy. I followed the typical destructive path which had the typical consequences. It wasn't until I "hit bottom," so they say, that things started to change for me. This book that I'm talking about is a 12-step recovery book and I felt like someone was following me around and taking notes. That intrigued me, so I kept reading. Since then, I have picked up so many books from Harry Potter to The Tennis Shoes Among the Nephites. I have learned more about myself and overcoming my thinking so that I can succeed in the last few years than I have my whole life.

This book saved my life, as I read the book it not only told me about myself through someone else's words, but it helped me with a solution to my problem. I felt that maybe I had a chance to live and be happy. It took work and pain, but the outcome of reading and doing what the book suggests helped me to become a better version of myself. That's what life is all about anyway, becoming a better version of yourself today than you were yesterday. Today I know that I need to do things differently, I have learned that listening to and following along helps me to understand what I'm reading a little better. Also, I know that just because I don't learn like the typical person, that I am stupid. Reading that book and going through the experience that I did, helped me to be more comfortable with reading and doing new things.

My goals for this class include learning how to write a successful and effective paper, correctly citing any paper that I write. Also how to layout my paper effectively so that I can know exactly how to write any paper with various topics.

Argumentative- English 2010

1st Place Winner: Shelby Rosenlof, "Secondhand Clothing and Its Impact in the Fast Fashion Industry"

For Professor Rosalyn Eves

The styles we see on the runway have made their way to closets faster than ever before, and in turn they end up being out of style and discarded faster than ever before. Fast fashion is the term used to describe large retailers producing cheaply made clothing in sweatshops to make new high fashion trends more affordable. This system has caused a lot of environmental damage in the past two decades, so in order to avoid supporting this system, many people of the younger generation have turned to "thrifting," AKA secondhand businesses to be more environmentally conscious. Though it seems like a better short-term option, secondhand clothing is not more sustainable than directly supporting the fast fashion industry because of the environmental and economic harm it causes. The best way to combat the damage done by fast fashion is to slow the industry and support the growth of local, sustainable businesses.

First, let's discuss one major effect of the fast fashion industry: overconsumption. Sunhilde Cuc and Simona Tripa explain that "fast fashion characterizes the speed of today's clothing production and consumption: clothing is designed to be cheap, easy, and rapid to produce, and is created to be distributed, sold, and consumed in ever increasing quantities," (163). In essence, fast fashion's purpose is to create low priced items that are ultimately disposable. Luz Claudio expands upon this idea, citing the industrialization following World War II as the beginning of modern consumerism. She explains that the post-war economy thrived on the cycle of advertising new products and phasing out old ones, and that the fashion industry played a large role in this shift. (Claudio 451). In the decades since, the cycles have only grown faster, and today, this culture of overconsumption is thriving. A study cited in "Fashion Consumers' Post Purchase Behaviors," found that "on average, an individual consumer spent $910 and purchased more than 62 garments in 2011," and these numbers are only growing every year (qtd. in Joung 689). As the rate of consumption increases, the rate of disposal increases right along with it. The large majority of used clothing ends up as waste, and Rosenberg reports that in 2012, 84% of clothing ended up in landfills or incinerators (Rosenberg). The waste generated by used fast fashion clothing is a major issue, and right now there are very few options for consumers to dispose of the waste properly. The most accessible way for people to discard their unwanted clothing is donating to secondhand stores.

The overconsumption of fast fashion feeds into secondhand stores, and leaves many of them with more clothing than they can handle. A report from Savers, one of the largest secondhand clothing chains, found that 28% of people donate clothes to thrift or charity stores (Rosenberg), though Luz Claudio states that "only one-fifth of clothing donated to charities is directly sold or used in their thrift shops," (452). There is so much clothing being donated that even with thrift stores seeing an increase in sales, there still aren't enough people shopping to buy them all. Stores can occasionally recycle clothes that don't sell in the stores, as Claudio goes on to explain, and many secondhand stores resell clothing to these textile recyclers (452). Though this is a genuinely sustainable practice, it is not as common as Claudio makes it seem. "Even as it is estimated that the textile recycling industry recycles 1.9 billion tons of post-consumer textile waste each year, this only accounts for 15% of all textile waste," Cuc and Tripa point out (164). While the idea of recycling clothing is a good solution, the practices aren't utilized

enough to make a difference. Another solution that many secondhand businesses have utilized involves shipping unsold used clothing to developing countries, such as those in Eastern Europe or Sub-Saharan Africa. Cuc and Tripa explain that the issue with this trade is that these countries often do not have infrastructure for these large amounts of textile waste, and the clothing ends up as major pollutants (165). Really this practice allows our overconsumption in the developed world to cause more environmental harm to countries that aren't as prepared to deal with that level of waste. While people donate their clothing with the hopes that someone else may enjoy their old clothing, often it never makes it to a new home.

Even when the clothing is purchased, the cheap fast fashion clothing is made to be disposable. Hyun-Mee Joung says that fast fashion is specifically designed to be worn less than 10 times (689). This means the clothing will fall apart and end up in landfills not long after being brought home from a thrift store. Another issue is the care of the items themselves. Luz Claudio states that "about 60% of the energy used in the life cycle of a cotton T-shirt is related to post-purchase washing and drying at high temperatures," (453). This shows that even simply maintaining the clothing bought secondhand can be wasteful and unsustainable. Extending the life of fast fashion through secondhand shopping is not enough to stop the large amounts of environmental damage that clothing waste causes.

The secondhand clothing industry has been growing rapidly in the past few years due to the increase in clothing consumption. When beginning this paper, I believed that the growth of the used clothing market would cause a decrease in fast fashion. I assumed that those buying secondhand fashion were using it as an alternative to fast fashion, but as Krista Garcia reports, they both have seen significant growth in the past few years, with off-price fashion, including retailers such as TJ Maxx and Ross, taking the biggest hit (Garcia). Secondhand can often be presented as an antithesis to fast fashion where one is set to outcompete the other, but in reality, the two are very much intertwined and benefit from one another. Laura Meraviglia states in her paper "From Fast Fashion to Fashion Vintage," that fast fashion and secondhand fashion "should not be seen as substitutes but as complementary," (2). It is shown that as fast fashion increases, consumers buy more clothing, which leads to them getting rid of more clothing, and thus causes an increase in the secondhand industry. The two industries are therefore benefiting from each other, instead of in competition.

The economic impact that comes along with this growth of the secondhand clothing industry is just as important as its ecological impact. As I mentioned previously, unsold clothing from thrift stores is shipped worldwide to developing countries. Out of the clothes that actually make it to the sale floor, "estimates indicate that only 10-30 per cent is retailed in the UK; this is similar to the situation in Canada and the USA," Andrew Brooks claims in his book Clothing Poverty: The Hidden World of Fast Fashion and Second-Hand Clothes (130). Brooks also states that used clothing accounted for "81 percent of clothing purchases in Uganda," and these clothes contributed to the closure of local textile factories (Brooks 217). Mass amounts of our used clothing being shipped to countries may seem like a great humanitarian gift, but there are many unseen economic damages that come with it. The companies that profit from the trade are in it simply for economic gain. As Brooks goes on to explain, these companies are often not transparent with their practices, and while they claim to be non-profit organizations, it is typically not the case (Brooks 126). The trade of used clothing to under-developed countries is only beneficial to those who sell it. As the clothing outcompetes locally produced textiles, factory workers lose their jobs and the locally made clothing becomes more expensive, these countries' economies are stunted, and its people are left dependent on this global trade.

Another economic issue in the secondhand fashion industry is the so-called "gentrification" of thrift shopping. In recent years, thrifting has become the trendy new way to buy clothing, which is a shift from the stigma of used clothing being "dirty" or "poor." Meraviglia states that in the past, low-income consumers were the primary purchasers of secondhand clothing, and thrift stores were found along the outskirts of major cities. Today, these stores have become staples of large city shoppers, and draw appeal because of the unique, retro fashions that have become popular in the mainstream fashion world (Meraviglia 13). People utilizing the clothing that would otherwise be thrown out seems like a great way to limit clothing waste, however, as Ronobir states, that "the gentrification of thrift stores and newer expensive pricing is… causing an economic burden on the intended customers for a typical thrift store," (50). The rise in business by higher income consumers that secondhand stores have seen has caused many of the stores to raise their prices. Now, people who once relied on the cheap clothing found at thrift stores find it harder to afford them.

A large contributor to this shift towards thrifted and vintage clothing in the mainstream is the increase in environmental awareness among young shoppers. In "Brand Avoidance Behaviour of Gen Z Towards Fast Fashion Brands," Eva Vajkai and Agnes Zsoska found that younger students who shop secondhand cited environmental concern as a reason behind their decision (Vajkai and Zsoska 44), and as Meraviglia claims, "through the purchase of vintage garments the eco-friendly consumer feels satisfied," (15). In other words, these new thrift shoppers believe that by buying secondhand, they are taking a step toward sustainability. Yet as I've discussed already, secondhand clothing is not really that sustainable. Ronobir claims that this idea is an example of "white environmentalism." He explains that "white environmentalism does not recognize that populations of color and low-income populations are drastically more impacted by pollution and climate change," (Ronobir 51). The popularization of thrifted clothing is a demonstration of white privilege, and though it is seen as a sustainable and healthy option, those who promote it do not take time to look at the adverse effects it has on the environment and the surrounding communities. When the thrift store prices become too high, the lower-income consumers may have to rely on fast fashion's consistently lowering prices, and thus continue the cycle of environmental and economic damage.

Despite these truths, many people continue to argue the perceived benefits of buying secondhand clothing. In her article "Is it Okay to Buy Fast Fashion Secondhand?" author Audrey Stanton says that "buying secondhand gives people the opportunity to begin their journey into sustainable fashion –even if they don't have the means to buy new consciously made options," (Stanton). While I agree it is an accessible option for those who are morally opposed to fast fashion, it puts the task of sustainability on the consumer, when the companies making clothing are the ones that hold the responsibility. Decisions made on the consumer level are insignificant compared to the damage done by the industry as a whole. Stanton also claims that thrift shopping can provide shoppers with unique pieces that they would not find anywhere else (Stanton). This argument focuses on how secondhand shopping can benefit the consumer and is mostly focused on following mainstream fashion trends and is ignorant of the low-income communities that are facing the negative consequences of the trendiness of thrifted clothing.

There are many other ideas for sustainable fashion that can be more or equally as effective than secondhand shopping. Some claim that clothing made from naturally made sources, such as cotton and linen fabrics, are the answer in settling the debate of sustainable clothing. This argument, however, overlooks the processes that make fast fashion clothing. Rosenberg says that these natural fibers have

been treated with harsh chemicals and dyes, and thus do not degrade naturally and release toxins into the air as they do degrade or burn in incinerators (Rosenberg). Like secondhand shopping, this idea is not always examined thoroughly when presented. More effective solutions to fast fashion include ethically sourced materials, local production of clothing, and reusing and recycling garments (Clark 427). These practices have seen an increase in recent years, but still have not grown significantly enough to offset the rapid growth of the fast fashion industry.

The environmental and economic problems are direct consequences of the fast-moving industry. Making clothes quickly and affordable is the reason the fast fashion industry has become so successful. Companies use advertising to make consumers want the latest trends as soon as possible. Luz Claudio claims that the consumers should be the ones responsible in slowing the market and lessening their environmental impact by buying less clothing and being more mindful about the way they take care of their clothing (454). This is a start, but overall, I believe that it is the industry's responsibility to change their model and produce clothing sustainably. Making claims urging the consumer to be conscious of their own impact removes the responsibility from those who are truly at fault, and places it on the everyday person who may not have the resources to change the companies they support.

Consumer blaming has become a common approach to sustainability, and it is very harmful. Jane Patton describes how plastic producing companies urge their consumers to recycle, while the majority of pollution comes from corporations (Patton). The same thing applies to the fashion industry. Andrew Brooks uses the example of the popular fast fashion brand H&M. For a few years now, the brand has encouraged its shoppers to bring their used clothing to their stores, and in turn receive a coupon. The clothing H&M collects is then either shipped in the global used clothing trade, sold to vintage clothing stores, or recycled into new textiles (Brooks 338). This seems like a sustainable model, with exception of the global trade, but in my opinion, it is a prime example of a corporation engaging in consumer blaming tactics. H&M is one of the largest fast fashion brands, and it is not excluded from the known harms of fast fashion production. By encouraging its shoppers to recycle their old clothing at stores and using it as a way to promote the shoppers to buy more clothing from the store, they are putting the responsibility of waste and pollution onto its consumers while continuing their own harmful business practices.

The only way to improve the environmental impact of fast fashion is for businesses to slow the industry itself, rather than relying on consumers to slow their shopping habits. Luz Claudio discusses the fast fashion industry and the major problems associated with it. The factories which produce fast fashion clothing pollute the air and water, and are known for the mistreatment of workers, who are exposed to harmful chemicals, work in unsafe conditions, and are often paid very little (Claudio 451). Even though secondhand shopping doesn't directly support fast fashion brands, it still perpetuates this unsustainable business practice because it does nothing to counter these impacts. Hazel Clark uses the term "slow fashion", which she uses to "identify sustainable fashion solutions, based on repositioning the strategies of design, production, consumption, use, and reuse, which are emerging alongside the global fashion system, and are posing a potential challenge to it." She explains that slow fashion is not the opposite of fast fashion, but the total reinvention of the current fashion industry (428). The practices associated with slow fashion include prioritizing locally sourced materials and incorporating transparent production systems. Of course, in order for these solutions to really make a difference, they need to be widespread and accessible to people from all different places in society.

The implementation of slow fashion methods would be instrumental in improving the sustainability of the fashion industry. Clark claims in her article that using local labor and resources in clothing production

is an effective alternative to the global trade and mass production of identical styles (430). As I mentioned earlier, a big appeal of thrift shopping is that unique vintage styles have become popular in current fashion trends, and as Clark explained, localized production can achieve the same kind of style while also providing work to locals. Transparent practices are also very important, because as Clark states, fast fashion companies often blur the lines of where their clothing is sourced, designed, and manufactured (435). Transparency allows consumers to know that they are purchasing ethically produced clothing, instead of allowing the companies to hide the pollution and sweatshops that produce fast fashion clothing today.

The biggest obstacle in implementing these methods is marketability and accessibility. In their study about sustainable fashions, Lisa McNeill and Rebecca Moore found that even though more people have become aware of the harm fast fashion causes, too few people have been made aware of the sustainable alternatives (McNeill and Moore 217). Presenting the issues related to fast fashion without providing resources for sustainable alternatives won't change anything. This is where the popularity of thrifting and other similar white environmentalism movements come from because people are not educated about sustainable options. They turn to practices that are equally harmful, and that is why fast fashion remains such a large problem. The best thing to be done in order for real change to happen is for the white, affluent consumers to use their privilege. They need to be the ones made aware of these sustainable alternatives, and they need to be the ones promoting and supporting these sustainable business practices and allowing them to grow and become more popular. Instead of using their privilege to take resources away from poorer communities who don't have access to sustainable options, they should strive to expand these practices in hope that eventually they will catch on more.

The secondhand clothing industry perpetuates the harm done by the fast fashion industry, as well as causes issues of its own and is therefore not a sustainable alternative. The damage done to poor communities locally and around the world, as well as the environmental damage caused by the clothing outweighs any benefits to it. By focusing on changing consumer behaviors rather than the industries that are doing the worst of the pollution, the damage done by the fashion industry won't be fixed. The best way to combat the fast fashion industry is restructuring the business model completely, and the responsibility then relies on those in charge rather than an unaware shopper.

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1st Place Winner: Valerie Ross, "Renewable Energy as a Replacement for Fossil Fuel in Residential"

For Dr. Julia Combs

Abstract

As climate events such as the periods of drought, hurricanes of growing intensity, and warming temperatures are escalating throughout the United States and around the world, people ask whether there is anything that can be done to help mitigate global warming and its effects. Fossil fuels, which emit extensive amounts of carbon into the atmosphere, are the main source of energy in the United States and universally across the world. Renewable, sustainable energy could provide an alternative to carbon heavy fossil fuels. This paper explored the potential for renewable energy to serve as a replacement for fossil fuels in residential homes and communities in the United States. Solar energy is the form of renewable energy commonly associated with residential development projects. Photovoltaic cells coupled with batteries can be used to generate and store renewable solar energy. The design of solar systems can be optimized using modelling algorithms to estimate energy requirements based on size of the residence and the wattage requirements of the appliances in accordance with the incoming solar irradiance. Most states implement political and social collaboratives to facilitate production of renewable energy, subsidizing the costs. Furthermore, the cost of supplies and installation of solar systems has decreased over time, helping to shape solar energy as a potential replacement for fossil fuel in the future. Solar energy as the predominant form of renewable energy has shown to be a viable source of energy for future home development.

Keywords: renewable, solar energy, photovoltaic cells, global warming, drought

Renewable Energy as a Replacement for Fossil Fuel in Residential Homes

The term "Global warming" defines the long-term warming of the earth that has occurred since the Industrial Revolution of the 19th century. Currently, there is worldwide discussion and debate on the topic of global warming and climate change. Jet streams (of which, the predominant are the Northern and Southern hemisphere streams) are currents of air located in the earth's troposphere that flow in a curving path from the west to the east. The boundaries of the jet stream separate colder and warmer air; therefore, the jet stream can move temperature gradients from one area to another, influencing climate.

According to the National Centers for Environmental Information (2021), the polar vortex, a high-pressure arctic oscillation, caused cold arctic air currents to plunge into the United States and Europe, disrupting the jet stream with a wave of unusually cold weather. This disruption devastated cities throughout Texas. Areas in Austin and Waco experienced record-breaking temperatures below freezing for consecutive days between February 10th and 19th, 2021. Due to the unusual nature of this drastic weather, the electricity grid was overwhelmed in locations around Texas as the demand for heat outpaced the supply. As we are seeing changes in the jet stream, we are witnessing a greater frequency of drastic changes in climate. Many climate scientists attribute current climate trends to man-made causes, especially the burning of fossil fuels and natural gas.

Other perspectives on the use of alternative energy are centered on the vulnerability of our current electrical grid. Public systems have been the target of cyberattacks which have the potential to cripple resources for large swaths of the population. For example, a cyberattack on the Colonial Pipeline, a supplier of fuel to the Southeastern United States, caused widespread panic as fuel supplies were disrupted in the area in May 2021. Colonial Pipeline paid millions of dollars to the cyberhackers to regain control of its computerized systems. Furthermore, the mainstream electrical grid in the United States is a model that has been in place since the late 19th century with small scale technology advancements added over time. It is not responsive to variable demand and is subject to being overwhelmed with high energy demand, leading to rolling blackouts. Having alternative energy options can increase energy security and maintain economic productivity. Several forms of renewable energy, which include solar, wind, biomass, and hydroelectric power could provide a solution to help meet the growing energy demand in the United States while reducing greenhouse gas emissions.

Photovoltaic panels which harness solar energy are well precedented for application to residential power (Cho et al., 2020). In addition, solar power produced by photovoltaic cells may be stored using batteries to bank the excess energy (Pulido et al., 2018). The purpose of this research is to evaluate if it is feasible to replace fossil fuel with renewable energy in residential homes and communities in the United States. Several different facets of solar energy will be examined.

The first topic of examination is the fundamental method to harness and store solar energy. To have a scalable form of energy available for use, it must be designed to effectively meet this purpose. Processes used to generate and store renewable energy and strategies to improve the design of solar systems are explored. There is not yet a formal infrastructure in place to facilitate wide distribution of solar energy. As the necessary foundational infrastructure development is undergoing, political and social collaboratives are required to subsidize and develop this form of renewable energy. In addition, it is important to understand the cost savings associated with solar energy. The cost effectiveness of renewable solar energy relative to fossil fuels will also be explored. The potential scalability and long term cost savings of solar energy as a form of renewable energy for residential homes and communities positions it as a viable source of energy for future home development.

Generation and Storage of Renewable Energy

Photovoltaic cells are used to harvest solar energy. According to the U.S. Department of Energy Efficiency and Renewable Energy, photovoltaic cells are composed of a semiconductor material; therefore, they can conduct electricity better than an insulator (e.g. plastic) but not as well as a good conductor such as a metal. The semiconductor absorbs energy from light when they are exposed to solar radiation and transfers that energy to negatively charged electron particles present in the material. This energy conducts the electrons through the material, producing an electrical current. This current is conducted along a conduit of metal contacts, the grid-like lines on the solar cells. This is the basis behind solar power which can be used to power homes and other components connected with its electric grid.

Heightened ecological awareness in the 1970's led to a resurgence in interest and demand for renewable energy. This was coupled with limited growth in demand for electricity, budget overruns for nuclear energy, regulatory rate caps unable to keep up with inflation pressures, and technological

innovation was unable to keep up with production costs. Renewable energy was proposed as the solution for this resource challenge and for its properties as a clean fuel.

Technological advancements in the development of solar energy have continued to bring new advances. With growing interest in solar energy, more manufacturing companies dedicated to production and development of solar energy systems have been conceived with the first stand-alone, solar powered home designed in the 1980's. Growth within the economic sector has increased the supply of component materials and has contributed to decreased costs. The inception of photovoltaic mega-watt scale power stations has also contributed to increased accessibility and the growing infrastructure of solar energy. Solar energy is now advancing as a scalable energy resource (Morris et al., 2013). The growing scalability of solar energy technology has propelled it as a potential source of renewable energy for residential homes and communities.

The current electricity grid in the United States is reliant upon antiquated infrastructure, and in many regions, most of the power lines are above ground making the grid more vulnerable to damage from fires and other sources. Furthermore, the grid is not responsive to changing power demand. A power surge or a significant increase in demand at a given moment of time could easily cause a short circuit leading to rolling blackouts. In 2011, San Diego, California experienced the largest power failure in its history. I was living in San Diego at the time and experienced the aftermath of this catastrophic event. The blackout resulted from the mistake of one technician who tripped a transformer, which led to a ripple effect of multiple power stations becoming overwhelmed as the energy was re-routed. Almost 700,000 people were impacted by the power outage. The outage occurred in the late afternoon just as many people were finishing their workday. As a result, thousands of people got into their cars and tried to drive home. This caused a traffic jam of immeasurable proportions. The whole city came to a standstill as traffic was so gridlocked that cars were backed up from parking lots through all major streets. Gas stations, grocery stores, and all other establishments went dark that afternoon. The power was re-established in phases. A few areas regained power by 10:00 pm that night, but others had to wait until the next morning. Stores carrying perishable items lost millions in revenue due to the spoilage caused by lack of refrigeration and significant losses occurred in residential homes with loss of perishable goods, causing significant distress.

The extensive consequences of rolling blackouts that occur on the scale of the 2011 blackout in San Diego could be avoided with one simple solution: a solar powered home with backup energy storage. According to Pulido et al. (2018), solar powered homes with battery fuel cells are good potential back up energy supplies in case the main electrical grid goes down. In addition, off-grid, renewable energy can provide electricity in remote, rural areas that are not otherwise on a secure electricity grid, which is also currently the case in many developing countries.

Typically, rural areas within the United States have limited resources compared to larger urban communities. They are often in unincorporated areas where they have limited options for power utilities. Given their relative isolation, rural communities often have long wait times when utilities go down. However, residents of rural communities have the option to establish an off-grid electricity system on their properties. Residents of rural communities typically own larger tracts of land with multiple buildings that facilitates having space to store solar battery storage systems compared to urban residents. In rural communities, residents that install photovoltaic power cells on their homes also have the capability to store large battery supplies and power transformers.

The solar powered system with batteries is an additional power generator for secure electricity generation. To design a photovoltaic system with batteries, the storage sizing requirements of a home must be determined so that it is of sufficient capacity to power the home. The energy system specifically consists of a battery, a photovoltaic charging controller, and an inverter (DC to AC) to supply power to all appliances in the residential home. The solar irradiance is converted into solar energy through the photovoltaic array. The generated solar energy is either used to operate appliances or stored in the battery. The battery supplies energy to operate appliances when the available solar energy is insufficient.

The design of the solar energy system can be optimized for efficiency. Technology companies can utilize computer-based models to calculate energy requirements for a home by applying mathematical integrals across multiple variables which include the location of the home, degree of solar irradiance, size of the home, and the energy requirements of the appliances. The storage sizing requirements of a home must be determined when designing a photovoltaic system with batteries to ensure that it is of sufficient capacity to power the home.

Pulido et al. (2018) examined the energy demands of two different homes in the United States and the Netherlands to determine if a solar powered photovoltaic system coupled with a sea-salt battery would meet energy demands to power the homes during the summer season. A sea salt battery was selected as the battery source due to its economic pricing (less than comparable lithium-ion and lead acid batteries) and because it is a more environmentally friendly alternative to standard batteries. The data was assessed using a power simulation device. Dynamic sizing and characterization of the solar powered system/sea-salt battery were evaluated to determine the efficiency and capacity of this model. The energy consumption for both homes was well within the capacity of the sea-salt batteries.

The household in Texas required a solar powered system of 38 Kilowatt power (kWp) and a storage of 226 kilowatt hours (kWh), and the household in the Netherlands needed a solar PV system of 11.5 kWp with a storage of 45 kWh. The researchers determined the capacity of the battery needed to establish a 100% off-grid design for both homes in this case study and demonstrated the feasibility of the solar energy through data simulations.

Similarly, Cho et al. (2020) designed a method to optimize a photovoltaic energy system. The authors of this study investigated optimization strategies for an off-grid photovoltaic energy system for use in isolated areas where access to the electrical grid is limited or restricted. Optimal design of the photovoltaic system is necessary to efficiently harness solar energy and meet the energy needs of the off-grid home. This requires optimizing both the photovoltaic array and the battery storage. A residential off-grid energy system is composed of energy generation units, an energy storage, and energy consumed by appliances. The model was designed to pre-schedule usage volume of appliances based on estimated solar irradiance. The schedule was run using a data simulation that accounted for any uncertainty of the solar irradiance, performing an uncertainty analysis by measuring the plane of irradiance data at two locations in the United States. The model utilized a day-ahead schedule for the operation of the appliances based on estimated solar irradiance.

Using this model, the researchers pre-scheduled energy allowance to maximize the operation of higher priority appliances. However, when the amount of forecasted solar irradiance was less than actual solar

irradiance, the lower priority appliances were pre-scheduled to not operate. This model balances available energy and demand by not operating low priority appliances. This model operated based on an interactive two-way grid in which the consumer and power operator dynamically communicate to deliver energy as needed and as available. This is a well-designed model in that a highly efficient and responsive photovoltaic energy system was prototyped that can automatically modulate based on energy requirements as a function of supply availability. This principle of interactive energy consumer to operator communication is central to the operation of a smart grid. Fish et al. (2016) describe the use of maps and geographic information systems (GIS) for interactive communication and decision making in power production and consumption. Geographic information systems (GISs) create, analyze, and manage datasets. The GIS connects data to a map, integrating location data obtained at a home with other types of descriptive information of interest based on its scan of the location. It is the foundation for mapping and analysis that helps users understand patterns, relationships, and geographic context. These systems help to improve communication, efficiency of process, as well as well as facilitate decision making.

An application GIS maps is energy sustainability planning, which has two major elements. The first element concerns the types and quantity of urban energy consumption to determine optimal locations for solar energy usage. The second involves mapping solar energy to identify and manage issues related to energy generation. Currently, the mainstream energy grid only permits one-way conduction of energy from source to end-user which leaves the system more susceptible to exhausting the grid, causing rolling blackouts. Solar energy has the potential to be a viable energy source if properly optimized and technological advancements in this field continue to yield improvements. Political and Social Collaboratives Required for Development of Renewable Energy

Renewable energy implementation is dependent upon financial incentives from the government and mainstream energy producers because it is not yet an institutionally established form of energy. The infrastructure for solar energy is still undergoing development and there are not yet sufficient solar power stations to support the need for all residences. Therefore, economic initiatives to develop decentralized, community-wide systems of renewable electricity production are required in the United States.

Morris et al. (2013) presented energy initiatives in Washington D.C. as a case study exploring the topic. The author explored the effects of regulatory diversity within this municipality of Washington DC on renewable energy policy. This region's largest utilities supplier, the Potomac Electric Power Company (PEPCO) is established itself as the main utility supplier. Although PEPCO is the predominant energy utility to the region, legislation enacted in the early 2000s has helped the district begin making a shift toward competitive electricity markets. As a result of that legislation, over 90 approved electricity transmission and generation suppliers licensed to sell power to residential, commercial, and industrial users in the district.

Regulatory change has driven the expansion of renewable energy as evidenced by a tremendous growth of over ten neighborhood-based solar cooperatives focused on expanding the reach of solar in various communities across the city. The co-ops provide communities with the information, connection, and opportunities they need to move efficiently through the solarization process. The co-op also promotes the expansion of geothermal heating and cooling systems, supports energy efficiency and energy conservation initiatives, and engages in general advocacy for renewable energy and conservation

efforts.

Other examples of initiatives within the United States are in Ann Arbor, Michigan. Ann Arbor has local clean energy initiatives run in partnership between the local authority and non-profit organizations (Pitt et al., 2017). In Ann Arbor, for example, faculty and staff from the University of Michigan have supported local environmental initiatives, and the city relies heavily on various local, state, and national environmental organizations. Chicago, Illinois also runs collaborative implementation, as the local authority contracts with CNT Energy to run its residential energy efficiency programs, which have retrofitted over 13,000 housing units in the city as of 2014. There are many examples of initiatives implemented throughout the United States. Currently, there is a growing body of policy in the U.S. state and federal Government in favor of renewable energy. These financial initiatives are adjuncts which help bring otherwise costly solar energy within reach of the typical residential homeowner.

Cost Effectiveness of Renewable Energy Relative to Fossil Fuels

The cost of photovoltaic cells and storage systems is prohibitive for many people in the United States. It is necessary to understand the estimates of solar photovoltaic system premiums for an understanding of actual investment. In a study of data performed by Hoen et al. (2017), the authors compared market premiums with amount paid for solar energy systems to gather estimates of saved energy costs (income earned approach) and, separately, the replacement cost of solar energy systems at the time of sale (cost of supplies approach) to examine renewable energy market viability. The researchers studied models to estimate the difference in sale prices between solar energy and non-solar energy homes. There was a premium associated with solar energy homes due to the presence of solar panels in pre-existing homes added market value to the homes.

A subset of homes in California were examined across these models. The mean sale price (sp) of the solar energy homes in the sample was $473,373 and ranged from a minimum of $165,500 to a maximum of $899,500. The gross installed cost for a similarly sized photovoltaic system in the same county at the time of sale was $6.90/watt (gross cost), while the net cost (after incentives) was $4.14/watt (net cost). The present value of the stream of energy produced by the solar system, as calculated by a solar energy modeling algorithm, was $2.93/watt. For the 18,871 non-solar energy homes, the authors found a mean sale price of $456,378, which was $16,995 lower than that of the market comparable solar energy homes. Both homeowners and third-party developers are increasingly motivated to integrate photovoltaic systems based on both economic (increased market value) and environmental benefits (Fish et al., 2016).

Given the incentives currently offered by governing bodies and energy producers, solar energy is not within reach for all. I interviewed a prospective buyer as a case study for this report. He is a homeowner in a rural community in eastern Virginia. He has evaluated options for equipping his 3,500 square foot farmhouse with solar energy panels. Based on his discussions with the suppliers, he was quoted a cost of $50,000 to invest in panels for parts and installation. He found this cost prohibitive. Although he believes that solar would be an efficient source of energy for him, he will not pursue the panels at this time. There are various options available for potential solar energy panels users. Consumers have the option to lease the powers rather than buying outright. In addition, outreach to local energy agencies can elucidate options for subsidies that could help lower initial investment in solar panels. Costs for solar energy panels vary by location, but a motivated may find viable economic options based on local initiatives. Alternatively, buyers have options to purchase homes with pre-existing solar panels.

Conclusion

The feasibility of renewable energy as a replacement for conventional fossil fuel in residential homes and communities in the United States was explored in this study. Current research on renewable energy was evaluated and described. Solar energy is the predominant form of renewable energy employed for home development. Designs which optimize the operation of photovoltaic panels and battery storage systems have been developed. Optimization of solar energy systems has demonstrated that homes can be powered sufficiently to meet full energy demand. In addition, investment in solar panels may be possible for many. There are economic initiatives available in many communities and a search of local energy agencies may elucidate information on private and public subsidies. It has also been shown that the long-term cost savings of solar energy enhances the viability of the systems.

As global temperatures rise and droughts and wildfires become more rampant, more people are recognizing the value of renewable energy. The decisions we make today about energy emissions have long term consequences on the quality of our lives and that of future generations. Notwithstanding, the long-term impact on the environment. We can minimize this major carbon footprint that we are leaving in our current processes and see positive changes in our environment if we are willing to collaborate and continue to investigate sustainable and efficient energy alternatives. More research is needed to gain further understanding of financial incentives in local communities. In addition, the field of solar energy technology is rapidly evolving, therefore it is necessary to evaluate current studies in progress.

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2nd Place Winner: Frances Hartzell, "The Power of Rhetoric: How Richard Nixon was able to Sway a Country With his Words"

For Dr. Rosalyn Eves

When America thinks of Richard Nixon, often the things that come to mind will be the Nixon Tapes (the recordings of the wiretapped Oval Office), and the Watergate Scandal, which led to his resignation from the presidency. Many historians, (for example Evan Johnson, who has written an article on Nixon's anti-communist rhetoric in the hopes of understanding how this particular strategy worked, and what it was comprised of) have been working hard to figure out exactly what made Nixon tick, and how he was able to convince a country that he was the only right choice for president. Often, analysis of Nixon's more prominent speeches and actions are what they rely on. However, there is a disturbing lack of analysis on the four speeches that introduced him to and allowed him to stay in the role of president from 1968 to 1974.

Richard Nixon's two inaugural addresses and two presidential nomination acceptance speeches may not be some of his most important speeches in the grand scheme of things, but they do give an interesting insight into how Nixon's words were one of the things that earned him the presidency. Richard Nixon utilized many different rhetorical strategies in order to win the presidency. He used patriotic speech to make his audience believe he truly cared for his country, hopeful speech to give America the hope that he would "fix" their nation, and Metaphors that referenced America, the American Dream, or American concepts to help his audience see what America could be if he were elected. Of course, these aren't the only strategies that Nixon relied on, but they are some of the more important ones. This is because Nixon was a very influential president in his time, and was able to convince his audience that he would make America better, and end the Vietnam war, even if he didn't fully deliver.

Background: a bit about Nixon

To understand a few pieces of his speeches, a brief account of the history of the times is necessary. All information was found in the NixonLibrary.gov website. Richard Nixon was first introduced to politics through his career in the Navy during WWII. This is due to his slew of promotions and transfers that moved him up in the ranks of the Navy. After the war, Nixon was nominated to run for California's seat in congress. Nixon Won the election with 65,586 votes to his opponents, Jerry Voorhis, 49,994. (Graf & Andrews, Statistics of the Congressional Election, 1946, 3) (NixonLibrary.gov, "The President" tab)

In 1950, Nixon went for a seat in the senate. He managed to convince his audience that his opponent, Helen Gahagan Douglas, was pro communism by calling to attention how similar her voting patterns were to the New York Congressman, Vito Marcantonio, another supposed communist. Nixon once again won in a landslide victory, and earned himself the nickname "Tricky Dick" (Johnson, 9) for his anti communist rhetorical strategies, and how he was able to use them against his opponents. (NixonLibrary.gov, "The President" tab)

In 1952, Nixon was recommended to future president Dwight D. Eisenhower to be his Vice President, as Eisenhower had no real preference. After they won the election, Nixon was given more duties than any Vice President before him. This is most likely what led to his eventual election, as he was able to talk about all his experience and use it to his advantage when running for president. After Eisenhower

suffered what was believed to be a life threatening heart attack, Nixon took over, and did a great job in the eyes of the public. In Eisenhower's second election, Nixon was written in as the popular candidate to be his running mate, and once again, the presidency was theirs. (NixonLibrary.gov, "The President" tab)

In 1960, Nixon first ran for president. He lost to Kennedy by a small margin. Hilariously, this is somewhat due to his perceived disheveled appearance in the first televised presidential debate. Compared to Kennedy's naturally photogenic face, he looked like he had rolled out of bed not an hour before. After this he attempted to retake the California seat in congress. When he lost, people believed this would be the end of his political career, because the general public believed that the defeat would ruin him. That is, until his presidential nomination in 1968. (NixonLibrary.gov, "The President" tab)

Nixon won his second bid for the presidency by a large margin, and by the time his reelection came around, he managed to win 49/50 states, sweeping the nation. (Leip, 1972 Presidential General Election Data Graph) After the Watergate scandal, a break in at the Watergate Office, which was a Democratic headquarters, his approval dropped from 67% to a low 24% (Coleman, 8th graph) after it was proven that Nixon was involved, where it remained for the rest of his life, even until modern day. (NixonLibrary.gov, "The President" tab)

Definitions: What the different strategies mean
Nixon utilized many rhetorical strategies, one being his anti communist rhetoric combined with his synthesized blend of paranoia and politics, (Johnson, 2018) Another, using what could almost be smear tactics to convince his audience that his opponent was the worst possible choice for the job. (NixonLibrary.gov, "The President" tab) However, I want to look at a few more general strategies that Nixon used to the fullest extent. One's that are still very common today. Patriotic speech, Hopeful speech, and Metaphors on America, the American Dream, and American Concepts (or similar variations thereof) are three strategies that America sees on the regular when it comes to presidential elections. For this reason, the definitions of these terms, in a political sense, will be given before any actual analysis.

Definitions: Patriotism

Often, people will recognize patriotism as an undying love for a person's country. This is only half right. John Sullivan, Amy Fried, and Mary Deitz did some research on this very question of what, exactly, is patriotism? They found two studies that gave them a somewhat well rounded answer. According to a study done by Kosterman and Feshbach, there are six factors that one can measure patriotism by. They centered around statements such as 'I love my country' and the like. This led them to conclude that ". . . Patriotism taps the affective component of one's feelings towards one's country" (Qtd. by Sullivan, Fried, and Deitz, 3) Meaning, what people generally see as patriotism is correct. Patriotism is, in part, a deep love of country. Politicians use this to their advantage by claiming that, should they be elected, they can restore America to glory, or jump start a new era for America.

In addition to the Kosterman and Feshbach study, the authors found another study done by Hurwitz and Peffley. In this study, Hurwitz and Peffley describe patriotism as, ". . . an unswerving love of country or a chauvinistic view of the superiority of one's nation, [which]. . . Implies an inherent preference for American Institutions and customs." (Qtd. by Sullivan, Fried, and Deitz, 4) A bit more simply, this means that the other form of patriotism is preferring American laws, customs, attitudes, and so on to any other on this planet. In politics, politicians use words that can insight a feeling of patriotism. Patriotism can be tricky, because patriotism in the year 2020 is not the same as patriotism in the year 1962. In the year

2020, an anti-communist based rhetoric, which Nixon was so fond of, might work, but definitely not as well as it would have in 1962. And as such, Nixon knew that his strategies that worked in the past, when he ran for congress and the senate, (NixonLibrary.gov, "The President" tab) may not work in his present, and by using a more anti communist rhetoric (Johnson, 2018), which could be and is a paper all of its own, as opposed to traditional patriotism of "I love my country, the flag is amazing", and things similar. So in a way, Nixon's anti-communist strategies were a form of patriotism at the time because America at the time would do anything to stamp out communism. Therefore, anyone who was against communism must have been pro America. Which may or may not have been true. This is why patriotism in rhetoric is so important to be able to recognize. Politicians play off of whatever important emotion or event is going on, in Nixon's case communism, and spin it to show that, should the politician be elected, the people won't have to worry about anything threatening patriotism any longer

Definitions: Hope

As many forms of media like to state, Hope is a powerful thing. This is true in politics as well. According to Joel Schlosser, "Hope counts as among the most dangerous political delusions, yet it also offers the only possible response to despair." (Schlosser, pp.1) Meaning, Hope is one of the most dangerous weapons in a politicians arsenal, and it can be a disaster if used improperly. However, hope is the only thing we have to rely on sometimes, and can lead to false or misled hope if the politician is just using words to get votes. In addition to that, improperly used hope runs the risk of making the politician using it sound naively optimistic to audiences, like they don't understand the dire situation they're trying to say they will fix. To an audience experiencing this situation firsthand, it could seem like the politician doesn't care enough to get all of the facts, which could ruin their chances if they can't recover. With hope that is false, misled, or overly optimistic, as with Nixon, on occasion, audiences run the risk of being strung along. Meaning, a politician can bring the hope that they will end a war, or maybe improve the state of the nation exponentially, but ultimately are just using nice sounding words to get the vote. In Nixon's case, he promised all the way back in his first presidency that he would end the Vietnam War, however the war didn't end until just four months shy of a year after he left the presidency (Nixon resigned in 1974, the War ended nearly a year later). (Michael Ray, "Vietnam War Timeline")

Hope can be dangerous for more than just the speaker. If an audience gives in to false hope, America ends up electing Nixon as president, which would be disaster for multiple facets of the Government. ". . . hope can serve to blind human beings to reality, deluding them into believing that their wildest fantasies might come true and that what lies beyond reach is easily attainable." (Schlosser, pp. 8) In politics, a false sense of hope can do one of two things. It can lead the public into a false sense of security that lets them believe that, should their candidate be elected, the country will be saved and all their problems are easier to solve than they realized. In reality, the actions of their candidate may make their problems worse. The second is that the people will, as Schlosser stated, be blinded to what is real, and will end up ignoring the problems that need attention all due to the promise that their political candidate will make everything better. The alternative, of course, would be that the Politician actually follows through on their promise, but the chances of that are rather evenly split. It can be very hard to tell. The only possible strategy is to look at the politicians past actions and decide whether or not they have a good chance of following through on all the hopes they promised or not. This is why hope can dangerous, it can lead a country to ruin, in some cases, and mask the urgency of big problems in others. However, hope is the only thing the world has when everything else seems lost. Hope is a powerful force, but in politics, it can build the foundation to take down a nation.

Definitions: Metaphors

Metaphors, as a political tool, serve to present a highly political topic, or perhaps a hypothetical situation, in an easy to understand way to an audience who does not have the political knowledge required to make the connections or understand the topic presented to them. According to a study by Lori D. Bougher, "Metaphor. . . Enables citizens to make sense of the political world by drawing from previous knowledge and experience in non-political domains." (Bougher, abstract) For example, if a politician were to be presented with an audience comprised of mainly Athletes and those interested in sports, they will undoubtedly make many references to the athletic world, and compare athletic situations to different political situations in order to allow the audience to understand what said politician is trying to say.

Specific metaphors are so ingrained in human thought that, in early studies, individuals who were asked specifically for literal meanings were unable to ignore metaphorical meanings. (Bougher, 3) For example, say you ask a person about their favorite type of music. If the person is passionate, they may say things like, "this music makes me feel like I'm totally free!" Or maybe "this is my favorite song because this line doesn't mean this, it actually means this." Politicians are aware of this fact, and use it to their every advantage. Metaphor is often paired with other political strategies, and is both obvious and somewhat hidden. There are more obvious metaphors, like use of similes, and other, less obvious metaphors, like personal anecdotes. For a quick example, Nixon once used a metaphor comparing the American Dream to a small American child. Ever growing, and with endless potential. (Nixon, 1968 Presidential Nomination Acceptance) This isn't exactly obvious as a metaphor, due to his lead in, but I will touch more on this particular metaphor in a later section.

Because metaphor is so central to human understanding, audiences don't often realize when they're being presented with a metaphor. Metaphor is such an ". . . Implicit procedure. . . That is so ubiquitous it can often go undetected, including the constraining role it plays in political decisions." (Bougher, 4) Metaphor, due to this, is incredibly sneaky. With the use of the correct metaphor, anyone can understand most anything. The fascinating thing about metaphor is that, even though a citizen might not realize it, their political opinions could very well be shaped by metaphor. On this, Bougher said, "Identifying the metaphors that shape the public's understanding of political issues can help further elucidate why citizens hold the preferences they do and indicate which they are likely to hold in the future— even if those preferences. . . Are outside of citizen awareness." (Bougher, 4) In other words, a good metaphor is just as powerful as hope and patriotism, and can even be the difference between winning or losing.

Analysis: Nixon and his Patriotism, Hope, and Metaphors

As stated above, American scholars still often wonder at how Nixon's mind worked, and what possessed him to do all the things he did. There are entire teams dedicated to transcribing the Nixon Tapes, in fact. (Nixontapes.org, "About" tab) To figure this out, they often study speeches or addresses he gave to cover something up. However, it is equally as important to study the speeches and addresses that earned him the presidency in the first place. Therefore, in order to understand Americans at the time, and why they would vote for Nixon, one of the first steps is to analyze Nixon's two inaugural addresses, and two presidential nomination acceptance speeches. In these speeches, Nixon used Patriotic speech, Hopeful speech, and Metaphors on America and the American Dream to make himself more appealing to his audience in order to win the presidency. In terms of organization, I will analyze these speeches in chronological order, by each strategy, in the order listed above.

Analysis: Patriotism

Richard Nixon, at the time of his first election, was known as being incredibly anti-communist, and very concerned for the people. (NixonLibrary.gov, "The President" tab) At the time, being anti-communist meant being pro America, or being a Patriot, because America stood against everything communism stood for. Due to this somewhat deluded link between anti-communism and pro Patriotism, the people believed that Nixon was patriotic enough that he should be the only choice for president. Nixon certainly proved that with his words.

In 1968, Richard Nixon stood in front of the Republican National Convention in order to accept their nomination for president of the United States. This speech is loaded with so much patriotism, It can be hard to find one overarching use of the strategy. The best example there is to find would be the overarching theme of the American revolution. As Nixon puts it, "The American Revolution was a shining example of freedom in action which caught the imagination of the world." (Nixon, 1968 Presidential Nomination Acceptance) Briefly put, Nixon uses the American Revolution, an already patriotic event, and relates it to the fight for progress and order in the world. He claims that the American Revolution was an ongoing battle, a battle for order and progress. This theme is so effective because Americans were raised on freedom. Freedom in America is often equated with patriotism due to the origin of the country, and the constitution that the government was built on. Due to this fact, there are very specific emotions attached to the word, and to the American Revolution and what it stood for itself. Because America was born of the progressive thoughts of the colonists, this analogy resonates deeply with most if not all of his audience. Nixon then relates the American Dream, and the American Revolution is something that must be spread to anyone and everyone possible. He almost begs the audience to, "...help me make that dream come true for millions to whom it's an impossible dream today." (Nixon, 1968 Presidential Nomination Acceptance) This appeals to potential voters because America always was, and always will be most likely, a very proud nation. The people of America are always looking for ways to improve their country. By saying that the American Revolution is ongoing, Nixon is acknowledging Americans and their desire to be the greatest country on the planet, which in turn makes the common man feel seen, and appeals Nixon as a person to them. This is only one of the many examples of patriotism in this particular speech, but it does help to understand what Nixon built his platform on.

On January 20, 1969, Nixon gave his first inaugural address after winning the presidency by a 110 electoral vote difference. His Inaugural Address was one of great ideas for the future of not only America, but the world. Patriotism ran rampant through this speech. A notable moment highlighted America's accomplishments, and what they must do to continue to grow and succeed. In what could be considered the climax of the speech, Nixon said,

> "No man can be fully free while his neighbor is not. To go forward at all is to go forward together. This means black and white together, as one nation, not two. . . What remains is. . . to ensure at last that as all are born equal in dignity before God, all are born equal in dignity before man." (Nixon, 1969)

At this point in time, racial tensions were still very high in some parts of the United States. For Nixon to get up and say that the only way to move forward is to realize that we are all equal is for one a great way to assure those who did not vote for him that he would not reverse the good that the Civil Rights movement had done. It was also an amazing way to incite a feeling of patriotism in his audience. Equality, just as much as freedom, is a very American, and therefore patriotic, value. Simply using the word correctly can sway a person's voting patterns, however subconsciously, towards the speaking politician, as Lori Bougher learned (Bougher). America was even founded on the notion that ". . . All men are created equal . . ." (The Declaration of Independence, 1776) For an American, especially a Republican

at the time, it is highly likely that at least this phrase is ingrained in their mind. At the time, those who were Republican in ideals, thoughts, and actions would have been against racial injustice due to the effects of the Democratic Party during the 19th century, which was mostly pro slavery until the party split, with one side essentially being prop slavery, and tho other against. (The Editors of Encyclopedia Britannica, Democratic Party). For Nixon to reference even equality itself is a great way to push a feeling of patriotism in his audience. He also references God in this small section, which is another thing America was considered to be founded on. In the Declaration of Independence, the second paragraph begins with, ". . . They are endowed by their Creator with certain unalienable Rights. . . " Meaning, the Creator, or God, essentially gave the people their rights as an American. America, no matter what, was founded under God. Americans in the past believed that God had a hand in the founding of America, therefore, God himself was, and still is, a very Patriotic notion when it comes to America.

On August 23, 1972, Nixon once again stood up to accept his second nomination for presidency. At this point in time, many people were frightened of the threat of communism in the world. Nixon was able to take advantage of this in one short paragraph;

> ". . . I have seen Communist systems, I have seen Socialist systems, I have seen systems that are half Socialist and half free. Every time I come home to America, I realize how fortunate we are to live in this great and good country. Every time I am reminded that we have more freedom, more opportunity, more prosperity than any people in the world, that we have the highest rate of growth of any industrial nation, [and] that Americans have more jobs at higher wages than in any country in the world. . ." (Nixon, 1972 Presidential Nomination Acceptance)

He goes on to describe the prosperity of America compared to other nations, going as far as to say that citizens on welfare would be considered rich in other nations. (Nixon, 1972 Presidential Nomination Acceptance) Referencing the prosperity of America is always a sure fire way to make an audience think about how much they love their country. This strategy works especially well in the situation that Nixon found himself in as a renominated Presidential Candidate. Given the context of the speech, he almost infers that he is the one who helped create all of this recent prosperity, and that he can help create more so long as he's elected again. He is able to play off of his own patriotism, and take advantage of his audience's emotions. It really was a brilliant ploy, and only goes to show how dangerous words can be. By telling his audience that America has been prospering in recent years, he subconsciously makes them think that this recent prosperity was because of him.

In Nixon's second Inaugural address, given January 20, 1973, he once again held a high set of patriotic ideals for the future of America throughout his speech. Near the end, he expressed his pride in the country that America had become, and told his audience that they should be proud as well.

> "Let us be proud that our system has produced and provided more freedom and more abundance. . . than any other system in the history of the world. Let us be proud that in each of the four wars [in which we fought]. . . we have fought not for our selfish advantage, but to help others resist aggression. Let us be proud that by our bold, new initiatives, and by our steadfastness for peace. . . we have made a break-through toward creating in the world. . . a structure of peace that can last, not merely for our time, but for generations to come." (Nixon, 1973 Inaugural Address)

Patriotism is very easy to see in this small paragraph. All he does is talk about the pride he has for his country, and uses a kind of anaphora to really make it stick in his audience's minds. As he does this, he adds more to Patriotism by stating things about the country that he is proud of. The things that his audience should be proud of as well. By stating these amazing traits of America, he leads his audience into a patriotic high almost, allowing them to relish in the amazing parts of their country, while

simultaneously building his rhetoric as a patriotic person, therefore confirming to America that he was the right choice after all.

Patriotism in Nixon's speeches is very easy to find so long as readers or listeners know what they're looking for. As patriotism is such a key topic for America, Politicians utilize it on the regular, much like Nixon did. If America can learn how to recognize even just this strategy, Americans can begin to separate the hollow words from the real promises, and will be able to make better informed decisions.

Analysis: Hope

Right alongside patriotism, Hope is probably the second most occurring rhetorical strategy in these four speeches. Hope, as many forms of media state, is a very powerful thing. It can rally armies, or in this case, an entire country. Due to the Vietnam war hanging over the nation during Nixon's two presidencies, Americans were pretty desperate for something to Hope for. It's my opinion that Nixon was fully aware of this, and used the nation's need for Hope against them in order to win. And because Nixon often linked hope with peace, progress, and justice in the world, Americans were heartily convinced that he could end the Vietnam War, and that he must have been the correct choice if he could do that.

In Nixon's 1968 Presidential Nomination Acceptance, he spoke a lot about Hope, although not in a direct way. He used a more subtle approach, using words that felt hopeful, and had hopeful connotations, instead of outright talking about Hope. One way He accomplished this by sharing his own thoughts on the American Dream, and what it really means. His tone and his particular word choice helps him accomplish this. After his rousing use of patriotism, he uses a very hopeful tone to calm things down. The first example of this is when he states that he does "... promise action— a new policy for peace abroad; a new policy for peace and progress and justice at home." (Nixon, 1968 Presidential Nomination Acceptance) Peace is a huge word with a very distinct emotion attached to it. Peace was such a powerful word for this audience because they and people they knew had been suffering from the Vietnam war for about the past four years. To this particular audience, peace may be all they want in the world. To others, peace is still an amazing word, full of hope for better days. Nixon continues with the words "Progress" and "justice" to round out this statement. Progress is almost never a bad thing, especially to America in the 1960's. Throughout the century, America had been striving for progress. It seemed as though almost every new decade brought along a different America. However, with a war, progress can feel halted as the violence continues. For these particular Americans, progress was not only something they wanted, but something they needed. Lastly, the word "justice" calls to mind any criminal being given what they deserved. For Nixon to promise to essentially clean up the nation brought hope for peace of mind for many city living audience members, where crime is more rampant. The promise of justice is always an amazing prospect, even for Nixon's audience, and he knew how much it would resonate with them. Nixon promising to bring justice to America gave the audience a hope for a brighter, safer future.

In his 1969 Inaugural Address, Nixon addressed a few of the public's concerns about peace in the world. "Let us take as our goal: where peace is unknown, make it welcome; where peace is fragile, make it strong; where peace is temporary, make it permanent. . . We seek an open world. . . a world in which no people, great or small, will live in angry isolation." (Nixon, 1969 Inaugural Address) In this particular section, Nixon incites hope by using very specific words. Words with negative connotations he replaces with positive ones. For example, he replaces "unknown" with "welcome", "fragile" with "strong", and "temporary" with "permanent." This strategy, called Antithesis, is especially effective because it lets the audience look at their world and see everything that is "unknown", "fragile", or "temporary", and allows them to replace these bad things with "welcome", "strong", and "permanent" things. To be more

technical, even in terms of English grammar, this strategy is very effective. It introduces words that are looked on as bad when they are used as a descriptor, and replaces them with words that, to America especially, are very positive. America always prided itself on being all of the positive words Nixon used, especially "strong." To Americans at the time, being strong was one of the most important things they could be. At this point, America was still involved in the Vietnam War. (Ray, Vietnam War Timeline) Obviously, this wasn't the first war America was a part of. America had always won wars in the past, so for the people, there was almost a reputation to uphold. Being strong when the Vietnam War may have seemed endless, and being permanent in the face of war was all that they were working for. And being welcome to all was something that America tried to be. So Nixon, in this one short paragraph, summed up everything America wanted, and everything it wanted to be. He most likely did this in order to try to embody what America thought it was, and what it wanted to be. By doing this, he made himself seem just that much better of a person than his opponents, and simultaneously made his audience associate these words with him in one subtle, subconscious move.

In Nixon's 1972 Nomination Acceptance, he liked to refer back a lot on things that his administration in the past four years had accomplished. At one point, he spoke a lot about the economy and the property tax cut his administration enacted. He then claimed that things could still get better, and that, should he be reelected, he would make things better. He placed this hope in his audience by saying, ". . . we must continue the unparalleled increase in new jobs so that we can achieve the great goal of our new prosperity--a job for every American, . . . The way to reach this goal is to stay on the new road we have charted to move America forward and not to take a sharp detour to the left, which would lead to a dead end for the hopes of the American people." (Nixon, 1972 Presidential Nomination Acceptance) The way Nixon words this particular section gives his audience the idea that he made jobs go up and unemployment go down, and he can keep making that happen so long as he is reelected. He also outright uses the word "hope" in this section, referring to the hopes of America being a greater economy, lower unemployment, and increased new jobs. For some Americans, this may not have been their exact hopes for the country, but the way Nixon says it just makes it seem so good. As an additional strategy that was honestly quite clever, Nixon also says that a "sharp detour to the left. . . Would lead to a dead end for the hopes of the American people." (Nixon, 1972 Presidential Nomination Acceptance) This is a bit of wordplay, as the Democrats he was running against are often referred to as the "left wing" of politics. By saying this, he is inferring that voting towards the left would be a disaster for the American people, and that voters should avoid the left. It must have worked wonders, because Nixon ended up winning that election with the popular vote in every state except for Massachusetts. (Leip, 1972 Presidential general Election Data Graph)

In 1973, Nixon, for the second and final time, gave an inaugural address centered around how he would help America grow. Helping America grow and prosper was something that many people wanted, especially in the midst of war. Nixon made a promise to his audience that he would lead and act boldly (Nixon 1973 Inaugural Address), and he implored his audience to do so as well. "From this day forward, let each of us make a. . . commitment. . . to bear his responsibility, to do his part, to live his ideals--so that together, we can see the dawn of a new age of progress for America, and together. . . we can [be] proud in the fulfillment of our promise to ourselves and to the world." (Nixon, 1973 Inaugural Address) promises are very powerful to any given person. With Nixon promising to lead and act boldly (Nixon, 1973 Inaugural Address), his audience is given the hope that he will once again take charge of the nation, and lead them to a bright future, as he supposedly did in his first term. And with Nixon asking the people to make a promise to themselves to do what they can for their nation, he simultaneously gives the people their own chance to create their own hope for the future. If they promise to do all these things,

which I am sure some of them did, then they can be comfortable in the hope that America would only prosper.

Nixon may have been a very strange case, but he knew what he was doing when he referenced hope. He was able to take a few words and make them into one great hope for the future, all in a few short sentences. Nixon's use of hope is something that even people in modern times can learn from, whether they learn to watch out for possible blinding delusions it can bring, or to use it to tell audiences that they will bring the hopes of the Nation to light. Should a person learn to recognize when a politician is trying to blind the audience with hope, then said person will be able to make a more educated vote. Politicians do use these same strategies all the time, and the thing that voters need to be careful about is when a politician tries to subtly bring hope that they will end some hopeless situation. And said situation might not be fixable by one person, it may only be fixed if multiple parties agree to fix it. If a politician promises to end that, then they may not be the best choice. However, hope is all a person can have in a dire situation, so should a politician decide to mimic Nixon's use of hope, then there's a good chance that they will only help themselves gain the upper hand.

Analysis: Metaphors

Finally, Nixon's use of Metaphors about America, the American Dream, or American concepts. Metaphors, as previously stated, serve to help the audience understand something highly political, in this case, by comparing it or equating it to something that most everyone can understand. Nixon used these metaphors to mainly help his audience to see his "vision" for the future. He also uses them in tandem with strategies that are mainly about hope and patriotism to help his audience see in simpler terms what exactly he had planned.

In 1968, Nixon began the end of his Nomination Acceptance with the metaphor of a small child. The child represented the hopes and dreams of America. He used this metaphor to seal in the feeling of hope he had built up, and the metaphor was the closing deal. He said, "Tonight, I see the face of a child. . . He is black. Or he is white. . . None of that matters. What matters, he's an American child. That child. . . is more important than any politician's promise. He is America. He is a poet. He is a scientist. . . He is everything we ever hoped to be and everything we dare to dream to be." (Nixon, 1968 Presidential Nomination Acceptance Speech) In this metaphor, the child represents Nixon's American Dream analogy, previously analyzed. This child represents every American, in every situation imaginable. It's also possible he was referencing Martin Luther King's famous "I have a Dream" speech, due to the "dream for America" analogy, and the use of a child to exemplify that. This may or may not be true, but either way, it may have made some audience members think back to that speech, which meant a lot of things for a lot of people. In addition to that, because this child is so ambiguous, Nixon can give every single audience member something to relate to, and therefore something to get behind. The best way to gain approval is to gain relatability, and Nixon does exactly that by shifting the analogy of the american child just enough so that, eventually, he shares his own story, and is able to say, look, this child came from an impoverished background, but with the help of his peers and his family, he now stands before you nominated president of the United States. (Nixon, 1968 Presidential Nomination Acceptance Speech) By doing this, he helps his audience to see that they're not so different from each other, and by tweaking his metaphor just enough, he is able to get his audience to relate to him, thus creating a new level of trust between his audience and himself.

Nixon's 1969 Inaugural Address was one that celebrated the recent victories of America, big and small. Around the middle, Nixon calls back to his metaphor of the American Dream, previously analyzed. In a

smooth bit of wordplay, he says, "The American dream does not come to those who fall asleep." (Nixon, 1969 Inaugural Address) This is especially effective to his Republican audience, because Republicans generally value hard work. This tells his audience that the Dream he shared in his Nomination Acceptance wouldn't come true if the people didn't put in the work. And because Republicans are known to value hard work, this also works as a call to action. Which, for a person who values hard work, is a very exciting prospect. The other part of this clever little wordplay is that, from a grammar and wording point of view, it doesn't make sense. How can a dream not come to someone who sleeps? This serves to make the phrase stick in a person's mind, creating a memory device that Nixon could reference later, if he so chose. This one sentence may be short and to the point, but it holds a rather powerful metaphor that most likely remained in a lot of people's heads.

Nixon's 1972 nomination acceptance speech mainly served to assure his audience that the past four years had been great, and that he can make the next four just as amazing. This speech actually doesn't have as many Metaphors as Nixon usually likes to have, however there is a small one that was designed to resonate deeply with the people. ". . . you know that every politician's promise has a price--the taxpayer pays the bill. The American people are not going to be taken in by any scheme where Government gives money with one hand and then takes it away with the other." (Nixon, 1972 Presidential Nomination Acceptance) This metaphor isn't as easy to spot in the first go through, and it's likely that many Americans in 1972 missed it as well. This metaphor compares politicians to crooks, in a sense. This is a rather unique idea, as Nixon himself is a politician, and at the time, saying that every politician's promise is paid for by the people was something that would have hit his audience deeply, as the Vietnam war was still going strong. This metaphor of a politicians promise having a price that the people paid is actually a little ironic, when one considers all the promises Nixon made. However, there is a certain level of good this metaphor can do. Nixon had already had four seemingly successful years as president, therefore, he really was the perfect candidate in his audiences eyes. By using the very general term of "politician" he almost sets himself apart from the rest, especially since a bit after these words, he essentially promises the create more jobs, and get more people off of welfare. However this promise just doesn't seem as scary as another politicians promise, because Nixon meant it, as the audience believed. Therefore, this metaphor serves to set other politicians apart from himself, making them the money stealing bad guys, and him the one who will help the people earn more money.

Nixon's 1973 inaugural address was a powerful one, even by today's standards. Once again, he started outright with a very simple metaphor. "When we met here four years ago, America was bleak in spirit, depressed by the prospect of seemingly endless war abroad and of destructive conflict at home. As we meet here today, we stand on the threshold of a new era of peace in the world." (Nixon, 1973 Inaugural Address) This may be a simple metaphor, but paired with his strategy of hope, it becomes twice as powerful. Essentially, Nixon personifies America into a single entity. Over the course of the Vietnam war, Americans pulled together once again, as Americans are wont to do in war time. By molding America into one entity, he acknowledges American's efforts, and lets them know that he sees their effort, and that he sees what the war had done to America. The people of America, as a whole, were downtrodden and losing hope. At the time of this speech, he uses this metaphor to let the nation know that he sees them, and he assures them that all of it was worth it, that America as a whole is mere inches away from "peace in the world" (Nixon, 1973 Inaugural Address) Americans in the past and present have always tried to band together whenever a threat faced their home, and for their president to say that he saw that, and that their efforts were not in vain was something that many people probably needed to hear. And through this simple metaphor of America as a whole entity, he hooked his audience, and gave them the hope that peace was just a step away.

Metaphors can be tricky to spot, especially in political speeches. However, most of Nixon's metaphors on America and the American Dream were intended to be quite blatant. Nixon was able to create very subtle metaphors that, instead of turning people away, made people realize that they were all Americans, and were all a part of a greater whole. He used metaphors to create unity, give the people a common enemy (other politicians that weren't Nixon), and to give each person a feeling of historical importance, and everyone loves to feel important. By using the metaphors mixed with his other strategies of patriotism and hope, Nixon was able to convince the country that they were important, and that they mattered to him, even when he probably only saw them as a voting ballot.

Conclusion: Why These Strategies Matter Today

Richard Nixon was one of the most infamous presidents in American history. As America remembers his two presidencies, a feeling of regret and embarrassment often follow. At the time, however, he appeared to be the best candidate for the presidency. This is because Nixon knew how to use Patriotic speech, Hopeful speech, and Metaphors on America, the American Dream, and American concepts to gain his audience's attention and trust. Because of this, it's easy to see how audiences were led to believe that he was as perfect a presidential candidate as an American could get. Nixon may not have turned out to be what America hoped and thought they knew he was, but he certainly spoke like it. This is why it is dangerous to take political speeches without a grain of salt. The audience shouldn't just listen and believe, but they should analyze and learn what the speaker's favorite persuasive strategies are. In terms of future rhetorical research, it would be wise to analyze these three strategies, as politicians use them all the time, and can use them just to get the vote. And in Nixon's case, a lot of these strategies did just that. For example, he often spoke about ending the Vietnam war during both of his presidencies, however the war didn't end until almost a year after he resigned. (Ray, Vietnam War Timeline) Nixon may have sounded perfect, but sadly, his words were halfway lies, meant only to get the vote, and the people whose struggles he said that he related to and knew were simply a number in his popular vote count.

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Expressive- English 2010

1ˢᵗ Place Winner: Abril Vale-Luzardo, "Music Narrative-One Song, One New World"
For Professor Tasha Seegmiller

Music has been one of the most important factors in my life. Its presence is constant and meaningful. It guides me, it allows me to understand my emotions, comprehend those around me, and discover new things about myself. It's like a kind and never-ending melody that stays by my side no matter what. People say that our sense of smell allows us to remember certain moments in life. I think music and the memories we get from it has that same impact: it slowly crawls up inside our ears leaving honeyed pieces of treasured memories beside us. Now, there are five songs that maintain a close contact with my memory and that continue to be part of my favorite playlists. These five songs probably had the strongest meaning and impact in my life as they are part of moments when I realized mental, emotional, and even spiritual things about myself. I consider these songs the lights that guided me to find the right path in moments when I couldn't see anything around me. These songs are all different in language, beat, lyrics, and message. But they all continue to have something in common: they are part of my identity and memories.

I remember it like it was yesterday. Pink room, purple mattress, and an infinite amount of Disney stickers all over my room. Dancing on top of the black old chair that I had to the melodies of the song called "Turn Up the Music" by Lemonade Mouth, a Disney movie and band. The song was sweet, calming, and it made me think of sweet pastel cake during a Sunday afternoon. I used to live in Venezuela with my family. My everyday routine would be simple: wake up, eat, go to school, do homework, and then sleep. It wasn't an exciting routine, it was simple, constant, and normal. But it was a tedious one. Due to the political situation in my native country, it was hard to find the encouragement to do things. It was hard to find that hope that is necessary for human survival. It was difficult to find the sense of having a mission or a goal because everything continued to deteriorate. It was a challenge to maintain a positive mental attitude when there was no future. It was hard to believe that there was something else I could get out of doing homework and continuing my "normal routine" every day. People would usually come up to me and ask what I would like to be when I grow up, and I would always answer with an awkward smile and with the same phrase: "I'm not sure yet, but I'll let you know." When I would feel that hopelessness I would reach out to this song. The song gave me peace. It would start slow and would raise its melody to produce the hope I was looking for. This song allowed me to express my feelings at that time because it felt like the words were communicating the kind of escape from reality I needed: "Let the music groove you / Let the melody move you / Feel the beat and just let go / Get the rhythm into your soul / Let the music take you / Anywhere it wants to / When we stuck and can't get free / No matter what we'll still be singing" (Lemonade Mouth 0:33). I was able to find the peace of mind I needed back then. I would forget my worries and value the little things around me.

Life quality in my native country continued to decline. The day my mother told me it was time to leave my country to come to the United States, the song "Story of My Life" by One Direction came into play. So, when I was told we had to leave, I started realizing something about myself: I need my family more than I could imagine. We had to leave everything behind and only pack the few things that could fit inside the suitcase. It wasn't much. Then, it was time for the goodbyes. I remember one night I started

looking at all the family photos. Some music started playing in the back and I remember not paying much attention to those songs. Until this song started playing. I heard the way it whispered to me the following words: "Written in these walls are the stories that I can't explain / I leave my heart open but it stays right here empty for days" (One Direction 0:16). It felt like the song was listening to my longing. Hearing my emotions and telling me that everything was going to be okay. It allowed me to have my heart in my hand and treasure all the memories I had with my family while taking everything in before I would have to leave. It was a song that helped me through this moment. It felt like there was someone who could understand me. When I listen to this song, I remember the nostalgia and how it pushed me to keep going and begin this new journey.

When I arrived in the United States, I couldn't help but feel an irrational sense of longing for leaving my family behind. It was a dry and heavy emotion. At this moment I remember I needed a force that would allow me to get the courage I needed to keep going, and that was the moment I found this next song called "Pura Vida'' by Don Omar. The song is originally in Spanish and it was intended to be used during a Pepsi campaign. However, the lyrics felt like the medicine I didn't know I was looking for. The song talks about life and how we must take advantage of every opportunity because we might not have that again. One of the most impactful parts of the song is when the singer says: "You have to start living / Dreaming, laughing / Enjoying and feeling / Everything bad stays behind / Decide not to suffer / Think of being happy" (Don Omar 0:16). I remember that hearing those words pushed me to do what I thought would be impossible due to all the heaviness I was feeling: stand up, gain some courage, and start working on my future. This song was the hope I needed to hold on to during this time in my life. One of the greatest things about this song was the fact that it helped me not feel alone. It allowed me to understand that things do happen for a reason and that I need to take advantage of every opportunity. Later on, the singer says "And just dance / Forget about the sorrows and the pain / Come and sweat / Just dance / Life is just one / And it's better / To dance with the moon and the sun" (Don Omar 0:30), which was perhaps the one part and stuck the most with me as it helped me understand that everything will pass and that there is always something to look forward to.

As I kept growing, I continued to learn new things about myself. I remember that at this age, which was around fourteen or sixteen, all my friends started to build their own "romantic life." They would use Instagram and Facebook to explore this area and learn how to act, what kind of things their partner liked, how to please the other person, etc. I remember that they were so into this new aspect of their life that they would cancel plans just to hang out with their partner! I couldn't believe it at that time. But then I started thinking and considering certain details about this age. These years are usually the ones that we utilize to grow as human beings, learn what we like and what we don't, and understand our emotions. I started wondering if this moment in the life of my friends was just an exploring face in their lives. I wasn't able to put a word or explain what I was thinking about until I heard the song titled "The Feeling" by Justin Bieber and Halsey. In this song Justin Bieber mentions the following: "Am I in love with you? Am I in love with you? / Or am I in love with the feeling? / Trying to find the truth, trying to find the truth / Sometimes the heart is deceiving" (Bieber and Halsey 0:51). This was the first moment I had enlightenment about this area in the life of a human being. Perhaps my friends were more attracted to what they could explore. Interested in discovering their own feelings and trying to recognize those things they couldn't explain easily with words. This song allowed me to also explore my thoughts and articulate ideas and discoveries I was starting to wonder about. It helped me foster a deeper connection with myself.

Not too long ago, I was on a trip with my family. During this trip, I felt anxious, tired, and stressed. This is

because I was afraid that taking this break would prevent me from completing work. It was a road trip and I remember feeling trapped in the back of the car because I couldn't do anything else. At that moment I remember opening Instagram and seeing that Justin Bieber had just released an album and a new song. I decided to look at it without much enthusiasm. Until I stumbled upon a song titled "Ghost" by Justin Bieber. I decided to play the song and close my eyes to see if I would like the song or not. When I heard the first few seconds of this song, I was able to feel a sense of freedom growing inside of me. I felt like all my worries were slowly leaving my body. This song had a strong influence on this moment of my life not because of the lyrics, but because of its melody. It was sweet, slow at some points, and then fast at some others. The beginning of the song is probably my favorite part because I feel like it's a way in which a melody has the ability to tell me to leave all my worries behind and focus on the present. This song helped me to enjoy the rest of the trip. I was able to release my worries and focus on this time with my family. This song allowed me to grow and enjoy the valuable and real things about this life.

All of the songs mentioned were key parts during essential and unforgettable moments in my life. They all helped me through something. Some of them allowed me to never feel alone like the song "Turn Up the Music" did. Others like "The Story of My Life" helped me understand my emotions while holding onto the memories I created with my family when I was living in Venezuela. A song like "Pura Vida" helped me gain the courage and strength I needed when I came to the United States. The lyrics in the song "The Feeling" introduced me to this new idea of exploring my own opinions and comprehending what I was thinking while nourishing my ideas, and appreciating how we all grow differently. And a song like "Ghost" increased my admiration for melodies instead of just lyrics. All of these songs helped me to grow mentally and emotionally. They allowed me to feel like there was someone who was listening and understanding what I was going through. These songs continue to support me when challenges arise. They continue to hold on to me and provide the peace of mind that I need. They continue to be part of my identity.

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