

**Cotley College  
&  
the Cotley College English Department  
Present**

# **Write On, Sister**

**The Merry Ann DeVaney Sauls  
Academic Writing Contest  
2020**



# About the Contest

The Merry Ann DeVaney Sauls Academic Writing Contest was developed to enhance the prestige of academic writing in the disciplines at Cottey College. All students are invited to submit writing to the contest. Internal judges from Cottey College perform initial assessments of the pieces. Then, finalist external judges, typically professors or professionals in the relevant disciplines at other colleges and universities, rank the best pieces in each category.

The winners are typically honored at a public ceremony; for the 2019-2020 academic year, winners were publicized via an online video announcement. The full texts of the winning pieces are shared online via this publication.

The contest is financed through a generous endowed fund established by Merry Ann DeVaney Sauls, a 1959 Cottey graduate. Ms. Sauls sees writing as fundamentally important to success in any endeavor, and sponsors the writing contest as a way of furthering that vision.

For more information about the contest and its past winners, as well as the 2020 video announcement, visit the [contest website](#).

The co-sponsors of the contest, Dr. Jonathan Green and Dr. Sarah Polo, wish to thank the internal and external judges for their service and commitment to student writing.



# Contest Judges

## External Judges

**Composition:** Dr. Julie Perino

**Academic Writing:** Dr. Ann Reed

**Professional Writing:** Professor Donna Lenharth

## Internal Judges

Dr. Jonathan Green, English

Dr. Julie Tietz, Psychology

Dr. Kathy Pivak, English

Dr. Sarah Polo, English

Dr. Sarah Quick, Anthropology

Dr. Trisha Stubblefield, English



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# Composition

## 2<sup>nd</sup> Place:

### **Shania Roberts, “Is it Really for the People?: A Rhetorical Analysis of Kamala Harris’s Announcement Speech”**

In the current American political climate, discourse has become divisive and vague. This concept is no better seen than in the wave of campaign announcement speeches for the upcoming 2020 elections, including Kamala Harris’s. Kamala Harris announced her candidacy on January 27, 2019 in a speech discussing her background as a lawyer serving the “people,” the importance of the “American dream,” and the goals she has for America to address the truths she believes are being ignored. In analyzing Harris’s political speech, it is important to understand the work of novelist and political critic, George Orwell, who wrote an essay titled, “Politics and the English Language” in which he argues that politicians use a number of different techniques that make language nonspecific. The reason Orwell believes that politicians are vague is to “defend the indefensible” because some political actions are hard to sell to the general public. One of the techniques Orwell mentions is the use of meaningless words, which are words that do not have an agreed upon definition, but they create an emotional response in the audience. The use of meaningless words in Kamala Harris’s presidential campaign announcement speech creates an argument full of pathos, but the argument is also vague and allows for the listener to create their own definitions to the benefit and detriment of Kamala Harris’s campaign.

During Kamala Harris’s speech, she uses the word “people” multiple times and the term attempts to create an inclusionary but vague argument for her support. In the beginning of her speech, Harris conveys her story of being a lawyer and says, “My whole life, I’ve only had one client: the people.” The use of the term “people” does not have a concrete definition in Harris’s speech, but it could be interpreted as meaning “all people living in the U.S.” The definition could be positive for her argument because then she would be a defender and advocate for every person in the U.S., but this is only one interpretation of the term “people” in the context of her speech. Another possible definition for the quote is that her clients are only minority U.S. citizens. It could even be argued that her intent was to target only minority citizens because later in the same section of her speech, Harris brings up a case she worked on as a lawyer by saying, “...sitting across from the table from the big banks, I witnessed the arrogance of power. Wealthy bankers accusing innocent homeowners of fault, as if Wall Street’s mess was of the people’s making” The quote seems



to villainize wealthy bankers as trying to pass the blame off to homeowners, and even the use of “people” here seems to exclude bankers. Interpreting the term “people” as meaning “only minority citizens” would be detrimental to Harris if her intent was to unite citizens for her support. Because Harris does not give a definite meaning behind the term “people,” it leaves the term open to interpretation and creates an unclear idea of who she intends to support. Although the term “people” is vague, it does create a valid pathos argument because it is similar to the terms “for the people” and the “American people” which are common cliches that sound good to listeners. But because Harris never defines what she means by “the people,” it hurts her ethos argument because she does not clearly address her speech to her audience. The use of the meaningless word “people” in Kamala Harris’s speech sparks an emotional response by trying to unify listeners, but the lack of a concrete definition makes it hard to understand who Harris is referring to and therefore hurts her ethos argument.

Another meaningless phrase used throughout Kamala Harris’s speech is the “American dream” which is a phrase that sounds positive, but has a variety of definitions and some of those interpretations could even be antithetical to Harris’s candidacy goals. One of Harris’s key calls to action in her speech is, “We are here because the American Dream and our American democracy are under attack and on the line like never before.” Specifically, the use of the term “American dream” is a type of meaningless word according to George Orwell. The term does not have a concrete and specific definition, but “American Dream” intends to create a positive response from listeners. In the quote from Harris, the “American Dream” is simply something that is intended to be good because having it under attack is meant to be a problem. The term could mean “a country where every person is equal and free,” which would be something that people would want to protect or it could be “a country with full gun rights,” which would be only a dream for a small subset of citizens. While the positive response may be the intended effect, different definitions of the “American dream” means it can contradict what Harris’s outlines as her presidential goals, such as the definition for gun rights. Defending the “American Dream” as a campaign promise could become a problem if Harris takes office. If Harris tries to translate the vague term into definition for legislative action, it will either be too vague to address quantifiable problems in the country or it will only address one specific definition that would exclude other, equally viable definitions. Kamala Harris’s speech creates an effective a powerful emotional response by using “American Dream” to mean “something good,” but the number of different definitions for the one concept can create divide during the discussion of political action, hurting her effectiveness as president in the future.

Lastly, the announcement speech by Kamala Harris overuses the common meaningless word “truth” which she uses for what she sees as true and hurts the logos in her argument for not providing evidence for her claims. For a large section in the middle of

the speech, Harris uses the word when trying to explain problems she sees in America such as, "Let's speak truth. Under this administration, America's position in the world has never been weaker." In fact, the theme of truth is so apparent in Harris's speech that the word itself is used 21 times total. Unlike other examples of meaningless words, truth could arguably have a universal definition meaning, "the correct statement or conclusion." What makes "truth" a meaningless word is that people often disagree when applying the term to statements, such as the quote from Harris. Some agree that it is true that American's have never been weaker internationally, but others could equally argue that it is false. Because what Harris argues is not a universally agreed upon statement, she would ideally argue why she believes her statement is the "truth," but announcement speeches seem to focus more on pathos than logos. The use of the term "truth" is powerful in her speech because the term empowers those who agree with the statements because they believe in the one correct conclusion and there is a candidate who also agrees with them. The problem is that if people do not inherently agree with Harris's "truth," then they are not inclined to support someone who is claiming falsehoods as the only "truth." The use of the meaningless word "truth" creates an empowering pathos argument for those who agree with Harris' message, but a statement which is disengaging for those who may not agree with all her sentiments which makes it hard to garner support from those who do not completely agree with almost every instance she uses the term "truth."

Kamala Harris's speech uses numerous terms that create a powerful pathos argument because they are concepts that most anyone can agree are good, such as the "American dream" and truth. But, these terms are meaningless words according to George Orwell. Meaningless words are words that do not have an agreed upon definition, meaning that any one person could have a different understanding of the term and its meaning. Not having a unified definition of terms used in Harris's campaign speech means that it can fail to appeal to ethos or logos by not addressing the audience clearly or by not arguing her position. Harris seems to intend a powerful emotional response from her audience because of the use of emotive but meaningless words, which will likely be successful in the short-term for gathering support. While meaningless words tend to incite broad emotional reactions, the vagueness opens the argument to numerous interpretations. Meaningless words may give Kamala Harris a short-term victory, but applying terms such as "American Dream" and "people" into legislative action will prove difficult and she may lose faith from supporters when her definition and theirs do not align. In the past four years, it has become apparent that the American public tends to dislike non-specific promises that cannot be kept. With that as the political climate for the upcoming presidential election, Harris's would benefit by being as intentional and specific as possible. Her future speeches should avoid the vague feel-good terms that George Orwell defines as meaningless words because while emotional speeches garner attention, well-detailed policy will hopefully garner votes.

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# Composition

## 1<sup>st</sup> Place:

### **Cheyenne Main, “Mass Migration and Climate Change”**

Climate change is a popular topic in modern political discussions. However, the migration of people because of global warming is rarely emphasized by the media. When mass migration is discussed, it is done in either academic journals detailing the history of the problem or news articles focusing on recent events that either progress or regress the development of helping people affected by the political side of climate change. These two texts, one an article in *Consilience: The Journal of Sustainable Development* called “Vulnerability and Climate Change Induced Human Displacement” from 2017 by Shweta Jayawardhan, and the other a newspaper article from *The New York Times* published on December 12, 2015, by reporter and editor Sewell Chan called “Paris Accord Considers Climate Change as a Factor in Mass Migration”, are examples of texts which discuss the issue. Both sources use a logical organization of evidence with differing terminologies and purposes for the use of evidence to present an argument to invest in helping communities vulnerable to the effects of climate change. However, the newspaper article is more effective in its ability to inform the reader in a general way that includes those outside the ecological field and conducts sympathy for those affected by mass migration, or human displacement, due to the consequences of climate change.

In the first text, “Vulnerability and Climate Change Induced Human Displacement”, Shweta Jayawardhan breaks the matter of climate change mass migration into political and ecological levels. The political level focuses on the global interactions between countries and how they deal with the movement of people affected by natural disasters, while the humanitarian level discusses the different major natural disasters that have forced people out of their homes and why governments should help the survivors regain their homes, especially those on lower socioeconomic levels. The article argues for policymakers to consider those survivors, many of whom struggle with racial discrimination, and address their vulnerabilities because of those inequalities before creating a policy attending to environmental mass migration.

The second text, “Paris Accord Considers Climate Change as a Factor in Mass Migration”, is a news report on events of the United Nations climate conference in France. The article progresses from a short history of the issue to what was said in the conference

and the research reports and studies addressed. The author, Sewell Chan, presents the information in a way that emphasizes the importance of addressing human migration as a “[challenge] the world faced in adapting to a warmer planet”. Chan argues that the situation should continue to be discussed within the United Nation’s climate talks because of global warming’s indirect tendency to create “violent conflicts” within countries, which causes migration, which causes conflict between countries. His argument’s purpose is primarily to inform the public of recent changes through diction dedicated to a more general audience of news readers.

The terminologies in the two texts differ so that the scholarly article uses technical diction for an academically inclined audience, whereas the news article is more concise and digestible for a general audience of people who are interested in the issues of current events. Jayawardhan’s article is written with jargon typically used by scientists and lawmakers specialized in the issues of climate change, such as “anthropogenic” (104), “multicausal” (104), and “sovereignty” (112); words which appeal to an audience of people who already have some background on the subject, or who study in the field of the studies. Her text also defines people who have been forced out of their homes from the results of climate change as “environmentally displaced persons (EDPs)” instead of “refugees” (Jayawardhan 115). Debating the correct terminology is strictly for people in that field who regularly use terms such as climate change experts and people in charge of the political side of climate change efforts. This use of language has a different purpose than Chan’s article for *The New York Times*, which is used less for logical appeal than emotional appeal. By using words such as “ominous”, “destabilize”, and “desertification”, the author makes the problem seem immediate and detrimental to the health of society, provoking an emotional response from a general reader instead of logical reasoning to another scientist in the field. The words also require less knowledge of the subject to understand, which makes the information in the article more available to a wider audience.

Although both texts utilize logical evidence to convey their points, the scholarly text focuses on how the history of the treatment of people in climate change-induced disasters will predict how it is dealt with in the future and asserts that lawmakers can prevent that future from occurring if they take action now. While discussing the effects of climate change on natural resources, Jayawardhan states that “climate change is expected to decrease freshwater availability and affect between 75 and 250 million people in Africa by 2020” (105). This fact not only makes the reader think about the global consequences of the problem by talking about Africa, but it also makes the matter current and the danger impending if no action is taken. In the *New York Times* article, however, logos is used to inform readers of the existing situation in the scope of recent events that have transpired and helps to develop a sympathy for people affected by climate change, which can then turn into motivation to persuade government officials to make decisions that will alleviate the

problem. Chan asserts that from “2008 to 2014, an average of 26.4 million people were displaced each year by floods, storms, earthquakes and other natural disasters”, citing a report from the Internal Displacement Monitoring Center. This statistic serves to inform the reader of the severity of global human displacement due to these natural disasters, which makes the problem seem significant and universal. The experience of losing one’s home to a natural disaster is something that many people in a general audience can sympathize with, and the magnitude of people affected serves to shock and move the reader to urge their local governments to look into and address the issue.

Although Jayawardhan’s article dives deeper into the history of the matter to make her point, Chan’s article is more effective in using that history as an appeal to logic and emotion in the reader while also making the information accessible to a general audience. This, in turn, broadens the variety and the number of people who read about the issue and thus makes the public motivated to help alleviate the problem.

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## Reflection

For my project, I selected an article published by Columbia University in *Consilience: The Journal of Sustainable Development* called "Vulnerability and Climate Change Induced Human Displacement" by Shweta Jayawardha and an article published by *The New York Times* called "Paris Accord Considers Climate Change as a Factor in Mass Migration" by Sewell Chan. I found Jayawardha's article in JSTOR through the Cottey library databases and Chan's article through the Environments section on *The New York Times* website. I selected Jayawardha's article because I was interested in climate change, specifically how it affects politics with the relocation of those affected by natural disasters, and I selected the newspaper article because it relates to the other article and goes into some of the same background information, while also adding new developments to the alleviation of the problem. My paper seeks to convey the argument that although the two papers are about the same topic and argue for similar goals, they are written towards two different audiences and so use their terms and logical evidence for two different purposes. *The New York Times* article is more effective than the other one because of its ability to condense history down into digestible sentences that anyone interested in the situation can understand and to report new developments in the events of climate change displacement that makes the problem immediate to a larger variety of people. I was successful completing this project in my ability to analyze the two different texts for their most basic argumentative components, which I have done before in other college-level classes, so it was an easier task for me to handle. I was most challenged by figuring out how to write and organize the paper. It was difficult trying to figure out how to balance my analysis paragraphs of the two texts, since one was longer and more extensive than the other one. If I were to give advice to a student completing this assignment next year, I would tell her to make absolutely sure that her scholarly article is from a journal, and to analyze her texts completely and then plan the paper before she starts to write it, to help break the whole thing down into smaller chunks. This project has taught me how to manage my time while writing a paper, which I will use in my future college experiences going forward.

# Academic Writing

## 2<sup>nd</sup> Place:

### **Hailey Lovgren, “Milk & Methane: The Impact of Dairy on Global Emissions”**

#### INTRODUCTION

Global warming has become an extremely important topic in the last few years. The United Nations warns that humanity is quickly approaching the point of no return, where the damage done to the Earth is irreversible. Human resource consumption as it exists is unsustainable and the world must look for novel ways of reducing emissions including greenhouse gases. The major greenhouse gases are methane (CH<sub>4</sub>) and carbon dioxide (CO<sub>2</sub>). According to the Environmental Protection Agency (EPA), methane is a potent greenhouse gas. Methane is 25 times more effective at warming the Earth than carbon dioxide and remains in the atmosphere for 12 years. It is also a precursor to ozone, another greenhouse gas. Methane makes up 10.2% of greenhouse gases emitted from human activities in the U.S. This may seem insignificant when compared to other emissions, but methane’s capacity for absorbing and emitting energy means it can effect greater change with lesser amounts. Ruminant animals produce 27% of this methane, and when combined with manure management from these animals, agriculture is the largest producer of methane in the United States.

According to the Food and Agriculture Organization of the United Nations (FAO), there are approximately 1.4 billion cows on the planet, and they account for 65% of livestock methane emissions. What is it about cows that causes all that methane? It has to do with the way they digest their food. Cows are ruminant animals, meaning they possess a rumen in which they ferment food (Moran 2005). The cow’s digestive system is unique in that it can digest plant matter that other animals can’t, such as stems, shells, and plant by-products. This is due to the cow’s four-chambered stomach, consisting of the rumen, reticulum, omasum, and abomasum. The abomasum is analogous to the human stomach and is the only true stomach. The other compartments are used as fermentation vats, breaking down plant fibers and other material. The rumen is the largest compartment, holding about 50 gallons of material. The cow ingests massive amounts of partially chewed food and bacteria in the rumen soften and break down the plant fibers. Once this material is less than 1mm in length, it passes to the reticulum where it is regurgitated and chewed between 40-60 times, a process called chewing the cud or rumination. The bacteria and protozoa in the rumen and reticulum are the reason cow can extract nutrients from

cellulose. The amount of time food spends in the reticulum and rumen is called rumination time and it varies between cows on the feed, microbe community, and the cow itself. After being rechewed, food is then properly swallowed and passed to the omasum where it is further broken down and excess water is removed. The last chamber is the abomasum; the cow's gastric juices digest the rest of the material and pass it to the small and large intestine (Moran 2005).

The microbes in the rumen produce three major volatile fatty acids (VFAs): acetate, butyrate, and propionate. These acids provide about 70% of the cow's energy and determine milk fat and protein depending on their proportions in the rumen (Moran 2005). These proportions can also be used to determine methane emissions (Tampio et al. 2018). Specifically, higher levels of propionate are associated with good animal health, as well as reduced numbers of methanogenic bacteria (Mamuad et al. 2014). Another important end product is ammonia, which the microbes in the rumen use for amino acid synthesis. This is a major source of protein for the cow as bacteria are 60-70% protein (Moran 2005). The breaking down of plant fibers, fibrolysis, releases huge amounts of hydrogen which bacteria used to produce massive amounts of methane (Jayanegara, Leiber, and Kreuzer 2012). Popular culture believes that flatulence is the problem; however, only 3% of methane leaves from the anus while the rest is eructed out the mouth (Muñoz et al. 2012). The FAO shows that dairy farming is a fast-growing industry that accounts for 20% of agricultural methane output. In the last 30 years, milk production worldwide has grown 53%. Most of that milk is made by cows; they produce 83% of the world's milk. The United States contributes significantly to this as the number one producer of cow's milk. This presents a significant opportunity in the dairy sector to lower America's methane emissions and this can be accomplished by making changes that lower a cow's methane production.

Many things factor into a cow's methane production. One of the largest factors being dry matter intake or DMI. Lactation week, milk yield, genetics, rumen biome, and farm location can also play a role in how much methane a cow produces (Bell et al. 2014). By manipulating these variables, we can lower the amount of methane that a cow produces. There has been extensive research in this area, however many studies are done *in vitro* and will have limited application in real world scenarios. Many of the studies are done on a small scale and the results are not feasible for commercial farming situations. With the development of new technology, studies are becoming larger and more reliable. Automatic milking systems (AMS) are being fitted with infrared methane analyzers. Cows visit the AMS multiple times a day, allowing for repeated large-scale measurements (Garnsworthy et al. 2012).

The easiest and most immediate way to reduce enteric methane emissions is to manipulate the cow's diet. Cows share an important biological relationship with the



ruminal microbe community and influencing the community with different additives can cause changes in energy balance, milk production, and most importantly methane emissions. This also means that the type of diet and feedstuff can have drastic impacts on production, emissions, and any treatment options used. Different dietary additives have been shown to reduce emissions (Bhatta et al. 2015, Carulla et al. 2005, Haisan et al. 2014, Baraz et al. 2018). Some examples include plant extracts, mineral salts, fats and oils, and antibiotics. The drawback is that no singular feed solution will work for every cow, and what reduces methane in one cow may increase it in another (Watt et al. 2015). There are also a few studies on adding bacteria to the feed (Mamuad et al. 2014). The mechanism of any dietary additives is to change the microbiological composition of the rumen to one that produces less methane. However, rumen composition has been shown to have a genetic component and changes in the biome are not permanent (Difford et al. 2018). Due to this genetic component, the most promising method is to breed cows that produce less methane. By identifying phenotypes of methane emission, cows can be bred to permanently reduce emissions.

The purpose of this review is to identify promising treatment options in the current literature for the reduction of enteric methane in the dairy and cattle industry. My hypothesis is that cows can be genetically bred to produce less methane over time and also be fed one or multiple dietary additives to further decrease methane emissions.

## DISCUSSION

### *I. Bacterial Additives*

In an effort to mitigate methane emissions, researchers have looked at antibiotics as a way to reduce methanogenic bacteria, or methanogens, in the rumen. Monensin is an antibiotic used industry-wide to prevent the disease coccidiosis, a parasitic infection of the animal's intestinal tract (Matsuoka et al. 1996) and also to relieve bloat during lactation (Grainger et al. 2008). Odongo et al. reported that a dose of 24 mg per kg/DMI lowered by an average of 7% when expressed as grams of CH<sub>4</sub> per day (2007). This supplementation of monensin was added to a total mixed ration (TMR) diet. A TMR diet consists of all total products needed for proper cow nutrition mixed into one homogenous feedstuff. This is then offered ad libitum (at liberty) to the cow. The supplement had no effect on dry matter intake which is important as a lower dry matter intake can be an underlying reason as to why a treatment lowered methane production. A lower dry matter intake is also associated with a lower milk production and causes a decline in production value of the cow. Odongo et al. found that these results persisted for 6 months, indicating that the bacteria in the rumen were not developing resistance. However, in the same study milk fats and proteins were reduced which can represent a loss in product value to the farmer. This lower market value can make monensin a hard sell to dairy producers as a way to reduce emissions.

Grainer et al. did a similar study with a smaller dose of monensin and found that it tended to increase milk fat and protein and improve energy efficiency but had no effect on methane emissions (2008). They suggested that a higher dose was needed and later repeated the study. With the higher dose, Grainer et al found that monensin had no effect on milk solids, production, energy efficiency, or methane emissions (Grainger et al. 2010). Odongo et al. also mentioned many studies that suggest the reduction in methane will not persist long term (Rumpler et al. 1986, Johnson and Johnson 1995, Sauer et al. 1998, Guan et al. 2006). Monensin as a mitigation strategy does not seem viable based on these studies.

The end goal of reducing methane emissions is to lessen the environmental impact of the dairy industry. So, one must consider the 'footprint' of any treatment strategies before implementing them. Odongo et al. added 24 mg of monensin per kg/DMI in their study; this would equate to approximately 1,200 mg of monensin being given to each cow (2007). If even half of the dairy and cattle industry adopted this strategy, 57,000 kg of monensin would be used daily, no doubt speeding the development of antibiotic resistance. According to the World Health Organization, antibiotic resistance is one of the biggest threats to global health, food security, and development, with farming practices such as these being one of the largest contributors. Antibiotics as a way to reduce methane emission is not a viable or environmentally friendly strategy.

Another way researchers have tried to change the ruminal microbe community is by adding a probiotic, or a directly fed microbial (DFM). This is a feed additive that contains live bacteria that causes changes in the existing ruminal populations. Mamuad et al. performed *in vitro* studies where fumarate reducing bacteria were added to ruminal fluid (2014). These bacteria reduced fumarate to succinate, which is an important intermediate for propionate production. Propionate is associated with animal health and energy balance. They found that the concentration of methane was reduced, the number of methanogens were reduced, and propionate levels increased. The bacteria in the DFM most likely competed with methanogens for hydrogen needed for fumarate reduction. Hydrogen is critical in the formation of methane. These findings are promising but must be tested *in vivo*. Jeyanathan et al. found when they added DFM to a cow's diet it had no effect on methane or milk fatty acids, and one strain actually increased methane intensity (2019). They also found it had no effect on the bacterial population numbers. There was speculation that the concentration of DFM was not high enough to have any effect, but the dosage in the Jeyanathan et al. study was comparable to the dosage in the Mamuad et al. study (2019, 2014). Therefore, the cows' stomach environment must exert some control over the ruminal bacteria population and a DFM treatment plan is not feasible.

## *II. Mineral Salts*

Researchers must look to other ways to cause shifts in the ruminal bacteria. Mineral salts are already widely used in the industry and have recently been looked at for their anti-microbial properties. Ruminants have a strong craving for mineral salts, especially during lactation. Cows voluntarily seek out this supplement. Historically, mineral salt blocks have been used to aid digestion, feed intake, reproduction, and lactation, and are a common supplement found on almost every farm (Li et al. 2017). As mineral salt blocks are readily available in the industry, it could be easily and cheaply implemented as a possible way to reduce methane. Li et al. found that mineral salts tended to increase milk fats and proteins and could possibly increase milk production (2017). The treatment also reduced methane production by inhibiting the methanogen population size. This study was done *in vivo*, therefore mineral salts is a possible way to reduce emissions.

In a later study, the same team tested the effectiveness of mineral salts across age groups (Liu et al. 2017). They found that addition of mineral salts to adult cows increased the amount of ammonia in the rumen which translates to more protein for the cow. It also increased the number of propionate-producing bacteria, which is an indicator of good ruminal health. Propionate requires hydrogen, so the bacteria compete with methanogens that also use hydrogen and this in turn lower overall methane production. In heifers, they found no evidence of these changes. Mineral salts have an age dependent effect, so it is a treatment option that is not applicable to every situation (Liu et al. 2017). However, it is cheap, readily available, and sought out by the animal, and any methane reduction could be a small benefit from widespread use.

### *III. Tannins*

Tannins as a feed additive has been a huge area of study in recent years. Tannins are phenolic compounds responsible for the bitter taste in red wines and unripe fruit (Khanbabaee and van Ree 2002). The name tannin comes from 'tanning', as many of these compounds were used to waterproof and preserve animal hides. Tannins are found in many different higher order plants, such as oak, pine, and birch trees. They have the ability to form compounds with heavy metals, alkaloids, and other proteins and precipitate. This is the mechanism in which they inhibit methane production (Bhatta et al. 2015). Tannins come in a large variety of structures and forms and can be grouped into four major classes. The class of interest for methanogenesis reduction is condensed tannins. Condensed tannins are formed by the coupling of a single building block, called a catechin unit. The tannins can be oligomeric or polymeric and reach sizes of over 50 catechin units (Khanbabaee and van Ree 2002).

Many early studies on tannins have conflicting results. This is likely due to a lack of technology for directly measuring methane emissions in a commercial environment. The most common techniques found in these early studies were the sulfur hexafluoride tracer

method and the use of respiration chambers (Muñoz et al. 2012). Respiration chambers are controlled rooms that have a set air volume and flow. Usually operated under negative pressure, the air in the chamber is changed a set amount of times per hour and analyzed using an infrared gas instrument. This captures all gas emitted by the individual within the chamber. However, results may not apply to free ranging animals as they occupy a larger area than can be contained by a respiration chamber. Chambers are also costly to produce and require trained animals, which requires time and money (Muñoz et al. 2012). The tracer method involves placing a permeation tube containing sulfur hexafluoride into the rumen and an evacuated cannister around the neck of the animal. The cannister takes samples from the air around the animal's mouth and nose using capillary tubing. The contents of the cannister are then analyzed by gas chromatography (Hammond et al. 2015). This technique does not account for emissions from the rectum and requires the animal to wear a harness. Muñoz et al. compared the techniques and calculated the average percent of emissions emitted through the rectum (2012). They confirmed that the tracer technique is associated with higher variability between individuals, but averages were comparable to the respiration chambers. This agrees with a later study done by Hammond et al. (2015). Muñoz et al. also found that the tracer technique overestimates methane emissions (2012). Permeation tubes do not release gas at a steady rate as thought. Instead, the rate of release decreases and increases with time. Lastly, they found that only 3% of the methane is emitted from the rectum. By correcting the tracer technique with the rectal emission and correction of the permeation tubes, the reliability of the sulfur hexafluoride technique can be massively improved.

One of the first studies that established a link between condensed tannins and lower methane emissions in dairy cows was performed by Woodward et al. (2001). They used the tracer method to estimate the emissions of the cows and found that cows fed a tannin-containing *Lotus* species had a lower methane emission per kg of dry matter intake. A similar study found that feeding sheep *Acacia mearnsii* as a tannin source reduced methane emission by 13% (Carulla et al. 2005). They used a respiration chamber to obtain the amount of methane produced. This study was repeated on lactating dairy cows by Grainger et al. (2009). They found that condensed tannins reduced methane production by a considerable amount, however milk production was also reduced. This is an unacceptable side effect and would likely not be accepted by the industry. Higher milk reduction was associated with higher tannin supplementation. Grainger et al. explained that the negative effects of tannins was due to the ratio of crude protein in the feed and the high astringency, or protein binding capability, of the condensed tannins (2009). This suggests that there is an optimal tannin concentration, which must be determined in conjunction with crude protein ratio and dry matter intake. Jayanegra et al. did a meta-analysis on existing studies and found that generally tannins are associated with a decrease in nutrient digestibility and

fiber degradation (2012). This indirectly reduces methane production as fibrolysis supplies hydrogen to methanogens in the rumen.

Monomers of tannins, mainly pyrogallol, gallic acid and tannic acid, are known to be toxic to methanogens, suggesting a direct effect of tannins on methane production. This idea was further explored by Bhatta et al. (2013). They studied the effect of different tannin containing leaves on the protozoa population and methane production *in vitro*. Bhatta et al found that some tannins lowered the population of protozoa that lived symbiotically with methanogens. However, in a later study by the same authors they found that certain tannin additives can suppress methanogenesis without affecting the protozoa population (Bhatta et al. 2015). This concept was tested *in vivo* by Moate et al. (2014). Dairy cows in late lactation were fed grape marc (skin, seeds, stems) and had a 20% reduction in methane production without a reduction in dry matter intake which is usually associated with tannin addition. This reduction was associated with changes in the ruminal bacterial and archaeal communities. Moate et al implied a temporal element, meaning lactation stage matters in terms of maximizing the effectiveness of tannin additives. They also raised questions on the long-term effect of tannin addition (2014), which were answered by Duval et al (2016). Duval et al. performed the first long term study on tannins and agreed that low levels of tannins can reduce methane emission and they found no adverse effects on milk production. The reduction did not decrease with time, meaning the ruminal community could not adapt to the treatment. In the same study, they also suggested changing the tannin additives in accordance with the lactation cycle for more pronounced effects.

Tannins have great potential for lowering the footprint of commercial dairy farming, but more studies on all of these factors are required to find the “golden ratio” for maximum methane reduction at minimum cost, financial or milk-wise. There needs to be studies to find which plant derivatives achieves the greatest methane reduction, as each plant creates different amounts and combinations of tannins. There also needs to be a reliable way to dose each cow without causing a reduction in milk production. Most importantly, there must be a renewable way to produce these tannins, otherwise the negative environmental impact of implementing this treatment will outweigh any positive impact created by methane reduction.

#### *IV. Oil Additives*

Many studies look at addition of various oils to the diets in an effort to reduce methane. Beauchemin and McGinn found that addition of canola oil *in vivo* reduced methane production by 6% but also caused a reduction in dry matter intake. The oil suppresses feed and acts as a hydrogen sink (2006). This deprives the methanogens of hydrogen they use to produce methane. However, this is undesirable as a reduction in dry matter intake will lead to a reduction in milk production. In the same study they performed

some *in vitro* trials as well. Beauchemin and McGinn found that the addition of fumaric acid could reduce methane production by being reduced to succinate, and eventually being formed into propionate. In the same study, they found similar results with adding a blended essential oil. It also increased volatile fatty acids overall and increased ammonia and bacterial protein (2006). However, these results were found *in vitro* so they may not function in the real ruminal environment.

Some other *in vitro* studies include adding thyme essential oil, disodium fumarate, and glycerin. Adding thyme essential oil was found to decrease total volatile acid concentration but increase propionate leading to better energy balance (Baraz et al. 2018). The oil also lowered methane production and increased the partitioning factor. This is likely due to the fact that thyme oil contains tannins and there are many studies proving tannin's ability to lower methane (Naumann et al. 2018, Hassanat and Benchaar 2013) The partition factor is calculation that represents the efficiency of the cow's digestive system (Jackson et al. 2010). Disodium sulfate was found to also increase the partitioning factor and increase the proportion of propionate without decreasing overall fatty acids. This also saw a decrease in methane production (Baraz et al. 2018). In the same study they also gave the treatments together and found that no effects occur likely because the tannins in the thyme essential oil bind to the disodium sulfate and precipitate it, cancelling each other out. So, these treatments may not be used together for greater reduction. Overall the disodium sulfate on its own improved the efficiency of the cow's digestive system and lead to a reduction in methane.

Almeida et al. tested if glycerin or sodium monensin could possibly reduce methane and found that both additions on their own reduced dry matter intake (2019). The sodium monensin caused things to stay in the rumen longer, leading to the cow feeling fuller and taking in less food. They only found that sodium monensin lowered methane production and the addition of glycerin had no effect. For both these studies, the methane measurements were done *in vitro*. The rumen is very different than a lab-created environment, so these studies have limited to no application for receiving positive results in practice. These preliminary studies have been done very recently, highlighting how far behind the research is in terms of making real significant change in methane emissions. These studies were also not conducted in the United States, which is interesting as the United States is the number one producer of cow's milk according to the FAO. Many of these studies show promise, but far more research needs to be done *in vivo* before any of these additives could be used in a commercial environment.

### *V. 3-Nitrooxypropanol*

The compound 3-nitrooxypropanol has only recently been synthesized. It is a highly specific enzyme inhibitor that targets the methyl-coenzyme M reductase, which is used in



the final step of methanogenesis in the bacteria of the rumen. 3-nitrooxypropanol is a highly specific inhibitor making it a promising feed additive to reduce the production of enteric methane (Duin et al. 2016).

The *in vitro* studies reported a massive reduction in enteric methane production, 86% of emissions were reduced with no effect on volatile fatty acids (Romero-Pérez et al. 2015). This is important as no effect on volatile fatty acid concentration indicates the additive will have little or no effect on milk fats, proteins, and production. This same study found that 3-nitrooxypropanol also reduced the proportion of acetate present, increasing the proportion of the favorable propionate. The hydrogen created from fibrolysis was redirected from methanogens to volatile fatty acids. The next step was to do *in vivo* studies. In sheep, 3-nitrooxypropanol significantly reduced methane production when added to a total mixed ration diet for 30 days (Martinez-Fernandez et al. 2013). In dairy cows, it was found to cause a reduction in methane production greater than the sheep trials. The addition of 3-nitrooxypropanol was also found to have no effect on a dry matter intake or milk, and actually increased weight (Haisan et al. 2014). This can be a gain in production value for cattle. They found that it tended to increase propionate proportion as seen in the *in vitro* studies. Another long-term study agreed with findings that 3-nitrooxypropanol significantly lowered methane emissions without negative effects on dry matter intake or milk production (Hristov et al. 2015). They also saw weight gain reported in the Haisan et al. study. The reduction in methane persisted through the length of the study. This makes 3-nitrooxypropanol a strong candidate for making meaningful environmental change in the dairy and cattle industry.

However, there are some weaknesses to this compound. The effects are only seen as long as the compound is in the cow's digestive system (Hristov et al. 2015). This means it must be continually taken for methane reduction. This may represent a high financial and environmental cost for commercial use. Hristov et al. also reported an increase in hydrogen emission from the cow that slowly decreased over time. They were unsure where the extra hydrogen was being used in the rumen (2015). This unknown represents a potential harm to the animal, as the unknown could present itself as a harmful side effect after long-term use. If every effect of an additive cannot be clearly explained, then it is unethical to implement that additive as a treatment option. More long-term studies are needed to determine if there are any negative effects on the animal after years of dosage.

## *VI. Adjusting Fat and Fiber Content*

Because of the close relationship between the cow and its ruminal bacteria, any change in the diet composition of the cow will result in changes in the bacterial community. Some studies show that by adjusting the fat or hemicellulose could cause changes in the microbe community that could lower methane emissions. Drehmel et al. found that adding

fat to a cow's diet slightly reduced methane when expressed as CH<sub>4</sub> per kg/DMI. In low fat diets, adding fat also improved net energy balance (2018). In the same study they found that adding hemicellulose to the diet could reduce methane per neutral plant detergent fiber by improving the digestibility of the fibers.

This seems like it could provide some strategy for methane emission, but according to Williams et al. this strategy would not provide any environmental relief in the long run as the carbon footprint to make and deliver the addition fats would cancel out the benefit of any reduction in methane (2014). They also point out the expense of fat, meaning many farms would not be able to afford the additive. This is a problem most dietary additives run into; there is no dietary additive that will have a small or nonexistent impact on the environment from production, packaging, and delivering. Therefore, we must look into methods of reduction that are permanent, cumulative, and have an ecofriendly manufacturing process.

One such method is altering the storage of the corn given to cows. Ensiling of corn feed is a process by which bacteria ferment the plant sugars and change the pH for long-term storage. This process changes the way feed ferments in the rumen; fresh feed producing less methane than ensiled feed (Woodward et al. 2001). Hatew et al. found that corn that was harvested at an increased plant maturity before ensiling was associated with lower methane production (2016). The longer corn is allowed to mature on the plant before being harvested, the more starch is present in the corn. This high starch content lowers the ruminal pH which lowers the richness of the methanogenic bacterial community (Hatew et al. 2016). This treatment also had no effect on milk production or volatile fatty acids. This may offer an effective strategy for reducing methane emissions, but it would only decrease methane production in cows who are already fed a corn silage diet.

## *VII. Environmental Factors*

Some ideas for methane reduction making changes to current practices and infrastructure to effect some change in emissions without incurring additional costs. Each cow varies in their rumination time and therefore their emissions, but this variance can be exaggerated by the environment (Watt et al. 2015). Grazing pattern and the level of activity affects methane production but there is little research on how behaviors can change emissions. Older, more dominant animals tended to be classified as "high ruminating", meaning it spent more time fermenting and chewing its food. This was associated with a higher dry matter intake and therefore a higher methane production. Younger animals tended to be classified as "low ruminating", spending less time digesting food and more time being active. This results in a lower feed efficiency and lower methane production, but a higher activity level could be considered beneficial to the cow. Watt et al. theorized that by manipulating the grazing pattern and therefore the rumination pattern one could lower

methane emissions at no cost (2015). However, large gaps in the literature remain and studies have yet to be completed that test the hypothesis that changing the grazing behavior can lead to lower methane production.

Some researchers have looked to computer simulations to test different hypotheses for lowering methane emissions and production costs. One such simulation looked at making insemination practice changes to affect reproductive efficiency. Using a hormone regimen for ovulation to have a pre-set insemination and conception date led to lower methane emissions but only in some situations. Herd size and individual cow variation can lead to changes in methane mitigation. However, the hormone therapy lowered production costs in all situations even after accounting for the price of hormones (Archer et al. 2015). This money saving benefit means the treatment would be more appealing to dairy farmers. However, one must question the impact of using commercial amounts of hormones to control conception. Studies have found hormonal treatments are found in the feedlot surface and in the runoff of the farm (Yang et al. 2012, Mansell et al. 2011). According to the World Health Organization, the presence of excess hormones in the environment can have negative impacts on human health and vital ecosystems. This treatment option is not a viable way to reduce methane emissions in dairy farms.

#### *VIII. Genetic Manipulation*

In addition to making changes to the diet and behavior of the cow, there is an increasing interest in manipulating the cow's genetic lineage to reduce methane emissions. Historically, dairy cows have successfully been bred to produce more milk and this breeding program can be applied to methane emissions (Oltencu and Broom 2010). Methane is highly related to rumination time and this has been shown to vary between animals (Watt et al. 2015). Many suggest that there is a genetic component to methane production, and this is more important than the microbes in the rumen (Difford et al. 2018, Bell et al. 2014). This explains why many treatments work *in vitro* and not *in vivo*. Difford et al. also implied that the genetic component of the bacteria profile was the reason the ruminal bacteria cannot be permanently altered. After stopping treatments that alter the microbe community the genetic component of the rumen will shift the community back to the same number of methanogens.

Instead of trying to change the bacteria, it may be more effective to change the genes. Many studies have found that cows can be classified as low or high CH<sub>4</sub> emitting and that measurements of these classifications are highly repeatable (Lassen and Løvendahl 2016, Haque et al. 2015). Lassen et al. tested the accuracy of a new, noninvasive, way to measure methane emissions from cows (2016). Portable infrared detection units were placed in the automatic milking machine and air was sampled every 20 seconds. They found this to be an accurate way to measure individual methane emission differences with

an acceptable level of repeatability. Bell et al. conducted the first commercial scale study using this method and they confirmed a genetic basis for methane emissions in dairy cows (2014). They measured emissions from approximately 2,000 cows while milking. They ensured all cows had a similar diet. After correcting for variables such as the farms that the data were coming from and week of lactation, there was still a significant difference in methane emissions, indicating that genes play a role in methane production. The farms had predictable but unexplainable variation in methane measurements, indicating that more research is needed to explain the impacts of location on methane emissions. This study was particularly important when compared to other studies. The emissions were repeatedly measured in the dairy cow's normal environment, meaning the data was more accurate for real industry conditions (Bell et al. 2014). Building on this study, Engelen et al. confirmed that methane and carbon dioxide production is genetically variable (2018). They attached an infrared gas sensor to the automatic milking system (AMS) so they could measure emissions every time the cow ate. Engelen et al. defined their experimental phenotypes as mean methane, mean carbon dioxide, a ratio of these two means, and the logarithm of all these values for a total of six phenotypes and also tested the repeatability of these phenotypes. They found that all phenotypes are heritable and repeatable but selecting for certain phenotypes may have a greater impact on methane emission (2018). Specifically, selecting for lowest mean methane production per AMS visit would be expected to give the greatest reduction in methane.

There have been many other suggestions as to what phenotypes should be used for the greatest reduction in methane. There are two types of traits or phenotypes, direct and indirect. A direct phenotype is a measurement of methane from the animal and an indirect phenotype is a trait that affects methane production (de Haas et al. 2017). It would seem that the easiest option would be select for lower methane production. However, methane production is highly correlated with dry matter intake (DMI) and a decrease in methane would also cause a decrease in dry matter intake. A lower dry matter intake causes a lower production value by lowering milk production in dairy cows and body mass (beef) in cattle. A ratio of lower methane to carbon dioxide could be selected for, but Engelen et al. predicted that over time this phenotype would be less effective than selecting for just methane (2018). A direct phenotype may be more likely to cause negative effects, so a different approach is needed (Knapp et al. 2014).

A way to avoid negative effects from direct phenotypes is indirect phenotypes. Indirect phenotypes are a way to affect multiple traits with potentially less detrimental effects. Basarab et al. (2013) proposed an indirect phenotype based on residual feed intake. Residual feed intake is the predicted amount of feed an animal will eat minus the feed actually eaten. This was then adjusted for animal size by measuring the backfat ( $RFI_{fat}$ ). This phenotype predicting many other traits, while having few negative effects on the

wellbeing of the cow. Cows that had a low RFI<sub>fat</sub> had a lower dry matter intake but a higher feed conversion ratio, preventing the loss of production value. A lower dry matter intake directly correlates with lower levels of methane emission, making this a promising indirect phenotype (Basarab et al. 2013). This is predicted to lower methane emissions between 0.75%-1% per year, affecting long-term cumulative change. Some other indirect ways to reduce methane emissions include breeding healthier and more efficient animals. If the animals are more efficient at converting their food, fewer animals can be used to produce the same amount of milk. This has already been implemented in a Canadian dairy sector and they reported a reduction in methane emissions up to 10% (de Haas et al. 2017). Improving the lifespan and reducing disease among cows may also reduce methane emissions up to 3% (Wall et al. 2012). Making effort to reduce animal waste by culling through better birthing practices has also been shown to help reduce some methane emissions (Knapp et al. 2014).

Some hurdles to implementing this breeding strategy is how to include it in the industry-wide breeding goals and what the long-term ramifications might be. Breeding goals have long been used by the dairy industry to regulate functional traits (e.g., mastitis resistance, stillborn rate) and productive traits (e.g., milk production) (Hazel 1947). Breeding only for traits that are economically valuable causes a breakdown in functional traits, as many functional traits are negatively correlated with productive traits (Nielsen et al. 2005). However, reducing enteric methane production has no economic or functional value as a breeding goal, which prevents farms from prioritizing methane reduction. Adding a nonmarket value to the breeding goals could help overcome this problem. Nielson et al. found a way to derive the nonmarket value of several functional traits simultaneously, allowing functional traits to have more weight in the breeding process while preserving economic value (2006). Convincing the dairy industry to prioritize lower emitting animals may be difficult unless the industry and society in America starts to value the environment.

Still, much more research is needed to make meaningful change in the dairy industry. The most promising method is genetic breeding and using these breeding strategies can create permanent and cumulative changes in methane emission with minimal negative effects on the animal and the environment. Unfortunately, current studies are not far along enough to report long-term change. Since this area of study has lots of room for growth, there are no studies on any dietary additives in genetically modified cows. It is unknown whether compounds such as tannins or 3-nitrooxypropanol can further reduce methane when used in lower methane producing cows.

## CONCLUSIONS

Methane is potent and dangerous greenhouse gases that poses a significant risk to the environment in the age of global warming. The livestock industry produces most of the

United States' methane, so there exists significant opportunity for reduction in this sector. Humanity is coming to a turning point where the damage done to the Earth cannot be undone. Emissions must be cut wherever they can be. There are generally two main ways to lower methane emissions in cows, by causing shifts in the ruminal bacteria population and by changing the genetic makeup of the cow.

Methods which target the bacteria in the rumen are short-term solutions, the most promising of which are tannins as an additive although much more research is needed before implementation to find the source and ratio for maximum reduction in methane. The 3-nitrooxypropanol inhibitor also shows promise, but again more studies need to be done on the longest-term scale, requiring studies with whole lifetimes of dosages. Adjusting fat and fiber content can cause differences in methane emissions but one must consider the environmental impacts of any treatment option, otherwise any steps taken to lower emissions will be cancelled out by unintended consequences. Most of the other additives have not been tested *in vivo*, so they have no real viability as treatment options.

Genetic manipulation is the most promising method for permanent long-term change in the emissions of the dairy industry. The best and safest way to genetically lower methane emissions is to use an indirect phenotype, such as residual feed intake to avoid a reduction in functional traits. Maintaining animal health, preventing disease, and selecting for longevity can also lower methane emissions.

#### *IX. Future Directions*

An important future study would be to test the effectiveness of multiple treatments at one time. Treatments may cancel each other out or increase methane mitigation effects. I would like to study the effects of tannins and 3-nitrooxypropanol in cows with a genetic background of low methane production.



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# Academic Writing

## 1<sup>st</sup> Place:

### **Becca Vukin, “Poor LGBTQ Representation on Television and How it Can Affect Its Audiences: A Brief Overview of the CW’s Recent Broadcast History”**

#### Abstract

LGBTQ+ representation on television plays a role in how the general populous feels towards the community. The CW is a channel with a historically rocky relationship with positive and intersectional representation of the LGBTQ+ community. Their monofaceted portrayals, their complete lack of representation for a number of identities, and their tendency to fall into negative and unhealthy tropes all mean that they have a long way to go before the content they produce is on par with what many individuals expect from representation of the typical identity: white, able bodied, conventionally attractive, and heterosexual. Though considering the importance of positive representation in the media, this paper also acknowledges that media is not the only deciding factor in acceptance and that many factors play a part in all people’s mental and physical well being. Overall, there are a number of ways the CW can immediately begin to work to make their content more LGBTQ+ friendly and their content creators more diverse.

#### Poor LGBTQ Representation on Television and How it Can Affect Its Audiences: A Brief Overview of the CW’s Recent Broadcast History

The world today is overly saturated with media; it is everywhere and more readily accessible than ever before. As many young adults and teenagers spend hours a day consuming media, its growing influence becomes more and more obvious. Today’s world is also becoming more open and supportive of LGBTQ+ individuals. LGBTQ+ is an acronym that is meant to be inclusive of all of those individuals who do not fall under the assumed label of heterosexuality. The identities it includes are lesbian, gay, bisexual, transgender/transsexual, queer/questioning, and the “+” to show that more identities exist. The media, however, does not often reflect the diversity and complexity that exists in the real world.

Most of today’s younger generations want more equality and positive representation, both in the real world and in the media. The CW is a channel that markets

its shows to those between 18 and 34, though as a number of its shows are high school based it is not surprising that it is popular with those under 18 either (Lausch, 2013). The only issue with watching such a popular channel is that their history of good representation is severely lacking. Due to their monofaceted portrayals of bisexual individuals, their exclusion and omission of transgender and asexual individuals, and their tendency to fall into negative tropes, the CW is not living up to the responsibility they have as a producer of widely consumed media to introduce positive and multifaceted LGBTQ+ representation into the world. This paper will explore these shortcomings and examine how such portrayals, or lack thereof, can affect the mental health of young LGBTQ+ individuals.

This short analysis of the CW's shows is by no means comprehensive. These examples are the most readily accessible because they are often the main characters of their respective shows. This means that some shows may have more representation in the form of one off characters. All of the shows on the CW, either currently airing, premiering in midseason, or no longer airing, will not be represented by this paper. It is important that the conclusions drawn here are not taken as wholly representative of the CW or, indeed, of media as a whole.

As society has become more accepting of lesbians and gays, the inequity of treatment towards all members of the LGBTQ+ community has become more apparent. Even amongst lesbians and gays, bisexual individuals are often stigmatized or discriminated against. Both heterosexuals and homosexuals sometimes criticize bisexuals saying they are more likely to cheat or that they just need to pick a side. In fact, sometimes when bisexuals enter into a straight passing relationship, others will erase their bisexual identity. They may say that if they are with someone of the opposite sex then they may as well be straight. Not only does this erase their sexuality, it also assumes that all masculine presenting individuals identify as male and vice versa. Another issue with bisexuality is that sometimes people's solution is to include bisexuality in terms of "performative bisexuality" or bisexuality that is represented as being there for the enjoyment of heterosexual men (Liss, Richmond, & Erchull, 2019, p. 277). This seems to be one place the CW has a better history with. Their portrayals of bisexual characters have been relatively positive; they have had healthy relationships with men and women and their sexuality is not often erased or objectified. What can be said about the CW's bisexual representation is that most of their bisexual characters are still able-bodied, conventionally attractive, white women. Intersectional representation is a place the CW struggles with as a whole.

One good example of a show with pretty good bisexual representation is *The 100*. This show has a variety of LGBTQ+ representation, including a main character whose bisexuality has been portrayed very well. She has been shown in relationships with both women and men and all have been treated no differently. However, despite its positive

representation, *The 100* has been used as an example again and again for the “bury your gays” trope (Shakeri, 2017). The bury your gays trope has shown up again and again in recent media; it is the concept that LGBTQ+ people will not get happiness in their relationships because one of them will die. These deaths often seem to serve little purpose, or they only serve to further a heterosexual character’s story. Lexa, a lesbian character who was portrayed as having great physical and political strength, was murdered immediately after she consummated her relationship with the main character of the show, and this caused an uproar on social media (Grillo-Marxuach, 2016). Though the CW only has this one instance of the bury your gays trope, it is a very influential one that is still talked about three years later.

Of the LGBTQ+ community, transgender individuals and those who are asexual are often the least represented or most stereotypically represented. On the CW there is a singular transgender character and no asexual representation. There was some backlash when the CW revealed that Jughead Jones, a character on *Riverdale*, would not be portrayed as asexual (Lence & Ogawa, 2017). Jughead became canonically asexual with the reboot of the *Archie* comics in 2016, but the CW opted to not include this in their show *Riverdale* which is based on those comics (Riesman, 2016). The transgender character was introduced last year on *Supergirl*, and she is played by transgender actress Nicole Maines (Lence, Ogawa, & Woehler, 2015). Her storyline seems rich and portrays her as being more than just a token transgender character.

McInroy and Craig (2015) conducted a series of semi-structured interviews to discuss with 19 LGBTQ+ individuals between the ages of 18 and 22 how they felt about depictions of the transgender community in popular media. McInroy and Craig found that those interviewed believed that transphobia was more of an issue than homophobia and “negative depictions frequently portrayed in offline media [television and movies] may have detrimental impacts, such as depression or shame, on transgender people who consume them and incite fear in the nontransgender population” (p. 607). Current representation is scarce which means that negative examples stand out more, and for those who do not have many interactions with any LGBTQ+ identified individuals, these representations may be the way they form their opinions. On the few occasions representation is present, it struggles to be accurate without pigeonholing individuals. The CW does not have to worry about pigeonholing anyone because they only have one transgender character.

Much of this research highlights the importance of considering the “minority stress theory” which says that having a marginalized identity, such as being a member of the LGBTQ+ community, puts an individual at a higher risk for negative outcomes on their mental and physical health (Liss et al., 2019). Liss, Richmond, and Erchull (2019) also discuss how minority stress theory can lead to internalized transphobia or internalized homophobia.

These internalizations are some of the things that make living life day to day more difficult for these individuals.

Solomon (2018) completed a study to see if parasocial contact, a media alternative to intergroup contact theory, would reduce prejudice in those who viewed positive portrayals. The idea behind intergroup contact theory, and by extension parasocial contact, is that interactions between groups that would normally be considered outgroups to one another reduces prejudice. What Solomon found is that, though the data showed small positive changes in the attitudes held towards transgender individuals, there was no real statistical significance to any changes that occurred due to exposure to positive media representation of transgender individuals. While this may imply that just having more positive representation will not lead to a reduction of prejudice in the mass populace, this study only showed participants two, four minute clips. If positive and complex transgender characters are shown more and more on TV, there may end up being a statistically significant reduction in prejudice and an overall increase in acceptance.

A number of recent studies on the LGBTQ+ community have looked at representation in popular media like television and movies because of how influential they have become. Similarly to their 2015 study, McInroy and Craig (2016) again performed a series of open ended interviews with young LGBTQ+ identified individuals. Some individuals felt that having positive representation is good because some people can use that representation to help them come out, put words to how they are feeling, or just to know they are not alone. The representation that is seen every day in popular media influences the way people think, the schemas people form, and the way that all people interact.

Peters (2016) completed a very specific study covering only five shows and how they portray the closet in conjunction with homophobia. Though Peters' specific results should be confined to the shows that they analyzed, the concepts that they proposed could be applied on a larger scale. With careful consideration, shows on the CW can be looked at through the lens of Peters' research. Peters discusses how being out of the closet is often portrayed as being much better than being in the closet and that usually there are positive outcomes when an individual comes out. *Riverdale's* Moose is shown to be publicly in a relationship with a girl, but he is secretly hooking up with one of the male characters, who is out. Another lesbian on the show puts some pressure on Moose to come out. The interactions between LGBTQ+ characters seem to flip around pretty quickly. The aforementioned lesbian character, Cheryl, is sent somewhere like conversion therapy, yet she still pressures Moose?

Though media representation is important and more omnipresent than ever before, it is not the end all be all that decides how culture will view and treat the LGBTQ+

community or how they will view and think of themselves. Shilo and Savaya (2012) looked at how “proximal stressors (internalized homophobia, disclosure, and fear of social rejection of sexual orientation) and coping resources (social support and connectedness to the LGBT community)” affected mental health (p. 310). Shilo and Savaya stress the importance of considering the impact of the environment when studying how the LGBTQ+ community, stress, and access to coping resources interact. To hold themselves to their own point this study was conducted in Israel. What they found was that “support from family and friends, family acceptance, and connectedness to the LGB [lesbian, gay, and bisexual] community may have a direct rather than moderating effect on mental health” (321). This shows that looking beyond the CW is important too. It cannot be just about calling out the media that does not depict the LGBTQ+ community accurately or fairly. There have to be systemic changes to the way the rest of society views and treats the LGBTQ+ community, something that is aided by the openness of the younger generations.

The CW has come far in terms of their LGBTQ+ representation in recent years, but they need to continue making strides. They should focus on more diverse representation in an intersectional manner. An easier way to increase diversity in front of the camera is to also increase diversity behind the camera. They should work on hiring more diverse writers, directors, and producers. Having a large variety of voices involved in every step of the process means that the end product is representative of more people and more accurate than it would be if it was one voice attempting to talk to the lived experiences of many others who are not like them.



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# Professional Writing

## 2<sup>nd</sup> Place:

### **Morgan Schmidt, “A Financial Proposal for a Homemade Products Workshop at Cottey College”**

Audience: Student Government Association (SGA)

#### **Introduction**

United States consumerism has become an increasingly important subject of discussion ever since the end of World War II. Consumerism, as defined by Amitai Etzioni, a HuffPost contributor, “is the obsession with acquisition that has become the organizing principle of American life” (Etzioni, 2017). With the ideals held around consumption, the mentality of “single use”, “replaceable”, and “new and better” are at the forefront of this issue; these ideals include the consumption of natural resources, environments/habitats, non-human animals, marginalized groups, and women. The main focus of this proposal is how S.A.V.E (Students Against a Vanishing Environment) can implement a small series of free workshops that creates homemade products at Cottey College and why students, faculty, and staff should care about the issue regarding consumption and its connection to women - since Cottey’s vision is to empower women. American consumerism, in that regards, ultimately affects women and animals and learning how to create homemade beauty and cleaning products not only allows people to regain control over their own personal sphere, it also gives women the ability to fight against the societal system that continuously oppresses them. The purpose of this proposal is to request funding from SGA to create the previously mentioned workshops into a reality that will further increase the reach of women empowerment.

#### **Background**

Historically, since the end of World War II and the beginning of the baby boomer generation, per capita income has increased by three hundred percent (Etzioni, 2017). Capitalism changed its influence of money spending in 1976 with the rise of L.L. Bean's mail-order catalog and later with the television’s home shopping networks. Now today with the aid of the Internet, humans are continuously surrounded by advertisements that beg for attention and money (Novotney, 2008). This capitalist system is creating what researchers and psychologists call “the almighty impulse”: the urge for people to spend and

keep on spending. In the words of Amy Novotney, “All this purchasing could be driving us into debt and unhappiness. Financial difficulties are the leading cause of marital problems among Americans today, and a 2001 Social Science and Medicine study [...] suggests that worry about debt can lead to stress and depression. Concern about money even extends to the workplace and can lead to absenteeism, lowered productivity and an increase in stress-related illnesses among workers.” (Novotney, 2008)

With the demand for more goods, there is also the demand for faster and cheaper service, which has ultimately burdened marginalized groups, women, and animals. These groups are put into unsafe working conditions that pay them below living wage and afterward, the beauty/ cleaning products are tested on animals, which causes damage to the animals physical and mental selves. From this demand, these groups become absent referents. As discussed in Carol J. Adams book, *The Sexual Politics of Meat*, the absent referent is a condition which has a missing, non-existent, or undefined label or name. An example that Adams uses is that people refer to animal farming as the meat industry instead of acknowledging the pain of the individual animal. When people go to the store and purchase these products, they unintentionally erase the suffering of the ones involved in the process of making the product. I suggest, which is further explained below, that by making one's own products, not only are they becoming more environmentally conscious, but they are eliminating the suffering that would usually go into the store bought product. Consumerism and consumption are closely linked with the oppression of women and animals, so by removing the act of suffering, they are calling out and rebelling against their oppressors.

Cottey College isn't absent within the system of consumerism. Nearly all of Cottey's students will be in debt by the time they graduate with their degrees; some needing to pay it back for years to come. If that isn't motivating enough, Cottey provides numerous students with jobs, but those jobs are minimum wage (by Missouri state standards) with limitations on hours. Students need cheap, affordable, healthy, and sustainable options because they can't afford not to, especially with the rise in tuition, textbooks, and student fees (discussed below).

The main question is, why should Cottey care about creating homemade products? The ingredients, which can be costly initially, isn't the main focus on what the workshops are attempting to create knowledge on (discussed below). Hand making products allows for a direct connection between oppressor and oppressed while putting the power into the hands of the powerless. Cottey College is a school that dedicates its time to giving power to a marginalized group - women. Cottey College, historically, has ignored the issue of consumerism/consumption, ultimately giving power to the social system that questions why should women be allowed to have it. These workshops will show that Cottey does empower its students by removing society's influence of buy, buy, buy.

## **Solution**

To help combat the continuous presence of consumerism and consumption, I propose a homemade product workshop that will have occasional events throughout spring 2020 semester: January 23rd, February 27th, and April 23rd at 8pm. I suggest a hands-on workshop because the mere act of creating a product oneself brings power to the maker. The workshops will provide instruction on how to create products such as shampoo, conditioner, lip balm, lotion, toothpaste, laundry detergent, deodorant, tampons, household cleaner, headache balm, essential oil mixtures to improve health conditions, and dish soap that is not only ecologically friendly and cruelty free, but is also more sustainable for people on a budget. The workshops would be multi purposeful too; the attendees will learn how to create these products, will become further educated on how these normal store bought products contain chemicals that are known to cause health issues, and how the products cause unnecessary harm to the environment and the animals that are tested on. The products aforementioned are easy to make and the knowledge of how to create these products can be transferred to others interested in the practice. Not only would this workshop series be incredibly useful for anyone, regardless of background, it would uphold Cottey College three main visions: women's leadership, global awareness, and social responsibility.

### *Women's leadership*

Despite having workshops that focus on activities/products that are presumed to be a part of the woman's sphere, I argue that all humans need these products to live a clean and healthy lifestyle; these products aren't for the sole use of women. Having a workshop that allows the Cottey community (students, faculty, and staff) to make products that benefits them will further spread knowledge on how these homemade products don't further oppress marginalized groups within the patriarchy. By taking action into their own hands, they are becoming leaders.

### *Global awareness*

The workshops will provide lessons on how products bought at the store increase the usage of natural resources (think plastic), habitat destruction, the global system of marginalized oppression, and the use of animals to test product effectiveness. The ones who attend these workshops are motivated to come for a reason, whether it be free products (discussed below), a previous awareness of ecological, economical, or social damage, or a time to procrastinate on homework. The workshops will use this motivation to lead to the discovery/awareness of globalized oppressions and how the attendee's purchase of these products further supports the system that oppresses them.

### *Social responsibility*

Cottery defines social responsibility as knowing and understanding the impacts of an issue, event, or action. To take it even further, social responsibility is also an action plan; a strategy to accomplish one's own beliefs. By coming to these workshops and making one's own product, the attendees are taking action to go against the capitalist system of buying and spending. The attendee's are taking their own time to responsibly correct the oppressive system.

## **Implementation**

In order to implement the proposed solution, an audience needs to be identified, a desire to attend calculated, budget cost established, and a sound action plan put into place.

### *Audience*

The audience for this solution will be the Cottery College community, as mentioned before. The main target audience will be the residential and commuter students who attend Cottery College, but the workshop would be open to other members of the Cottery community.

### *Interest*

From personal interactions, I found that many were intrigued by the idea of having workshops on creating products, but one conversation stood out amongst the rest. I was talking to a Ghanaian - during the time I was making deodorant - that make period pads from cloth and would teach other Ghanaian's how to make them so their periods wouldn't interfere with daily life - as the coverage of a period would determine whether or not they could attend school/work for that week. From her example, she opened my eyes to see how homemade products could better the lives of people across the globe.

There is also the matter of each individual's financial status. Many of the students who come to Cottery College for an education statistically don't come from wealthy backgrounds. If students can't afford laundry detergent, then they reuse dirty clothes - causing personal hygiene to decrease. Whether or not students are aware of the option of creating their own products doesn't matter, there is a student need that hasn't been fulfilled. There is interest, whether it's intentional or not, but the real question is, how many are willing to participate?

### *Action plan*

The answer to the above question is to make a survey to gather information, not just on interest, but a rough estimate of possible attendance. A survey (see Appendix A) will be released for students, faculty, and staff alike to complete. The percentage goal is to get half of the student population to respond. If there is little response, another survey will be set

out as a reminder. Again, if there is little feedback, the percentage goal will be reevaluated and action will happen based on the results.

#### *Location, needs, incidents, and staffing*

If the pre-action surveys proves hopeful, I propose to hold the workshops in either the Center for Women's Leadership or Raney Dining Hall - depending on the number of attendees. The workshops will require access to a heat source - like an oven or stove top - cookware, and utensils for recipe making. As all of the attendees will be adults and there is the assumption that everyone has had prior experience with heat sources, the number of incidents should be minimal, but if an accident does happen, a water source will be nearby and medical supplies on hand. Staffing-wise, S.A.V.E members will be in charge of regulating materials and speaking during the workshop to help attendees better understand how making these products gives power back to the perceived powerless. If there is a lack of help, volunteers will be asked, but the workshops are designed to not have a reliance on staffing (three to four needed).

#### *Budget*

There are three proposed dates where a workshop will take place, so three products will be made. Depending on the interest, many of the proposed products would require the same ingredients, causing the need for a smaller budget. In order to better calculate cost, people would be required to RSVP (through email or sign up sheets in residence halls) to the event so numbers will be known so the purchase of ingredients will be easier to estimate. For these workshops, I request 150 to 200 dollars from SGA to make this a reality. This budget is with the understanding that each workshop will require around 50 dollars to implement; costs going towards ingredients (such as essential oils and baking soda) and eco-friendly containers to hold the finished product. With this proposed budget, people will be able to see the connection of consumerism/ consumption and women and animals.

#### *Measuring success*

To measure success of the workshops, attendance will be counted and paper surveys (see Appendix B) will be handed out before the attendees leave. If the workshops were successful, the workshop success will be measured by question 4 in the survey; if the workshops receive a rating of 80% or better, it will be considered successful.

#### **Conclusion**

The proposed workshops are minimalistic and easy to put into action and they will allow the members of the Cottey College community to better understand how their personal purchases further supports a system that oppresses multiple groups, including animals and women. Creating a solution that has an international impact is very hard -



almost impossible within the current structure of society - but creating a solution that caused a large impact in the daily lives of the everyday person will cause a ripple effect of knowledge and awareness. I recommend these workshops because not only do they teach the Cottey community how to be sustainably aware, they create the skills needed to fight and create that which goes against the destructive foundation of consumerism.

### **Appendix A:**

Many beauty and household products are detrimental to an environment due to the high concentration of chemicals not usually found in that particular area. Not only do these products affect the environment, they are also used on animals, who are unwilling participants. This survey is to gather information on whether or not a person from the Cottey College community would be interested in learning more about this issue and how to combat this terrible treatment by making your own beauty/ cleaning products that you personally use everyday.

1. Would you be interested in an interactive workshop that will include making household/ beauty products?

2. What workshops would you be interested in attending? (Pick three)

shampoo and conditioner  lip balm  lotion  laundry detergent  deodorant  tampons  toothpaste  household cleaner  headache balm  essential oil mixtures  dish soap  body wash  other

3. If you selected 'other', please explain.

### **Appendix B:**

1. What did you enjoy about this workshop?

2. Did you learn anything from the speakers?

3. On a scale from one to ten, how likely are you going to recreate this recipe?

4. On a scale of one to ten, how likely would you recommend someone to attend this or another similar workshop?

5. Comments or suggestions?

## Works Cited

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- Etzioni, A. (2017). "The crisis of American consumerism". *Huffpost*. Retrieved from [https://www.huffpost.com/entry/the-crisis-of-american-co\\_b\\_1855390](https://www.huffpost.com/entry/the-crisis-of-american-co_b_1855390)
- Novotney, A. (2008). "What's behind American consumerism?" *American Psychological Association*. Retrieve from <https://www.apa.org/monitor/2008/07-08/consumerism>

# Professional Writing

## 1<sup>st</sup> Place:

### **Morgan Gamboa, “Technical Instructions: How to Create a Customized Letterhead”**

## **Overview**

Letterheads are commonly used in professional work settings; therefore, being able to create one can serve as a great skill to have. This guide is intended for those looking for a way to learn how to make their own letterhead for any professional document. The instructions will not directly give each user of the guide a perfect letterhead suited for their needs; however, it will largely assist them in becoming familiar with the tools available in Microsoft Word. The instructions included will be step by step on how to creatively develop a letterhead using shapes, text, and clipart.

I am qualified to write these instructions because of my prior knowledge from a computer applications course that covered various different ways to use Microsoft Word. I became proficient in this area because of constant practice. Aside from the course, I am quite familiar with many of the tasks which can be performed with in Microsoft Word.

There is a Frequently Asked Questions (FAQs) page prior to the instructions in case the user has questions before they use the guide.

Listed are points that all users should note:

### Instructions

- Intended for those using Microsoft Word
  - Not all software have the same functions
- Instructions are numbered with detailed instructions
- Each step should be appropriately followed by the next step
- Some steps may not be necessary for every situation
  - The user may feel free to skip the sections that they feel they do not need assistance with.

### Visuals

- Some steps will give instruction to refer to the “Visuals” page
- Visuals are intended to assist the reader as they follow the steps
- Visuals included are not of each step
  - They follow steps that may be confusing to the reader or user of the guide
- They may be used by the user to double check their own work

Additional Note:

When referring to the tabs in Word, they have been typed in all capital letters. Sections in the ribbon have capitalized, and command buttons within each sections are placed in quotation marks.

## FAQs

**Q: What if I do not have access to Microsoft Word?**

A: Microsoft Office is not a free software. You will need to find an alternative.

**Q: Can I use this guide if I am working in Google Docs?**

A: This guide is not designed to be used for other software because of its process is very much likely to be different than others.

**Q: What can I use a letterhead for?**

A: Typically letterheads are generally used for documents that are being used as a source of communication to internal or external individuals.

**Q: Why would I need a letterhead?**

A: Letterheads can create a professional look to a document and can establish consistency in all documents used by the same individual or organization.

**Q: Can I use these exact instructions to create my own letterhead?**

A: The instruction provided are given to help guide you through the process and can be followed step by step. Although, you may want to consider testing out different shapes, fonts, colors, and graphics to make it best suitable for your needs.

**Q: Am I able to use my own pictures instead of clipart?**

A: Yes, you can. Using your own pictures or graphics is as simple as selecting "Pictures" in the INSERT tab instead of "Online Pictures."

**Q: What if I am not sure if I did the steps correctly?**

A: To track you progress, you can refer to the "Visuals" page and look at the visual that corresponds to the step you are on.

**Q: How can I save my letterhead and use it later on in different documents?**

A: There are steps included in the “Saving the Letterhead” section that will give you instructions on how to save the letterhead. In order to use the letterhead later on, it is suggested that you make a copy of the original letter head so that you do not work in the original document.

**If you have any further question please email them to [name removed for judging]**

# Instructions

1. Begin by opening a blank Word document in Microsoft.

## Adding a Shape

2. Click the INSERT tab, in the Illustrations section select “Shapes” and click the rectangle.
3. Position the pointer in the left corner, then hold and drag it downward and to the right.
4. While the shape is selected the FORMAT tab will be open. In the Size section, correct the shape height to .7” and shape width to 5”.
5. In the FORMAT tab, select Position and click “Position in Top Center with Square Text Wrapping,” to center the shape on the document.
6. Next click the LAYOUT OPTIONS icon next to the shape, select the “Top and Bottom” option. Click the close button once done. (Refer to the Visuals page).

## Applying a Theme

7. Click the DESIGN tab and then click Themes. Use the theme “Wisp.” (Refer to the Visuals page).
8. Click the rectangle so that the FORMAT tab appears again. In the Shapes Styles sections there are 3 different colored squares, at the bottom of the right square click the downward arrow (labeled “more”).
9. Select the “Subtle Effect – Green, Accent 6” (last option in row 4).

## Adding Text in the Shape

10. Right click the rectangle and select “Add Text.” Type **Alexander’s Floral Shop**.
11. Select the entire text, then in the HOME tab change the font size to 35 and change the font to Rage Italic.
12. Bold the text, then click outside of the rectangle to unselect the text.

## Inserting & Adjusting Graphics

13. In the INSERT tab, click the online picture option and search for “flowers clip art.” Select the graphic in the visual or one similar, then press insert. (Refer to the Visuals page).
14. While the graphic is selected the FORMAT tab will appear. In the Adjust section, click the Color option and choose “Saturation 66%.”



15. In the Adjust section, click “Corrections” and choose the 4<sup>th</sup> option in the 3<sup>rd</sup> row (Brightness: +20% Contrast: 0%)
16. Change the border on the picture by clicking Picture border and selecting “Green, Accent 6, Lighter 40%.” (Refer to the Visuals page).
17. Change the graphic’s height to .7” so that it matches the height of the rectangle.
18. Click the Layout Options next to the graphic and choose the option “In Front of Text.” This allows the graphic to be moved near and on the existing text.
19. Click and hold the graphic, then move the graphic by dragging it so that it lines up with the rectangle on the left side of the document.
20. Then right click the graphic and press “Copy”, followed by “Paste.”
21. In the FORMAT tab, click Rotate then “Flip Horizontal”. This will make both graphics mirror one another.
22. Move the new graphic to the right side of the document by dragging it with the mouse. Align it with the rectangle. (Refer to the Visuals page).

### Adding Address Information

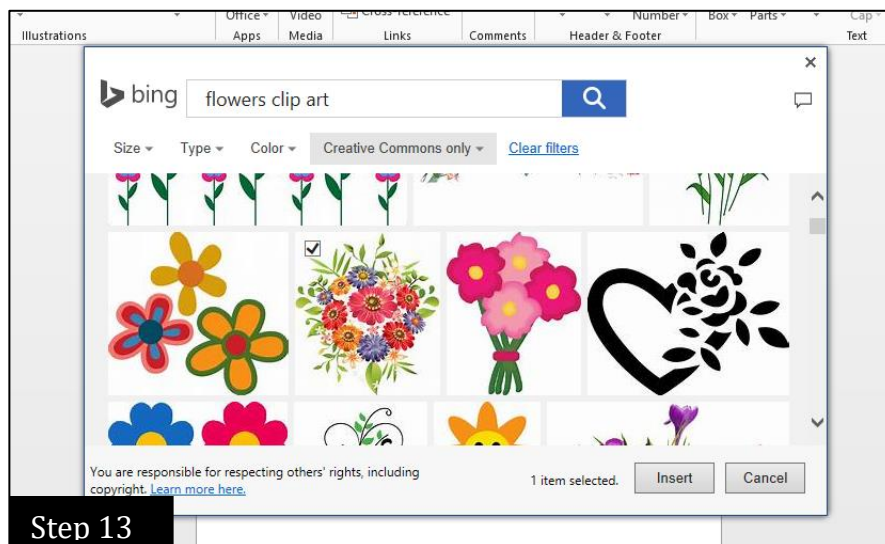
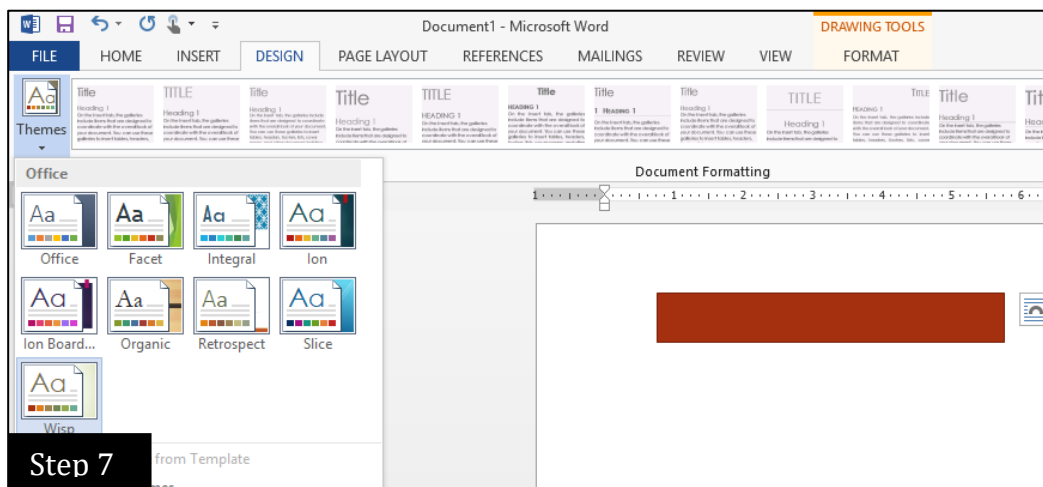
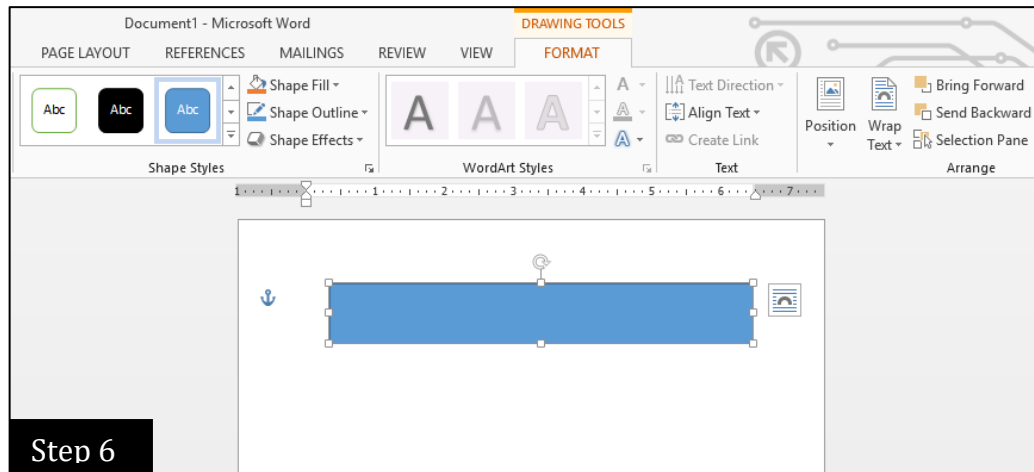
23. To insert the sender’s address information, select the line below the shape to begin typing.
24. In the HOME tab change the paragraph positioning to “Center”
25. Type **218 Cedar Road, Visalia, CA 93291**, then press SPACEBAR.
26. Open the INSERT tab and select Symbols. Press “More Symbols”
27. Choose “General Punctuation” in the Subset field. Then find the black dot (Bullet) and press “Insert.” Close after. (Refer to the Visuals page).
28. Press SPACEBAR again, then type **Phone: (559) 555-6425**, then SPACEBAR
29. Repeat instructions 27 and 28.
30. Press SPACEBAR, then type **Email: floral@gmail.com**.
31. In the HOME tab, click the borders option in the Paragraph section to add a bottom border to the text.

32. To continue with the rest of the document press the ENTER key and then “Clear Formatting” (A with an eraser in Font Section). (Refer to the Visuals page).

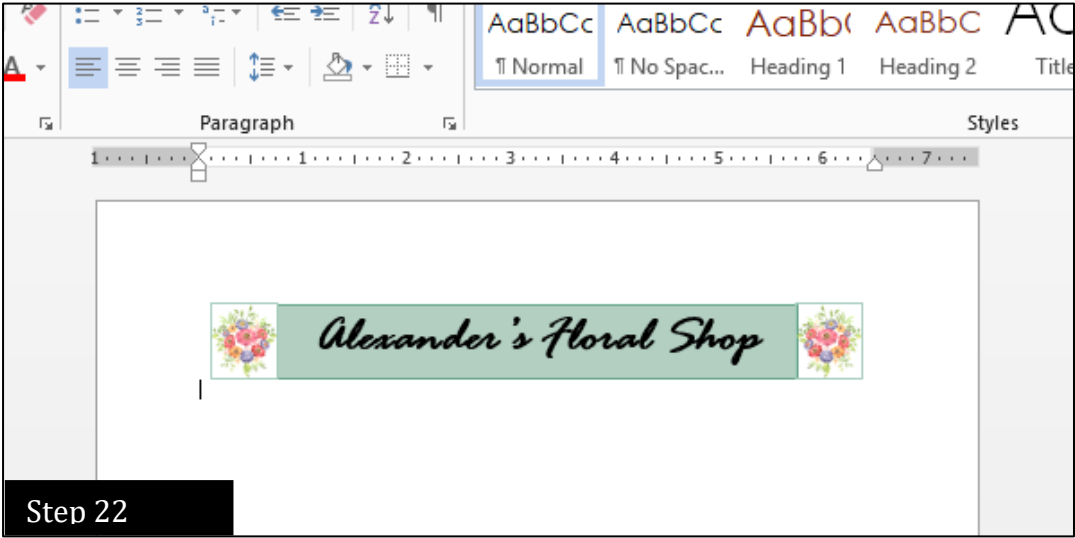
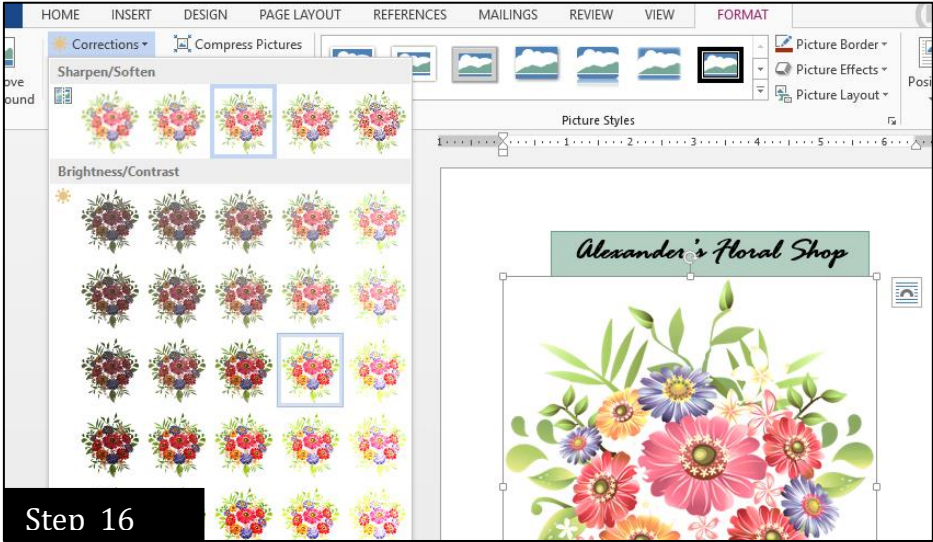
### Saving the Letterhead

33. To save letterhead, click the FILE tab and then press “Save As.”
34. Select the desired location where you want the file to be saved
35. Enter the file name, then press the save button.

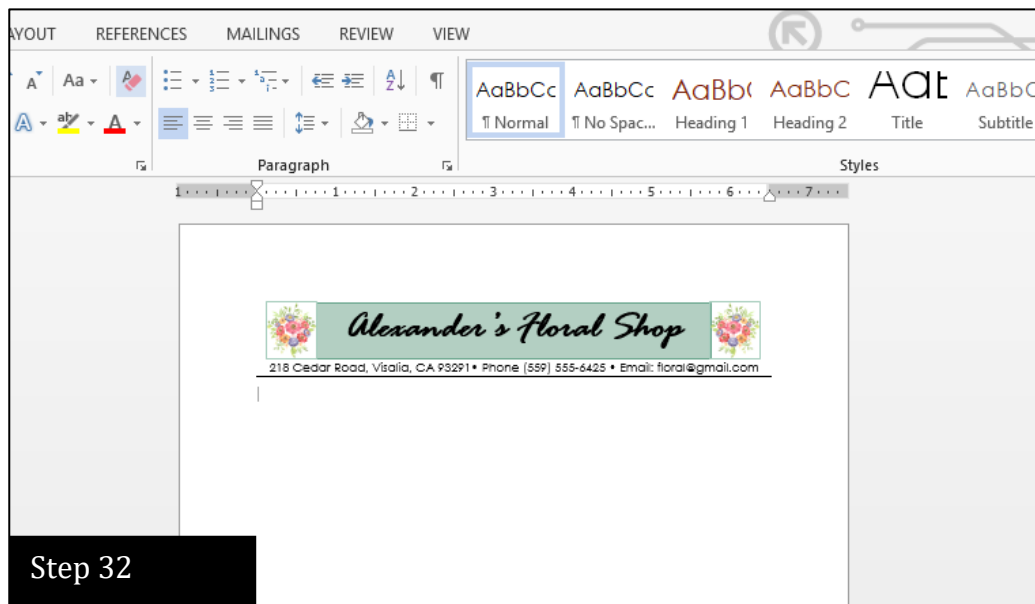
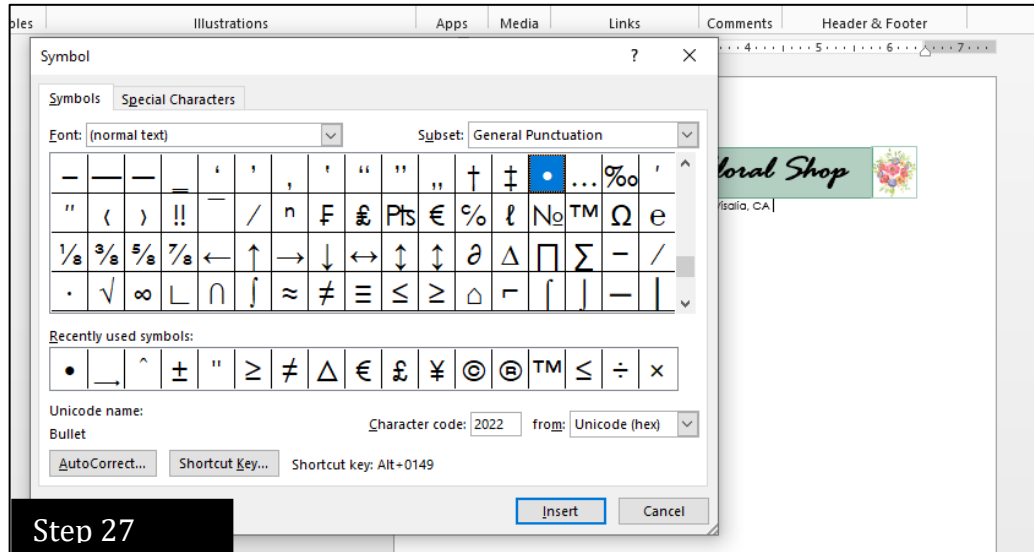
# Visuals



# Visuals (Cont'd)



# Visuals (Cont'd)



# Creative Writing

## 1<sup>st</sup> Place:

### **Morgan Schmidt, “Death in the Capital”**

The stars and moon are absent as I silently run beside the shoddy wooden structures of the townpeoples’ homes. The streets reek of poorness; a smell similar to vomit and feces. The former most likely due to the drunks stumbling out of the taverns, even at this late hour, hoping to join a pretty girl in bed. Disgusting, but predictable. I pay them no heed as I swiftly move toward my destination: the mansion with alabaster columns. Everyone knows who’s mansion I head towards, I mean... who didn’t? It’s Bastion Harlocke’s - the right hand man of the king of Albience - summer residence despite the massive house being located next to the palace walls. Bastion is famous - not just because of his high status - but because of his involvement in the selling of slaves. That’s why I’m here.

The packed dirt of the alley I am running on quickly shifts to a nicely paved cobblestone street as I head further into the wealthier part of Cleviban, the sparkling capital of Albience. I slow down and stay to the shadows, as to not draw attention. It’s difficult, as I am covered head to toe in black and have my twin daggers strapped to my hips, but this late into the night, the streets are deserted. If it were midday, the ladies of the court would giggle at any handsome male stranger and flutter their fans, the shoppe’s would be open, and the streets would be crowded.

The shining mansion stands proud up ahead. A tall metal fence surrounds the property, inlaid with designs of leaves and berries. The fence is at least eight feet tall, but that is no matter. I was warned of guards, but during my previous visit, I heard and saw none. Even now, I don’t see any guardsmen standing at attention. Cautiously looking down the interweaving streets, I take a running start and vault over the barbed tips of the fence post and silently land in the bordering garden. Beneath my feet are now squished flowers that I don’t know the name to.

I peer up at the house and match the window to the description I was given earlier by my client; second floor, back of house, and to the left. I calculate how to get to the window and realize that the clearest path is to enter through the adjacent window. I crouch into a good position and sprint to the side of the house, eyes open for movement. Nothing. As I stand in the shadows of the house, I examine the wall more closely. It’s made out of bricks; bricks that are light in color to better match the alabaster columns out in front of the house, or so I assume... I’m no architect.

Assessing the wall, I see many good footholds and begin my ascent. The city to my back is quiet and dark. A shiver overcomes me and for a moment, I contemplate what would happen if I didn't complete my client's wishes. What if I left Cleviban and never returned? What if...no. There's no good in thinking like that; if I succeed, I could purchase a whole house if I wanted to with the money I will be given. No point in letting that money go into a different person's hands.

At the window, I unsheath my dagger, the blade a mix of steel and diamond, and slip it between the cracks of the window to unlock it. Honestly, Bastion should invest in better windows. Unlocking these windows is child's play.

A small breeze brushes against my back and I step into a bathroom and reattach my dagger - Bastion's master bathroom to be precise. The turquoise tiles at my feet shin in the candlelight as I walk toward the door that will lead me to Bastion's bed and to Bastion himself, my boots squeaking slightly as I near the door. The door is plain compared to the wealth in the bathroom; the toilet with piping is worth more than I care to say. I twist the knob and the door opens without a sound.

Ahead, two intertwined figures lay on top of the bed, draped in silk sheets and skin - most likely that of a wolf, which are favored at the royal hunting events that take place whenever the king feels particularly overweight. I inch closer, seeing Bastion face up with blond hair mused. He looks innocent in sleep, but I know that if he woke up, a sneer would mark his face. His companion looks like a commodity of the slave trade, forced to please Bastion in the art of flesh. My lips curl in hatred and I walk to his side, drawing out my trusted dagger. I peer down at his neck, looking to see the best place to drag my blade across his flesh. I lift my dagger and just as I'm about to let blood spill, a movement to my right draws my attention. It's the woman I'd mistaken as sleeping.

With a pulse of adrenaline, I cut down on Bastion's throat the same moment the woman screams. Without thinking, I take the already bloodied blade and fling the dagger towards the woman's head. A clean blow, right through the forehead. I hear a shout of alarm outside of the room and I make quick work of gathering my blade from the woman's head. Just as I pull the blade out, the door of the bedroom is thrown open; guards with swords drawn scan the room until their eyes settle onto my already retreating back. I kick the window open, glass shattering.

"Someone, get him!" The guards rush towards the broken window and I leap out of the second story, fall...fall...falling, and land harshly on the bushes beneath the window. I stand, legs aching, as I bolt toward the fence. Almost there. Almost there!

"Don't let him get away!" The command is heard outside of the mansion and guards already on the property grounds start running towards the commotion - to where they see me.



Despite running and hearing the deafening sounds of my harsh breathing, I hear the unmistakable draw of an arrow being notched. I run in zig zags, attempting to escape the arrow headed my way. The first one misses, landing off to my right, but the second lands its mark in my shoulder and the third hits my outer waist. After the third arrow, I fall hard to the grassy ground, struggling to breath as I keep in tears of pain and frustration. The voices, filled with victory, come closer. I raise with difficulty, teeth clenched, and stand.

The fence isn't far now, only ten feet away. I begin to run and hoist myself up and over the points attached at the top. I almost fail due to the pain in my shoulder, but I will strength into my limbs, and clamor over to the otherside.

Blood is coming out viciously and creating a pool of red liquid at my booted feet. My head begins to swarm and my vision begins to dim. I've got to move, to leave, to get away! I blindly sprint down a cobblestone road, the pain the only thing I can think of. No! Get your head together , I tell myself.

The shouts of men grow distant as my legs take me further away. I continue weaving my way through the streets of Cleviban, barely noticing the streets changing back into dirt, barely noticing the drip of blood leaking out of my body and onto the streets. My vision dims again, faster than before.

Pain. So much pain. A frustrated cry comes out. I take notice that I'm lying on the ground, eyes squeezed shut. When did that happen? I was running and then...what? I must of blacked out. I make my way to stand, but my vision turns black once more. I can't move.

It doesn't take long for the shouts and movements of men to come crashing down on me. A soldier comes from around the corner, holding a lantern in one arm and brandishing a sword in the other. Shit. I again attempted to rise, but I'm stopped by the pain of the arrow still stuck in my waist. The man runs up to me, takes a long look before shouting to his comrades.

"I've found him! Over here!"

"I'm a woman, you idiot." I snark back. I'd be damned if I died as a man. The soldier quickly turns his head back towards me, an excited gleam in his eye. His straight face curled into a cruel smile before saying, "Even better."

He begins to reach for me as I back away. The pain! He roughly grabs my injured shoulder and I black out again, this time for good.