

HŌHŌNU



A JOURNAL OF ACADEMIC WRITING
VOLUME 14

H O H O N U

2 0 1 6

Academic Journal

Hohonu is a publication funded by
University of Hawai'i at Hilo student fees.

All production and printing costs are administered by:
University of Hawai'i at Hilo
Board of Student Publications
200 W. Kāwili Street
Hilo, Hawai'i 96720-4091
Phone: (808) 933-8823
Web: www.uhh.hawaii.edu/campuscenter/bosp

All rights revert to the writers upon publication.
All requests for reproduction and other propositions should be directed to the writers.

Table of Contents

Letter from the Editors.....	iv
Marine Debris Accumulation on the Big Island of Hawai'i By Victor Ciaramitaro.....	1
Not a Step Back By Leanne Crain.....	5
Lucia Greenberg: In Depth Analysis By Sadie Dossett.....	10
The One Who Changed: An Analysis of "A & P" and Sammy's Epiphany By Sadie Dossett.....	13
In the Company of Thorin Oakenshield: A Baggins' Styled Femininity and Acquired Masculinity in The Hobbit: An Unexpected Journey By Asia Howe.....	15
From Oppression to Nationalism: The Irish Penal Laws of 1695 By Samantha Howell.....	21
Remote Sensing: Applications in Paleontology By Erin Jean.....	24
Rob Roy's Contribution to Contemporary Understandings of British National Identity By Cecilia Johansson.....	28
Jewish Oral Tradition: A Look At Human Rights Literature About The Holocaust By Hannah Lipman.....	31
Let's Be Neighbors By Valentina Martinez.....	35
Being Native American in a Stereotypical and Appropriated North America By Ariel Moniz.....	41
The Voice of a Culture: Folktales in Russia By Ariel Moniz.....	47
The Other: Orientalism in Frankenstein By Terri Pinyerd.....	55
The Symbolism in Suffering: Art and the Holocaust By Terri Pinyerd.....	57
The Effects of Acidified Water on The Olympia Oyster <i>Ostrea lurida</i> By Jeremiah Storie.....	62
A Grimm Evolution By Kylee Sullivan.....	67
Gilded Freedom: U. S. Government Exclusion of Chinese Migrants, 1882 By Robert Villanueva.....	70
The Positive Impacts of Fairy Tales for Children By Leilani VisikoKnox-Johnson.....	77
Sea Turtle Energetics By Christina Wine.....	82

Letter from the Editors

Asia Howe, Editor-in-Chief

Throughout my term as the *Hohonu* Editor-in-Chief, I consistently reimagined one, out of many, *Hohonu*-related memory. I reimagined it not for a pick-me-up or reminder why I was doing what I was doing, but for the satisfaction it brought me. Wow, I would think, I went from submitter to General Editor to Editor-in-Chief in two years by pursuing an interest and never questioning said pursuit. The memory to which this thought belonged? Dr. Kirsten Møllegaard, the publication's advisor, steps into the shared *Kanilehua/Hohonu* office, and I follow, my work not yet published, myself not yet a part of the publication. Seeing such a place for the first time, I exclaim, "It's like the *Millennium* office!" (which is, regrettably, untrue). Every work within this issue illustrates an interest, and perhaps, if enough zeal supported the work, a passion. Thank you, *Hohonu* team, for your interest and passion in publication.

Hannah Lipman, General Editor

I firmly believe that life asks us to be *vulnerable*, *allow change*, and *let go*. This translates into work experience as a *Hohonu* General Editor. Each student who submits their writing to our journal is *being vulnerable*. There is an empowerment that comes from submitting your writing to an academic journal. I would like to personally thank each student who submitted their work and express how wonderful it is to see people taking the time to acknowledge their own power as a writer. Furthermore, each student *allows* our editing team to make changes and support the writer in creating more concrete academic research. The student also learns to *let go* by letting their writing become available to the public. I would also like to take this time to thank the entire *Hohonu* editing team and our Editor-in-Chief, Asia, for their commitment and dedication.

Jannah Pante, General Editor

It's one thing to submit a paper for a grade. It's another thing entirely to submit a paper for publication. To everyone who took the plunge, you're a brave bunch—*Hohonu* wouldn't exist without you (and neither would my job!). I sincerely enjoyed reading and editing every submission I received. I know how tedious it is to revise an essay that you've already spent hours writing, so thank you all for also cooperating with our requests and comments. To my fellow editors and our esteemed editor-in-chief: thank you for always being on top of things. It definitely kept me motivated to get everything done in a timely fashion. I wish I had joined the team sooner, but I learned a lot in the semester we worked together.

Zoe Banfield, General Editor

Serving as a General Editor for *Hohonu* this semester has been a rewarding experience in many ways. I have enjoyed collaborating with *Hohonu*'s small team of dedicated editors, and sharing space with *Kanilehua*'s creative and dynamic art and literary editors. I'd like to thank our Editor-in-Chief, Asia, for all the hard work and outreach she has dedicated to make *Hohonu* a success, and also our neighbors BOSP for their diligent efforts in supporting our student-run publications. The most enriching aspect of this position has been having the opportunity to read the works submitted by UH Hilo undergraduates on topics ranging from folklore, to politics and history, to marine sciences. My own body of knowledge has increased in a diverse range of subjects thanks to the creativity and academic rigor of our student body members who made the brave choice to submit the fruits of their research efforts, and to the professors who guided and encouraged them.

Valentina Martinez, General Editor

After being an editor for *Hohonu* for two school years, my editing and grammar has drastically improved. This position has opened my eyes to a new realm of English and being that English is my major I felt it crucial to improve my grammar, especially since I have a passion for writing. Now that I have come to know what *Hohonu* is and the potential it holds for every student, I find it a shame that very few have even heard of it. I appreciate those who put the effort into their papers and research and went the extra mile to submit to *Hohonu*; I enjoyed reading what everyone has been researching and writing. Keep submitting!

The 2015-16 *Hohonu* team acknowledges and thanks the following organizations and individuals for their support and assistance: Dr. Kirsten Møllegaard, *Hohonu* advisor; the Board of Student Publications (BOSP); Campus Center; Matthew Kalahiki, Campus Center Administrative Fiscal Support Specialist; the Graphics Department; and Kenneth Adam Smith, cover art photographer.

Marine Debris Accumulation on the Big Island of Hawai'i

Victor Ciaramitaro
English 225

Introduction

Since the dawn of the industrial era, human effect on biodiversity and the environment has been detrimental. Human-generated pollution has globally established itself. One of the most predominant forms of pollution found is plastic. Since the start of commercially made plastic products in the 1950s, in just a few decades these same plastics can be found worldwide (Barnes et al., 2009). Plastics are an incredibly versatile item, and they have evolved over the past half-century to be used in our everyday lives (Laist, 1987). They are a resilient and long-lasting material that can be made at cost effective prices (Laist, 1987). Due to this, plastic usage has increased tremendously since its introduction. With no other alternative for plastic, the quantity of its waste from land to the ocean is projected to increase annually (Jambeck et al., 2015). The consistent input and collection of plastics into the marine environment has a detrimental effect to the Earth. The oceans consist of five major marine debris gyres: in the Indian Ocean, the North and South Atlantic, and the North and South Pacific. The numerous currents that push and pull the debris throughout the oceans facilitate the trash accumulation in these generalized areas. According to the location of the North Pacific gyre and the combination of the various North Pacific currents, more marine debris accumulation should be located along the southeastern side of Hawai'i Island.

Background

Global Effects of Pollution

Plastics in the marine environment have collected for quite some time. Although plastic makes their way around the world and in far to reach places, such as the middle of the ocean, estimates can still be made. The first aspect of plastic having an effect on a global scale starts with the amount of its waste that is generated. In a 2010 study based on data collected from 192 coastal countries, an estimated 275 million metric tons of plastic waste was gathered (Jambeck et al., 2015); though only about 4.8 to 12.7 million metric tons are expected to make it into the ocean (Jambeck et al., 2015). This constant downpour of plastic waste has now been continuing since it originated over half a century ago. Over time, plastics of all sizes have spread onto the land, horizontally across oceans and vertically into the deep sea.

As the tides and currents change throughout the day the plastic pieces are pushed and pulled down into the abyss. Most of the plastic that sinks to the sea floor ends up on the continental shelf since it is more shallow and likely to settle there first (Cauwenberghe et

al., 2013). Researchers for the first time have discovered plastics in the deep-sea sediment. Microplastics, which are small plastic particles less than 1mm, were tested at a few locations between 1000m to 5000m; the results showed on average that 1 microplastic was detected every 25cm³ (Cauwenberghe et al., 2013). Nearly all microplastics eventually settle into the sediment, whether at the bottom of the deepest part of the ocean or even at the surfaces of beaches.

Beach sediment can contain numerous materials, from regular sand, organic material, to even microplastics. It is inevitable that with the daily amount of plastic waste produced and put into the ocean, that there is a great possibility for it to end up in the sediment of beaches, especially those most frequented in densely populated areas (Jambeck et al., 2015). This is because of the possibility of pollutants being directly deposited on the beaches from its visitors. In a study conducted on Kamilo Beach, known for its high concentrations of plastic waste accumulation on the southern side of Hawai'i Island, sediment cores detected several plastic materials. The implications of such data imply that more plastic in the sediment causes more permeability (Carson et al., 2013) Effects of this can cause small beach organisms in the sand to be flooded out and even reduce subsurface temperatures (Carson et al., 2013). The effect of plastics in sediment creates a threat to the biological life that it comes into contact with.

The biological effect of plastic concentrations in beach sediment starts off unnoticed. Reduced subsurface temperatures affect temperature-dependent organisms such as turtles, causing an influx of males to females (Carson et al., 2013). Other organisms that are interconnected to beach sediment such as seabirds are at harm (Blight and Burger, 1997). From surface feeding birds to diving birds, plastic was recorded in the stomachs of both types (Blight and Burger, 1997). Small fragments of plastic find their way into food sources of many organisms and have also been recorded in zooplankton. After being ingested by the zooplankton, the microplastic particles were seen to have attached themselves to the bodies of the organism, causing reduced fitness ability in the zooplankton (Cole et al., 2013). With a negative decline in the population of zooplankton, other organisms such as fishes or marine mammals that are above them in the food chain can become seriously in danger of perishing as well. Many places have flourishing water filled with biodiversity, but at this rate, it is hard to see them flourish much longer.

Local Consequences in Hawai'i Due to Pollution

Hawai'i is home to many beautiful creatures both on and off the land. Marine debris is detrimental to the biodiversity within the island chain. In a remote location, in the middle of the Pacific Ocean, Hawai'i is sensitive to changes in environment. The majority of globally documented extinctions since the 1500s have occurred most commonly on islands (Baillie et al.,

2004). Isolated islands, like Hawai'i, tend to be more easily invaded than continents (Lonsdale, 1999). Plastic debris that is more buoyant is able to travel vast distances (Kubota, 1993). This leaves Hawai'i vulnerable to sources of debris from all parts around the Pacific. Plastics that are able to float at sea for long distances are subject to have accumulated microscopic organisms that can now be deposited at a new location (Minchin, 1996). This is what makes Hawai'i so vulnerable. As trash from all around the north pacific moves to one gyre, potential contaminants such as microscopic organisms or bacteria can make their way onto pieces of buoyant plastic. Soon enough those same pieces that are now contaminated make it to new locations, leading to the spread of invasive species and destruction of native habitats.

Apart from the destruction on the biological side, the degradation of beaches is apparent as well. In Kauai, approximately 500 pieces of plastic debris are making their way on to the beaches every day by people and currents (Cooper and Corcoran, 2010). At this rate, the chances of contamination rise drastically. Not only does the chance of contamination affect the beaches, but the size and shape of the debris do as well. Some pieces according to their shape can scrape and drag the beaches, which in turn causes it to deform its natural structure (Cooper and Corcoran, 2010). The same way if an object is dragged over the beach, it creates a deformation of the sediment behind leaving it susceptible for more degradation to occur. The overall destruction these pieces cause is damaging towards all it encounters.

New Methods for Ratification

The distribution of plastic debris is sporadic across the oceans. Wind and water currents vary everywhere. The abundance of plastic in a location can vary from 0 to 7300 pieces per hectare (Barnes et al., 2009). The importance of the knowing about the accumulation of plastics is essential because they have a wide variability as to the damages they can cause. Through a complex modeling system to estimate plastic accumulation as of today, an estimated 5 trillion tons of plastic, weighing about 270,000 tons has been collected (Eriksen et al., 2014). More precise methods for understanding the amount of plastic debris out there can help provide solutions for removal.

For removal of debris within sediment, there is elutriation. This process that separates particles based on physical characteristics in a stream of gas or liquid. Mostly used for small particle collecting, sediment can be separated from the plastics and extraction can begin (Claessens et al. 2013). Another form of debris collection includes beach cleanups, where annually, specifically on Hawai'i Island, 16 metric tons of debris is collected over a 15km coastline (Carson et al., 2013). Plastic pollution is apparent based on collected data and computer estimates and the effects of this accumulation of plastic is obvious as well. The importance of plastic

debris clean up is vital to overall health of the ecosystem by which the human population lives off of.

Site Descriptions & Methods

A total of six beach locations around Hawai'i island were surveyed in three districts: Kona, Ka'u, and Hilo. In the Kona district, Hapuna Beach and Kua Bay were chosen because they are both popular beaches that have dozens of daily visitors and locals. Punalu'u Beach of the Ka'u district usually has sea turtles which draws people to visit, and Green Sands is an isolated beach which requires a hike or 4WD to reach it. Hilo Bay sits alongside the district of Hilo and is used and visited for recreational activities such as sailing or rowing, and Richardson's Beach is quite popular where dozens of locals and some tourists visit daily.

Upon arrival at the beaches, a random location just offshore was chosen. Two 30m transect line were laid in parallel approximately 3m apart from each other. Within this area now enclosed, a survey was conducted taking note of pieces of any marine debris detectable by the human eye no deeper than 4in. The debris collected was placed in three basic categories.

Categories of marine debris:

- a) Small: 0-3in
- b) Medium: 3.1-8in
- c) Large: >8.1in

Results

SITE	SIZE	COUNTS
Hilo Bay	Small	15
	Medium	6
	Large	2
Richardson's Beach	Small	13
	Medium	4
	Large	1
Punalu'u Beach	Small	8
	Medium	1
	Large	0
Green Sands Beach	Small	4
	Medium	0
	Large	0
Hapuna Beach	Small	12
	Medium	5
	Large	0
Kua Bay	Small	9
	Medium	3
	Large	0

Figure 1: All recording were placed into a spreadsheet that was color coded to represent different districts. (Orange = Hilo, Green = Ka'u, Blue = Kona).

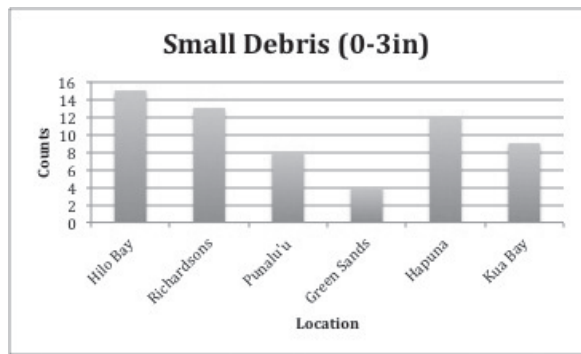


Figure 2: Graph of all small sized debris recorded at each beach location.

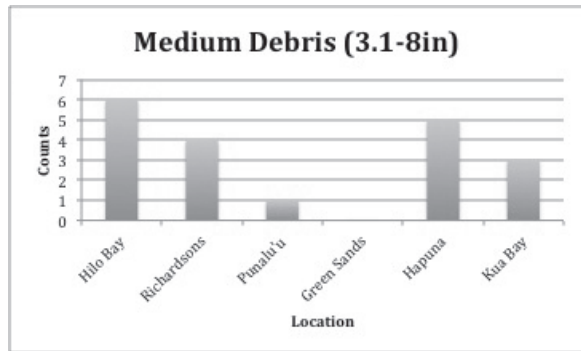


Figure 3: Graph of all medium sized debris recorded at each beach location.

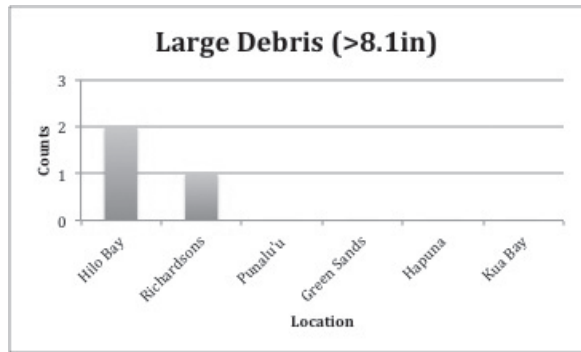


Figure 4: Graph of all large sized debris recorded at each beach location.

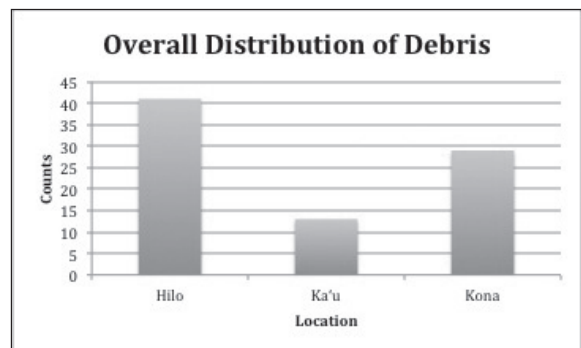


Figure 5: Graph of all debris recorded in each district.

The data collected were put into separate charts to show the correlation between debris size and location. These divisions provided a clearer understanding of how the debris was distributed across the island.

Findings

Observations made from the data conclude that the debris accumulation did not depend on the currents that move through the island. Of the beaches that were tested, the greatest accumulation of debris was shown in areas that have the highest population density. Beachgoers tend to pollute these beaches rather than the debris coming in from the water. Most commonly found were paper-like materials (wrappers, napkins, cardboard, etc.) and plastic bottles and bags. All of these constituents are most likely caused by human pollution that occurs directly on the beach. Overall, not much debris was observed throughout all of the test sites. The small pieces were primarily wrappers or paper-like materials and the larger items were either plastic bottles or bags. The low number of debris at such popular beaches show that these pollutants are probably picked up and thrown away in order to keep these beaches clean and visitors coming.

Between the three districts that the beaches were tested in, Hilo showed the greatest amount of pollutants. This also coincides with the previous assumption that more populated beaches tend to have the most trash. Hilo is the most populated city on the big island and therefore would make sense to have the most pollutants on its popular beaches. Following were Kona and then Ka'u, respectively. Kona has many tourists come visit its beaches and therefore that adds to debris accumulation on the western side of the Big Island. As for Ka'u, the southern side showed relatively clean beaches.

Discussions

The experiment tested only three districts and six beaches. Overall there are six districts and countless beaches. A better understanding of the accumulation of debris should include many more beaches and all districts around the island. The data collected showed the beaches in Hilo to have the most debris. This may be the case, however Kamilo Beach which is located in Ka'u, where the experimental data showed that this area had the cleanest beaches, is known as the one of the worst trash filled beaches in the world where approximately 90% of the beach is debris (Carson et al., 2013). The structure of the beach and the path of the currents make this place a prime dumping spot for marine debris. This beach was not chosen to exclude any bias.

The data collected also excluded any debris that was below 4in. Many pieces of debris can become covered over time and be placed deeper in the sediment, due to lack of research tools, this could not be assessed. Sediment cores, which pull out layers of sediment could have produced more effective results because this would

show a longer time span as new sediment is placed on top of the older. Another aspect of the experiment is that storms or other natural events also impact the amount of debris accumulation. Runoff and strong winds, in conjunction with changing currents, move debris all around. Therefore debris can easily be transferred from one place to the next. A better understanding of the accumulation of debris should be taken over a length of time and using tools to show the previous history as well.

Conclusion

Marine debris, both on and off the beaches, has a broad impact on the environment. The many animals that interact with these pollutants are, majority of time, negatively affected. This poses an enormous threat to world ecosystems, as all animals in one way or another are interconnected in an environment. More efforts should be made to eliminate the use of plastics and all other non-biodegradable pollutants. The life expectancies of these materials are unreasonably long and with that the build up of these plastics and other items will just keep accumulating for many generations to come. Based on the data observed, most places will most likely have a correlation between population and pollution. The efforts of the community must come together to solve this ongoing problem. Ultimately, this problem lies at the source and the constant pour of millions of metric tons of plastics into the environment must stop and the communities, along with the business men and women must learn to take care of the place they call home, Earth.

References

- Baillie, J E M, Hilton-Taylor, C, and Stuart, S N. (2004). A global species assessment. IUCN Spec. Surv. Comm.
- Barnes, A K D, Galgnani F, Thompson, C R, Barlaz, M. (2009). Accumulation and fragmentation of plastic debris in global environments. *Phil. Trans. R. Soc. B.* 364(1526).
- Blight, K L, Burger, E A. (1997). Occurrence of plastic particles in seabirds from the eastern North Pacific. 34(5).
- Carson, S H, Lamson, R M, Nakashima, D, Toloumu, D, Hafner, J, Maximenko, N, McDermid, J K. (2013). Tracking the sources and sinks of local marine debris in Hawai'i. *Marine Environmental Research.* 84(pp.76-83).
- Cauwenberghe, V L., Vanreusel A, Mees, J, Janssen, R C. (2013). Microplastic pollution in deep-sea sediments. *Environ. Pol.* 182(pp. 495-499).
- Claessens, M, Cauwenberghe, V L, Vandegehuchte, B M, Janssen, R C. (2013). New techniques for the detection of microplastics in sediments and field collected organisms. *Marine Pollution Bulletin.* 70(pp. 1-2).
- Cole, M, Lindeque, P, Fileman, E, Halsband, C, Goodhead, R, Moger, J, Galloway, S T. (2013). Microplastic ingestion by zooplankton. *Environ. Sci. Tech.* pp 6646-6655.
- Cooper, A D, Corcoran, L P. (2010). Effects of mechanical and chemical processes on the degradation of plastic beach debris on the island of Kauai, Hawai'i. *Marine Pollution Bulletin.* 60(5).
- Eriksen, M, Lebreton, M C L, Carson, S H, Theil, M, Moore, J C, Borerro, C J, Galgani, F, Ryan, G P, Reisser, J. (2014). Plastic pollution in the world's oceans. *PLoS ONE.* 9(12).
- Jambeck, R J, Geyer, R, Wilcox, C, Siegler, R T, Perryman, M, Andrady, A, Narayan, R, Law, L K. (2015). Plastic waste inputs from land into the ocean. *Sci.* 347(6223).
- Kubota, M. (1993). A mechanism for the accumulation of floating marine debris north of hawaii. *Sch. Mar. Sci. Tech.* 24(pp. 1059-1064).
- Laist, D W. Overview of the biological effect of lost and discarded plastic debris in the marine environment. *Mar. Pol. Bull.* 18(1987).
- Lonsdale, W M. (1999). Global patterns of plant invasions and the concept of invisibility. *Eco. Soc. Of Amer.* 80(5).
- Minchin, D. (1996). Tar pellets and plastics as attachment surfaces for lepadid cirripedes in the north atlantic ocean. *Mar. Pol. Bull.* 32(12).

Not a Step Back

Leanne Crain
History 435



"Such talk [of retreat] is lying and harmful, it weakens us and strengthens the enemy, because if there is no end to the retreat, we will be left with no bread, no fuel, no metals, no raw materials, no enterprises, no factories, and no railways. It follows from this that it is time to finish with retreat. Not a step back!"

-Order No.227¹

German Field Marshal Frederich Paulus surrendered his remaining exhausted and starved troops of the Sixth Army on January 31, 1943 in Stalingrad. The culmination of just over five months of intense fighting within the ruins of the sprawling city that sat against the banks of the Volga River. Operation Barbarossa, the German invasion of the Soviet Union, began in late June 1941, but by the time of Paulus's surrender, the German army had been dealt a blow from which it would never recover. Though Operation Barbarossa was initially successful, Hitler and his commanders had vastly underestimated Russia. They believed, based upon the Russian defeat of the Winter War against Finland, that Russia would be easily conquered and that the "Bolshevik tyranny" would crumble, but this was shown to be a fallacy.² The Russians held tactical advantages with sharp minds of the remaining high level military officials, the people's knowledge of how to deal with their particular climate, and the vast number of human resources that could be called up. The Russian forces fought with desperation in the aptly named "meat grinder" of Stalingrad due to a mix of patriotic fervor, stirred up by Stalin to inspire his troops into fighting for their homeland, and the grim knowledge of both Order No. 227 – the infamous 'Not a Step Back' order – and the wholesale mass extermination of Soviet party members and civilians in German occupied areas. It was German overconfidence, and the Russians' tactical advantages, luck, and fear that enabled the Battle of Stalingrad to slow and eventually stop the German advance into Russia, and turn the course of the war.

The beginning of the war in Russia came as a surprise to the Soviet government, even though they had been repeatedly warned by other countries that Nazi Germany was planning an attack on Russia, and nearly the entire first year of the German advance into Russia was met with disorganization and reactionary planning. Hitler, and indeed, most of the top military minds in Germany, had every right to feel confident in their troops. The Germans had swept across Europe, not meeting a single failure aside from the stubborn refusal of the British to cease any hostilities, and they had seen how the Soviets had failed spectacularly in their rushed invasion of Finland in the winter of 1939. The Germans had the utmost faith in their army and the success of their *blitzkrieg* strategy against their enemies further bolstered that faith as the Germans moved inexorably through the Ukraine and into Russian territory nearly uncontested. The Nazi-Soviet Non-Aggression Pact had kept Germany safe from any attack from Russia, but Hitler had already planned for the eventuality of invading Russia with Operation Barbarossa. Hitler was convinced that the communist regime was on the verge of collapse, and that the oppressed people under Stalin would welcome the Germans as liberators, but at the same time, the Germans looked at those same oppressed people as sub-human, fit only for slave labor.

There was also a practical reason for invading Russia in 1941, and that was that after the disastrous results Winter War, Stalin had initiated the largest mass promotion of officers in history in 1940 and had begun the rapid industrialization of the Red Army. Hitler would not want to face a stronger armed force if he delayed the invasion further.³ The confidence of the German Army of being able to easily invade Russia before winter set in had echoes of World War I overconfidence that the troops would 'be home by Christmas.' With the utmost confidence in German superiority, Hitler began Operation Barbarossa on June 22, 1941, and the Germans advanced quickly through Russian territory, fueling their confidence. The early days of the war in Russia were marked by brutality and ruthlessness on the part of both armies. German SS teams moved in behind the front lines, and began the process of mass murder of Communist Party members, along with any suspected Party members and suspected Jews and POWs, as they were not covered by the Geneva or Hauge Conventions.⁴ The Russians resorted back to a scorched-earth policy, one bent on leaving the Germans nothing to gain, and the extent of the destruction of their own resources shocked the Germans, who had hoped to use the raw materials and already functioning factories to further provide for war production and domestic consumer demands.⁵ The overconfidence and brutality of the German Army would prove to be a source of tactical advantage and luck for the Russians.

The war had stalled during the winter of 1941, but by summer, the press towards the Caucasus region and the rich oil fields was moving again, even though

the morale of the German Army had begun to waver in the face of their inability to topple Russia and capture Moscow within a few months. It was at this point that the unassuming city of Stalingrad became a target. Stalin, after having learned his own failings, began to rely more on the Stavka, which had been filled with the generals that Stalin felt to be trustworthy, and just before the Battle of Stalingrad began, there was a change in the chief of General Staff to General Aleksandr Vasilevsky, who seemed to have a more rational and calming influence on Stalin than Marshal Gregory Zhukov, and with the addition of General Semyon Timoshenko, the Stavka began preparing to attempt to stop the German advance.⁶

Though Stalin, via the Stavka, had issued Order No. 270 in August 1941, ordering the formation of 'blocking' defensive units to stop the massive retreats of the Red Army, he went a step further in July 1942 with the issue of Order No. 227, which became characterized by its Draconian orders of 'Not a step back.' This order detailed what Stalin and the Stavka saw as the main points plaguing the Soviet armed forces, which was desertion and thoughts of retreat with the argument that Russia had more than enough territory to maintain for a long time. It would also form penal battalions, which would be sent to the most dangerous sections of the front lines so that these offenders could repay their cowardice and desertion of their country with blood. In a calculated move, Stalin did not have the orders published, knowing that if a copy fell into German hands, and it would turn into propaganda against him and further demoralize his troops. It was distributed verbally, to be read aloud to the armed forces.⁷

By 1942, the brutality of the German Army towards Russian POWs and civilians was known throughout the ranks, and it left the Red Army little choice to either face the guns of the Germans or face the guns of their own countrymen, as the blocking units were fully authorized to shoot any deserters. Order 227 could have been a massive blunder, on par with Stalin's early purges of military and tactical leaders in the late 1930s, but it was his ability to coach the order into patriotic, nationalist language and the force of his personality that made this order more of a morale builder and bolstered the troops for a long, hard fight.⁸ It is conceivable that the members of the Russian army would think that they were dead either way, knowing that they would be shown no mercy from the Germans and knowing that measures had been implemented on their own side of shooting deserters, and this would prove a source for their tenaciousness and forcefulness in the fighting that was to come at Stalingrad.

The Battle of Stalingrad began with the bombing of the city by the *Luftwaffe* on August 23, 1942, killing thousands of civilians. Soviet claims were that over forty thousand people had been killed, but those numbers are unsubstantiated, and the city was left in ruins. Though Stalin had refused initially to order the evacuation of

the civilian population, arguing that the defenders would defend a living city rather than an empty one, thousands of refugees from the city waited for ferries and ships to take them across the Volga in the aftermath of the initial bombing.⁹ The bombing had ignited fires throughout the city, and though the city seemed gutted and ripe for conquest by the Fourth Panzer and Sixth Armies, the Russian defenders refused to surrender, and the Germans would have to capture every bit of the city in order to succeed. The buildings of Stalingrad, built during the early Soviet years and made of reinforced concrete, had roofs and windows blown out, floors collapsed and burned from the bombs, but many of the buildings were still standing and could take further bombings due to their construction and the ease with which the pressure waves from a bomb would dissipate within the buildings. The buildings that did collapse did so within their own footprint, keeping destruction to a minimum for neighboring buildings, and the rubble and skeletonized building ruins were perfect for the guerilla warfare and sniping that would become Stalingrad's legacy.¹⁰ Before the battle, the heavy artillery of the Red Army had been moved across the Volga and established along the banks of the river, where they were able to easily aim at targets within the city. Within months, the Germans had almost complete control of the city, but the city was not taken totally.

General Vasily Chuikov, an independent thinker and determined fighter, was appointed to command the 62nd Army two weeks after the battle had begun. His task was the monumental one of preventing the city from falling into German hands, and his unconventional methods worked within the ruined city. He provided morale for his troops by keeping his headquarters within the city and only going across the Volga for reports and inspection of the heavy artillery, but he also provided the grim reminder with his claim that for the 62nd Army, there was "no land across the Volga," indicating that they would either keep the city or die there.¹¹ The luck for the Russians came with Chuikov, who ordered No Man's Land be reduced ideally to zero and he ordered his troops to 'hug' the German lines, forcing the *Luftwaffe* into the friendly fire decision of dropping bombs onto their own troops, along with the Russians.

Chuikov fully believed in the spirit of Order No. 227, as he had either guessed or been told of plans of a massive counter-offensive by September 1942, and he believed that one sector would suffer while offensives could be planned in others, and it was simply his sector being picked for the brunt of the suffering.¹² Many regiments that were sent into Stalingrad's urban warfare also displayed that belief, most notably Rodimtsev's nearly annihilated 13th Regiment. Out of the ten thousand men it started with, only three hundred twenty men survived the battle, and the regiment was renamed a Guards unit. To be renamed as such was a high honor, one that had been earned with blood, even as it invoked images of the former tsarist regime.¹³ There were an

additional seven other regiments that suffered the same fate of near total casualties, most all of whom were also renamed Guards units.

A detachment of Rodimtsev's 13th Regiment was led by a man named Jacob Pavlov whose task was to secure a location within the center of the city. With the help of a few surviving members of his squad, Pavlov took control of an L-shaped apartment block in central Stalingrad, one that could defend a section of the Volga River. It also afforded the defenders a wide field of sight, about one kilometer to the north, south, and west. The house became known as *Dom Pavlov* – Pavlov's House. On German maps it was labeled as a fortress, as Pavlov and his men had either discovered or installed an anti-tank rifle on the roof, and protected their location further with the assignment of a sniper on the roof and sowing mines and barbed wire around the apartment building, along with digging communication trenches to stay in contact with the other Russian forces.¹⁴ From their vantage point, they could strike at the Panzers with impunity. They were not only a symbol of the resistance against the Germans, but they were also proven deadly. The Germans would routinely attempt to take the house almost daily, only to fail every time. Pavlov's House stood for fifty-eight days, until the defenders and the civilians found hiding in the basement were finally relieved in November.¹⁵

Chuikov's street fighting army flummoxed the German army, and letters and reports reflected the German distaste for this dirty method of warfare. Their complaints were that they controlled the kitchen, but were left fighting for the bedroom, and they called this the *Rattenkrieg* – the War of the Rats, displaying their contempt for their Russian adversaries who fought excessively for each piece of ground that could be lost or gained. The *Rattenkrieg* that the Germans complained so bitterly about became the haven of sniper warfare, snipers able to take residence in various positions through the city and strike at their enemies quickly. Here too, the element of luck came into play with a literal war of rats slowing the Panzer tanks to a halt. The tanks, especially as the weather became colder, became infested with rats, who were apt to chew on the sensitive electrical systems, rendering the tanks useless.¹⁶ Some of the defenders were also fortunate to have anti-tank guns, as was the case with Pavlov's House, but the tanks had been mostly taken out of the battle due to the close quarters combat, the rubble in some of the streets, and by rats. The remaining Panzers would be rendered useless by the coming winter.

Winter in Russia is an inevitability. Even as the German troops began to move into Stalingrad in August, summer would be giving way to a quick autumn, and then to the depths of winter in short order. Many people believe that it was the winter that brought the German army to a grinding halt, when in reality it was more the final straw for troops far from home, equipped only with summer gear and ill-prepared for the eventual onset

of their second winter. German soldiers would pillage anything they could to try to stay warm, from women's ski pants to bits of cloth they could wrap over their faces to protect their noses and lips from the cold, as frostbite was a deadly concern. As a contrast, the Russians were able to receive supplies quickly from across the Volga, including warmer clothing that would better blend in with their surroundings.

However, with the swift giveaway from fall to winter, the issues of supply began plaguing the Russian forces as well as the Volga began to have ice floes drifting downstream. Their ferries, which supplied the troops with ammunition, troops, and food usually operated at night, but with ice in the river, it became too dangerous to attempt to cross. Until the river could freeze, the troops at Stalingrad had been cut off from their supplies across the river. Though Chuikov joked that his troops had enough rations for two weeks in the form of chocolate, the main cause for concern would be the lack of ammunition, fresh troops, and communication with the heavy artillery batteries across the river.¹⁷ Supplying a battlefield is difficult enough even in nearly perfect conditions, but until the Volga was frozen over, there were many miscommunications with the heavy artillery across the river. These miscommunications on the part of the Russians seemed to be the luck the German Army needed to try and finally take the city, and it began its last major offensive into Stalingrad in the early days of November. The offensive lasted less than a day, and the Germans had little ground to show for their efforts by November 12. The Russian counter offensive would be launched eight days later, having been planned in secret with a program of intentional misinformation. The perception of the Germans was that the Russians had not learned from their mistakes at the beginning of Operation Barbarossa, mistakes that had cost Russia territory and manpower.¹⁸

The tactical planning of the defense of Russia had initially been haphazard, Stalin believing he could perform the duties of Supreme Commander, but he was eventually persuaded to heed the advice brought to him by senior military commanders. Whereas Hitler seemed to invest more and more of himself personally within the Battle for Stalingrad, as the prestige of taking a city that bore the name of his enemy would be a direct blow against Stalin, break the confidence of the Russian people, scatter the Russian defenses, and open the oil-rich Caucasus region for his war time efforts. Hitler's orders to Paulus within Stalingrad seemed to reflect the increasing personal stake and obsession with the city, and also reflected the overconfidence in the might of the German Army. Paulus was ordered to fight to the last man, even as winter set in, and even after his army had been encircled and trapped within the city by November 22.¹⁹

This tactical error coming from the German High Command was to prove fatal for many German soldiers, and without this overconfidence, the Russian

encirclement could have been broken through by Field Marshal Manstien, providing the German soldiers with relief, supplies, and a way out of the city. Hitler had been assured by Hermann Goering that the *Luftwaffe* could airlift and provide supplies for the trapped Sixth Army, but this claim was to be proven false. The amount of supplies the Germans needed within the *Kessel* – the Cauldron – was almost eight hundred tons per day, but the *Luftwaffe* only had the capability to carry around half of that, as several of the needed planes were diverted to North Africa to provide fighting cover. With Manstien and Paulus hampered by orders to maintain their positions instead of fighting to merge together, the Soviet forces had time to strengthen their forces around Stalingrad, and it would only be a matter of time before the Germans would be crushed within their cauldron. Though the second phase of the Soviet counter-offensive stalled and only met with limited success

By January 1943, starvation, disease, and the cold were beginning to take a heavy toll among the German army while still being harassed by the encircling Soviet forces. It is estimated that between the encirclement of the *Kessel* and January 7, over fifty thousand German troops died from not only fighting, but the other conditions within the city. Towards the end of the battle, requests for permission to surrender were repeatedly denied by Hitler, who believed that if there were reports of a heroic sacrifice by the Sixth Army, that it would inspire the remainder of his troops along the Eastern Front into rallying around the memory of the Sixth Army. Hitler had promoted Paulus to Field Marshal, on the assumption Paulus would commit suicide instead of being captured, as no German of that rank had ever surrendered. However, that promotion came just before Paulus had allowed himself to be captured by Soviet forces within the remains of the city he had failed to take on January 31. The last German resistance in the city surrendered two days later, and the Battle of Stalingrad had finally ended after five months. The tide of the Eastern Front was beginning to turn against the Germans and there seemed to be little doubt that the Russians would push all the way to Berlin in their quest for vengeance for the invasion of their country and the mass extermination of their countrymen.²⁰

The Battle for Stalingrad was a long, drawn out battle of attrition, one that the Germans had initially thought they would never be drawn into. The overconfidence in the tactic of *blitzkrieg*, the strength of the German army, and Russian unpreparedness and weakness would be the very thing that began to turn the tide of World War Two against Germany. Stalin, though caught unprepared for the speed at which the Nazi-Soviet Non-Aggression Pact was violated, proved his ability to learn from his mistakes and listen to more militaristic minds when it came to planning resistance. Stalin had also dispensed with ideology for the war time years and used a tactic of nationalistic pride to stir up patriotic fervor for the war effort, but also used

Draconian orders to ensure discipline within the armed forces. Order No. 227 was enacted as a measure to cease any form of retreat and to boost the morale of those inclined to heroism to fight to the death for every inch of Russian territory. By the time of the Battle of Stalingrad, the grim knowledge of the mass killings behind German lines provided Russian troops with the options of dying on the battlefield, dying at the hands of the Germans, either in concentration camps such as Auschwitz or executed by SS troops that followed the front line, or being executed by their own countrymen left Russian troops little choice as to their fate. Luck and tactics went hand in hand, Chuikov's spontaneous tactics employed by his troops matching up with strokes of luck, such as the river freezing quickly at the onset of winter, the city's buildings standing up to the bombs of the *Luftwaffe* and providing cover for the guerrilla warfare the Germans called the *Rattenkrieg*. Tenacious fighters, such as Pavlov's squadron or the Siberian detachment of the 187th Rifle Division that fought for a riverfront factory, were the norm rather than the exception during the Battle of Stalingrad. The German advance into Russia was stopped by the city that lay upon the banks of the Volga, a point of pride to both Stalin and Hitler, the overconfidence of the German army, luck and the Russian defenders that fought a bloody battle out of nationalistic sentiment and fear, using tactics suited uniquely to Russia.

Notes

- ¹ Geoffrey Roberts, *Victory at Stalingrad: The Battle That Changed History* (Harlow: Longman, 2002), 204-5.
- ² Michael Bitter, "Russia and World War Two" (Lecture, University of Hawaii at Hilo, Hilo, HI, April 30, 2015).
- ³ Walter Boardman Kerr, *The Russian Army: Its Men, Its Leaders and Its Battles* (New York: A.A. Knopf, 1944), 150 & Bitter, "Russia and World War Two."
- ⁴ Bitter, "Russia and World War Two" & Roberts, *Victory at Stalingrad*, 68.
- ⁵ David M. Glantz and Jonathan M. House. *When Titans Clashed: How the Red Army Stopped Hitler*, (Lawrence: University Press of Kansas, 1995), 72.
- ⁶ Glantz and House, *When Titans Clashed*, 129.
- ⁷ Roberts, *Victory at Stalingrad*, 203-210.
- ⁸ Roberts, *Victory at Stalingrad*, 65-8.
- ⁹ Roberts, *Victory at Stalingrad*, 77.
- ¹⁰ "Battle of Stalingrad | Battlefield Detectives Documentary," YouTube, Accessed March 19, 2015, <https://www.youtube.com/watch?v=61eYOpEF7hk>.

- ¹¹ Roberts, *Victory at Stalingrad*, 87 & Mike Yoder, "Military History Online - Battle of Stalingrad," Military History Online - Battle of Stalingrad, Accessed March 19, 2015, <http://www.militaryhistoryonline.com/wwii/stalingrad/>.
- ¹² Kerr, *The Russian Army*, 197.
- ¹³ Bitter, "Russia and World War Two".
- ¹⁴ Mike Yoder, Military History Online & "Дом Павлова," *Volfoto.ru*, Web, April 09, 2015. http://www.volfoto.ru/volgograd/ploschad_lenina/dom_pavlova/.
- ¹⁵ Roberts, *Victory at Stalingrad*, 97 & William Craig, *Enemy at the Gates: The Battle for Stalingrad* (New York: Reader's Digest Press, 1973), 146.
- ¹⁶ "Battle of Stalingrad | Battlefield Detectives Documentary" & "Crucial WW2 Battle Remembered," Crucial WW2 Battle Remembered, Accessed April 09, 2015, http://web.archive.org/web/20090309114524/http://russiatoday.com/Top_News/2009-02-02/Crucial_WW2_battle_remembered.html.
- ¹⁷ Craig, *Enemy at the Gates*, 168 & Kerr, *The Russian Army*, 201.
- ¹⁸ Alexander Werth, *Russia at War, 1941-1945*, (New York: Dutton, 1964), 470-1 & Glantz and House, *When Titans Clashed*, 133.
- ¹⁹ Kerr, *The Russian Army*, 207.
- ²⁰ Roberts, *Victory at Stalingrad*, 130-4.
- Bibliography**
- BBC News. February 02, 1943. Accessed March 19, 2015. http://news.bbc.co.uk/onthisday/hi/dates/stories/february/2/newsid_3573000/3573003.stm.
- Baird, J. W. "The Myth of Stalingrad." *Journal of Contemporary History* 4, no. 3 (12, 1969): 187-204. doi:10.1177/002200946900400312.
- "The Battle for Stalingrad." The Battle for Stalingrad. Accessed March 19, 2015. <http://www.stalingrad.net/>.
- "Battle of Stalingrad | Battlefield Detectives Documentary." YouTube. Accessed March 19, 2015. <https://www.youtube.com/watch?v=61eYOpEF7hk>.
- Bialer, Seweryn. *Stalin and His Generals: Soviet Military Memoirs of World War II*. New York: Pegasus, 1969.
- Bitter, Michael. "Russia and World War Two." Lecture. University of Hawaii at Hilo. Hilo, HI. April 30, 2015.
- Craig, William. *Enemy at the Gates: The Battle for Stalingrad*. New York: Reader's Digest Press, 1973.
- "Crucial WW2 Battle Remembered." *Crucial WW2 Battle Remembered*. Web. 09 Apr. 2015. http://web.archive.org/web/20090309114524/http://russiatoday.com/Top_News/2009-02-02/Crucial_WW2_battle_remembered.html.
- Ellis, Frank. "Vasilii Grossman: The Genesis of Heresy 1937-41." *The Modern Language Review* 85, no. 3 (12 1990): 653. doi:10.2307/3732202.
- Fenyo, Mario. "The Allied Axis Armies and Stalingrad." *Military Affairs* (1965): 57-72.
- Glantz, David M., Jonathan M. House. "When Titans Clashed: How the Red Army Stopped Hitler." Lawrence: University Press of Kansas, 1995.
- Hayward, Joel. "Too Little, Too Late: An Analysis of Hitler's Failure in August 1942 to Damage Soviet Oil Production." *Journal of Military History* 64, no. 3 (2000): 769-794.
- Kerr, Walter Boardman. *The Russian Army; Its Men, Its Leaders and Its Battles*. New York: A.A. Knopf, 1944.
- Kirschenbaum, Lisa A. "'Our City, Our Hearths, Our Families': Local Loyalties and Private Life in Soviet World War II Propaganda." *Slavic Review* 59, no. 4 (12 2000): 825. doi:10.2307/2697421.
- Merridale, C. "Culture, Ideology and Combat in the Red Army, 1939-45." *Journal of Contemporary History* 41, no. 2 (12, 2006): 305-24. doi:10.1177/0022009406062072.
- "Order No. 227: Stalinist Methods and Victory on the Eastern Front." Not Even Past. Accessed March 19, 2015. <https://notevenpast.org/order-no-227-stalinist-methods-and-victory-eastern-front/>.
- "Revisiting Stalingrad: An Inside Look at World War II's Bloodiest Battle - SPIEGEL ONLINE." SPIEGEL ONLINE. Accessed March 18, 2015. <http://www.spiegel.de/international/zeitgeist/frank-interviews-with-red-army-soldiers-shed-new-light-on-stalingrad-a-863229.html>.
- Roberts, Geoffrey. *Victory at Stalingrad: The Battle That Changed History*. Harlow: Longman, 2002.
- Werth, Alexander. *Russia at War, 1941-1945*. New York: Dutton, 1964.
- Yoder, Mike. "Military History Online - Battle of Stalingrad." Military History Online - Battle of Stalingrad. Accessed March 19, 2015. <http://www.militaryhistoryonline.com/wwii/stalingrad/>.
- "Дом Павлова." *Volfoto.ru*. Web. 09 Apr. 2015. http://www.volfoto.ru/volgograd/ploschad_lenina/dom_pavlova/.

Lucia Greenberg: In-Depth Analysis

Sadie Dossett
English 300

MAUS by Art Spiegelman tells the story of Jewish Holocaust survivor Vladek Spiegelman and his son. The graphic novel follows Vladek from his marriage to Art's mother to the end of his life. The focus of this essay will only be on the first chapter. More specifically, it will be focusing on one character from the first chapter: Lucia Greenberg. She deserved more than the portrayal she got in the book, and because of that this paper is dedicated solely to her.

The attention *MAUS* gave to women was negligible. The exclusion of women from the narrative is something that has been happening for centuries, going all the way back to early Judaism: "Many women appear here and there throughout biblical narratives, often playing strong roles but not dwelt on at any length by the narrators" (Fisher 163). Similarly, very little is written about the women in *Maus*, most analyses focusing only on Mala, Anja, and Francoise. While it is important for all of the women in the story to be written about, Lucia is especially important because of how little we know about her. By providing an in-depth analysis, this paper will show that she was so much more than the measly seventeen panels she appeared in.

Lucia is first introduced on page 15 of *MAUS*. Vladek is bragging about how attractive he used to be and talks about how girls he did not know would want to meet him. Lucia is one of those girls, quick involve herself in Vladek's life. She works very hard to get over to his apartment and they start some sort of relationship together that spans "maybe three or four years" (Spiegelman 17). Lucia is only mentioned because of her relationship with Vladek, and while her time in the story is short, there is obviously a lot happening with her. The first thing that should be addressed about Lucia in general is her appearance. *MAUS* is a book dealing with the Holocaust, and while there is some nudity, there is no sexualized nudity. Despite this, Lucia is drawn in a very over-sexualized way.

Most of Lucia's clothes are form-fitting, and she definitely shows off the most skin of all the female characters. The two panels that definitely show this happen early into her introduction. She is lying on Vladek's bed trying to persuade him to marry her, dressed in a tight black dress that shows off a lot of her chest. There is a lot implied in drawing her this way. Since it is Vladek's son who has illustrated the caricature, it is hard to determine whether Vladek had described Lucia in this way or if the artist made the decision to over-sexualize her through the artwork. Lucia is only seen in the little black dress for two panels, but even in her other panels, her clothes tend to accentuate her figure.

When she is dressed in her coat or not explicitly visible, her sexualization comes more from her behavior rather than how she looks. Lucia is the only female character in text explicitly described as sexually active, whereas it is only implied with a lot of the other women because of the children they have. Lucia's sexual activity does not involve getting pregnant, but it is still made clear that she is having sex. There is an awkward conversation between Art and his father where Art asks if Lucia was his father's first time and Vladek confirms that she was.

Despite the relationship lasting for a while, Vladek seems to know very little of what happened to Lucia. In fact, after getting through the story of what happened with Lucia, he has nothing else to say about her for the rest of the entire collection of *MAUS*. While losing track of someone in such a tumultuous time would make sense, when compared to the knowledge Vladek seems to have about everyone else, it seems a little callous. Another thing to consider is how Lucia is an integral character to the first chapter of the book, and yet never returns.

Looking at the story in chronological order, Lucia is the first female character introduced. Even the author himself is surprised to hear Vladek talking about Lucia, because he knows his mother's name was Anja. Lucia has little to do with the story itself except causing a rift between Anja and Vladek when she sends a letter outlining what she thinks Vladek's true intentions are, yet Vladek thinks Lucia is important to mention. Vladek brushes the letter off and calls Lucia an old girlfriend. Vladek just as easily could have said this again about Lucia and not gone into the long story of how Lucia slept with him.

The span of their relationship is also important. If the two really were seeing each other for more than three years, it is strange that Vladek seems to have no idea what happened to Lucia. There is *no* mention of what happened to her after the relationship. This is significant because with nearly every other character Vladek seems to interact with, he knows exactly what happened to them. Vladek even reveals the fate of a man he had only met briefly—a man who had reported his family's hiding spot to the Germans (Spiegelman 119). While that mention is the grim announcement of his death, it is still more information than we get about Lucia. Vladek seems to know the outcomes of nearly everyone except for Lucia.

The next area that must be looked at concerning Lucia is how she compares to Anja and Vladek. Anja and Vladek are Art's parents, and thus without them, the book would not exist, although Vladek is pretty much who the book is about—it is his story that is being told. Anja is also important, though she does not get to tell her story because she is already dead by the time the book is being written. By looking at how Lucia compares to these two characters, the audience can see more about her own character.

Anja is Vladek's first wife. From Lucia's point of view, Anja is the person who takes Vladek away from her. The differences between Anja and Lucia are pointed out from the very beginning. Lucia is definitely more confident than Anja is. While Anja feels comfortable enough to talk to her friend, seemingly in private, about how handsome she thinks Vladek is, Lucia takes the direct approach and has her friend set a date between Vladek and her. Had Vladek not known English, he would not have known Anja's secret feelings for him. Lucia was very clear about how she felt about him. Additionally, Lucia and Anja clearly have very different personality types. While he does not have kind words regarding Lucia's personality, Vladek praises Anja constantly over the fact that she was "sensitive and intelligent" (Spiegelman 20).

Personality aside, Vladek did find Lucia attractive. When Art asks, "Mom wasn't that attractive, huh?" Vladek says that Anja was not attractive like Lucia was (Spiegelman 20). However, while looks aren't everything to Vladek, the implication seems to be that money is. One of the big reasons he says he was not interested in marrying Lucia was her family was poor and she didn't have a dowry. It is repeated many times how much money Anja's family had. There is very obviously a class difference between the two women.

While there are a lot of differences between Anja and Lucia, their biggest similarity is what connects them. One of the biggest reveals in *MAUS* comes at the end of the first book when it is revealed that Vladek burned all of Anja's diaries. Art calls Vladek a murderer and while it seems over dramatic, the statement is true in a way. Vladek has effectively stolen the opportunity for Anja to tell her own story. He also attempts to do this to Lucia's story. At the very end of the first chapter, he tells Art not to include their story because it is too private. Once again Vladek is keeping a woman's story from being told. Thankfully, Art still writes about it, but it is an experience that Anja and Lucia both shared.

Vladek is the main character in the story and without him, Lucia would not have any significance. While there are a lot of other things that cause problems, in the first chapter, Lucia appears to be Vladek's foil (Abrams 294). Not only does she highlight a different side of Vladek other than the rational way he presents himself, she also acts as a big stressor for him. Yet, the two are more similar than one might assume. They tend to do a lot of similar things, but because of the double standard, the way the things are portrayed end up being different. Lucia is trivialized for doing what she does, while Vladek is rewarded.

One of the first examples is when Vladek tries to break things off with Lucia. She goes to his apartment and desperately tries to get him to take her back. Lucia falls down on the floor and clings to his legs. This image is what makes the cover of chapter one. The readers are supposed to see Lucia as desperate and crazy for going to Vladek's home and begging for his affection. However only one page later, we see Vladek do something very

similar. When Anja stops calling him, he goes all the way to her home. Though she doesn't want to see him, Vladek brings her flowers. He eventually convinces her that the letter she received from Lucia was not true. Vladek going to see Anja is supposed to be considered a romantic gesture; nothing like what Lucia did to him.

The other area where the two seem similar is when they react jealously. Lucia is very upfront about her jealousy. First she reacts by insulting Anja, very obviously cutting the other woman down because of the way she looks. After Vladek ends things with her, Lucia also reacts negatively by sending Anja the letter, hoping to sabotage the relationship. Vladek's jealousy is a little ambiguous, because it also seems to be intertwined with anti-communism. When Art asks if Anja had any other boyfriends, Vladek says that there were no romantic relationships but Anja had been involved with a communist. Vladek prohibits Anja from working with any communists again, and Anja obeys. It is hard to determine if this is jealousy or fear, but it does show Vladek being very controlling. Whether it is from rereading or analyzing a specific part of the text, the way a character is looked at can be completely different. Lucia is definitely one of those characters that could be looked at in many different ways. This last section will look at how Lucia can be viewed, both positive and negative, to see how one character can be interpreted in a multitude of ways.

If looking at Lucia from a positive point of view, she suddenly becomes a character way ahead of her time. She is not without her flaws, but her positive aspects outshine them. Much like Vladek controlled his story and told it exactly how he believed it happened, Lucia transforms into the heroine of her story. Lucia's control of her sexual agency is what makes her one of the most captivating characters in the text. From the very beginning, she knows what she wants and she goes after it. She has her friend set her up with Vladek. When she finally gets to his apartment, they begin a relationship based on sex. This is made clear by Vladek's conversation with Art. It ends when Vladek breaks things off, and this leads into the other area where Lucia shows another positive trait.

From Lucia's point of view, the letter she sends Anja is a warning. As previously mentioned, Vladek does seem to be interested in money. One of his biggest complaints against Lucia is that her family is poor. In the letter Lucia sends Anja, she warns her about Vladek. From Lucia's perspective, what she says is true. Vladek was still doing things with Lucia when he began his relationship with Anja, so that could be what she meant by "a lot of girlfriends" (Spiegelman 24). From what can be gathered from the text, a large part of why he preferred Anja over Lucia was Anja's money, so what Lucia says about marrying for the money could be true. Lucia's letter was a warning to Anja that she ignored because of Vladek's persuasion. By looking at Lucia like this, she can be added to a long list of female characters

that “reinforce a feminist desire for women to break past traditional barriers and control their own lives” (Parker 153).

While the previous version of Lucia definitely seems like a heroine more than the textual version does, it is possible to twist her character in a completely opposite way. More often than not, this is what readers are led to do, especially operating under the impression that Anja and Vladek are the couple they are supposed to root for. When looking at Lucia from this point of view, her character changes drastically, and she becomes somewhat of a villain. Compared to the Lucia introduced earlier that is trying to protect Anja from Vladek, the Lucia in this interpretation is very mean. Spiegelman does a good job of drawing this Lucia in a way where her disdain for Anja can be seen. Lucia sees the picture of Anja and cuts her down for the way she looks. This is the only time we see Lucia talk about something that isn't Vladek or wanting to be with him, and it is sad that it is only to cut Anja down. This is vastly different from the Lucia we see later who calls herself Anja's secret friend (Spiegelman 24).

The other area where Lucia could be painted negatively is in the sense of being Vladek's other woman. While their relationship actually started before Anja and Vladek's, Lucia is still set up more as the mistress. This is mainly because she is not the one Vladek wants to marry; it is made obvious that Anja is that one for him. Because of this Lucia is made the “other”. Despite wanting to marry Anja, Vladek continues to see her because “[i]t was not so easy to get free from Lucia” (Spiegelman 19). She is seen as the one that he is cheating on Anja with rather than the other way around.

As shown, there are different interpretations that could be made about Lucia. She could be a heroine or a villainess. However, due to how little is revealed about her, the readers just know her as one of the women Vladek was involved with. Lucia was so much more complex than how she comes off in the short chapter. By analyzing the depth of her character, I hope to encourage others to look more critically at women in all media forms and in real life. “The problem comes with reducing women to little or nothing except their status as an object,” Parker writes (171). Hopefully by acknowledging this we can encourage better portrayal for women in fictional works.

Works Cited

- Abrams, M. H., and Geoffrey Galt Harpham. *A Glossary of Literary Terms*. 11th ed. Stamford: Cengage Learning, 2015. 138, 294, 378. Print.
- Fisher, Mary Pat. “Women in Judaism.” *Women in Religion*. New York: Pearson, 2007. 156-186. Print.
- Parker, Robert Dale. “Feminism.” *How to Interpret Literature: Critical Theory for Literary and Cultural Studies*. Third ed. New York: Oxford UP, 2008. 148-184. Print.
- Spiegelman, Art. *The Complete MAUS*. New York: Pantheon, 1980. 15-25, 97-129. Print.

The One Who Changed: An Analysis of "A & P" and Sammy's Epiphany

Sadie Dossett
English 200

Queer feminist literature is no longer something you need to ask a librarian for help finding. With a mind open to alternate interpretation, you can find it nearly anywhere. "A & P", by John Updike, is one of those stories, and it does not take much effort to turn it into that genre. One of the most key elements of my paper involves interpreting Sammy, the main character, as a woman. While the story never outright states Sammy's gender, many readers assume the characters are men, because of the way they are written. I want to challenge this idea though, and interpret Sammy as female. By looking at her through that perspective, her epiphany becomes that much more significant, and a lot of her behavior has better explanations too. Rather than being one of those stories when some awkward boy fantasizes about girls, judges them, and does some grand gesture for their attention, a different story is told. In this paper I will examine the story that comes about by explaining how each bit feeds into Sammy's big epiphany.

One of the first things to accept in this interpretation is that Sammy is definitely suffering from internalized misogyny. Internalized misogyny affects many women: your mother when she warned you against giving boys the wrong idea to your friends when they tell you what a slut their *friend* has been. Sammy is just as guilty. She starts off judging all the girls for their appearances, and in her head has assigned them all roles and personalities that they might not necessarily live up to. But the real telling bit comes from where she talks of girls as a whole: "You never really know how girl's minds work (do you really think it's a mind in there or just like a little buzz like a bee in a glass jar?)" (Updike 17). Sammy is very critical of women, but pays special attention to the one she deems Queenie.

Girl on girl hate is terrible. It ruins friendships, it pits women against each other, and it is not helpful in anyway. But Sammy is definitely guilty of it. She's overly critical of the three girls that come in. She criticizes the one in the green swimsuit for her weight. Her judgement of the tall one is particularly telling. Sammy calls her "the kind of girl other girls think is 'very striking' and 'attractive' but never quite makes it, as they well know, which is why they like her so much" (Updike 17). Not only does this show how well Sammy understands the dynamic of women friendships, but how she believes that other girls judge each other too. In a way this shows her belief of justification for her judging these girls.

The most telling part comes from her judgments of Queenie. She sets the queen up on a throne. Just because she has put her on a pedestal doesn't mean that

Sammy has kind words for her. In fact, Sammy seems the most judgmental of her. Sammy assumes that this girl is the mastermind of the group. Sammy pays special attention to Queenie, describing her in great detail, but there is still that tinge of something almost akin to jealousy in her tone. Sammy talks of the way she walks, how she "didn't walk in her bare feet that much" and compares her to something much more high class than what Sammy is used to (Updike 17). One of the most telling parts comes towards the beginning of the climax: "Still with that prim look she lifts a folded dollar bill out of the hollow at the center of her nubbled pink top" (Updike 19). Sammy is still thinking of the other girl as something proper, something different from her. Of course, only one sentence later Sammy admits that it was "so cute", which leads into my next area to examine.

In the very least, Sammy's a little *bicurious*. Yes, she judges these girls harshly, but that's because of a multitude of reasons. In part it is because she is jealous of them. This shows up many times and is easy to see in her judgments of the girls. I don't think she is just jealous of how they look, but also that they have this free time. While Sammy works, these girls can just trapeze around in their swimsuits. But I think that her biggest issue is that she likes girls. It's not that big of an issue, but for Sammy, it is. I think she struggles with being attracted to girls. On one hand she accepts it and looks at these girls because they are pretty; On the other hand, she is struggling, and cutting them down and criticizing them is a way for her to avoid addressing her feelings for them. Sammy is unable to completely stuff her feelings for the queen: "She held her head so high her neck, coming out of those white shoulders, looked very stretched, but I didn't mind. The longer her neck was, the more of her there was" (Updike 17). Sammy talks so much about Queenie, and sets her up a certain way in her mind, which makes the reveal of the Queen's voice so perspective-changing.

The reveal of the queen's voice is very important, because it helps lead Sammy to her epiphany: "Her voice kind of startled me, the way voices do when you see the people first" (Updike 19). Everything that Sammy had built Queenie up to be changes. Suddenly rather than viewing Queenie as other, Sammy regards them as similar. She even thinks of how they could be dealing with similar situations with their families. Hearing Queenie's voice helps Sammy relate to her and think of her as someone experiencing the same things as Sammy rather than just some girl in a swimsuit.

Recognizing Queenie as a person is a very important part of Sammy's development. Just as important is why Queenie spoke. Lengel, the store's manager and the story's antagonist, comes out of nowhere to basically make the girls feel bad about themselves. He makes multiple comments about how they are not dressed properly and he is very rude. It flusters the girls, especially Queenie whose blush becomes more and more noticeable. Sammy has yet to ring up their purchase, but hurries to do so after Lengel makes it clear

that the girls don't belong there. In this I think it truly shows Sammy as female. Sammy can think whatever she chooses about the other girls, ranging from the mean- "Queenie and Plaid and Big Tall Goony-Goony" to the perverse- calling Queenie's boobs "the two smoothest scoops of vanilla I had ever known" (Updike 19 & 20). However, a man speaking out about it is unacceptable. The dismissive and rude way that Lengel talks to the girls angers Sammy. She rings them up and as the trio hurries out, Sammy quits.

Sammy's resignation from her job is swift. She explains to Lengel that she quit, she takes her apron off, and she leaves the grocery store. Sammy looks around for the girls in their swimsuits, but they are gone. The closing line is dark: "my stomach kind of fell as I felt how hard the world was going to be to me hereafter." [20], but at the same time, I still think the ending has a bit of a positive spin to it. If you compare Sammy at the beginning of the story to who she is at the end, she's different. Yes, she's still a little weird with her feelings towards the swimsuit trio, calling them "my girls", but I like to believe that she has changed (Updike 20). Sammy finally stands up for the swimsuit trio rather than cutting them down. While it's a small step, it's a step in the right direction. As a reader, I would like to believe that the incident would inspire her to stop hating her own gender.

The reader gets to experience Sammy's epiphany with her. She doesn't outright state it, but you can see it happen as you read the story. It is very clear in this excerpt from page 20 that something has shifted in Sammy's thinking. After selling the snack to the girls, Sammy announces that she is quitting as the girls walk out of the store. The following interaction happens between Lengel and Sammy:

"Did you say something, Sammy?"

"I said I quit."

"I thought you did."

"You didn't have to embarrass them."

"It was they who were embarrassing us."

I started to say something that came out "Fiddle-de-doo." It's a saying of my grandmother's, and I know she would have been pleased.

"I don't think you know what you're saying."

"I know you don't," I said. "But I do." (Updike 20)

A lot happens in this conversation. The most obvious thing is that Sammy quits, this hint that Sammy is working towards possibly making some progress with her issues of internalized misogyny among other things. The line about her grandmother is especially important to me, because it shows how her grandmother would be pleased to see her standing up for these other girls rather than cutting them down. This shows a possible

positive female role model that Sammy has had in her life. Sammy's line about Lengel not understanding is also especially important. Lengel might not understand her reasoning, but Sammy does.

Her epiphany comes in two parts. The first part came when she realizes that Queenie is a person just like her. Queenie wasn't some impossible ideal. The girl in the beige swimsuit was just trying to get a snack for her mom. Queenie was a lot like Sammy, stuck doing something that made her feel awkward. The other part comes in this interaction. Sammy knows that in quitting, she's going to disappoint her parents and also that she might not find another job. But she doesn't let her fears stop her from resigning (Updike 20). She makes a decision for herself. Even though Sammy expresses nervousness at the end of the story, she looks back on the situation differently. Around the middle of the story, she reveals what her true feelings are: "Now here comes the sad part of the story, at least my family says it's sad but I don't think it's sad myself." (Updike 18).

By changing Sammy's perceived gender, the whole story changes. There's more of a struggle with her feelings, the time she takes to describe the swimsuits the girls wear makes sense, and her judgments of them and how they look also becomes an internalized judgment on herself. Her comment about buzzing in the heads of girls becomes less insulting and more self depreciating. Most interestingly, it changes this story into something a little more unique, giving it a queer protagonist, which shifts the story in a lot of ways. It also makes Sammy's epiphany that much more important. It is not just some clerk realizing that the customers are people too, it is creating a bridge between two girls who come from different backgrounds; it highlights sexism and classism. Not only that, but it creates a more hopeful ending. Yes, Sammy has lost her job, but perhaps she will start to learn how to stop hating herself and other girls. If more stories could end with girls having revelations like that, I would be very happy.

Works Cited

Updike, John. "A & P." *An Introduction to Fiction*. Ed. X. J. Kennedy and Dana Gioia. 11th ed. New York: Longman, 2010. 16-20. Print.

In the Company of Thorin Oakenshield: A Baggins' Styled Femininity and Acquired Masculinity in *The Hobbit: An Unexpected Journey*

Asia Howe
English 370

The scene, a hobbit hole aglow with warm hues from a fireplace, is set and a frustrated wizard Gandalf growls at a flustered young hobbit Bilbo Baggins, "You've been sitting quietly for far too long." This indictment, one of several catalysts for the hobbit's eventual departure from The Shire, alludes to his place within the hierarchy of males around him. Although Bilbo is the main protagonist of *The Hobbit: An Unexpected Journey*, he does not represent the ideal ego as main protagonists conventionally do. His lack of the characteristics which comprise protagonists who represent the ideal ego, in addition to settings and props, place him in a feminized position in relation to Gandalf, the leading dwarf Thorin, and the rest of the dwarves. Yet, plot facilitates his abandonment of femininity and acquisition of masculinity.

While Bilbo is the main male protagonist, his image does not conform to the narcissistic phantasies which constitute cinematic representations of the ideal ego. Laura Mulvey, in *Visual Pleasure and the Narrative Cinema*, states that a "heterosexual division of labor" considers the main male protagonist representative of the "more complete, more perfect, more powerful ideal ego" of the identification process (41) within Lacan's mirror phase (38). Bilbo fills the role of the main male protagonist Mulvey mentions; however, his image is deficient of the characteristics which cause such protagonists to signify the ideal ego. Steve Neale, in *Masculinity as Spectacle: Reflections on Men and Mainstream Cinema*, defines those characteristics, positing that power and omnipotence constitute the main male protagonist (256). Bilbo's deficiency is highlighted when he is in relation to Gandalf, Thorin, and the rest of the dwarves.

In the Appendix A scene, for instance, despite the hobbit's protestation that he cannot be the company's burglar because he has "never stolen a thing in [his] life," Gandalf decides he will be their thief by proclaiming, "If I say Bilbo Baggins is a burglar, then a burglar he is." Although the dwarves originally agree with the hobbit that he is unfit to be a thief, they present him their contract and assume him to be their burglar as soon as Gandalf makes his proclamation. Bilbo's inability to decide for himself and the company that he is not to be a thief, in conjunction with Gandalf's ability to decide otherwise, illuminates Bilbo's lack of power and omnipotence. In

the Appendix B scene, Thorin stops the company from their dinner festivity and gets them to gather around the doorway to meet him with a few knocks on the hobbit's front door. In the Appendix C scene, after pushing their way into Bilbo's home, Dwalin and Balin talk amongst themselves while the hobbit lectures them about trespassing. They do not acknowledge him until he ends his lecture by saying, "I had to speak my mind. I'm sorry." Contemplated in conjunction, the scenes further illuminate Bilbo's lack of power and omnipotence. His failure to command Dwalin and Balin's attention using his voice contrasts with Thorin's success at commanding the company's attention without speaking, and thus exposes his powerlessness. Furthermore, Bilbo's failure to end Dwalin and Balin's conversation except with an apology also illustrates the weakness of his ideal ego.

In addition to these defining characteristics, Neale also attributes emotional and linguistic reticence to the main male protagonist. Emotional reticence and reticence with language uphold "the image of the self as totally enclosed, self-sufficient, omnipotent" (Neale 257), as the ideal ego. Language ruins this image for it is "a process (or set of processes) involving absence and lack" (Neale 257). Bilbo's emotions, intentions, and thoughts are consistently well known as he uses facial expression and language liberally. His displeasure at riding a pony is shown via his expression in the Appendix D scene, for instance. Gandalf, Thorin, and the rest of the dwarves, in comparison to the hobbit, use facial expression limitedly; even when they use expression, their expressions are not as dramatic as Bilbo's facial expressions are (See Appendix E). On the same note, while the other males employ language, the hobbit speaks and asks questions more freely. In a particular scene, when Gandalf, whom Bilbo just met, announces to him, "I'm looking for someone to share in an adventure," he responds, "An adventure? Now I don't expect anyone west of Bree would have much interest in adventures. Nasty, disturbing, uncomfortable things. Make you late for dinner." The hobbit's expressiveness, talkativeness, and inquisitiveness hence prevent his image from being that of the ideal ego.

The features which deem Bilbo unrepresentative of the ideal ego place him in a feminized position. Hélène Cixous, in *Sorties*, asserts that the activity/passivity binary underlies all hierarchical organization, subjecting all organization to man (Easthope and McGowan 158). Neale's features are each part of a hierarchy: Power/weakness, reticence/expression. They are structured this way because power, omnipotence, emotional reticence, and reticence with language are equated with the male gender in cinema. Gender, being a signification that a sexually differentiated body assumes, "exists only in relation to another, opposing signification" (Butler 9). The opposing signification in the abovementioned binaries is that of woman, seeing how the activity/passivity binary underlying hierarchy is coupled with sexual difference (Easthope and McGowan 158), and the signification of power, omnipotence, emotional

reticence, and reticence with language is already that of man. The hobbit's need of these features places his image within the facet of weakness and expression, thus placing him in a feminized position. Indeed, his image is feminine for it is the "negative" of the other males' images and/or "lack" from which their images are differentiated (Butler 10-11). His image not only inverts the features that constitute the main male protagonist, but is situated in a feminized position, for the features are affiliated with sexual difference.

In addition, the settings Bilbo inhabits establish him in a feminized position in relation to Gandalf, Thorin, and the rest of the dwarves. The Shire and Bag End embody the feminine while Middle Earth embodies the masculine, following the laws of association Sigmund Freud used to interpret signs (Hall 260). The Shire's terrain conveys castration and in effect, the female genital through resemblance in form (Hall 260), it lacks the mountains and cliffs which signify the male genital organ (*The Interpretation*) (See Appendix F). Bag End's circular front door signifies the female genital opening (*The Interpretation*) via resemblance in shape (Hall 260); its curved rooms collectively signify the womb through resemblance in form and function (Hall 260) (See Appendix G). Their form is like that of the womb for they enclose spaces able to be filled (*The Interpretation*); they function like the womb as they provide warmth, nourishment, safety, and isolation. Although natural scenery of Bag End signifies the female genital (*The Interpretation*) the setting that Gandalf, Thorin, and the rest of the dwarves inhabit, Middle Earth, is marked by mountains, cliffs, and trees, signifiers of the male genital organ (*The Interpretation*) (See Appendix H). Trees may be seen in The Shire, but Middle Earth's exuberant amount renders them conspicuous and suggests a more masculine sphere. That male signs dominate a female sign conveys man's "glorious phallic monosexuality," his inability to be bisexual (Easthope and McGowan 159).

Bag End and Middle Earth also embody the feminine and masculine because they exhibit the mother-and father-identification of the Oedipus complex (*The Ego* 22) via those who inhabit them. Several phenomena happen during this Freudian complex, two of which are: The boy "develops an object-cathexis for his mother" (*The Ego* 22), a development that causes him to identify with her prior to discovering sexual difference and, after discovering sexual difference, he identifies with his father (Minsky 110). By possessing Bag End, Bilbo possesses a symbolic womb, a quality the boy assumes himself to have during his identification with his mother (Minsky 110). When inside Bag End, he displays stereotypical feminine qualities, qualities the boy likewise assumes he will have (Minsky 110). The hobbit cooks, frets about appearing decent, and hosts. He concerns himself with food, doilies, utensils, furniture, and his mother's glory box and pottery. Adhering to the father-identification of this complex, Gandalf, Thorin, and the rest of the

dwarves express stereotypical masculine qualities when within Middle Earth. They concern themselves with attack, battle, and murder, eat and sleep outdoors, act aggressively and apprehensively. Moreover, the wandering Gandalf does within this setting is a masculine quality, for a male's choice not to settle is viewed as a "rejection of home, family, and feminized control" (Domosh and Seager 118). The Shire and Bag End place Bilbo in a feminized position in relation to Gandalf, Thorin, and the rest of the dwarves because they embody the feminine.

Two props further feminize the hobbit through his state of affiliation with each in relation to the other males. His lack of a sword from the film's start, as well as his later acquisition of the prop, is a reflection of the castration complex in which he is portrayed female. Arising during the Oedipus complex, this anxiety depends upon the boy or girl discovering sexual difference. Freud explains, "[t]he antithesis here is between having a *male genital* and being *castrated*" (Laplanche and Pontalis 56-7). Since Bilbo is shown without a sword, a sign of the male genital by likeness in length, uprightness, and ability to penetrate the body (*The Interpretation*), from the start, he is symbolically castrated. He appears emasculated in comparison Gandalf, Thorin, and the rest of the dwarves who, excluding Bombur, all possess a staff or weapon from the beginning that, like a sword, signifies the male genital (*The Interpretation*). By possessing such signs from the start, the other males render them inherent to themselves as the male genital is inherent to the boy. Bombur does not own a prop signifying his maleness; however, his relation to the dwarves who possess phallic props allows him to vicariously have a male genital. Bilbo's lack of a sword portrays him female as the boy and girl, on discovering sexual difference, regard the female castrated (Laplanche and Pontalis 56-7). His acquisition of a sword continues to reflect the castration complex in which he is portrayed as female. Finding herself emasculated, the girl desires male genitalia. She satisfies the desire by developing an object-cathexis for her father, because she feels he will give her a son, a "longed for penis" (Siann 27). This process is represented when Gandalf gifts Bilbo with Sting, a sword and representation of masculinity. The wizard, having watched over, scolded, advised, defended, and answered the questions of Bilbo before the Appendix I scene, assumes the father's role. Sting, occurring with Gandalf's father figure and the hobbit's castrated condition, becomes the coveted male genital.

Bilbo's tie to food also feminizes him for woman is customarily linked with sustenance. Early foraging societies instituted the connection between females and food. Pregnant or nursing during most of their adult lives, women could not withstand the long-distance animal tracking or maintain the physical strength hunting demanded and in effect, came to gather (Morse 17). They undertook food processing and cooking for these tasks could be interrupted, resumed, and "done close to

home." In other words, these tasks suited pregnancy and childcare (Morse 21). Females' connection to sustenance persisted from hunter-gatherer in to horticultural societies. Horticultural women's work involved food preparation, and cooking meals (Morse 27). Faced with population increases, communities developed agriculture. Since agriculture necessitated "muscular strength, long[] hours, and frequent travel away from home," it was ill-suited for pregnancy and childcare. Agriculture's exclusivity, followed with land privatization that reduced polygyny, dichotomized men and women's duties into public and domestic work (Morse 31-3). By "giv[ing] men control of the political and economic structures," the dichotomy supported female subordination. Among other duties, women were expected to "satisfy[] their family's food requirements" and serve their husbands at mealtimes in Medieval Europe, for instance (Morse 33-4).

Considering this connection, ingrained in the tradition of the Western World (Morse 33), food enables the hobbit to assume the feminine role of sustenance provider when he is in relation to the other males. In the Appendix J scene, he makes himself dinner, but before he can consume it, Dwalin invades his home and devours his meal. Finishing the food, the dwarf inquires if there is any more. Bilbo produces a plate of biscuits. Dwalin's consumption of the hobbit's dinner and Bilbo's fulfillment of the dwarf's request for food present the hobbit as a provider. His feminine role is enriched once the rest of the dwarves arrive and clear out food from his pantry. Although he does so reluctantly, Bilbo provides Gandalf and the dwarves with sustenance he gathered and sustenance that has been prepared (See Appendix K). The food has been prepared, and Gandalf and the dwarves consume it right after it is removed from storage. Despite arriving at the hobbit hole late, Thorin is provided for by his host: He is shown eating from a bowl at Bilbo's dining table, a plate of biscuits and mug of ale to his left and right. Gandalf, Thorin, and the rest of the dwarves, in contrast, do not assume the role of provider. The wizard and dwarf do not supply food to their comrades. While Thorin snaps, "Come on Bombur, we're hungry," at one point, the dwarf is not depicted providing or preparing the sustenance he and his allies later eat. The rest of the dwarves do not give each other, Thorin, Gandalf, or the hobbit compensation. By allowing Bilbo to assume the traditionally female role of sustenance provider, food, like Bilbo's initial lack of sword, situates him in a feminized position.

Yet, in spite of this initial position, plot facilitates Bilbo's abandonment of femininity and acquisition of masculinity. Joseph Campbell, in *The Hero with a Thousand Faces*, states a call to adventure within a diegesis signals an individual's "familiar life horizon has been outgrown, the old concepts, ideals, and emotional patterns no longer fit; the time for the passing of a threshold is at hand" (51). Gandalf, who announces the call to Bilbo, states that the familiar life horizon has been outgrown: He questions, "Tell me, when did doilies and

your mother's dishes become so important to you?" The hobbit, unlike the other males who have no residences, is associated with home just as woman is. He is introduced within the confines of his hobbit hole, seated behind the fence surrounding Bag End; he does not break from this domestic sphere until he answers the call. Simone de Beauvoir, in *The Second Sex*, posits man "is but mildly interested in his immediate surroundings because he can find self-expression in projects" (450). Woman, in opposition, is devoted to the home: "Because she *does* nothing, she eagerly seeks self-realization in what she *has*" (450-1). Bilbo does nothing—he puffs his pipe, checks the mail, makes himself dinner—and is implied as seeking self-realization in what he has, experiencing the world through his books and maps. Consequently, his conduct and attachment to home ingrains his person with femininity.

By answering the call, he meets the custodians of the first threshold (77), dangers "every hero must encounter who steps an inch outside...his tradition" (Campbell 83). According to this perspective, the trolls, being the foremost threat he comes across, indicate Bilbo's departure from what has become his tradition, effeminacy. Gandalf confirms the hobbit's tradition, revealing his once active and therefore masculine condition (Siann 29) when he intones, "I remember a young hobbit who was always running off..., who'd... come home after dark." The trolls rouse activity, a "sense of morality," and a "social interest," traits Freud ascribes to men (Siann 29), in Bilbo as he attempts to recover the ponies and rescue the dwarves from them. On traversing the threshold, the hero "must survive a succession of trials" with the assistance of a supernatural helper and his "advice, amulets, and secret agents" (Campbell 97). The hobbit not only eludes orcs, but survives a thunder battle, fends off a goblin, defeats and escapes Gollum, stays with the company despite being given the means to return home, and endures a fight with Azog. He manages most of these trials with the wizard's help: Gandalf finds an escape, equips Bilbo with a sword, informs him on how and when to use it, and calls for help. Campbell asserts the hero's collection of a prize (181) often concludes his journey (193). On receiving it, he must cross the return threshold, reintegrate himself into society and, at the same time, "confront society" with that which he gained through his travels (216-7). Particular elements may place the hobbit in a feminized position in relation to Gandalf, Thorin, and the rest of the dwarves, but plot, even if unresolved, ultimately dissociates him from femininity. The diegesis moves him toward action, a vocation of fighting, creating, and progressing, an acquisition of masculinity (Beauvoir 448). Although he has yet to receive his one fourteenth of the dwarves' treasure, the prologue reveals he returns home. Hopefully, the change Frodo claims other hobbits perceive in this untypical protagonist refers to the maleness he gained through his adventure, not just to his unsociableness.

Appendix A



Appendix B



Appendix C



Appendix D



Appendix E



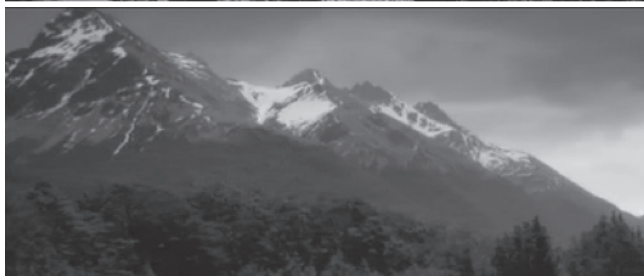
Appendix F



Appendix G



Appendix H



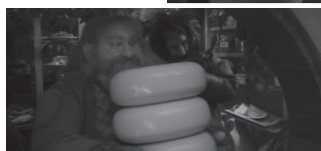
Appendix I



Appendix J



Appendix K



Works Cited

- Beauvoir, Simone de. *The Second Sex*. New York: Knoff, 1953. Print.
- Butler, Judith. *Gender Trouble: Feminism and the Subversion of Identity*. New York: Routledge, 1990. PDF file.
- Campbell, Joseph. *The Hero with a Thousand Faces*. New York: Bollingen Foundation, 1949. Print.
- Domosh, Mona, and Joni Seager. *Putting Women in Place: Feminist Geographers Make Sense of the World*. New York: Guilford, 2001. Print.
- Easthope, Anthony, and Kate McGowan, eds. *A Critical and Cultural Theory Reader*. Toronto: University of Toronto, 2004. Print.
- Freud, Sigmund. *The Interpretation of Dreams*. Trans. G. Stanley Hall. New York: Liveright, 1920. Project Gutenberg. Web. 23 Mar. 2014.
- Hall, Calvin. "A Cognitive Theory of Dream Symbols." *Psychopathology: A Source Book*. Ed. Charles Frederick Reed. Massachusetts: Harvard UP, 1958. 258-274. *Google Book Search*. Web. 25 Mar. 2014.
- Laplanche, Jean and Jean-Bertrand Pontalis. *The Language of Psychoanalysis*. Trans. Daniel Lagache. London: Karnac Books, 1988. Ebrary. Web. 23 Mar. 2014.
- Minsky, Rosalind. *Psychoanalysis and Culture: Contemporary States of Mind*. New Brunswick: Rutgers UP, 1998. *Google Book Search*. Web. 27 Mar. 2014.
- Morse, Elaine. "Woman the Provider." *Fed Up: Women and Food in America*. By Catherine Manton. Westport: Bergin & Garvey, 1999. Print.
- Mulvey, Laura. "Visual Pleasure and the Narrative Cinema." *Feminism and Film*. Ed. E. Ann Kaplan. New York: Oxford UP, 2000. 34-47. Print.
- Neale, Steve. "Man as Spectacle: Reflections on Men and Mainstream Cinema." *Feminism and Film*. Ed. E. Ann Kaplan. New York: Oxford UP, 2000. 253-264. Print.
- Siann, Gerda. *Gender, Sex, and Sexuality*. Bristol: Taylor and Francis, 1994. Print.

From Oppression to Nationalism: The Irish Penal Laws of 1695

Samantha Howell
English 484

Ireland had stood in the shadows of the great powers of Britain for centuries. From the reign of Henry VIII and Elizabeth I thereafter, to the invasion by Oliver Cromwell, Britain's puppetry over Ireland had continued to dehumanize the Irish peoples. The Irish Penal Laws of 1695 intensified the injustice brought upon by the Protestant English, wherein they stripped the Catholic Irish of religious freedoms and nearly all of their holdings including land. Various rules were created to suppress the Catholics in order to make sure they did not rise above the British power as they attempted in the Williamite Rebellion in 1688 (Franks n.p.) While the enforcement of the Penal Laws resulted in poverty across the Irish state and consequently led to emigration, it also created a sense of unity amongst those who remained in Ireland, and introduced the concept of nationalism. "A Modest Proposal," written in 1729 by Anglo-Irish writer Jonathan Swift, emphasized Ireland's destruction using satire, and highlighted the injustice casted upon the Irish through prose.

Having been born fatherless into an Anglo-Irish family, Jonathan Swift moved back and forth between Britain and Ireland. Swift often accompanied his mother to England when in search for work, until eventually he was passed over to his uncle, who lived in Ireland (Simon). There, he attended the Kilkenny Grammar School, known as the best school in Ireland at the time, and later enrolled in Trinity College (Simon). Written in the perspective of a Protestant Englishman, "A Modest Proposal" satirizes careful arguments on ways to manage poverty in Ireland through statistical, social, and mathematical calculations; this emphasizes Swift's resentment of British policies against the Irish. In his writing, Swift portrays Ireland in "distress," which perfectly describes its state in the 18th century.

According to the video narrative "Ireland and the Penal Laws" by Maurice Franks, any practice of Catholicism and communication in the Gaelic language was forbidden and labelled as rebellious against the powers of Britain. Catholic priests were banished, Catholic schools were banned, and Catholics were forced to pay a tithe to upkeep the Anglican church. Brave teachers who continued to teach their students their religious beliefs in the Gaelic tongue did so in remote areas, hidden and away from the Protestant English. Suppressing the religious and linguistic practices of the Irish Catholics were a few of Britain's many strategies that contributed to the weakening of Ireland as a whole (Franks).

Under the Penal Laws, the Catholics could not hold commission in the army, enter a profession, or own a horse worth more than five pounds. Catholics could not possess weaponry and arms, could not study law or medicine, and could not speak or read Gaelic or play Irish music (*The Penal Laws*). The most impactful rules to the Irish, however, were the rules surrounding the ownership of land. The Popery Act of 1703, passed by the British parliament, forbade the Catholics to pass down their land to their eldest son, and instead required landowners to distribute the land equally amongst all sons. Moreover, if the family bore only daughters, the land were to be also split equally amongst the daughters (Harvey 56). As a result, by the end of 1703, Irish Catholics who made up 90% of Ireland's population owned less than 10% of the land (*The Penal Laws*). According to Karen Harvey of Pennsylvania State University, "Incentives were offered to promote conversions to the Protestant faith; a Catholic eldest son was allowed full inheritance rights if he changed his religion; younger sons, upon conversion, could claim a portion of an estate." Therefore, land became a tool used to bribe the Irish Catholics to convert to Protestantism.

In the 18th century, land ownership served as a symbol for social, economic, and political power. It represented security, community, and was a crucial factor in the establishment of Irish identity. In "The Green Flag: A History of Irish Nationalism," writer and historian Robert Kee addresses Swift's statement regarding the Protestant landlords in Ireland:

'By unmeasurable screwing and racking their rents all over the kingdom, have already reduced the poor people to a worse condition than the peasants in France, or the vassals in Germany or Poland. 'Whoever travels this country,' he declared, 'and observes the face of nature, or the faces and habits and dwellings of the natives will hardly think himself in a land where law, religion, or common humanity is professed.' (Kee)

Leases were offered by the Protestant English landlords, but they were to be kept no more than 31 years, and if the land produced more than a third of the price of the rent in profit, the land could then be confiscated from the Catholics (Harvey 57). Some Irish Catholics converted to Protestantism just so they could maintain the land that had been passed down for generations, in which case the British had claimed their victory in luring the Catholics into their religious beliefs. Ireland slowly but surely became the center of poverty, as Swift describes in his satiric prose, "It is a melancholy Object to those, who walk through this great Town, or travel in the Country, when they see the *Streets*, the *Roads*, and *Cabbin-Doors*, crowded with *Beggars* of the female Sex, followed by three, four, or six Children, all in *Rags*, and importuning every Passenger for an *Alms*." It was not until 1782, approximately 80 years after the Popery Act

was first enforced, that the freedom to purchase land was granted to the Irish Catholics (Harvey 58).

Observing the decline of the Irish state, Jonathan Swift illuminates the severity of depression of Ireland through "A Modest Proposal" by suggesting the people of Ireland to begin breeding children for consumption and leather. Since his work was submitted anonymously, Swift was able to prove the injustice of the Penal Laws through satire. The "scheme" that Swift proposes would supposedly lead to the decrease in the "number of Papists." Tenants would be able to make their own money to support themselves despite the rent they pay to their landlords, increase the "Nation's Stock," bring "*Custom to Taverns*," and improve the economy by exporting the flesh and skin of young children. By incorporating the term "Papist" to refer to the members of the Roman Catholic Church, Swift maintains the vulgarity of his proposal to further exaggerate the absurdity of the religious battle. The Protestants had deliberately humiliated the Irish Catholics, and wiped out what little power that remained- power that had been gradually reduced since the reign of Charles I and under the command of Oliver Cromwell.

In 1649, Oliver Cromwell, the head of the British army, was sent to Ireland to suppress the forces of the royalists ("Ireland and Scotland"). According to John Walsh, after the beheading of Charles I of England, the Irish Roman Catholics in support of monarchy hoped for his son to be installed as Charles II. In addition to backing the temporarily abolished system, the people of Ireland hoped for reciprocation from Charles II for the support they gave, in the form of religious freedom amongst the Irish people (Walsh). The increase in Protestant settlers in the 17th century Ireland had sparked tension between them and the Catholic Irish, eventually leading to a rebellion against the Protestant population in 1641 ("Ireland and Scotland"). Thousands of Protestants were murdered in the battle, consequently resulting in Cromwell's attack eight years later. Cromwell, who believed God had reached out to him directly about the fate of the Irish once stated, "I am persuaded that this is a righteous judgement of God upon these barbarous wretches, who have imbrued their hands in so much innocent blood" (Fraser 338). During the short period of nine months, Cromwell's army left behind a pool of blood on Irish land, proving Protestant England's dominance over Catholic Ireland (Walsh).

The tension between the Catholics and the Protestants continued throughout the century, resulting in the Jacobite Rebellion in Scotland in 1680 and the Williamite War in Ireland in 1689 between the Jacobites (supporters of King James II) and the Williamites (supporters of the Dutch Protestant Prince William of Orange). After a year of bloodshed, the Williamite army claimed their victory, crowning Prince William as King of England and eliminating James II, thus reviving Protestant England (Heritage Academy History n.p.)

Within the religious conflict, Patrick Sarsfield, Earl of Lucan acted as a negotiator for Ireland, and formed a compromise through the Treaty of Limerick. Under the military article of the treaty, the Jacobites were allowed to leave for France with their families, an act now known as the Flight of the Wild Geese ("The Treaty of Limerick"). Others, if chose to do so, had the option of fighting for the Williamite army. According to Sir Henry Parnell, the civil article of the treaty on the other hand, stated:

The Roman Catholics of this kingdom shall enjoy such privileges in the exercise of their religion as are consistent with the laws of Ireland, or as they did enjoy in the reign of King Charles the second: and their majesties, as soon as their affairs will permit them to summon a parliament in this kingdom, will endeavour to procure the said Roman Catholics such further security in that particular, as may preserve them from any disturbance upon the account of their said religion. (190)

The Irish Catholics were granted the freedom of practicing their own religion as long as they followed King William III's rule. At such point, the Catholics and Protestants shared a certain level of peace, unlike Ireland under the Penal Laws several decades later.

Later in the 18th century, Primate Hugh Boulter wrote to the Duke of Newcastle about the state of Ireland in horror, "Since I came here in the year 1725, there was almost a famine among the poor; thousands of families quitted their habitations to seek bread elsewhere, and many hundreds perished." Later in 1728 he wrote, "I am sorry I am obliged to give your grace so melancholy an account of the state of the kingdom, as I shall in this letter" (Parnell 98). One of the major effects of the Penal Laws were emigration from the Irish land. Many Irish Catholics, as well as Protestants, fled Ireland in search of a better life elsewhere, often to other areas of Europe such as England, Wales, Scotland, or to the Americas. Swift also states in his introductory paragraph of "A Modest Proposal" that the poor mothers are "forced to employ all their time in Stroling, to beg Sustenance for their *helpless Infants*... or leave their *dear native Country to fight for the Pretender of Spain*, or sell themselves to the *Barbadoes*" (Swift).

According to Robert E. Kennedy in *The Irish: Emigration, Marriage, and Fertility*, the Americas were a more common destination for the Protestants rather than the Catholics, considering the expensive transatlantic voyage (22). Many Irish Catholics emigrated to areas within close proximity, but often stayed only until they attained enough money to travel to the United States (U.S.) (22). Once emigrating to the U.S., the Irish fought for independence with the colonies present, and by 1776, approximately one-sixth of the population in the U.S. was comprised of Irish people (21). The effects of

the Penal Laws had been impactful to the point where it physically and psychologically drained the Irish Catholics, and consequently drove them out of their native land.

Although the majority of the Catholic Irish fled Ireland, those who remained slowly gained a sense of unity amongst each other. Consequently, a new found wave of Irish nationalism was formed—a wave that carried on for centuries thereafter, influencing various Irish writers such as John McCormack and William Butler Yeats.

John McCormack's song *The Wearin' o' the Green* (c. 1798) expresses the immediate response of the Catholic Irish against the Protestant English:

An' if the colour we must wear is England's cruel red,
Let it remind us of the blood that Ireland has shed;
Then pull the shamrock from your hat, and throw it on the sod,
An' never fear, 'twill take root there, though under foot 'tis trod. (Regan 176)

Despite the lives lost in the physical and psychological war against Britain, the Irish stood tall and proud of their nation. The first two lines depict a rebellious image, convincing the Irish crowd to remember who they are and the suffering that the British brought upon them. The pain that the Irish experienced, in other words, became the center of Irish unity and pride.

The Irish continued to fight for their freedom all throughout the 19th and 20th century, rebelling against the British powers in various uprisings. Reflecting upon the Easter uprising of 1916, W.B. Yeats expresses:

Now and in time to be,
Where the green is worn,
Are changed, changed utterly:
A terrible beauty is born. (Regan 349)

Using the Irish color green, Yeats foresees the future, illuminating an image of Ireland, rising above Britain. The juxtaposing words, "terrible" and "beauty," contrasts the angelic image of Ireland against the angry and vengeful members of the nation.

Although the Irish Penal Laws were abolished in the late 18th century, the effects had carried on for centuries thereafter. Swift's heavy satire in "A Modest Proposal" expresses just how detrimental the effects were on the Catholic Irish. While some sacrificed their identity to seek a better life elsewhere, others gathered as one to rebel against Britain's oppressive forces, finding unity along the journey. Ireland's national pride carried forth, strengthening with each and every failure against the powers of Britain. The weight of the Irish Penal Laws had forced a sinking ship to reach the depths of the ocean floor, but failed to rid the sailors of their pride,

integrity, and dedication to their beliefs. With power invested towards freedom and independence, the people of Ireland sailed their ship throughout the sea, building a powerful nation along the journey.

Works Cited

- Franks, Maurice. "Ireland and the Penal Laws" *YouTube*. CDBaby, 24 July 2015. Web. 20 Nov. 2015.
- Fraser, Antonia. *Cromwell*. New York: Grove, 2001. Print.
- Harvey, Karen Jeanne. "The Bellews of Mount Bellew: A Catholic Gentry Family in the Age of the Penal Laws." (*Book, 1984*) [*WorldCat.org*]. ProQuest, 1984. Web. 21 Nov. 2015.
- Heritage Academy History. "Jacobite Rebellions." *Heritage History*. N.p., 2013-2015. Web. 23 Nov. 2015.
- "Ireland and Scotland." *BBC News*. BBC, 2014. Web. 22 Nov. 2015.
- "James II." *BBC News*. BBC, n.d. Web. 23 Nov. 2015.
- Kee, Robert. "The Green Flag." *Google Books*. Penguin UK, 06 July 2000. Web. 21 Nov. 2015.
- Kennedy, Robert E. *The Irish; Emigration, Marriage, and Fertility*. Berkeley: U of California, 1973. Print.
- Parnell, Henry Sir. "A History of the Penal Laws Against the Irish Catholics; From the Treaty of Limerick to the Union." *The Pamphleteer*. By John H. Rice. Vol. 20. Richmond: From the Franklin, 1819. 40-210. Print.
- The Penal Laws*. *YouTube*. Virtual Label LLC, 28 Aug. 2015. Web. 20 Nov. 2015.
- Regan, Stephen. *Irish Writing: An Anthology of Irish Literature in English 1789-1939*. Oxford: Oxford UP, 2004. Print.
- Simon, John. "A Giant Among Men." *The New York Times*. The New York Times, 30 Nov. 2013. Web. 02 Dec. 2015.
- Swift, Jonathan. "A Modest Proposal." *Jonathan Swift*. Ed. Jack Lynch. N.p., n.d. Web. 02 Dec. 2015.
- "The Treaty of Limerick." *Ask About Ireland*. N.p., n.d. Web. 22 Nov. 2015.
- Walsh, John. "Cromwell, Oliver: Tyranny of 1649 - Irish Cultural Society of the Garden City Area." *Irish Cultural Society of the Garden City Area*. Web. 20 Nov. 2015.

Remote Sensing: Applications in Paleontology

Erin Jean
English 225

Introduction:

Many scientists have attempted to apply remote sensing to different aspects of geology. According to "A Canada Centre for Remote Sensing," remote sensing is defined as, "the science (and to some extent, art) of acquiring information about the Earth's surface without actually being in contact with it" (A Canada Center for Remote Sensing). Remote sensing requires an energy source or illumination, which would be something to capture, like a photograph, a sensor to collect the data or record the energy, transmission, processing, and analysis. According to Randall B. Smith, the Earth provides that energy source, by reflecting the electromagnetic radiation from the sun (Smith 2006). Remote sensing is an important study and can be used in many ways, as will be discussed. Applying remote sensing to paleontology could be a low cost evaluation of the geologic terrain. Matching rock types, by using image analysis programs, such as ENVI, and applying processing techniques, known for being fossiliferous, one could potentially narrow possible dig sites prior to entering into the field.

Paleontology:

Humans have been studying fossils since early civilizations. Since the late 1700's, humans have been using paleontology to prove theories, such as Flood geology and catastrophism. Glen Kuban describes the importance of studying fossils as learning about the history of Earth, the biology and ecology of ancient ecosystems, and locating deposits of oil and natural gas (Kuban 1994).

Finding new dig sites is one of the most time consuming parts of paleontology. Dmitry V. Malakhov, Gereth J. Dyke, and Christopher King claim that remote sensing applications will "become more and more prevalent in paleontology, especially in the development of remote field areas" (Malakhov et al. 2009). K.B. Oheim discusses a similar view, in which prospecting land in the field takes significant time and money. Using Geographic Information Systems (GIS) or other remote sensing processing systems could cut the cost and time spent finding new "fossil-producing regions" (Oheim 2007). Other researchers in the remote sensing field have been attempting to apply it to other aspects of geology, such as finding mining areas for gold (Gabr et. al. 2015), creating geologic maps or improving on existing ones (Karnieli et. al. 1996), or even identifying geological issues in remote areas (Frei et. al. 2015).

Remote Sensing:

Continuous research is being done in the relatively new field of remote sensing, and its technologies are constantly being upgraded and changed. Many online databases that store images are free to the public or for students, making access relatively easy. Michaela Frei et. al. discuss different ways to gather remote sensing data through the National Aeronautics and Space Administration (NASA), Advanced Spaceborne Thermal Emissions and Reflection Radiometer (ASTER), and Landsat satellites. This article applies remote sensing to geological issues in Africa. Africa covers a large area and much of it is economically lacking, meaning that there are still areas that do not have basic geologic or topographic maps and infrastructure in rural areas and are not up to par. Frei et. al. used "qualitative and quantitative interpretation of the interaction between electromagnetic waves of various wavelengths and the natural media," using techniques such as principal component analysis, data fusion, spectral angle mapping, spectral feature fitting, and more (Frei et. al. 2015). Some of these techniques and avenues to gather data were used in other research.

Methods:

The research done in Malakhov et al.'s paper "Remote Sensing Applied to Paleontology: Exploration of Upper Cretaceous Sediments in Kazakhstan for Potential Fossil Sites," was followed to find if their data was reproducible, which is a major part of scientific research, and to see if the data could be extrapolated into other areas. Using images found from Earth Explorer and the Landsat 8 satellite, images of the Syrdra uplift in central Kazakhstan (as shown in Figure 1) were downloaded and studied. This area was chosen for its known Cretaceous fossils, to use as the ground-truthed fossil locations. To use satellite images for analysis of geologic terrain, land cover must be minimal in order to maximize the accuracy of the received data. While some electromagnetic waves can penetrate vegetation and water, visible light (red-blue-green), which was used in this case, cannot penetrate vegetation. This area is distinctly lacking vegetation and other land cover, aside from a small lake, which was helpful to distinguish the clay from the ferrous mineral.

After learning about the brief geology of the area, I downloaded a Landsat 8 image from Earthexplorer.usgs.gov. In the paper I was following, they used a Landsat 7 ETM image. I wanted to use Landsat 8 because I thought using band 1 or deep blue visible band would help enhance the image, I found that it did not make that much of a difference. I also wanted to use Landsat 8 for the thermal bands, but I had the same problem, it did not seem to help the image once layer stacked into my image. Since I used the different Landsat image, I had to be careful when they said they used a 3-2-1 image or

7-3-1. Using Landsat 8, the bands are different, so I had to match up the correct wavelengths instead of bands. Their 3-2-1 or true color image was equivalent to my 4-3-2 and 7-3-1 or false color image was equivalent to my 7-4-2 image.

After I downloaded the image, I layer stacked bands 1-7 and also made a layer stack of 1-7 +10, but as mentioned earlier, the thermal band did not make a noticeable difference, so from here on out, when the layer stacked image is mentioned, I will be referring to the 1-7 image. Figure 2 shows the layer stacked image of true color or 4-3-2 (R-G-B respectively). Figure 3 shows the layer stacked image of false color or 7-4-2. In both images, it is easy to see the distinctive two units, the sedimentary basin or the lighter colors (light blue and light pink) and the metasediments/granitoids (dark blue and dark pink). In figure 2, I have shown the ground truthed fossil sites (Malakhov et al, 2009). After playing around with several different band combinations, these two proved to be the best at showing the most detail.

Since this project was geared to show what types of rock units held fossils, I used band ratios to show iron oxide, clay, and ferrous minerals. I created the band ratios and set them to the R-G-B, clay-ferrous-iron oxide, respectively. What I found was that the majority of the fossil sites were in the clay minerals (figure 4), which corresponds to the findings of Malakhov et al. Next I wanted to create a classification. I did an unsupervised classification with 5-15 classes over 3 iterations. Malakhov et al. found that three iterations would allow the pixel classifications to become consistent. After creating 4 different classification images, I found them unuseful.

Since the unsupervised classifications did not work the way I wanted, I decided to create a spectral library using spectral profiles of the original subset image. The classification on the original image worked pretty well, as seen in figure 5. In that classification, it is more clear that the above mentioned sedimentary basin is intermingled with the upper metasediments in the center. I made a couple different spectral libraries with more and less classes, but figure 6 was the only one that really showed the differences in the basin. Because I was trying to see if I could extrapolate the data I found into different areas, I downloaded images in two different areas. In each area, I layered stacked bands 1-7. Then tried to create classifications using the spectral libraries I created from the original subset image. It was found that an atmospheric correction, such as the dark-object subtraction technique described by Pat S. Chavez Jr., must be performed prior to any spectral analysis to allow the spectral libraries I created to be accurate. After the atmospheric correction was done, the classification image of the new area turned out better (Figure 6). I also used band ratios to create the same clay-ferrous-iron oxide image (Figure 7) as the original, since I thought that was the most useful. I have only included the images

from the first location I chose because that is the only area that had similar properties as the fossil sites from the original.

Results:

From the results, I found that the experiment was reproducible, but to know if it can be extrapolated into other areas, it would need to be tested by sending a team into the area I have chosen to possibly have fossils. The two areas I chose were okay, but I think I would want to spend more time analysing and studying the areas before sending people into the field.

Findings:

The point of the experiment was to find if remote sensing could be used as a low cost evaluation of the geologic terrain. It was found that it is possible, but more research needs to be done. Creating spectral libraries from the spectral profiles was deemed ineffective and difficult to know the accuracy. I found that it was easier to manually set up the classifications using the profiles rather than using the libraries and produced more accurate results. It was found that the band ratio image was the most informative, but using the classification and band ratio images together helped gain better knowledge of the geology of the area.

Discussion:

This method of ground prospecting isn't widely used in the paleontological world, but from the research, it was found that it could be a beneficial method in terms of saving time and money prior to sending a team into the field. Using similar techniques as those researched, for other geologic reasons, could now also apply to paleontology and prospecting for new dig sites. There were some limitations found such as accuracy of the spectral profiles, distinguishing similar units, and extrapolating the data into other areas. The areas used in the experiment were all in similar locations of Kazakhstan, but in reality, dig sites won't always be in that area. More research and analysing would have to be done in each area to ensure a site would be worthwhile for a dig site.

Conclusion:

It was found to be possible to use remote sensing to find new paleontological dig sites, but there are some complications. I think the accuracy of the spectral profiles needs to be taken into consideration when working on a project like this. It is crucial to recognize the limitations to ensure large mistakes will not be made when trying to apply this data. Another limitation is its ability and accuracy when trying to differentiate similar units. Many of the areas that this would work in have a lot of similar units, like sandstones, clays, and others that are hard to distinguish even with the spectral profiles. I certainly believe the paleontological world could benefit

from applying this information for the future. I think this information could be the future of paleontology or even archeology, and it could definitely be used as a low cost evaluation of remote areas.

Figures:



Figure 1:
Taken from ENVI. Blue box represents the ROI

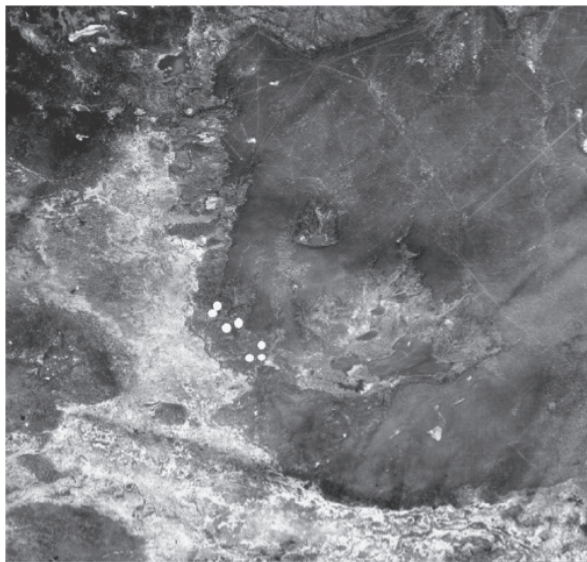


Figure 2:
4-3-2 (white dots represent ground truthed fossil sites)

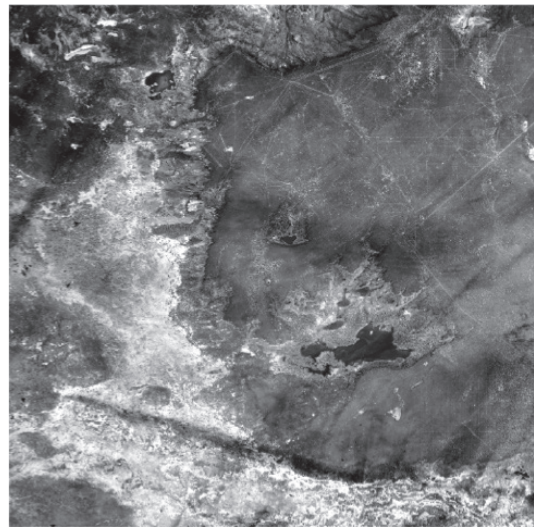


Figure 3: 7-4-2

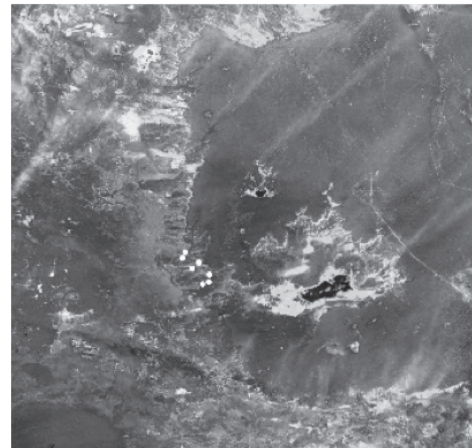


Figure 4: Clay-Ferrous-Iron Oxide

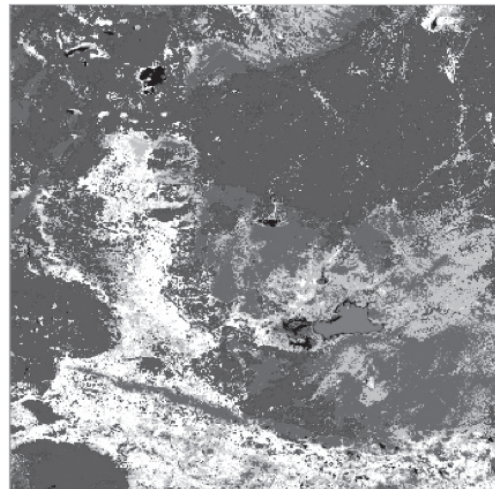


Figure 5: Classification

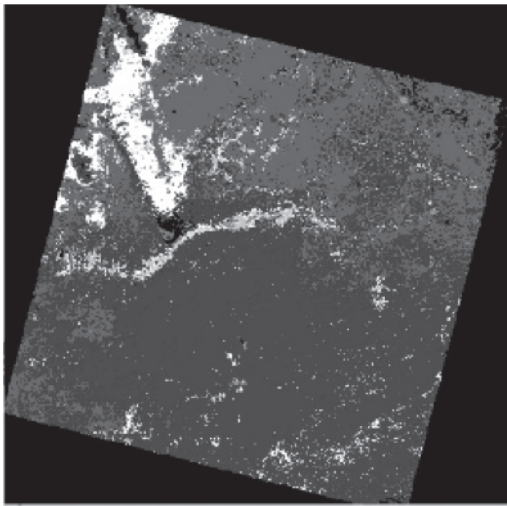


Figure 6:
Classification New Area

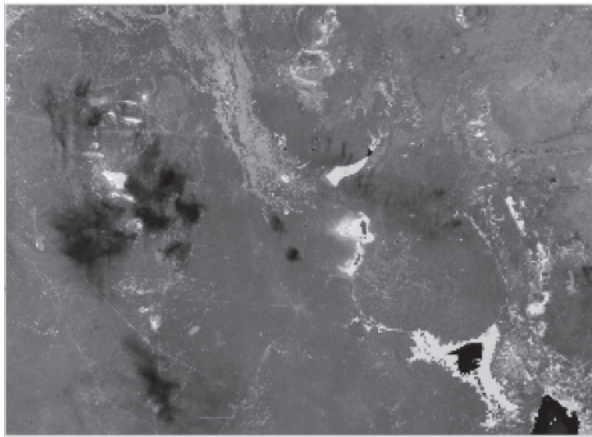


Figure 7:
Band Ratios New Area

References

- Arnon Karnieli, Amnon Meisels, Leonid Fisher, and Yaacov Arkin. "Automatic Extraction and Evaluation of Geologic Linear Features from Digital Remote Sensing Data Using a Hough Transform." *Photogrammetric Engineering & Remote Sensing* 62.5 (1996). Web. 22 September 2015.
- A Canada Centre for Remote Sensing "Fundamentals of Remote Sensing: Remote Sensing Tutorial." *Natural Resources Canada*. Web. 28 September 2015. <https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/earthsciences/pdf/resource/tutor/fundam/pdf/fundamentals_e.pdf>.
- Dmitry V. Malakhov, Gareth J. Dyke, and Christopher King. "Remote Sensing Applied to Paleontology: exploration of upper Cretaceous sediments in Kazakhstan for potential fossil sites." *Palaeontologia Electronica* 12.2 (2009). Web. 9 September 2015. <palaeo-electronica.org>.
- Glen Kuban. "A Brief History of Paleontology." Excerpt from *Introduction to Fossil Collecting* (2000). Web. 1 October 2015. <paleo.cc/kpaleo/fosshist.htm>.
- K.B. Oheim. "Fossil site prediction using geographic information system (GIS) and suitability analysis: The Two Medicine Formation, MT, a test case." *Palaeogeography Palaeoclimatology Palaeoecology*, 251 (2007):354-365. Web. 9 October 2015.
- Michaela Frei, Mohamed G. Abdelsalam, and Nicolas Baghdadi. "Remote sensing applications to geological problems in Africa." *Journal of African Earth Science* 44.2 (2006). *ScienceDirect*. Web. 7 Oct. 2015.
- Pat S. Chavez, Jr. "An Improved Dark-Object Subtraction Technique for Atmospheric Scattering Correction of Multispectral Data." *Remote Sensing of Environment* (1988). Web. 23 September 2015.
- Randall B. Smith. "Introduction to Remote Sensing of Environment (RSE)." *MicroImages, Inc.* (2006). Web. 28 September 2015. <<http://www.microimages.com>>.
- Safwat S. Gabr, Safaa M. Hassan, and Mohamed F. Sadek. "Prospecting for new gold-bearing alteration zones at El-Hoteib area, South Eastern Desert, Egypt, using remote sensing data analysis." *Ore Geology Reviews* 71 (2015): 1-13. *ScienceDirect*. Web. 7 Oct. 2015.
- S. Poursaleh. "Separation of Carbonates by Using PCA on ASTER Bands (2007). Web. 9 October 2015. <<http://www.gisdevelopment.net/application/geology/mineral/geom0018.htm>>.

Rob Roy's Contribution to Contemporary Understandings of British National Identity

Cecilia Johansson
English 484

Texts serve as a crucial element in the shaping of the public mind. That nationhood and nationality are social constructs is clearly demonstrated by the ambiguity and abstractness of British nationality/nationalities. *Rob Roy*, written in 1817 by iconic Scottish author Sir Walter Scott, marks the beginning of how our understanding of British national identity has developed. The aim of this paper is to address British nationality in general and not "Scottish", "English" or "Welsh" national identity specifically.

National identity is generally defined through language, customs, traditions and origins (Miscevic, np). According to Benedict Anderson, author of *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, "nation-ness is the most universally legitimate value in the political life of our time" (xii). Anderson also argues that nationalism is a cultural artefact that we need to look at historically to understand why it has come to command such strong emotional legitimacy – thus suggesting that nationality has been constructed through a nation-state's historical past. Supporting the claim that nationality is a social construct, Gellner argues that "Nationalism is not the awakening of nations to self-consciousness: it *invents* nations where they do not exist." (quoted in Anderson *xiii*).

Moreover, the fact that nationality seems to be constructed through customs and traditions that are represented from various historical pasts is important, because *Rob Roy* is seen as a historical novel which also falls into the category of Romantic and nationalistic novel. Some general aspects of a historical novel are that "[...] action takes place during a specific historical period well before the time of writing [...], and in which some attempt is made to depict accurately the customs and mentality of the period" (Baldick 114). In other words, although mainly fictitious, a historical novel depicts some truthful elements of a specific time and place. While texts also serve as a foundation of the shaping of our understanding of the world, it is obvious that *Rob Roy* has had a great impact in how we perceive British nationality. Ironically, historical accounts may in fact not be much more accurate than historical literary works. The American novelist Jane Smiley recently wrote in an article published on *The Guardian's* web page:

[...] If there is one thing that I do know about history, it is that it must be based on the author's theory of what happened. He or she may change the theory as the research is completed, but

without a theory, and if the research doesn't fit into the theory, then the text has no logic, and therefore makes no sense. If it makes no sense, then readers will not read it. A history book is, therefore, a construct. (Smiley)

The disparity between the various British national identities is famously known, and national identities are based on historical impressions which are often somewhat inaccurate. Scott's *Rob Roy* is generally acknowledged as a historical novel which both set the tone for the genre and contributed to the development of contemporary perceptions of British national identity. (Baldick 114). One aspect of British identity which is articulated in the novel, is the internal conflict between English and Scottish culture, within the framework of general British identity.

There are many examples in *Rob Roy* that show how the Scots were looked down upon by the British. This cultural condescension is demonstrated in the actions and attitude of upper-class British narrator Frank Osbaldistone. One of the most vivid passages is when young Frank describes a Scotchman using terms such as "savage" – a half human with wide shoulders and long arms (Scott 273), i.e. he portrays the Scots animalistically. This makes it clear that, from the narrator's point of view the Scotchman and the English are so different that they do not even belong to the same category of beings. Another significant part is when Frank travels to Scotland with the Scottish gardener Andrew and Frank refuses to trust the gardener's knowledge of his own land. Frank gets so angry at Andrew for riding so fast and not "obey[ing] or reply[ing]" to him that he desires to attempt to knock him off his horse (Scott 229-230). However, Frank realizes that he depends on Andrew and his knowledge of the land so even when he manages to catch up with Andrew, he decides not to knock him off.

Internal difference in British identity in *Rob Roy* is further demonstrated by the fact that the story is constructed in a series of binary opposites. Frank's Anglo-Scottish relative Sir Hildebrand works with agriculture and Frank's London-based father is a modern businessman whose work feeds into capitalism. The narrator and protagonist, Frank, is a dreamer, whereas his rival, Rashleigh, is a highly rational and smart, modern businessman. Perhaps the most significant and evident binary opposite throughout the story is, of course, the English and the Scottish. All these opposites define one another as they contrast through polarities.

Interestingly, there are various sources stating that Walter Scott was a Unionist, a Tory and a realist. An article published on *The Telegraph* quotes Scott's great-great-great-great grandson, Matthew Maxwell Scott, stating that "nothing in the great man's words or deeds" [suggests] he was "anything other than a loyal unionist" (Furness). Because Scottish Unionists based their politics in the belief that Scotland should remain within the British Empire, this suggests that Scott believed

that without Britain, there could be no defined Scottish identity, and that the various internal colonies of Great Britain are all crucial to the national identity of Britain as a whole. The British Empire did, at its peak, occupy one quarter of the earth's landmass and was scattered around the entire globe. As mentioned above, national identity is shaped through shared customs, traditions and historical pasts. From this point of view then, the previous British colonies are fragments of the British national identity too, but we do not generally define them as British. Likewise, the Scottish and the English are both two separate British identities, with a shared historical past. Arguably, the way the English view the Scots has greatly influenced the way the Scots view themselves, following the psychological process of self-fulfilling prophecy. Thus, the two identities are inseparable, and together make up the British national identity as a whole – neither one of them could exist without the other. The Scottish/Canadian journalist Ivison writes:

Scott's achievement was that he helped create for Scotland a distinctive identity — yes, based on spurious associations with tartan, but one comfortably Scottish within the union and different from the English," said Mr. Massie (Ivison).

Ivison also argues that "Scott put an end to the North Briton identity and gave birth to a distinct Scottish cultural, if not political, nationalism". This supports the claim that *Rob Roy* has had a great influence on our contemporary idea of British national identity.

At some points throughout the novel, the young Englishman is surprised that the Highlanders speak understandable English (Scott 322-323). At the end of the novel, Frank narrates that he never saw "the bold highlander again who had such an influence on the early events of my life" (Scott 452). Ideally, that he never saw "the highlander" again, might mean that he never viewed the Scottish in the same way again, *i.e.* that his deeply rooted ideological concept of Scottish difference had been altered through his personal experience. Unfortunately, in the given context it is stated, it is more likely that he never saw this particular Scot again.

However, it is implied that Frank does return to visit Scotland frequently. It does therefore seem that his perception of Scotland – and additionally, the Scottish, has changed, after he came in contact with some personally. Edward Said supports this idea as he argues that we only trust the representation of a group of people because we have not experienced them in reality. Lacking this personal experience, the only knowledge we have access to is the portrait of the other in media and arts. We have preconceived notions of certain groups, what "they believe and how they act without ever having met someone" (Jhally) from that specific region, this in turn "distorts the actual reality" (Jhally).

Said generally refers to the Oriental cultures when developing his post-colonial theory, but it is applicable to the case of Scotland as part of Britain. Said argues that this process is a means to understand the unfamiliar and the strange (Jhally). It can thus be argued that Scott constructed Scotland in the novel of *Rob Roy* in a highly romanticized way to attract visitors to his nation, so they could experience it with their own eyes, and thus they would become familiar with Scotland and its people, and as a result change the preconceived idea of the highlanders as strange, indulgent savages, with long arms and wide shoulders.

The disparity between the English and the Scots is evident in *Rob Roy*, and this disparity between the peoples is as obvious today, but the great distinction between the various kinds of Britons may in fact be what signifies British culture as whole. Interestingly, few people define themselves as being British. Instead the British define themselves as "Scottish", "English" or "Welsh". This was supported by the results of a study published in an article on BBC in September 2013 (Easton). As *Rob Roy* was among the first widely read historical novels, it likely greatly contributed to this specific perspective. The fact that *Rob Roy* so evidently looks at the obvious disparity between the Scottish and the English, and also as a result portrays how we have come to view the general British national identity, makes it a foundational historical novel with contemporary social import.

Works Cited

- Anderson, Benedict. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. 3rd ed London: New Left Books, 2006. Print.
- Baldick, Chris. *The Concise Oxford Dictionary of Literary Terms*. New York: Oxford University Press, 2015. Web. Accessed 18 October 2015.
- Easton, Mark. "How British is Britain?" BBC, 30 September 2013. Web. Accessed 18 October 2015.
- Furness, Hannah. "Sir Walter Scott would not have voted for independence, descendent says." *The Telegraph*, 25 August 2014. Web. Accessed 2 November 2015.
- Hobsbawm, Eric. *The Invention of Tradition*. Cambridge: Cambridge University Press, 2000. Print.
- Iverson, John. "What would Sir Walter Scott do? Both sides of debate lay claim to author who helped forge Scottish identity." *National Post*, September 12 2014. Web. Accessed 23 October 2015.
- Jhally, Sut. *Edward Said on Orientalism*. Northampton, MA: Media Education Foundation, c1998. VHS.
- Miscevic, Nenad. "Nationalism", *The Stanford Encyclopedia of Philosophy* (Winter 2014 Edition), Edward N. Zalta (ed.), Web. Accessed 18 October 2015.
- Scott, Sir Walter. *Rob Roy*. New York: Oxford University Press, 1998. Print.
- Smiley, Jane. "History v Historical fiction." *The Guardian*, 15 October 2015. Web. Accessed 18 October 2015.

Jewish Oral Tradition: A Look At Human Rights Literature About The Holocaust

Hannah Lipman
English 300

I have listened long and hard to the stories about the Holocaust since I was a child. I can still hear the charismatic voice and see the hand motions of my *bubbe* telling me stories of my family's past. Deep in my imagination, I have pictured what my relatives went through. In the realm of graphic novels, there is a genre called human rights. This genre has allowed authors like Art Spiegelman to write about the Holocaust through the form of art (comic style). While Jewish-American Women were the first among writers to begin to document the memories of the Holocaust, these regular novels, meaning non-comic, lack the pictorial effect of graphic novels (Brauner 24). Spiegelman's *Maus* is not just a novel, but a form of the Jewish storytelling tradition. This tradition in Jewish culture is highly useful in retelling a family's historical perspective on the Holocaust and the lives of loved ones now gone. I will use *Maus*, along with the graphic novel, *Auschwitz* (2004), to analyze graphic novels from a historical perspective. Louis Montrose and Stephen Greenblatt theorized a method called New Historicism, which I will be using as a lens for this paper (Parker 262). New Historicism "is not just about saying here is the historical background and then applying that historical background, as if it were a mere lump of inflexible facts, to the supposedly more nuanced challenge of interpreting literature." Instead it "offers us a chance to put our chosen commitments to work by thinking through the relation between literature and the historical and cultural conflicts and changes that we care about deeply" (Parker 260-283). Two key phrases that will be used in this research paper are *representations* and *cultural constructs*. Both phrases hold a great deal of weight in the New Historicism method. By examining Human Rights Literature through the medium of graphic novels, I suspect to find a stronger use of "oral" storytelling that shows the Jewish perspective of the Holocaust, along with *vicarious past* lived by the younger generations reading the stories. I argue that graphic novels are the elite of Human Rights Literature, and allow for a more honest look at the Holocaust.

Approaching *Maus* from a New Historicism perspective, I find it key to start by looking at the different ways this graphic novel is part of the Human Rights genre in the form of historical storytelling. The story presented by Art Spiegelman is an on-going interview with his father (Vladek) about his survival of the Holocaust, and follows the oral form of storytelling in the Jewish tradition. As Michel E. Staub points out, *Maus* uses a traditional form of storytelling and documentary strategies relating to oral narratives (Staub 34). Spiegelman uses both direct

quotes from his father, and direct thoughts of his own connections to his father's past. At times objectivity and subjectivity are blurred, but this seems natural in ethnographic historical storytelling. Affirming this use of oral tradition, Staub remarks, "There is the present-day storytelling frame about Art and Vladek—[a] standard feature of ethnographic narrative[s], and its inclusion enhances rather than calls into question Maus's" reminisced past (Staub 34). At times, it may seem that Vladek's representations of the Holocaust are separate from the hegemonic history for this specific world war, but this is again common in oral storytelling, where the storyteller focuses on their personal experience and cultural perspective. In my own family, it is important to listen and take on the tradition of telling stories about our family's historical past. Just as Spiegelman retells his father's survival tale, I too retell the stories about my family and the Holocaust. This oral tradition is key in keeping the Holocaust memory alive. Why not just write it down? Spiegelman answers this question within *Maus*:

Art's therapist Paul Pavel, a Czech Jew and a survivor of Terezin and Auschwitz, tells him during one of their weekly sessions: 'I'm not talking about YOUR book now, but at how many books have already been written about the Holocaust. What's the point? People haven't changed...Maybe they need a newer, bigger Holocaust'. Frames like these about the uselessness of representations take on a very particular meaning in the context of Jewish history: they reflect a general anxiety over the impending death of all concentration camp survivors and their living memories. (Staub 35)

Holocaust survivors, like Vladek, have represented their memories in writings, videotapes, films, and recordings, but over time, the voices of these survivors will die. This is why oral storytelling is a key component to Human Rights literature. As Spiegelman is quoted in James E. Young's article, *The Holocaust and Vicarious Past*, "the strength of commix lies in [its] synthetic ability to approximate a 'mental language' that is closer to actual human thought than either words or pictures alone" (Young 672). The use of both writing and graphics allows for a more natural feel of oral storytelling. As Young quotes Rudolphe Töpffler, "The drawings without their text would have only a vague meaning; the text without the drawings would have no meaning at all. The combinations make up a kind of novel—all the more unique in that it is no more like a novel than it is like anything else." (Töpffler qtd. in Young 672). The Jewish tradition of oral storytelling is best used in graphic novels, where human rights issues and cultural constructs can be seen through pictorial and written form. This combination theory, backed by scholars such as James E. Young, Rudolphe Töpffler, and Winsor McKay (also a cartoonist), proves how through the medium of graphic novels, Jewish oral storytelling can be better exercised for historical Human Rights Literature. This is not to say

that written Human Rights Literature is not important or viable, but that graphic novels' use of pictures enhances the oral aspect of retelling historical representations of the Holocaust.

Arguably, some might call *Maus* a misrepresentation of the Holocaust, and assert that written forms of Human Rights Literature are more accurate. There is no doubt in my mind that written works about the Holocaust are just as moving and emotional as graphic novels, but the use of pictures in the graphic novels helps readers connect on a deeper level with the subject matter. Even reporters have begun to use the form of graphic novels to give a more detailed effect of wars and human rights violations, where words are just not enough (Keane para. 6). Hillary Chute further confirms the narrative form of *Maus*, stating, "the specificities of reading graphically, of taking individual pages as crucial units of comics grammar—is essential to how [Maus] represents history. Indeed, *Maus's* contribution to thinking about the 'crisis in representation', I will argue, is precisely in how it proposes that the medium of comics can approach and express serious, even devastating, histories" (Chute 200). As I stated earlier, I have imagined the Holocaust from the stories told to me by my family, but never did I make as strong of a connection to a Holocaust survivor narrative as I did to *Maus*. I claim this is due to the use of traditional Jewish oral storytelling and corresponding pictures that feed the mind graphic detail. One example of this from Pascal Croci's *Auschwitz* (see appendix A) shows how Jewish people in Auschwitz were forced to collect the dead bodies of those who had been gassed and throw them into a giant grave to be burnt. This historical event was highly traumatizing for those who lived through it. It is hard to describe a massacre of people with only words, but the use of pictures helps readers to better understand the human rights violations that took place during World War II. Pascal Croci, author of *Auschwitz*, uses minimal words when describing WWII in his graphic novel and places more focus on the pictures.

The event discussed above is also in *Maus* (see appendix B), but here Spiegelman is surrounded by burning corpses at his art table. He is hunched over—depressed by the weight of memories he has received from his father. This frame shows how human rights literature is able to convey the vicarious past in one slide.¹ Visibly seeing what someone looks like under the effects of the vicarious past, allows for the reader to grasp what the vicarious past looks like, and maybe acknowledge their own life story. When I came to this very frame, I made a strong connection to how Spiegelman must have felt while writing *Maus*. As Young explains, Spiegelman is part of the "media-savvy generation" that was born right after the Holocaust, but still shaped by its events (Young 669).

This postwar generation after all, cannot remember the Holocaust as it actually occurred. All they remember, all they know of the Holocaust, is

what the victims have passed down to them in their memoirs. They remember not actual events but the countless histories, novels, and poems of the Holocaust they have read, the photographs, movies, and video testimonies they have seen over the years. They remember long days and nights in the company of survivors, listening to their harrowing tales, until their lives, loves, and losses seemed grafted indelibly onto their own life story. (Young 669)

Graphic novels have the ability to show this type of deep listening and deep memories being passed down by generations. *Maus* shows the reader Spiegelman writing down Vladek's tormented past, and through photos we can see how these traumas are transmuted into Spiegelman's life story. I argue that the vicarious past is an aspect of Jewish storytelling. I do not see vicarious past as purely a bad thing. By taking on the memories of our beloved family, we can account for their life story and history to be passed down to the next generation and so on.

Non-pictorial literature in the Human Rights genre has the ability to represent WWII in the form of Jewish storytelling, but what happens when the "indescribable" cannot be translated into words? Katalin Orbán explains the struggle Spiegelman writes about in his autobiography *No Towers*—how hard it was to picture what he would draw to show the smells of Auschwitz and the parts of the Holocaust which his father called indescribable (Orbán 58). In the end, Spiegelman did find a way to culturally construct what his father called indescribable. Tsai Mei-Yu, author of *A Poetics of Testimony and Trauma Healing in Anne Michaels's Fugitive Pieces*, states that while literature was the capability to represent the Holocaust, it is unable to describe what is indescribable (Tsai 50-71). In the novel *Inheriting the Holocaust*, Paula S. Fass explains "I am the daughter of Holocaust survivors. This fact has been inscribed in my identity since I was a child—In this book, I have decided to speak and to share my memories because I now firmly believe that my memories do count" (Fass 1). Fass definitely represents the vicarious past and is able to describe some of the Holocaust memories passed down to her, but what her book lacks is the ability to create a picture in the reader's mind. In *Auschwitz*, the author gives the reader direct snap-shots of what one might see as their family's past (see appendix C).

Another element that makes graphic novels the most effective form of Human Rights Literature is its direct postwar protest towards *Bilderverbot* (the name given to the ban on images in Germany during WWII) (Orbán 59). Spiegelman's *Maus* is a direct literary campaign against the Nazi ban on images during WWII. Graphic novels not only verbally object to human rights violations, but they visually show how these social injustices are/were affecting people. As Orbán points out, "From the ghettos

through sealed boxcars to the camps and the sites and modes of killing, the conditions of the 'concentrationary universe' restricted the visual records that could be made" (Orbán 59). These restricted views are made visible through graphic novels like *Maus*.

As Fass recites, "When I was a child, I thought as a child (almost) and wanted some space to grow between the edges of the stories my parents told of a life once lived in a past now gone. As a grownup, I want to pass some of this along to my children who will have to find their own space to grow in" (Fass 182). Growing up as Jewish child, the Holocaust was always a part of my life—it was something I was not allowed to forget—it was my bedtime story. While I may not want to have children, I feel it is a part of my Jewish heritage to pass along the stories I have been told to the younger generations. Graphic novels within the Human Rights genre have allowed authors like Art Spiegelman to write about the Holocaust through the form of art (comic style). Spiegelman's *Maus* is not just a novel, but a practice of Jewish storytelling. *Maus* gives representations of Jewish people and takes into account cultural constructs imposed upon specific groups during the Holocaust. Human Rights Literature through the medium of graphic novels allows for a more visually-truthful look at the Holocaust. Graphic novels expose the "destruction of historical memories" of survivors of the Holocaust and children of Holocaust survivors—through this unearthing, Jewish storytelling is used to remember the life of these survivors and the powerful memories that should not be forgotten.

Notes

¹ Vicarious Past: trauma and history displaced onto a younger generation from an older generation

Works Cited

- Brauner, David. "Breaking the Silences: Jewish-American Women Writing the Holocaust". *The Yearbook of English Studies* 31 (2001): 24–38. Jstore. Web. 4 Nov. 2015.
- Chute, Hillary. "'The Shadow of a Past Time:' History and Graphic Representation in 'Maus'." *Twentieth Century Literature* 52.2 (2006): 199–230. Web. 20 Nov. 2015
- Croci, Pascal. *Auschwitz*. New York: Harry N. Abrams, 2004. Print.
- Fass, Paula S. *Inheriting the Holocaust: A Second-Generation Memoir*. New Brunswick, NJ, USA: Rutgers University Press, 2008. ProQuest ebrary. Web. 4 November 2015.
- Keane, David. "Graphic Reporting: Human Rights Violations through the Lens of Graphic Novels." *Middlesex Minds*. Middlesex University London, 5 June 2015. Web. 5 Nov. 2015.
- Mei-Yu, Tsai. "A Poetics Of Testimony And Trauma Healing In Anne Michael's Fugitive Pieces." *Shofar: An Interdisciplinary Journal Of Jewish Studies* 32.3 (2014): 50-71. Academic Search Complete. Web. 4 Nov. 2015.
- Orbán, Katalin. "Trauma and Visuality: Art Spiegelman's "maus" and "in the Shadow of No Towers""." *Representations* 97 (2007): 57–89. Jstor. Web. 4 Nov. 2015.
- Parker, Robert Dale. "Historicism and Cultural Studies." *How to Interpret Literature: Critical Theory for Literary and Cultural Studies*. 3rd ed. New York: Oxford UP, 2008. Print.
- Spiegelman, Art. *Maus: A Survivor's Tale: My Father Bleeds History: And Here My Troubles Began*. New York: Pantheon House, 1994. Print.
- Staub, Michael E.. "The Shoah Goes on and On: Remembrance and Representation in Art Spiegelman's *Maus*". *MELUS* 20.3 (1995): 33–46. Jstor. Web. 4 Nov. 2015.
- Young, James E.. "The Holocaust as Vicarious Past: Art Spiegelman's 'Maus' and the Afterimages of History". *Critical Inquiry* 24.3 (1998): 666–699. Jstor. Web. 4 Nov. 2015.

Appendix A

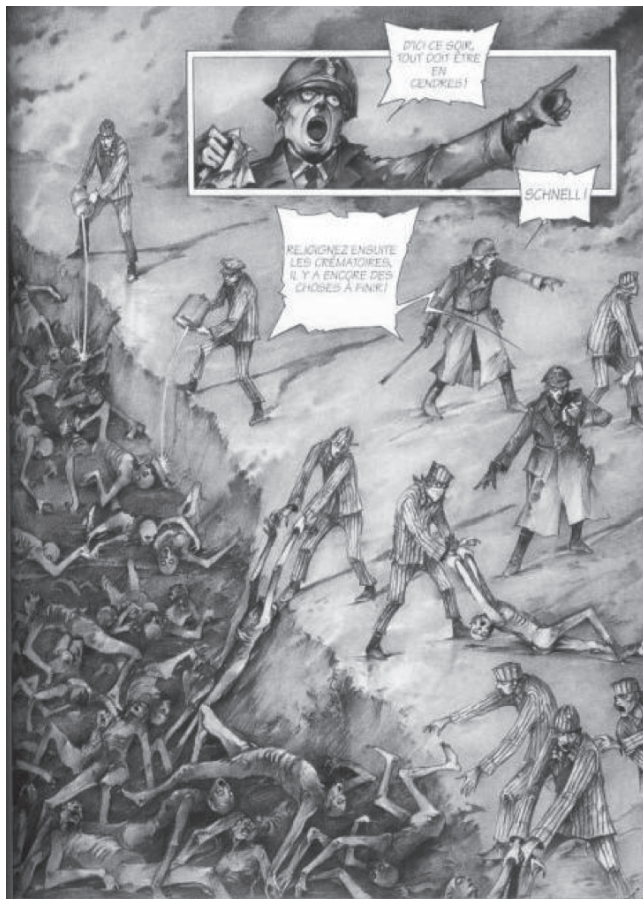


Fig. 1. Croci, Pascal. *Auschwitz*. 2004.

Appendix C



Fig. 3. Croci, Pascal. *Auschwitz*. 2004.

Appendix B



Fig. 2. Spiegelman, Art. *Maus*. 1994.

Let's Be Neighbors

Valentina Martinez
English 432

Living in a tropical paradise should be nothing but... well, paradise. Living in the town of Waimea, Kauai, with a population of roughly 1,700 (as of a 2000 consensus), should be nothing but peaceful aloha, but these residents have some secretive neighbors surrounding their small community: four giant biotechnology corporations that own thousands of acres of test-crop fields which are sprayed in an abundance of controversial chemicals by the tons every year. The small, lush Hawaiian sanctuary is the least populated of the four main islands, yet it is fighting an enormous crusade. Kauai has been termed "ground zero" for dangerous open-air testing of restricted-use pesticides (pesticides unavailable to the general public) and genetically modified (GM) food experimentation. There have been dozens of civilian cases and an impending county lawsuit against these chemical/seed companies for infringing on the lives and health of residents and for causing damage to the precious and sacred land. One of the leaders for change, a fighter within the system in this uphill battle against these unwelcome "neighbors," is former Hawai'i State Senator and current city councilman, Gary Hooser.

June 25, 2008, *Honolulu Advertiser* report: Wendy Tannery, a physical education teacher at Waimea Canyon Middle School (WCMS), is on the athletic field supervising her class playing capture the flag, when she and all but one of her students (who lives nearby) smell a strange odor and begin to feel dizzy, nauseous, and develop headaches. Another affected young girl from WCMS is sent to the hospital, where she is given anti-vomiting medicine and sees several other students breathing on machines to help open their lungs. Earlier that day, about sixty more children had been sent to the school nurse due to similar symptoms. The young girl's mother, Sue Schott, is a teacher at the school, and after experiencing the same effects, regurgitated her last meal. The equivalent transpired with Schott's substitute, who was then sent to the hospital. According to *Grist Magazine*, the middle school, which is the closest school to test-crop fields, has been forced to evacuate twice: once in 2008 due to the unusual case aforementioned, and once two years earlier in 2006, for similar reported symptoms.

Syngenta, a Swiss international chemical and seed company, has 3,000 acres of test-crops that lie 0.4 miles away from WCMS. When the Waimea community pointed to the company's pesticide spraying to blame for the bizarre incidents, Syngenta claimed, and continues to claim, that the inhalation of the common stinkweed is the culprit. However, according to Amanda Gregg of *The Garden Island*, the Hawai'i Department of Agriculture (HDOA) pesticide program manager, Bob

Boesch, said Syngenta had told him that they sprayed the day of the alleged odor that caused the school to close for a number of days. Responding to Kauai's community concerns, air tests were conducted by members of the Department of Molecular Biosciences and Bioengineering, who then reported to the *Hawai'i Independent* that the concentrations of restricted-use pesticide (RUP) exposure were "well below health concern exposure limits or applicable screening levels." They stated that although the symptoms the schoolchildren experienced did coincide with the day of chemical spraying, they could have also been caused by "exposure to volatile chemicals emitted from natural sources, such as stinkweed." Gary Hooser, who is also the Director of Office for Environmental Quality Control, negated those claims, "No comprehensive testing or evaluation of possible pesticide drift occurred until four years after the 2008 incident at Waimea Canyon School. Syngenta had, by that time, stopped applying pesticides near the school and was aware the testing was taking place, yet pesticide drift was still detected on the school grounds."

In a personal interview Dr. Stevan Knezevic of the University of Nebraska-Lincoln, who specializes in plant protection and weed management, responded to the question of whether stinkweed, also known as pennycress, can cause children to faint from 0.4 miles away, saying, "that is not true, sounds like science fiction to me... you better find out what chemical they sprayed." He even stated that flaming the weed does not kill it due to its thick leaves being laden with moisture, which is easy to believe with the constant Hawaiian humidity. Dr. Knezevic, who has helped conduct the most cited study from 2001-2011 in weed technology, said that stinkweed shows up every year in his crop and it does not make him sick. Additionally, it seems unlikely that this weed would be prevalent enough in test-crop fields to stake this hefty claim, since the heavy chemical testing is supposed to be substantially reducing weed growth. Maggie Sergio of *The Huffington Post* adds that in one particular incident between the time period of 2006 and 2008, ten children from WCMS collapsed and were hospitalized.

The major biotechnology companies on Kauai that are capable of utilizing mass chemical crop-testing are Syngenta, DuPont-Pioneer, Dow Agrigenetics, and BASF (not counting Monsanto, which presides on the island of Maui, not Kauai). The Merriam-Webster Dictionary defines biotechnology as "the manipulation (as through genetic engineering) of living organisms or their components to produce useful usually commercial products (as pest resistant crops, new bacterial strains, or novel pharmaceuticals)." Is it important to recognize that Syngenta is the offspring of a major pharmaceutical company, AstraZeneca, which was ranked #8 in global revenue in 2014 on the website for pharmaceutical market? How wonderful, they make your food *and* prescribed medications. Additionally, Monsanto, Dow,

and BASF either make pharmaceuticals or have ties to manufacturing companies. There is a reason why so many of these corporations are taking over the island chain state.

The consistent year-round Hawaiian weather (averaging from 73-80°) allows farmers to produce three annual crop yields as opposed to one in most regions of the mainland United States. Mark Phillipson, Syngenta's head of Hawai'i corporate affairs, described to *The Huffington Post*, "developing a new seed variety takes about ten to twelve growth cycles," with one cycle occurring annually on the mainland. On the tropical islands of Hawai'i, a biotechnology company can achieve three to four cycles of growth per year, which considerably speeds up the time it takes to get a new seed to market. *Hawai'i Seed* reports that although a successful papaya crop engineered to be resistant to the widely spread ringspot virus has been created, Hawai'i has lost almost half of its papaya farmers and it has impacted the fruit's export and organic farming due to air contamination. The Center for Food Safety (CFS) adds that papaya makes up .001% of the nation's GM crop acreage. The CFS also reports that the most common Hawaiian crops are corn at 67% and soybeans at 24%; unfortunately, neither crop is native to Hawai'i.

Crop seed such as corn, soybeans, coffee, tobacco, papaya, and even the sacred Hawaiian taro plant, have been genetically engineered. With alteration, the seed's eugenics can become resistant to a virus and/or being sprayed with the corresponding pesticide, which the company also sells. According to Bill Reeves, the Regulatory Policy and Scientific Affairs manager of Monsanto, the use of these patented herbicide-resistant seeds are sustainable because they don't require as much frequent spraying as non-GM crops require. From 1996-2011, Center for Food Safety revealed that herbicide-resistant corn, soybeans, and cotton have increased the use of pesticides by an alarming 527 million pounds – all of which is being exposed to the public through the air, water, and non-organic foods that the unaware consumer chooses to eat. The CFS, the Union of Concerned Scientists, and the Food and Water Watch organization have issued concern about the recent development of "superweeds," or pesticide-resistant weeds, along with insects that have quickly evolved (due to short life spans) to become self-resistant to current pesticides. Because of this cycle, the perpetual introduction of different and stronger chemicals become introduced and tested. For example, Dow's new patent, Enlist, is advertised on its website as "advancing herbicide and trait technology," while the company also states that, "...growers need new ways to meet the growing problem of herbicide-resistant and hard-to-control weeds." Gary Hooser recalls that upon the initial introduction of Enlist, Dow claimed that their combination of the two chemicals, 2,4-D and glyphosate, are no more toxic than the two of them are individually. However, the patent office revealed that

Dow's application claimed their combination increases toxicity. For this contradiction, the EPA has withdrawn its approval of Enlist until further investigation can be conducted (Hooser's claim can be confirmed by Dan Charles of the National Public Radio).

Maggie Sergio of *The Huffington Post* also informs that these potentially toxic, highly-concentrated and undisclosed chemicals are applied by the guidelines on the chemical's labels, and without legally established buffer zones (areas in which no chemicals can be sprayed) for surrounding waterways or public areas such as schools and parks. The EPA describes a 'restricted-use pesticide' as having "the potential to cause unreasonable adverse effects to the environment and injury to applicators or bystanders without added restrictions." Apparently, spraying can occur in the early morning, afternoon, and even the middle of the night. Kyle Smith, an attorney who represented Waimea residents in a 2013 lawsuit against DuPont-Pioneer, revealed that "sixty-five percent (65%) of the days of the year on average, so about two hundred forty (240) days, they [DuPont] are applying pesticides. You can look at the combinations [of chemicals] that are applied... The average is between eight and maybe sixteen applications per day of pesticides on these research fields." Gary Hooser personally reports that the state of Hawai'i does not keep records of the amount of "General Use Pesticides" (GUPs, such as glyphosate) sprayed annually. The only public state records kept of pesticides being utilized are of RUPs *sold*, not the amount being *used*.

Unfortunately, the Center for Food Safety states that these agriculture giants continually withhold the names of sprayed chemicals the public is exposed to, claiming it is confidential business information (CBI). Claiming CBI is handy because by disclosing the chemicals that they use, companies will tip off their rivals as to what new crops are in the making. However, companies often claim CBI even when their products are already well-known to competitors. For instance, Dow's Enlist, as previously mentioned, is comprised of 2,4-D and glyphosate, yet none of their hundreds of permits for field testing identifies 2,4-D, a major component of Agent Orange, as a main trait. CFS reported that 81% of Hawai'i permits hid at least one trait as CBI in 2014. Permits are granted by the USDA, and are simple to acquire upon providing minimal information such as the crop species, intended trait(s), and the test field location(s). According to a Virginia Tech-sponsored database for the USDA, GM test-crop permits are the highest in Hawai'i (3,243) over any other state in North America since experimentation first began in 1987. Under the National Environmental Policy Act (NEPA), once upon a time, the USDA used to carry out environmental risk assessments before issuing a permit; however, the last fully conducted study of a test crop was in 1994.

The passion of nearly 4,000 Hawaiian locals in Kauai alone has helped raise awareness on this insidious

issue; local activists have encouraged and adamantly supported individuals in public office to put bills into play for some regulation. It is important to note that not every biotechnology company on Kauai presides on the other islands, and vice versa. For example, residents on Maui will vent the issues the county has been experiencing with Monsanto, while it in fact does not currently test crops on Kauai (although there are local rumors that they have begun buying land on the east side). Agrigenetics Inc., a unit of Dow, however, is on both islands. While each Hawaiian county is fighting its own battles, Gary Hooser, who has dedicated over thirteen years in office fighting for his community and family's safety, will not go down without a fight. His latest hotly debated introduction, known as Bill 2491, briefly passed into law until its implications soon unraveled...

Bill 2491, which after ratification became Ordinance 960, states that: "The purpose of this Article is to establish provisions to inform... and protect the public from any direct, indirect, or cumulative negative impacts on the health and the natural environment of the people and place of the County of Kauai..." Christopher D'Angelo of *The Garden Island* explains that the purpose of the bill is to enact a county study on the environmental and health impacts of pesticide exposure; to demand chemical companies and large farms to disclose when and where they use all pesticides; to establish buffer zones 500 feet (.09 mi.) away from public areas such as schools and neighborhoods; and to disclose which crops are being genetically engineered on the island of Kauai. *Biology Fortified* adds that the environmental risk assessment would impose a moratorium on company expansion, harming their market profits, until the environmental impact statement is complete.

During the time leading up to Bill 2491's passing, *Civil Beat* reported that Gov. Neil Abercrombie and the Department of Agriculture's Russell Kokobun said the agrochemical companies in question assured them they would adhere to the impending rules of the bill by voluntarily disclosing pesticide exposure. The companies affected by Bill 2491: Syngenta, BASF, DuPont-Pioneer, and Agrigenetics Inc. (a Dow subsidiary) have conjured up a friendly ol' "Kauai Agricultural Good Neighbor Program" (KAGNP). This collective idea is a year-long voluntary agreement between the aforementioned corporations and the Pesticide Branch of the Hawai'i Department of Agriculture (HDOA) as an attempt to avoid Bill 2491's establishment. The HDOA explains on their website that the plan proposes for those involved to voluntarily submit a monthly report of the restricted-use pesticides (RUPs) they spray on their fields and for each to implement a generous 100-foot (.019 mi.) buffer zone between neighborhoods, schools, hospitals, and RUP areas. The first statement on the pre-application guideline reads as follows: "Under this program, farm operators [large corporate agriculture] on Kauai will notify schools, hospitals, and medical clinics that register

with a participating farm operator on Kauai ("registered entities")."

While much of the public eye, including Hooser, sees the Good Neighbor Program as a step in the right direction, he also points out the major flaws of this voluntary disclosure on his official self-titled website. Hooser introduces his concerns, expressing, "the voluntary nature of the program means there is no government oversight, no verification of the accuracy of the reporting, no accountability and no penalty for providing false information." With no governmental oversight or accurate verification of what is disclosed, it is all self-regulated. The voluntary disclosure effort refers specifically to restricted-use pesticides, which only make up 25% of the total chemicals these companies spray. Additionally, according to the State Department of Agriculture's (SDOA) historical sales data, RUPs alone have been reported an annual use of 18 tons on Kauai alone. The disclosure will not apply to General-Use Pesticides, or the little-known Special Local Need Label Registration pesticides, which require an "experimental pesticide use permit." Hooser states "these 'special exceptions' include allowing the pesticides to be used in wind conditions double the recommended wind speed on the existing label, and increasing the frequency of pesticide applications above and beyond the federal recommendations." He continued that such categorized pesticides are labeled with warnings of health hazards and environmental impacts, but there is no disclosure to the public or through the Good Neighbor Program when the labels are amended in company favor. Some of these special label pesticides include Evik, which is toxic to aquatic life and shouldn't be used near waterways; and another pesticide, Tilt, should not be used on land where food will be grown or where animals will graze within 100 days of its application due to residue. Most of the public is not aware of these hidden chemicals the seed giants hope to conceal by offering "voluntary disclosure."

In one of the Kauai court hearings for Bill 2491, Gary Hooser had the floor and began questioning Kirby Kester on October 15, 2013. Kester is a former Dow development and research leader who now serves as the current president of the Hawai'i Crop Improvement Association (HCIA), which is a trade group that represents Hawai'i's seed industry, including Monsanto, Syngenta, BASF, Dow, and Pioneer Hi-Bred (DuPont). Hooser asked if he was okay with accepting the 500-foot buffer zones implied in the bill, and Kester, representing all the accused companies, replied, "the fundamental difference is between it being law or voluntary, because what happens and here if it's law, it has ramifications much wider than just Kauai...of being adopted in other counties and states." This caused councilmember Hooser to sarcastically respond, "so you are concerned that other counties would also want to protect their schools?" After Hooser immediately apologized and promised to

not be facetious, Kester replied, based on the evidence presented, "we don't believe we are doing any harm."

Babies are being born with their two main heart arteries switched, or transposed. In 2015, Kauai Pediatrician Carla Nelson had just held the fourth infant born in three years with transposition of the great arteries, which demanded an emergency air-lift to Oahu for complex heart surgery. Nelson informed Christopher Pala of *The Guardian* that although she herself had only witnessed four, there has been a total of nine reports of this mutation in the last five years. She confesses that she and other doctors, as well as locals, are beginning to wonder if it is any coincidence that these abnormalities were from towns that have had more exposure to agricultural chemicals. In Kauai alone, Syngenta, Dow, BASF, and DuPont-Pioneer spray 17 times the amount of Restricted Use Pesticides per acre than any other conventional field in America. Some cornfields lie on a hill above the affected town of Waimea, and when the Hawaiian trade winds begin their daily flow of roughly 8-30 mph (depending on season), all the crop dust and chemicals being sprayed drift downhill to permeate the small town and neighborhoods.

Waimea High School is just 0.6 miles down the road from the nearly 3,000-acre test fields of Syngenta, the Kauai Veteran's Memorial Hospital is 0.5 miles away, and the Waimea Canyon Middle School lies 0.4 miles away from government-leased Kauai land for crop-testing. The Waimea Canyon Middle School's special education teacher, Howard Hurst, told Pala, "your eyes and lungs hurt, you feel dizzy and nauseous. It's awful." Hurst went on to disturbingly explain that the state average of special-needs assistance is 6.3%, yet 10% of the school's students require special-education services. "It's hard to think the pesticides don't play a role," he said. Until recently, the Waimea Hospital had never looked into the effects of pesticides on the community. Carla Nelson thinks it is imperative for these companies to pre-disclose which chemicals are sprayed because "it's hard to treat a child when you don't know which chemical he's been exposed to."

"This past February my son Arrow was born inside out. His small intestines and testicle was outside of his body through a hole where his belly button should have been. He spent his first three months in an Arizonan NICU (we had to move from Kauai to Arizona where medical facilities were better equipped) having six surgeries and multiple procedures. We didn't get to hold him in our arms until he was three weeks old and he did not get to eat until he was three months old. He was given nutrition through an IV for the first three months and developed an oral aversion from being traumatized by multiple throat tubes. He was poked by needles multiple times a day and was opiate dependent for several weeks. After 3 long months he was sent home with a g-tube

where he is given nutrition straight into his stomach through a feeding tube."

This disheartening testimony was posted on the blog *The Maui Mama* by Kauai mother Madison Strecker about her son's rare birth defect known as gastroschisis. She felt compelled to add that she worked on a local ranch while pregnant, where the owner announced that the water was unsafe to drink due to high levels of pesticides discovered through testing practices. Coincidentally, her close-by neighbor gave birth to yet another innocent victim of the horrible defect shortly after. With her son's condition, Strecker soon learned "I was not able to protect my son from the environment I was living in." A study conducted by the University of Washington (Seattle) shows an increasing link of Atrazine (a Syngenta chemical banned through most of Europe) to gastroschisis and it gained enough momentum to be presented at the Society for Maternal-Fetal Medicine. The CDC disclosed that this disease has nearly doubled from 1995-2005.

The issues concerning pesticides are an unfathomable, global crisis. The following incident took place in Argentina, perhaps the most recently mass poisoned country since Vietnam. Two young boys are swimming in their backyard pool, when suddenly, without warning, a shower of pesticides rains down on them. Villagers store their every-day-use water in a plethora of discarded pesticide containers (even for drinking), and students faint as their schools are doused overhead in chemicals during class time. Since the introduction of GM farming, Argentina has become #3 in world soy production (once popular for its grass-fed beef), with cultivation tripling to 47 million acres, accompanied by a reported ninefold increase in pesticide use from 9 million gallons in 1990 to 84 million in 2013. With no national standards, Argentina's 23 individual provinces are the rule-makers, which rely on municipal fulfillment. Crops are still being planted as close as 99 feet (.02mi) from backyards while local law enforcement looks the other way. In 2013, the *USA Today* presented this little-known crisis along with hospital statistics in the Argentine province of Chaco (with a population of roughly 1.53 million). They reported a quadrupled rate of birth defects since the introduction of biotechnology a decade ago, rising from 19.1 per 10,000 to a staggering 85.3. From a survey conducted in Avia Terai, Chaco, 31% (of an estimated 6,200 population count) declared to have a family member with cancer. These companies, their patented seeds, and the corresponding pesticides are implemented throughout the world, especially in developing countries such as Latin America, Africa, India, and the Philippine Islands where regulations are much more likely overlooked and users are uneducated on appropriate use and protection.

By far, the most commonly used pesticide in Argentina, and most of the world, is Monsanto's RoundUp, primarily composed of glyphosate, a chemical which the

World Health Organization's International Agency for Research on Cancer (IARC) has recently claimed to be a 'probable human carcinogen.' Monsanto retaliates to the glyphosate declaration on their website as "a conclusion that conflicts with the overwhelming consensus by regulatory bodies and science organizations around the world, like the U.S. EPA, which have found no evidence of carcinogenicity." Monsanto also found it helpful to further elaborate, "probable does not mean that glyphosate causes cancer, even at 100 times the exposure that occurs during the normal labeled use glyphosate is not a human health risk." The California EPA's Office of Environmental Health Hazard Assessment (OEHHA), however, placed glyphosate on Proposition 65, a list of "chemicals known to the state to cause cancer or reproductive toxicity," under the Safe Drinking Water and Toxic Enforcement Act of 1986. Because glyphosate is a general-use pesticide (roughly 75% of spraying is GUP), it is not included in the voluntary reporting in the Good Neighbor Program.

Despite the voluntary disclosure, thousands cheered and celebrated upon the historic passing of Bill 2491, Hawai'i's first law regarding pesticide exposure to protect public health, as stated by *Hawai'i Seed*. The undying support of residents involved those willing to sleep on the cold cement outside the Kauai county building to support the right to protect the land and community during the time of the final hearings, and thousands of Hawaiian locals participated in marches to show their support. D'Angelo of *The Garden Island* reports that On October 16, 2013, hundreds patiently attended an eighteen-hour hearing before the bill was finally passed at 3:35am. Yet, was such communal passion all rallied in vain? *Biology Fortified* revealed that shortly after the bill was passed, Mayor Bernard Carvalho Jr. announced his contemplation of a veto. He assured his community, "My final decision will only be after I look at the final draft and I get the county attorney's opinion." *Hawai'i News Now* adds that the mayor cautioned, "We all know there's a high likelihood that the new law will be challenged in court." On Halloween, following the county attorney consultation, Mayor Carvalho vetoed Bill 2491, admitting his agreement with its intents, yet claimed, "However, I believe strongly that this bill is legally flawed. That being the case, I had no choice but to veto," *Civil Beat* reports. Backing up his statement, he explained, "One of the issues with Bill 2491 as it stands today is that it does not directly address pesticide buffer zones. Instead criminalizes the growing of any kinds of crops on agricultural land regardless of whether or not pesticides are used on said crops," as reported by *Biology Fortified*.

"We are a group of concerned physicians who support Bill 2491. We are concerned with what we believe may be the results of the 'farming' practices that are occurring predominately on the west side of our island where we provide health care." This statement from Carla Nelson derives from a group compilation of twenty

letters from various Kauai doctors, physicians, nurses, and obstetricians, which were delivered to Mayor Carvalho on October 20, 2013, about their concerns of his veto. Dr. Nelson, along with the group of medical specialists, explained that some of their collective concerns are: an observed occurrence of birth deformities at higher than the usual rate involving miscarriages and heart defects, unusually higher rates of gout, a higher result of rare cancers in a small population, almost daily reports of respiratory problems in patients with no former history of problems, recurring nosebleeds in children, hormonal changes including women growing excessive facial and body hair, recurring dermatitis with no previously known sensitivity, and many reporting experiences of metallic tastes in their mouths. Nelson makes clear, "we have no direct evidence of a specific correlation between these unique variances in the health of some of our patients with the current or past agricultural practices but we do have a high level of suspicion that a strong correlation exists between the two." Dr. Rick Goding addressed in his own statement, "I strongly urge you [Carvalho] to sign this bill into law... The people's voice and the medical community's voice must count when the County engages in lawmaking." Many of the individual letters shared the same urgencies, and all agreed it imperative to know which chemicals are being sprayed and how close their patients live to crop-test sites. Along with the community, they all support the buffer zone implementation for sensitive areas of long-term exposure and the passage of Bill 2491 in hopes of being able to better help their patients.

Hooser vented about the veto on his blog, stating, "they [agriculture companies] chose to use their money and legal power to bully us in court," *The Huffington Post* furthered Hooser's statement by adding that nine Hawai'i attorneys delivered a joint statement defending the legally sound bill. Carvalho later said that just one of the laws the bill would violate is the Right to Farm Act, which, according to the National Agricultural Law Center, is a set of laws enacted to protect qualified farms and ranches from nuisance lawsuits to stop ongoing practices. *Civil Beat* continues that the biotech representatives indicated a lawsuit if the bill were to pass, claiming that aspects of the bill could be overturned in court because of its vagueness and ambiguity. Despite the threats, on November 16, the mayoral veto was ultimately overridden and Bill 2491 was officially ratified on a 6-1 vote.

Consequently, Syngenta, DuPont, and Agrigenetics (Dow) filed a lawsuit to block the sanction at the United States District court of Honolulu against the county of Kauai on January 10, 2014. The plaintiffs argue that the passage violates the U.S. constitution, several state and federal laws, and the Kauai County charter. Syngenta and DuPont released equivalent statements: "The ordinance is invalid... It arbitrarily targets our industry with burdensome and baseless restrictions on farming operations by attempting to regulate activities

over which counties in Hawai'i have no jurisdiction. These activities are already regulated by governmental agencies under state and federal laws." D'Angelo informed that pro-bono attorneys with Earthjustice and the Center for Food Safety pledged legal assistance once the county is officially served. "Kauai's ordinance is a sound and well-crafted law," said George Kimbrell, senior attorney of the CFS, "The industry's challenge is without merit, and we will vigorously defend it."

On April 28, 2015, Syngenta's board of directors hosted a shareholder's conference in their homeland of Switzerland with over 1,000 investors, trade unions, political parties, environmental organizations, and Swiss lawmakers such as the Social Democratic Party. Little did Syngenta know, however, that one of their single-share investors known as MultiWatch, had a trick up their sleeve. As a non-governmental watchdog organization, MultiWatch is a major advocate for monitoring involvement of Swiss transnational corporations that pose as "bad actors" for the environment, labor workers, and social justice. The progressive organization bestowed their only Syngenta share to volunteer President of the Hawai'i Alliance for Progressive Action, Gary Hooser. With such a critical meeting taking place, Hooser took advantage of his legally granted access to bring Syngenta's impact in Kauai and their collective suppression along with the other major companies affected by Bill 2491 to light. It goes without saying, as Hooser expressed on his self-titled personal blog, "Syngenta did not want me there and was working on many levels to prevent me from speaking, but legally there was nothing they could do to stop me." The list of convention attendees was released as public information, and Syngenta soon found that MultiWatch had cunningly transferred their share, and argued to say that only the organization could attend. Therefore, Hooser was temporarily placed on their board of directors, making Syngenta's argument even less feasible. He continued that once he arrived at the door, the abundance of press outside the building added more pressure on letting him in without a struggle. Syngenta did not stop there, and ordered security to sit behind Hooser and his affiliates throughout the entire conference for good measure.

Inside the shareholder meeting, Hooser addressed Syngenta's abuse of public pesticide exposure, including their own chemicals Atrazine and Paraquat, which are restricted in their home country of Switzerland and throughout most of Europe, yet are applied by the tons on Kauai and the rest of the United States. Before getting a security escort out of the building for recording (although there were no signs posted anywhere stating otherwise), one of Hooser's associates was able to capture him at the podium requesting, "I am asking you with great respect...and honor... comply with our laws and treat us with the same respect, the same dignity, and the same protections that you give the people of Switzerland. Do not spray chemicals in my community

that you cannot spray on your own community." *The Huffington Post* reported that Hooser's presence along with protesting islanders (and other internationals who followed) raised enough awareness to lead Switzerland's Social Democratic Party to announce their support of Kauai in asking Syngenta to "honor the democratic process and protect the people of Kauai." He also presented a petition with over 4,000 signatures (which now has over 7,000), including medical professionals, asking Syngenta and its shareholders to withdraw their lawsuit against Kauai County. No official comment from Syngenta or the shareholders could be found on Hooser's attendance.

With so much at stake, and the common knowledge that food and water is the fundamental essence of human survival, is it really worth waiting thirty more years to start seeing the effects of pesticide exposure unfold similarly to the way the world found out about the dangers of cigarettes, which at one point in history were physician approved? In another example, in the 1940s, scientists went to Africa to promote the use of DDT (once a Monsanto-manufactured chemical) by spraying a generous amount on a bowl of food and then eating it in front of villagers to show its safety. Being a highly toxic insecticide, DDT was heavily used until its final EPA ban in 1972 (thirty years later), only after making 89456.97 tons at its peak production in the 1960s, as disclosed by the International Programme on Chemical Safety. Only time will reveal the true dangers of agricultural chemical exposure, unfortunately at the cost of public and environmental livelihood. Upon the newly-filed lawsuit against Kauai county, Syngenta's Michel Demaré quoted "the dispute is likely to last for years." Meanwhile, almost simultaneously, Gary Hooser stated, "we are not going away and we will not tap out."

Being Native American in a Stereotypical and Appropriated North America

Ariel Moniz
English 419

Stereotypes are a common facet of the human psyche. These are often gross overgeneralizations about places, things, or most commonly, people. A stereotype can latch itself onto any widely held belief or idea and blow it out of proportion, tainting the truth and smudging the facts. The issue of stereotyping lends itself often to matters of race. As "race" is a matter of compartmentalization, stereotypes flourish. These can be harmful, whether they are "good" or "bad," as they inevitably lump people into a category under an idea that often does not apply to all within the larger group. This can easily lead to a lack of individual identity as well as simple misconceptions. All races, especially minorities, are victims to stereotyping, and this includes Native Americans.

Being the indigenous peoples of America, the Native Americans have always been viewed as the "Other" since colonization by European peoples began. The clash of cultures and language barriers resulted in endless conflict in which the natives were often depicted in a negative context. The history of early American colonization is a dirty and bloody one which still leaves much to be explored. Misunderstandings and lack of a double-sided education about this tumultuous period has resulted in overgeneralizations, stereotypes, and the devaluing of the Native American peoples and their cultures. Lack of knowledge and respect leads to the formation of stereotypes-- aided in contemporary times by cultural appropriation-- which has been fed by incorrect and demeaning images and ideas of Native American life and culture as expressed in the media, particularly film.

The history of the Native American stereotype is a complicated one as there are many of them, and though some have changed over time due to contemporary lifestyles, they hold true to the same racist ideals of the past. The story of the Native American as it is known to the masses today took place on the frontier within the context of colonization pushing its way across America. The frontier is a land of opposites, which personifies the "otherness" of the native—wilderness versus civilization, savagery versus humanity, and individual versus community (Smith 130). Those who told the stories and therefore shaped the context of this history were the colonizers, who paid little mind to the natives as people, and that is where the clashing images of the natives truly began.

As the world modernized, the understanding of the native peoples of America did not seem to move forward. Some of the first widely distributed images of

Native Americans arose in dime novels in the 1860s, in which they were most commonly portrayed as bloodthirsty savages battling against the white protagonist (Hirschfelder and Motano 177). Soon after came the rise of the Wild West show in which real animals, natives, and "cowboys" would be used to act out stories of the frontier. As the frontier quickly closed, the nostalgia for it grew, and the Wild West shows reached soaring heights of popularity. The most popular of these was Buffalo Bill's Wild West show, which opened in 1883. Buffalo Bill was known for hiring "real Indians" to partake in his show, including Sitting Bull, Gall, Gabriel Dumont, and Black Elk (Smith 126).

It is unclear how the Native American actors felt about being a part of the shows, or why they participated. Some say that they needed the revenue or felt a need for mobility (Smith 126). Both of these reasons sound somewhat suggestive to ideas of what "whites" imagine natives value or lack, though one cannot be certain that these were not the reasons. Another suggestion is that they wanted to use the opportunity to communicate their own cultural identities (Smith 126). Though essentially playing cowboys and Indians for a crowd may not seem like the best route to cultural understanding and acceptance, Native Americans have continued to try to have their voices heard in any way that they can, which has unfortunately tended to be exploitive.

In 1894, Thomas Edison created the first moving pictures, an invention which immediately resulted in the penny arcade peep-show. One of the first of these was called the *Sioux Ghost Dance*, a series of images of Native Americans dancing, surely in the stereotypical garb and manner that America had already come to expect from the natives (Smith 125). As these moving pictures advanced into films, the nostalgia for the frontier did not weaken, but instead manifested itself into the Western genre of film, which was at its height from the 1920s into the 1950s. The staple of these films were the cowboys and Indians who fought upon the stage of the still-open frontier of the past (Smith 129). These films helped shape and engrain many of the stereotypes and images of Native Americans still held today.

Towards the end of the 19th century, with the frontier closed and many Native Americans still living within their homes and cultures, assimilation of these peoples was made official federal policy by the United States government. The steady crushing of their cultures was enacted in several ways, perhaps the most famous and brutal of which were the boarding schools, in which native children were taken from their cultural homes and forced into embracing the white culture and language (Treuer). It was also during this time that the stereotype of the "doomed" native arose. Native culture and language was being eradicated and buried beneath that of the colonizers, resulting in a shallow form of pity for the slowly dying "race" ("Stereotypes").

The idea of the extinct Native American is a deep one, which was further engrained by western films.

Westerns, primarily the only genre to include Native American characters as integral to the plots, are set in the historical past. The genre runs off of the conflict between colonizers and Indians, an issue which is tied within the genre to a time and place—the open frontier (Mihelich 130). As far as popular media is concerned, the “Indians” did not survive the transition from the Wild West to modern society (“Common Portrayals of Aboriginal People”).

This concept has had some far reaching and startling results. Native Americans have become “obsolete” to some. There is a stigma that “real Indians” can only be those that modern culture recognizes from the past (“Common Portrayals of Aboriginal People”). The idea that they cannot wear skinny jeans, shop at GAP, or drink a caramel macchiato at Starbucks if they want to be “real” natives is absurd and also damaging to their identities. The concept of having to remain “other,” and further, the “other” that was designated for them by the white culture, undermines their sense of self and their place in American society.

America has distorted ideas of what Native Americans are, do, and believe, which have been enforced through the media. Film is the primary catalyst for these misconceptions because it has had the opportunity to spread misinformation for generations. As stated by Paul Chaat Smith in his essay “The Big Movie,” “If you live in North America, westerns are the Book of Genesis, the story of our lives” (Smith 125). This accurately portrays the persuasive power of the western genre over the Native American identity. Western films have focused on four primary Native American character archetypes; the beautiful maiden, the savage warrior, the wise medicine man, and the noble savage. These archetypes tie into misconceptions or downright historical and social smudging of the past relations between the natives and the colonizers, and continue to appear in the media today.

The archetype of the beautiful Indian maiden is perhaps one of the most directly harmful to Native American women, as it is a concept that still affects the way that they are viewed and treated today. In the media, the Indian maiden is beautiful, virginal, and “other,” though in this context her otherness is an attribute directly tied to her sexuality. She is to be conquered and assimilated through white patriarchal dominance. The common storyline associated with this archetype in film is her falling in love with a white man and assisting in his mission to “civilize” her people (“Common Portrayals of Aboriginal People”). This archetype is often added to with the concept of the “native princess.” As the native peoples did not have a system of inherited royalty, this was a concept personified onto the native peoples through the cultural perceptions of the European colonizers (Riverwind). The most common interpretations of this archetype can be seen in *Pocahontas* (1995) and Tiger Lily in the story of *Peter Pan*. This concept of a malleable, exotic, and conquerable woman has resulted

in the image of the “easy squaw,” a derogatory term for Native American women which implies their loose morals. This has led to the very serious and real problem of high rates of sexual assault among native women, most commonly perpetrated by non-native men (Nittle).

The savage warrior is another archetype which has been fed not just through the media but also through educational systems which often focus on the battles between colonizers and natives, a history which is almost inevitably painted in shades of the majority's cultural concepts and values. This has led to the image of the savage warrior, which takes on multiple levels depending on the context. Most often in western films, native warriors have been portrayed wielding tomahawks (although this was not a weapon used by every tribe across North America) thirsting for the blood of white men and the purity of white women (Nittle). These men are portrayed as a threat to civilized society. In other contexts, these warriors are depicted as strong, silent, brave, and over all, sexualized in their “otherness” (“Common Portrayals of Aboriginal People”). The primary issue with this archetype is that it portrays Native Americans as being occupied with savagery and warfare, when many tribes did not partake in much conflict, especially amongst themselves, and it obscures the importance of community and spirituality which were much more prevalent amongst native peoples (Nittle). Kocoum from *Pocahontas* (1995) is a modern interpretation of this archetype, as he is strong, silent, and willing to fight to the death for his people.

The wise man is one of the “positive” stereotypes of Native American culture which is based in European concepts. Some tribes did have medicine men who knew a good deal about herbs and cures. There were also healers who used prayers and ancient methods of healing. The term “shaman” is often used to describe these people. This is a term which does not exist in any of the Native American cultures, and has its origins in Europe (Riverwind). This archetype shares many qualities with that of the “magical negro.” In film, these characters often act only as a guide for white protagonists, making them beneficial characters (Nittle). An example of this character can be seen in the film *Little Big Man* (1970). This archetype has led to the grossly overblown belief that many Native Americans are exceedingly wise and spiritual, which may not have a heavy toll on their culture today, but still resonates as a proclaimed aspect of their culture via the white culture of America (Ridgway).

The oldest and deepest set of these archetypes is that of the noble savage. In the 18th and 19th centuries, some native people were imbued with certain virtues that the colonizers deemed to be noble, including guilelessness, strength, and helpfulness to whites (“Stereotypes” National Endowment for the Humanities). Perhaps the best known example of this mentality arose in Benjamin Franklin's *Remarks Concerning the Savages of North America*, in which he paints them to be noble and well-living people. The sentimentalism of the noble

savage has carried into modern film, apparent in films such as *Little Big Man* (1970) and *Dances with Wolves* (1990).

This evolution has resulted in a counter-culture of westernized films which attempt to flip the expected narrative on its head by portraying the natives of America as the “good guys” and the colonizing whites as the “bad guys”. In the film *Little Big Man*, the main protagonist is a white male who is raised by a Native American tribe and spends his life between the two worlds—that of the native cultures and that of “civilization.” Through his character, the audience is made to feel the importance of native peoples and their cultures. There is a similar realization of the pitfalls of white civilization present in the film *Dances with Wolves*.

Many see this as a step forward for the representation of Native American culture, but this too has its pitfalls. As is the case with both of these films as well as many others that try to bring Native American life to the forefront in western settings, there is still the issue of what Paul Chaat Smith refers to as the “master narrative” in his piece “The Big Movie” (Smith 132). Even in these films with more “enlightened” views of native culture, the protagonists are still white. The natives themselves most often appear in supporting roles and therefore often lack character and personality. This essentially has the effect of putting them on a short little pedestal but leaving them without a voice (“Common Portrayals of Aboriginal People”). They play as pawns stoking a campfire or smoking a peace pipe in the narrative in which the white protagonist faces character defining life issues (Smith 130).

Film has been a sort of second frontier for the Native Americans, as they must fight every step of the way to retain their cultural identities and their voices as people of conquered nations. For some time—and even today, though it is admittedly more difficult to pull off since the invention of the color TV—Native Americans in films were most often portrayed by white people, usually Italians or Spaniards if possible due to their darker but still European complexions (“Common Portrayals of Aboriginal People”). In 1936, William Hazlette formed the Native American affiliation of the Screen Actor’s Association in an attempt to stop Native Americans from being misinterpreted on screen (Hirschfelder and Montano 182).

In 1960, Harry Preston Smith, most widely known for his role as Tonto on *The Lone Ranger* television series of the 1950s, spoke out against the way that natives were portrayed on TV, and even wrote protest letters to President Dwight Eisenhower (Hirschfelder and Montano 183). He also went on to create the Indian Actors’ Workshop in 1966, which widely promoted the use of natives in Indian roles and taught useful skills to Native American actors concerning show business, such as acting skills and even horse skills (Hirschfelder and Montano 183). Finally, in the 1990s, the American Indian Registry for the Performing Arts in Los Angeles began

publishing a directory of Native American performers (“Common Portrayals of Aboriginal People”).

The history of the Native American people in film is important because the perceptions created through this medium have formed the opinions of the nation perhaps more than for any other minority in America. Between the misconceptions enforced through film and history books, many Americans do not know much about the true Native American peoples and their cultures. The lack of clarification between truth and falsity has led to multiple layers of stereotypes surrounding the Native American people, some with more wide-reaching results than others.

One of the oldest and most narrow-minded stereotypes concerning Native Americans is the belief that the whole of North America consists of one culture. This is not much different than assuming that all of Europe or Africa consists of one set of beliefs, one language, and one way of life. When colonizers came to America with the intent to conquer it, the differentiation in cultures meant little for their overall cause. Certain images—the tomahawk, the peace pipe, the dreamcatcher, and the headdress for example—all became melded into one culture, implying one tribe, and one set of identical people.

In actuality, there are about 560 tribes recognized by the United States Bureau of Indian Affairs in North America today (Blais-Billie). Each of these tribes has its differences, which is a part of why many Native Americans have an issue with being considered a “race.” The overgeneralization of their similar continent of residence meaning that they are of the same “race” is more political than genetically accurate. This is equivalent to insisting that all the peoples of Europe are just “Caucasians,” which strips a person of an important part of their national identity (Blais-Billie).

Another stereotype that reaches back to the point of colonization is the belief that Native Americans have an endless love for animals, are essentially tree huggers, and practice sun-worship. Many tribes believe that all animals and plants have a spirit, but they do not worship them or idolize them in the way that many modern Americans assume. Most tribes—as has been the case for thousands of years in hunter/gatherer as well as other “primitive” societies—observed animals and used plants to exist in harmony with nature, as well with the necessity of understanding the land in order to survive (Riverwind). Native Americans for the most part believe in a Supreme Being—not unlike most Europeans—and do not worship the sun and other aspects of nature, but simply respect them (Ridgway).

There are many stereotypes concerning Native Americans that have come to define the modern Indian in American culture. These are mainly negative, enforcing the status of “minority.” As late as the 1950s, relocation programs were pushed towards Native Americans in an attempt to get them to move off their cultural lands with the promise to provide housing and job training (Treuer).

This has led to the idea that all Native Americans live on reservations. This is of course somewhat ironic, as in the western film genre all natives lived in tipis (Riverwind). Tipis were common housing for tribes of the Plains, but these were not the only houses natives had across the continent. Some in the east lived in wigwams, long wooden buildings, whereas some tribes of the west lived in houses made of adobe bricks (Riverwind).

As was the case during and before colonization, Native Americans do not all have the same living arrangements today. There are currently about 560 federally recognized reservations in North America, and as of 2010, only about 22% of Native Americans live on one (Ridgway). Around 60% of Native Americans actually live in cities, with New York, Los Angeles, and Phoenix boasting some of the highest Native American populations in North America (Nittle).

The concept of the reservation as home to Native Americans has led to other stereotypes in itself. The knowledge that many on the reservations receive some sort of government benefits has led to the idea that Native Americans are lazy and abuse the system. This idea is founded in ethnocentric definitions of "laziness", primarily the idea that they lack education, work ethic, and higher goals. These are values that modern American culture deems acceptable and important, therefore demeaning the Native American people or any minority that does not follow suit (Ridgway).

One of the most popular stereotypes believed about Native Americans is that they are all alcoholics. A study done by the National Institute of Alcohol Abuse and Alcoholism (NIAAA), suggests that white males are the demographic most likely to drink alcohol on a daily basis and drive under the influence. The idea of the drunken Indian is embedded in the history of the native peoples and the use of alcohol as a leverage tool by colonizers. In modern times, alcoholism is a trait associated with the economically disadvantaged and issues of racial discrimination (Ridgway).

On the other end of the misconception of the government money dependent Native American is the myth of the casino and the supposed massive hauls of money it makes to support reservations. In 1976, the United States Supreme Court gave certain reservations the rights to govern themselves, define their membership, manage their property, and handle their own tribal business and relations. Of the roughly 560 federally recognized reservations, only about 224 are involved in gaming. Casinos do provide funds for housing, health care, schools, and jobs. Despite this, unemployment on some reservations is reaching up to 75% and nearly 10% of Native American families are homeless (Lentsch).

There are also many other stereotypes that don't seem to have a secure source or deeper meaning than a misinterpretation of culture. These include natives lacking a sense of humor, having no money sense, putting little effort into becoming educated, being skilled at handicrafts, seeking handouts, lacking unity, and

ostracizing themselves rather than blending into society (Riverwind). Several of these are obviously baseless, and some are tied into the history of oppression and displacement that natives have suffered at the hands of the United States government.

In the modern age, television is not the only form of media. There are endless venues into which misinformation can be fed and spread at alarming rates. As is made pretty clear by the modern stereotypes of Native American life, stereotyping, racism, and ignorance has had to become more subversive, but did not go away. The primary regime of media in a capitalist system is entertainment and advertisement. Everyone wants to be entertained, and everyone wants and needs money to survive. Westerners sold the image of a savage Indian, and perpetuated untrue archetypes and stereotypes that have lasted until today. In contemporary life, commercials reign. These ads sell people everything—services, devices, entertainment, tools, food, etc.—and use popular images, ideas, and even colors to make their money.

Modern America tends to use its status as a "melting pot" to "borrow" ideas, images, and cultural icons from minority groups to feed the need for the changing atmosphere of high end white culture. This often leads to cultural appropriation, the use of a minority group's cultural elements in the dominant culture, thereby making it more "acceptable" in the context of the "superior" group. Native Americans have fallen victim to this time and again, and it has helped feed some of the stereotypes that people have concerning the native cultures of America.

The most common version of the removal of a cultural item, which is glorified by the dominant culture only after it is in "their" consumption, is that of the headdress. Fashion magazines and runways are full of Native American prints, jewelry, and imagery, but the headdress is perhaps the most popular due to its regal beauty. The meaning of the item is often discarded—as most culturally appropriated things are—and there lies the disrespect of the use of the item. In some Native American cultures, headdresses are restricted items, holding very important values for the wearer, not unlike military medals or a bachelor's degree. The ownership of a headdress is an honor which must be earned. They represent achievements accomplished by the wearer, and it is offensive to many native peoples to see them used as a fashion statement ("An Open Letter to Non-Natives in Headdresses").

This issue is taken to an extreme in the matter of mascots. Indians or Red Skins are popular sports mascots in high schools across the nation, and the Washington Red Skins are a major football team. This imagery is demeaning to the Native American culture because it perpetuates a ridiculous and outdated stereotype of what an "Indian" is. A "race" of people should not be summed up into an image that is used to represent a sports team or a school event. This shows a clear lack of

understanding of Native Americans as a modern living culture. This might be equivalent to having the "Yellow Skins" mascot with slanted eyes and large front teeth. It is the image that the dominant culture wishes to portray, a defeated people of the past who can now be summed up into a costume for people of the majority to wear and use at their disposal (Ridgway).

Though stereotypes are still a part of the modern Native American representation, things are slowly changing. The Native American voice is being heard more than ever before. Sherman Alexie, a popular Native American writer, has been writing about the Native American experience in modern America for years. One of his books, *The Lone Ranger and Tonto Fistfight in Heaven* contained a short story that inspired his screenplay for *Smoke Signals*. This film was the first full-length feature film made completely by Native Americans, opening the arena of film even wider for others who want their stories told (Alcalay).

Of course, there will always be steps taken backwards by some. Recently, several Native American actors and a cultural adviser walked off the set of Adam Sandler's film *The Ridiculous Six* (2015) due to the use of disrespectful imagery and interpretations of the Apache culture. Some of the native female characters were given names such as "Beaver Breath" and "No Bra." Another native actress was instructed to squat and urinate while smoking a peace pipe. These sorts of ideas are clearly insulting and unnecessary (Garcia).

Native American culture through the lens of natives is also being expanded into the realm of fashion and journalism. Kelly Holmes started the first Native American fashion magazine in 2012 called *Native Max*. Fashion is an area of heavy cultural appropriation of the native cultures, and hopefully more native peoples will strive to have their voices heard through their passions (Duggan). Native voices will do the most to enact change and the eradication of stereotypes from popular culture. When these voices are heard, read, or seen through the passions of native peoples' talents and work, there will be no excuses left to those who perpetuate these damaging stereotypes.

The most useful tool that the unaware and those of the dominant culture can use to aid in this reclaiming of identity is education and respect. Assumptions lead to stereotypes which rob people of their sense of individuality, a value modern culture holds above almost all else. Unfortunately, this can be difficult when the education system teaches the same lies and misconceptions as Hollywood (Mihelich). Those who wish to be educated and culturally aware must walk a fine line, and need to reach deeper than popular culture and outdated history books for their answers.

The government system is also starting to take a closer look at the needs of Native Americans. On July 9, 2015 the White House is going to host the first ever White House Tribal Youth Gathering. This opportunity

will provide American Indian and Alaska Native youth from across the country the chance to interact directly with senior Administration officials and the White House Council on Native American Affairs. This will hopefully be an exciting and fruitful meeting of minds which will result in the native voices being heard and appreciated ("White House To Host First Ever White House Tribal Youth Gathering").

The Native American identity has been subversively oppressed by the colonizing culture since the days of the frontier. After the fighting, there arose the invention of film, another battle ground on which the natives had to fight for their identities and often lost ground. Stereotypes were engrained into the popular culture of America, and eventually their cultures became little more than symbols or ideas that were taken out of their cultural contexts and used as props for the dominant culture of America, leaving the Native Americans with even less of their identities than before. Though Native Americans have been long silenced, their voices are rising through film, literature, and other modes of communication and media. They are slowly taking back their cultural icons, their histories, and their personal identities. They no longer must reside as the "other," after all, this is America, and they are its native peoples.

Bibliography

- Alcalay, Galit. "Telling Their Own Stories: Native American Stereotypes in Art." *Cultural Survival*, 1998. Web. 20 Apr. 2015.
- "An Open Letter to Non-Natives in Headdresses." *Apihtawikosisan: Law, Language, life: A Plains Cree speaking Metis Woman in Montreal*, 2012. Web. 20 Apr. 2015.
- Blaise-Billie, Braudie. "10 Things You Didn't Know About Native Americans." *Native American Heritage Programs*, 2014. Web. 24 Apr. 2015.
- "Common Portrayals of Aboriginal People." *Mediasmarts*, 2015. Web. 23 Apr. 2015.
- Duggan, Leeann. "Why the First Native Fashion Magazine's Mission Matters." *Refinery29*, 2015. Web. 24 Apr. 2015.
- Garcia, Feliks. "Insulted Native Americans Walk Off Adam Sandler's 'Ridiculous Six' Set." *Dailydot*, 2015. Web. 24 Apr. 2015.
- Hirschfelder, Arlene and Martha Kreipe de Montano. *The Native American Almanac: A Portrait of Native America Today*. New York: Prentice Hall General Reference, 1993. Print.
- Lentsch, Katie. "The Myth of the Casino Cash Cow for Native Americans." *Mint Press News LLC*, 2013. Web. 24 Apr. 2015.
- Mihelich, John. "Smoke or Signals? American Popular Culture and the Challenge to Hegemonic Images of American Indians in Native American Film." *Wicazo Sa Review* 16.2 (2001): 129-137. Web. 26 Apr. 2015.
- Nittle, Nadra Kareem. "Five Common Native American Stereotypes in Film and Television." *Aboutnews*, 2015. Web. 20 Apr. 2015.
- Ridgway, Shannon. "Common Native American Stereotypes Debunked." *Everyday Feminism*, 2013. Web. 24 Apr. 2015.
- Riverwind, Joseph. "The Basic Indian Stereotypes." *Blue Corn Comics*, 2007. Web. 23 Apr. 2015.
- Smith, Paul Chaat. "The Big Movie." *The Norton Mix Composition*. Ed. Katie Hannah. New York: W.W. Norton & Company, Inc., 2014. 123-133. Print.
- "Stereotypes." *National Endowment for the Humanities*, 2011. Web. 20 Apr. 2015.
- Treuer, David. "Kill the Indians, Then Copy Them." *The New York Times*, 2012. Web. 20 Apr. 2015.
- "White House To Host First Ever White House Tribal Youth Gathering." *Native Max*, 2015. Web. 26 Apr. 2015.

The Voice of a Culture: Folktales in Russia

Ariel Moniz
History 435

Every culture across the globe has its own set of beliefs, values, and tales that make up the psyche of its people. These tales, which often come in the form of what is considered a folktale or fairytale, give others a look into the lives of those people in a way that is often psychologically intimate and bridges generations. Folklore is deeply ingrained into Russia's history. It carried the essence of the people and their values. In this way it has served as a voice for the Russian culture and its people, which has been both stifled and amplified over time in an attempt to help define Russia. Folklore has been viewed alternately as a path to damnation, or a tool for nationalism, and has been viewed by many as a step towards answering questions of Russian identity.

Folklore in Russia was born of myths and rituals of tribal forms of society¹. These elements came together over time from every corner of Russia. The nation's size is duly reflected in its wide array of folktales. It is not difficult to find more than one version of essentially the same story depending on what area of the country one is in. All the way into the 19th century, previously unknown works were being found on the fringes of the Russian empire, meaning that there was no successful wide sweep of folklore done, at least up until that time².

In the tenth century, Orthodoxy entered Russia and quickly became an everyday part of life in the country³. Folktales were popular by this time, especially for the peasants, but the clergy had a strong standing against folklore. This was primarily due to the fact that much of the folklore in the country revealed "pre-Christian concepts, beliefs, and modes of symbolic thought"⁴. This included things like astrology, totemic beliefs (animal ancestors), ancestor worship, initiation rites, and even human sacrifice⁵. It was due to this stance against folklore that caused the collection of folktales to be put off until about the 19th century⁶.

Even into the 17th century, the clergy was against the telling and collection of folklore. In the early half of the 17th century, Abbot Panphilus, a churchman, complained about the pagan celebrations of the people. He insisted that festivals and songs provoked damning behavior in women, which created a terrible temptation for men and youths⁷. With the skill of writing being held primarily by clergy members, written accounts of folklore and the collection of these pieces were virtually nonexistent⁸. Ironically, elements of folklore sometimes wove themselves into tales of the church, including the story of St. Mercurius of the 15th century, who was said to have walked home from a battle with the invading Tatars carrying his own severed head under his arm⁹.

Folklore is known for its roots in the peasant culture. Most of the peasantry was illiterate, and the

folklore of this pre-collective period is said to define "the values and attitudes of the ordinary people of a preindustrial society"¹⁰. There is some speculation to this concept. Some think that the themes and values of folktales were indeed based in the peasant psyche, but they also believe that these attitudes and values of the rural population were, in fact, mediated through the consciousness and prejudice of the educated elite. This idea implies that the views of the lower classes were simply based upon those of the higher classes, from an earlier period in time¹¹.

Be they a product of the peasantry or of the elite in days passed, folktales were valued as escapist entertainment and had meaning to the people as a part of a living tradition¹¹. A large portion of the peasantry practiced a dual faith, *dvoeverie*, which blended aspects of Christianity with those of the original animistic beliefs of the area¹². Many people followed the guidelines of Orthodoxy in their lives, but also believed in the old ways and stories of the time before Christianity. Russians had to be Orthodox in the public sphere, but within their homes they could practice their own personal beliefs.

Despite the oppression of folklore by the church, it still circulated. This is made clear by the presence and popularity of storytellers. From ancient times until the 18th century, there was a specialized caste of storytellers called *bakhari* or *skazochniki*¹³. They were known to play an important role in Russian social life. Princes and nobles often kept a storyteller as an entertainer, and they were also popular figures in the rest of society¹⁴. Others were hired by groups of workers, such as the lumbermen, fishermen, and hunters in northern Russia as tools of leisure between work periods¹⁵.

Almost all of these "professional" storytellers were men. It was believed that female storytellers were "less informed" than males and could never meet the skill and experience of male storytellers¹⁶. This did not mean that women did not also partake in the act of storytelling. Adolescent girls as well as women of middle age or beyond commonly told folktales in the home to entertain and educate children. Sometimes elderly women worked in the homes of families as nannies, and a large part of her occupation would be her storytelling skills¹⁷. Ironically, while men were held in higher esteem for their storytelling skills as entertainers, it was women who used their storytelling to transmit values and morals for future generations¹⁸. Despite gender differences, storytellers had leeway with the stories that they shared, and were encouraged to add their own styles to the story. This helped to set them apart from others, as the telling of a tale was considered a useful skill¹⁹.

It is in the setting of home life that most children were imbued with folktales. This included Aleksandr Pushkin, the first writer to really put to use the folktales taught to him by a peasant woman in his own writing²⁰. Other authors began to use folkloric elements in their professional writings as well, including Gogol²¹. Dostoevsky also recreated oral traditions within the style

and plots of his stories²². This helped prove the centrality of folklore to the people of Russia, and it became an area for exploration as well as a proud part of the Russian identity.

As the telling of tales lived on, so did the interest in them. Soon people wanted to begin collecting these tales, as well as songs and others forms of folk tradition. The first to begin seriously recording folktales in Russia was a foreigner. Perhaps this was because of the ever-present rules of the church upon the locals or simply that no one had seen the need to collect them before. The collecting started with an Englishman named Richard James, quickly followed by Samuel Collins. James collected folk songs between 1619 and 1620, and Collins collected folktales in the 1660s²³. Casual collecting of folklore continued throughout the 17th and 18th centuries as a sort of curiosity, primarily by foreigners interested in Russian culture²⁴. This was partly due to the thriving study of folklore in the West, which was slowly brought to Russia, though even during this time many of the tales were subject to editing and change²⁵.

The 19th century was a period of great change for the world of Russian folklore. This was when collections of folklore were becoming popular, though the folktales in these collections began to sound less and less like the oral tales from which they were scribed. Tales often underwent editorial “improvement” during this period²⁶. Due to this fact, it can sometimes be difficult to determine the depth of meaning behind some of these tales as they were in their original form. Another difficulty is that since most of the tales were collected during this century and into the 20th century, it is no simple task to find clear evidence of the changes in popular attitudes of the common people over time²⁷. However, it is known that during this time the common people still viewed folklore and superstitions as a mix of fact and faith, and integral to their lives²⁸.

The Romanticism of the 1820s brought about a thriving effort to collect Russian folktales. Scholarly study was also initiated at this time. It was also at this point in time that folktales came to the forefront of literary thought, and several authors began to imitate the style of folklore in their own work²⁹. This only further spurred the collectors to unearth what they could. Of course this rise in folklore did not go unnoticed. In the 1830s, a slavophile by the name of P.V Kireeskij wished to use folklore as a means of projecting the greatness of Russia and its people. This idea of using folklore to assert “Russianness” would be repeated in the following century³⁰.

In the 1860s, there was a surge in the study of folktales, most of which followed in the footsteps of the studies being done in Western Europe³¹. This was spurred by the discovery of a flourishing tradition of *byliny*—folksongs—in a remote region of Russia³². It was around this time that multiple schools of study for folktales arose. There was the mythological school, which was developed in Germany by the Grimm Brothers, which

reduced plots of folksongs and folktales into “primeval cosmological myths”³³. The historical school viewed folktales through a different lens, linking themes or plots to specific historical events or periods. This school was considered “the last word in scholarship” up until the revolution of 1917³⁴. There was also the comparative school, which tracked themes, plots, and other elements across cultures and linguistic boundaries³⁵. The Finnish school used the historical-geographical method of analysis, which aimed to present the entire history of the tale by analyzing all of the available versions and viewing them all through the lens of historical as well as geographic factors³⁶. This was done in an attempt to clarify the origin and migration patterns of certain folktales across Russia³⁷.

Those who studied folklore broke the tales into different genres, though the titles and guidelines for these genres vary. There are the magic tales, called *volshebnye skazki*, which incorporate elements of the supernatural. These often included such things as ogres, dragons, spirits, vampires, and witches, as well as enchanted objects. These enchanted objects are alive and active members of the story, often doing things themselves, without the aid of human hands³⁸. The hero is usually a young man—a prince or a fool—and in the case of a heroine, she is usually either a princess or an orphan. The protagonist will go through a sequence of trials or adventures, and the story always has a happy ending³⁹. On their adventure, the hero or heroine is often aided either by an animal or another beneficial character, such as the witch Baba Yaga⁴⁰. The magic tale is one of the oldest in folklore, which has pre-Christian origins⁴¹.

The next most popular genre of folktale is the everyday tale, called the *bytovaia skazka*⁴². These folktales make up about 60% of Russian folklore, and of these, the anecdotes are the most popular⁴³. These have a clear moral message, and often focus on “real” everyday issues for the people, such as family relations and peasant-landlord relations, from the peasant’s point of view⁴⁴. This genre of folklore is the youngest. Their aim is often to glorify the “lesser” peoples, such as the hard-workers and the poor. These tales grew out of the peasantry and their ways of looking at life⁴⁵. It is these later tales that tell more of society through a somewhat realistic lens⁴⁶. Most of these tales focus on the peasant’s concepts of fairness and retribution, the rise of the underdog from oppression to salvation⁴⁷.

Another popular genre of folktale is the animal tale, called *skazka o zhivotnykh*⁴⁸. These stories give the animals humanlike qualities, and make up a solid 10% of Russian folklore⁴⁹. These anamorphic beasts often help out the heroes and other humans in the tale. In this way, the beasts are able to point out the vices and other shortcomings of the human world⁵⁰. The animals most prevalent in these tales are foxes and wolves, the two of which are often juxtaposed. The fox is portrayed as a clever fellow, whereas the wolf is portrayed as simple-minded and often receives the punishments in the

stories⁵¹. Other animals that are sometimes present are the clumsy and slow bear, the cowardly hare, and the contented cat⁵².

There are also allegorical, religious, and satirical tales in Russian folklore. These genres often cross with everyday tales, as they all focus on the life of the peasantry, and are often realistic, reflecting the complaints of the lower classes. Many of these sorts of tales focused on the divide between the upper classes and lower classes, as well as the corruption of the clergy⁵³. The anecdotal tales often mocked the clergy for their professional hypocrisy, fondness for bribes, and lack of chastity⁵⁴. Many of these satirical tales involve some sort of retribution against those in power. These included violent acts—such as beatings—as well as non-violent humiliations performed by the community⁵⁵. It is clear in these tales how the peasantry actually felt about the church as well as other forms of authority, and in a way, it shows how much folktales meant to the common people because of this. They could not speak out as such in church or on the streets, but through the folktales, the voice of their true selves and their culture, they were able to express themselves and undergo catharsis, purging the stress of their everyday lives away with a bit of laughter and finger pointing.

A common theme throughout most of the folklore was the status of the hero, who was almost always of a lower class than his opponent⁵⁶. A common theme was role reversal immersion, which swaps power from those who usually have it to those who usually do not. This is obviously wish fulfillment for the peasantry, who wish to rise above their situation and would surely enjoy the treatment and power of the upper classes for a while⁵⁷.

These heroes are usually defined by their humble ways and ingenuity, whereas the opponents are most often portrayed as stupid and greedy⁵⁸. Interestingly, when a third power player is added to the story, it is most often the tsar. Though the tsar is the ultimate power in the land and many of these folktales revolve around power reversal, the tsar is almost always a benefactor for the hero in these folk tales. The tsar is viewed as a “just judge”, and legitimizes the values of the hero rather than attempting to undermine them, like the other authoritative character, who is most often a member of the nobility⁵⁹. This might be because of the fact that many peasants saw the tsar as a fatherly character.

One of the most infamous characters of Russian folklore is Baba Yaga, who spans across the nation of Russia and defies the compartmentalization of time or space. Baba Yaga has been present in hundreds if not thousands of Russian folktales⁶⁰. She is a staple character of many magic tales, existing at the crossroads between logic and imagination. She is the character that most clearly represents the chasm between logic and paradox that defines the magic tale of folklore⁶¹. Baba translates to “grandma” or “old woman”. Some believe that the second half of her name refers to the word

yagat, meaning to abuse or to find fault⁶². Her presence in folklore stretches from a time before Christianity all the way to the present. She is noted to have links with the Ugrian goddess, Jamala, who was thought to have contained all things within her body⁶³.

This concept of motherliness has been attached to Baba Yaga for centuries, despite or perhaps due to her dual nature. Interestingly enough, she is also present in the folktales of the Ukraine and Belarus, meaning she is not of purely Russian design⁶⁴. This implies the vastness of Russia and shows how one character or tale can take on different meanings or details across the nation. The quantity of tales that include her imply that she must have held great meaning to the people, an appeal which has not seemed to lighten over the past several centuries. Baba Yaga is not simply one character. She is many different things depending upon which folktale one comes in contact with.

Some of this appeal may come from Baba Yaga's duality. She is seen as both a dangerous witch and a benefactress in her tales. She is best known for her role as a witch who lives on the edge of a wood in a house that stands on chicken feet. When inside, she lies on her stove, with her nose touching the ceiling and her body stretching from one corner of the hut to the other. In this type of story, she often has a mortar, pestle, and mop or broom on which to travel⁶⁵. Her hut is surrounded by a fence of human bones, with skeletons as fence stakes, and with hands instead of bolts in the doorways, and teeth where a lock should be⁶⁶. This is the somewhat modern or popular version of Baba Yaga that has made its way into world consciousness. This is not the only Baba Yaga.

Baba Yaga has many other names, including *lagaia*, *lagabora*, and *Gigibikha*⁶⁷. She is linked back to being an underworld goddess for the ancient Slavs. It is said that they made blood sacrifices to her, and perhaps this is why modern tales of Baba Yaga have her hungry for the blood and flesh of youngsters and maidens⁶⁸. Baba Yaga's link with the underworld has not been upturned. The forest in the Russian culture is seen as a place of initiation and possibly an entrance to the land of the dead, making this passage a symbolic death. Baba Yaga's hut sits at the edge of a forest, and it is the hero of the tale that has to somehow get her hut to face him and turn its back to the forest so that he can pass. This is reminiscent of the tales of heroes passing to the underworld in other cultures, such as the tales of the mighty heroes of Greek mythology. This makes Baba Yaga the guardian of the underworld, a somewhat terrifying figure⁶⁹.

Baba Yaga also has a very motherly aura to her character. She is often viewed as portraying the Jungian archetype of the “Great Mother”, whereas Freudians see her as one's infantile experience of the mother—both loving and at times frightening, protector and devourer⁷⁰. She is also considered the mother of animals, as they reside in the forest that she guards⁷¹.

Baba Yaga's immediate role within stories

also has a tendency to be motherly or have references to motherhood. The protagonists sometimes refer to her as “mother”, and sometimes she uses the guise of a mother-- either by literally disguising herself as the hero's mother or by simply imitating her voice⁷². This has all helped lead to the belief that Baba Yaga originated during a matriarchal period in time, and was blackened into an image of wickedness later through the rise of patriarchy⁷³.

The most notable reference to Baba Yaga as a motherly figure plays into how the peasantry viewed Russia itself. Russia is often referenced as the “Motherland.” Most of the peasantry worked the land, making a living off of the crops that they could grow. Like many other cultures, that of the Russian peasantry viewed the land as a motherly figure, due to its fertility. The earth could be a very beneficial or destructive being, just as Baba Yaga could be. In this way, Baba Yaga was linked to the “Moist Mother Earth”⁷⁴. This may add to why she came to be cast in a more negative light over time, as she represented pagan values and wisdom concerning the earth, which the church surely did not approve of⁷⁵. This helps explain why her character was so present in the folklore of the common people. Their lives revolved around the fertility of the land, and many people were dependent upon the changing “moods” of the weather and the seasons. A fruitful year could be massively beneficial to their living, but a bad harvest year could lead to death. With this duality constantly on their minds, it is not difficult to see how the idea of Baba Yaga may have come to be.

Russian folklore changed drastically with the rise of the Soviet Union. Folklore became a tool of Russian self-expression more than ever before. The everyday tale came to the forefront of the movement of folklore into the political sphere, concentrating on social relations and class struggles⁷⁶. Peasant tales and tales of the working class swiftly became tools to those in power⁷⁷. The collection of folklore was initiated by the government—primarily Stalin—in an attempt to advance communism⁷⁸. Due to the closeness of folklore to the common people, it was seen as an excellent propaganda tool for communism and socialism⁷⁹.

Many folktales and songs were collected during Stalin's reign, as he saw these tales as tools for furthering his regimes as well as boosting the Russian culture. Most of the tales collected and used were “everyday tales”, but some magic tales were also collected. These were often changed to be less fantastical and more realistic, with the introduction to the tale detailing a contemporary life⁸⁰. One of the most notable changes in the tales that were edited was the position of the tsar. In the original folktales concerning power dynamics, the tsar was often seen as a beneficial character, the real evildoers being the upper classes. In Soviet folklore, the tsar became a very unlikable character; merciless, cowardly, stupid, and sometimes downright comical⁸¹. This obviously played at the heartstrings of those who had followed the

monarchy, and tried to give the Russian people another nudge towards forgetting the tsar and accepting the new regime.

Besides these reworked folktales, the Soviet Union was the catalyst for a whole new era of folklore, which was specifically created for political use. These new tales, which began to rise into the public sphere in the mid-1930s, imitated traditional folklore through motifs and poetical devices, but were set in contemporary life and stuck primarily to the rules of such⁸². Instead of princes or fools, the heroes became those who were mighty and brave enough to defend the socialist fatherland. The most common of these were of course Lenin and Stalin, who replaced the epic heroes of yesteryear⁸³. The creation of these modernized folktales was taken very seriously. Many writers and folklorists were assigned as tutors to storytellers and singers in an attempt to get them to all work together in the most genuine and useful way possible⁸⁴. These tales were published in local newspapers and magazines across most of Russia, acting as another finger of Stalin's reign upon the mind of the Russian people⁸⁵.

Though folklore may have been at a form of its prime in the 1920s through the 1930s, things began to change for folklore once again. In the 1940s, an intense campaign was launched to rid all Russian literature—and folklore—of any Western elements⁸⁶. After the death of Stalin in 1953, folklore began to fall back into the backdrop of Russian life, and efforts to use it as a form of propaganda ceased. The censorship and following liberation of folklore seems to have happened multiple times in Russian history.

In the 1970s through the 1980s, many scholars avoided certain topics of study within folklore. Some folklorists were even hired to purge certain texts of objectionable content before they could be released to the public⁸⁷. After the dissolution of the Soviet Union, folklore scholarship was revived once again. Folklorists were finally allowed to study what they pleased, and this of course led to many of them reveling in the formerly forbidden topics of folklore, including tales with connections or references to the West⁸⁸. Some tales were rereleased in their uncensored forms, and emulation of western folklore scholarship rose. There was also a dedicated movement to reclaim folklore as it had been before the Soviet Union, to try to get back to the true roots of the timeless and culturally important tradition⁸⁹.

Folklore has continued to thrive in Russia, and is still central to the lives of many in the nation. There has been a rise in “urban folklore” in recent years, sometimes termed “post-folklore” or “anti-folklore”. These are tales set in urban, contemporary settings, not unlike the everyday tales of their time⁹⁰. Folklore in Russia has now also become a part of the popular culture, continuing its jump from one generation to the next⁹¹. Though it is still going strong in its home nation, Russian folklore has failed to make a lasting and widespread impression on North America⁹². Perhaps this is due to the issues of

the past or simply because not enough of the tales have made their way to stick. Either way, there is a small but thriving study of it, of its colorful characters and fruitful storylines.

Russian folklore has changed greatly over time. Tales coagulated over the vastness of the nation over hundreds of years, with pockets of stories and songs found here and there over the centuries that prove the diversity of the people and their beliefs. It has been used as a voice for the people who did not have one, and it has also been used by those in power to personify their voices to the "little people". It has been used to discuss issues of class relations as well as to provide entertainment and hopes for a magical realm just out of reach of the everyday lives that they filled with satire and superstition. Though most of the writing down and collection of these folklore elements have occurred in the past couple of centuries, there is a distinct evolution of the mentality of the people visible in these stories which to this day put the readers and listeners in touch with the world as it was hundreds of years ago. Folklore in Russia is indeed an "echo of the past, but at the same time it is also the vigorous voice of the present"⁹³. Hopefully it will continue to be an outlet of cultural voice and beliefs for generations to come, and will never die if for no other reason than the fact that "it was just too much a part of being human"⁹⁴.

Notes

- ¹ Maureen Perrie, "Folklore as Evidence of Peasant Mentalite: Social Attitudes and Values in Russian Popular Culture," *Russian Review* 48, no. 2 (1989): 122. Accessed April 5, 2015, <http://www.jstor.org/stable/130323>.
- ² *Ibid.*, 121.
- ³ Gregory Manaev, "Scary Monsters: Russia's Creatures of Folklore Live On," *Russia Beyond the Headlines*, accessed April 15, 2015, http://rbth.co.uk/arts/2014/06/13/scary_monsters_russias_creatures_of_folklore_live_on_36659.html.
- ⁴ *Russian Folklore: An Anthology in English*, trans. Alex E. Alexander (Massachusetts: Nordland Publishing Company, 1973), 13.
- ⁵ *Ibid.*, 129.
- ⁶ Atelia Clarkson and Gilbert B. Cross, *World Folktales: A Scribner Resource Collection* (New York: Charles Scribner's Sons, 1980), 3.
- ⁷ Victor Terras, *A History of Russian Literature* (New York: Yale University Press, 1991), 1.
- ⁸ Felix J. Oinas, "Folklore Activities in Russia," *The Journal of American Folklore* 74, no. 294 (1961): 362. Accessed April 15, 2015, <http://www.jstor.org/stable/538259>.
- ⁹ Victor Terras, *A History of Russian Literature* (New York: Yale University Press, 1991), 1.
- ¹⁰ Maureen Perrie, "Folklore as Evidence of Peasant Mentalite: Social Attitudes and Values in Russian Popular Culture," *Russian Review* 48, no. 2 (1989): 119. Accessed April 5, 2015, <http://www.jstor.org/stable/130323>.
- ¹¹ *Ibid.*, 122.
- ¹² Victor Terras, *A History of Russian Literature* (New York: Yale University Press, 1991), 1.
- ¹³ *Ibid.*, 9.
- ¹⁴ *Ibid.*, 9.
- ¹⁵ Felix J. Oinas, "Folklore Activities in Russia," *The Journal of American Folklore* 74, no. 294 (1961): 362. Accessed April 15, 2015, <http://www.jstor.org/stable/538259>.
- ¹⁶ Olson J. Laura and Svetlana Adonyeva, *Worlds of Russian Women: Tradition, Transgression, Compromise* (Wisconsin: University of Wisconsin Press, 2013) 26.
- ¹⁷ *Ibid.*, 29.
- ¹⁸ *Ibid.*, 30.
- ¹⁹ Victor Terras, *A History of Russian Literature* (New York: Yale University Press, 1991), 9.
- ²⁰ Vladimir Yakovlevich Propp, *The Russian Folktale*, ed. Sibelan Forrester (Detroit: Wayne State University Press, 2012) 47.
- ²¹ Felix J. Oinas, "Folklore Activities in Russia," *The Journal of American Folklore* 74, no. 294 (1961): 362. Accessed April 15, 2015, <http://www.jstor.org/stable/538259>.
- ²² Linda Ivanits, "The Early Dostoyevsky and Folklore: The Case of the Landlady," *The Slavic and East European Journal* 52, no. 4 (2008): 513. Accessed April 15, 2015, <http://www.jstor.org/stable/40651269>.
- ²³ Felix J. Oinas, and Stephen Soudakoff, *The Study of Russian Folklore* (Indiana: Indiana University Press, 1975), 1.
- ²⁴ *Ibid.*, 1.
- ²⁵ Y.M Sokolov, *Russian Folklore* (Detroit: American Council of Learned Societies, 1950), 383-384.
- ²⁶ Maureen Perrie, "Folklore as Evidence of Peasant Mentalite: Social Attitudes and Values in Russian Popular Culture," *Russian Review* 48, no. 2 (1989): 120. Accessed April 5, 2015, <http://www.jstor.org/stable/130323>.
- ²⁷ Maureen Perrie, "Folklore as Evidence of Peasant Mentalite: Social Attitudes and Values in Russian Popular Culture," *Russian Review* 48, no. 2 (1989): 121. Accessed April 5, 2015, <http://www.jstor.org/stable/130323>.

- ²⁸ Jack Zipes, *Irresistible Fairy Tale: The Cultural and Social History of a Genre* (New Jersey: Princeton University Press, 2012), 63.
- ²⁹ Victor Terras, *A History of Russian Literature* (New York: Yale University Press, 1991), 2.
- ³⁰ Felix J. Oinas, and Stephen Soudakoff, *The Study of Russian Folklore* (Indiana: Indianan University Press, 1975), 2.
- ³¹ *Ibid.*, 2.
- ³² Felix J. Oinas, "Folklore Activities in Russia," *The Journal of American Folklore* 74, no. 294 (1961): 363. Accessed April 15, 2015, <http://www.jstor.org/stable/538259>.
- ³³ Victor Terras, *A History of Russian Literature* (New York: Yale University Press, 1991), 3.
- ³⁴ Felix J. Oinas, "Folklore Activities in Russia," *The Journal of American Folklore* 74, no. 294 (1961): 363. Accessed April 15, 2015, <http://www.jstor.org/stable/538259>.
- ³⁵ Victor Terras, *A History of Russian Literature* (New York: Yale University Press, 1991), 3.
- ³⁶ Felix J. Oinas, "Folklore and Politics in the Soviet Union," *Slavic Review* 32, no. 1 (1973): 46. Accessed April 20, 2015, <http://www.jstor.org/stable/2494072>.
- ³⁷ Felix J. Oinas, "Folklore Activities in Russia," *The Journal of American Folklore* 74, no. 294 (1961): 364. Accessed April 15, 2015, <http://www.jstor.org/stable/538259>.
- ³⁸ Y.M Sokolov, *Russian Folklore* (Detroit: American Council of Learned Societies, 1950), 425-426.
- ³⁹ Victor Terras, *A History of Russian Literature* (New York: Yale University Press, 1991), 9.
- ⁴⁰ Y.M Sokolov, *Russian Folklore* (Detroit: American Council of Learned Societies, 1950), 424.
- ⁴¹ Victor Terras, *A History of Russian Literature* (New York: Yale University Press, 1991), 9.
- ⁴² *Russian Folklore: An Anthology in English*, trans. Alex E. Alexander (Massachusetts: Nordland Publishing Company, 1973), 127.
- ⁴³ Y.M Sokolov, *Russian Folklore* (Detroit: American Council of Learned Societies, 1950), 439.
- ⁴⁴ Victor Terras, *A History of Russian Literature* (New York: Yale University Press, 1991), 9-10.
- ⁴⁵ *Russian Folklore: An Anthology in English*, trans. Alex E. Alexander (Massachusetts: Nordland Publishing Company, 1973), 131.
- ⁴⁶ Maureen Perrie, "Folklore as Evidence of Peasant Mentalite: Social Attitudes and Values in Russian Popular Culture," *Russian Review* 48, no. 2 (1989): 122-123. Accessed April 5, 2015, <http://www.jstor.org/stable/130323>.
- ⁴⁷ *Ibid.*, 126.
- ⁴⁸ *Russian Folklore: An Anthology in English*, trans. Alex E. Alexander (Massachusetts: Nordland Publishing Company, 1973), 127.
- ⁴⁹ Y.M Sokolov, *Russian Folklore* (Detroit: American Council of Learned Societies, 1950), 433.
- ⁵⁰ *Russian Folklore: An Anthology in English*, trans. Alex E. Alexander (Massachusetts: Nordland Publishing Company, 1973), 130-131.
- ⁵¹ Y.M Sokolov, *Russian Folklore* (Detroit: American Council of Learned Societies, 1950), 435.
- ⁵² *Ibid.*, 435-436.
- ⁵³ Maureen Perrie, "Folklore as Evidence of Peasant Mentalite: Social Attitudes and Values in Russian Popular Culture," *Russian Review* 48, no. 2 (1989): 124. Accessed April 5, 2015, <http://www.jstor.org/stable/130323>.
- ⁵⁴ *Ibid.*, 125.
- ⁵⁵ *Ibid.*, 130.
- ⁵⁶ *Ibid.*, 128.
- ⁵⁷ Maureen Perrie, "Folklore as Evidence of Peasant Mentalite: Social Attitudes and Values in Russian Popular Culture," *Russian Review* 48, no. 2 (1989): 129. Accessed April 5, 2015, <http://www.jstor.org/stable/130323>.
- ⁵⁸ *Ibid.*, 130.
- ⁵⁹ *Ibid.*, 128.
- ⁶⁰ Sibelan Forrester and Helena Goscilo and Martin Skoro, *Baba Yaga: The Wild Witch of the East in Russian Fairy Tales* (Mississippi: The University Press of Mississippi, 2013), vii.
- ⁶¹ Amelia Glaser, "In Baba Yaga's hut," *The Times Literary Supplement*, accessed April 20, 2015, <http://www.the-tls.co.uk/tls/public/article1259555.ece>.
- ⁶² "Russiapedia", *Autonomous Nonprofit Organization "TV-Novosti"*, accessed April 15, 2015, <http://russiapeda.rt.com/>.
- ⁶³ Joanna Hubbs, *Mother Russia: The Feminine Myth in Russian Culture* (Bloomington: Indiana University Press, 1988), xii.
- ⁶⁴ Sibelan Forrester and Helena Goscilo and Martin Skoro, *Baba Yaga: The Wild Witch of the East in Russian Fairy Tales* (Mississippi: The University Press of Mississippi, 2013), vii.

- ⁶⁵ Andreas Johns, "Baba Iaga and the Russian Mother," *The Slavic and East European Journal* 42, no. 1 (1998): 21. Accessed April 20, 2015. <http://www.jstor.org/stable/310050>.
- ⁶⁶ Atelia Clarkson and Gilbert B. Cross, *World Folktales: A Scribner Resource Collection* (New York: Charles Scribner's Sons, 1980), 182.
- ⁶⁷ Andreas Johns, "Baba Iaga and the Russian Mother," *The Slavic and East European Journal* 42, no. 1 (1998): 21. Accessed April 20, 2015. <http://www.jstor.org/stable/310050>.
- ⁶⁸ *Ibid.*, 23.
- ⁶⁹ *Ibid.*, 24.
- ⁷⁰ *Ibid.*, 26.
- ⁷¹ *Ibid.*, 24.
- ⁷² *Ibid.*, 26.
- ⁷³ Andreas Johns, "Baba Iaga and the Russian Mother," *The Slavic and East European Journal* 42, no. 1 (1998): 25. Accessed April 20, 2015. <http://www.jstor.org/stable/310050>.
- ⁷⁴ Joanna Hubbs, *Mother Russia: The Feminine Myth in Russian Culture* (Bloomington: Indiana University Press, 1988), xiii.
- ⁷⁵ Sibelan Forrester and Helena Goscilo and Martin Skoro, *Baba Yaga: The Wild Witch of the East in Russian Fairy Tales* (Mississippi: The University Press of Mississippi, 2013), xi.
- ⁷⁶ Atelia Clarkson and Gilbert B. Cross, *World Folktales: A Scribner Resource Collection* (New York: Charles Scribner's Sons, 1980), 3.
- ⁷⁷ Y.M Sokolov, *Russian Folklore* (Detroit: American Council of Learned Societies, 1950), 15.
- ⁷⁸ Felix J. Oinas, "Folklore and Politics in the Soviet Union," *Slavic Review* 32, no. 1 (1973): 47. Accessed April 20, 2015, <http://www.jstor.org/stable/2494072>.
- ⁷⁹ Felix J. Oinas, "Folklore Activities in Russia," *The Journal of American Folklore* 74, no. 294 (1961): 366. Accessed April 15, 2015, <http://www.jstor.org/stable/538259>.
- ⁸⁰ *Ibid.*, 365.
- ⁸¹ *Ibid.*, 365.
- ⁸² Felix J. Oinas, "Folklore and Politics in the Soviet Union," *Slavic Review* 32, no. 1 (1973): 49. Accessed April 20, 2015, <http://www.jstor.org/stable/2494072>.
- ⁸³ Felix J. Oinas, "Folklore and Politics in the Soviet Union," *Slavic Review* 32, no. 1 (1973): 50. Accessed April 20, 2015, <http://www.jstor.org/stable/2494072>.
- ⁸⁴ *Ibid.*, 52.
- ⁸⁵ Felix J. Oinas, "Folklore Activities in Russia," *The Journal of American Folklore* 74, no. 294 (1961): 367. Accessed April 15, 2015, <http://www.jstor.org/stable/538259>.
- ⁸⁶ *Ibid.*, 367.
- ⁸⁷ Natalie Kononenko, "Go I Know Not Where; Bring Back I Know Not What: Fifty Years of Slavic Folklore in North America," *The Slavic and East European Journal* 50, no. 1 (2006): 165. Accessed April 15, 2015, <http://www.jstor.org/stable/20459240>.
- ⁸⁸ *Ibid.*, 165.
- ⁸⁹ Natalie Kononenko, "Go I Know Not Where; Bring Back I Know Not What: Fifty Years of Slavic Folklore in North America," *The Slavic and East European Journal* 50, no. 1 (2006): 166. Accessed April 15, 2015, <http://www.jstor.org/stable/20459240>.
- ⁹⁰ Regina F. Bendix and Galit Hansan-Rokem, *A Companion to Folklore* (Massachusetts: Blackwell Publishing, 2012), 439.
- ⁹¹ Maureen Perrie, "Folklore as Evidence of Peasant Mentalite: Social Attitudes and Values in Russian Popular Culture," *Russian Review* 48, no. 2 (1989): 119. Accessed April 5, 2015, <http://www.jstor.org/stable/130323>.
- ⁹² Natalie Kononenko, "Go I Know Not Where; Bring Back I Know Not What: Fifty Years of Slavic Folklore in North America," *The Slavic and East European Journal* 50, no. 1 (2006): 160. Accessed April 15, 2015, <http://www.jstor.org/stable/20459240>.
- ⁹³ Y.M Sokolov, *Russian Folklore* (Detroit: American Council of Learned Societies, 1950), 15.
- ⁹⁴ Natalie Kononenko, "Go I Know Not Where; Bring Back I Know Not What: Fifty Years of Slavic Folklore in North America," *The Slavic and East European Journal* 50, no. 1 (2006): 164. Accessed April 15, 2015, <http://www.jstor.org/stable/20459240>.

Bibliography

- Bendix, Regina F., Hansan-Rokem, Galit. *A Companion to Folklore*. Massachusetts: Blackwell Publishing, 2012.
- Clarkson, Atelia and Gilbert B. Cross. *World Folktales: A Scribner Resource Collection*. New York: Charles Scribner's Sons, 1980.
- Forrester, Sibelan and Helena Goscilo and Martin Skoro. *Baba Yaga: The Wild Witch of the East in Russian Fairy Tales*. Mississippi: The University Press of Mississippi, 2013.
- Glaser, Amelia. "In Baba Yaga's hut." *The Times Literary Supplement*. Accessed April 20, 2015. <http://www.the-tls.co.uk/tls/public/article1259555.ece>.
- Hubbs, Joanna. *Mother Russia: The Feminine Myth in Russian Culture*. Bloomington: Indiana University Press, 1988.
- Ivanits, Linda. "The Early Dostoyevsky and Folklore: *The Case of the Landlady*." *The Slavic and East European Journal* 52, no.4 (2008): 513-528. Accessed April 15, 2015. <http://www.jstor.org/stable/40651269>.
- Johns, Andreas. "Baba Iaga and the Russian Mother". *The Slavic and East European Journal* 42, no. 1 (1998): 21-36. Accessed April 20, 2015. <http://www.jstor.org/stable/310050>.
- Kononenko, Natalie. "Go I Know Not Where; Bring Back I Know Not What: Fifty Years of Slavic Folklore in North America." *The Slavic and East European Journal* 50, no. 1 (2006): 159-171. Accessed April 15, 2015. <http://www.jstor.org/stable/20459240>.
- Laura, Olson J., and Adonyeva, Svetlana. *Worlds of Russian Women: Tradition, Transgression, Compromise*. Wisconsin: University of Wisconsin Press, 2013.
- Manaev, Gregory. "Scary Monsters: Russia's Creatures of Folklore Live On". *Russia Beyond the Headlines*. Accessed April 15, 2015. http://rbth.co.uk/arts/2014/06/13/scary_monsters_russias_creatures_of_folklore_live_on_36659.html
- Oinas, Felix J. "Folklore Activities in Russia." *The Journal of American Folklore* 74, no. 294 (1961): 362-370. Accessed April 15, 2015. <http://www.jstor.org/stable/538259>.
- Oinas, Felix J. "Folklore and Politics in the Soviet Union". *Slavic Review* 32, no. 1 (1973): 45-58. Accessed April 20, 2015. <http://www.jstor.org/stable/2494072>.
- Oinas, Felix J., and Stephen Soudakoff. *The Study of Russian Folklore*. Indiana: Indiana University Press, 1975.
- Perrie, Maureen. "Folklore as Evidence of Peasant Mentalite: Social Attitudes and Values in Russian Popular Culture". *Russian Review* 48, no. 2 (1989): 119-143. Accessed April 5, 2015, <http://www.jstor.org/stable/130323>.
- Propp, Vladimir Yakovlevich. *The Russian Folktale*. Ed. Sibelan Forrester. Detroit: Wayne State University Press, 2012.
- Russian Folklore: An Anthology in English*. Trans. Alex E. Alexander. Massachusetts: Nordland Publishing Company, 1973.
- Russiapedia. *Autonomous Nonprofit Organization "TV-Novosti"*, 2005. Accessed April 15, 2015. <http://russiapedia.rt.com/>.
- Sokolov, Y.M. *Russian Folklore*. Detroit: American Council of Learned Societies, 1950.
- Terras, Victor. *A History of Russian Literature*. New York: Yale University Press, 1991.
- Zipes, Jack. *Irresistible Fairy Tale: The Cultural and Social History of a Genre*. New Jersey: Princeton University Press, 2012.

The Other: Orientalism in *Frankenstein*

Terri Pinyerd
English 305

The idea of the “other” is one that has intrigued man since the dawn of time; whether it be the opposite sex, a different culture, or simply a neighbor across the street, the contrast between what is “us” and what is different poses questions about existence, identity, and the structure of everyday life. Orientalism is a concept that relies entirely on the idea of the “other”, aimed toward Middle Eastern, South Asian, and East Asian people in particular, and it is through the use of this concept that Mary Shelley's *Frankenstein* portrays its antagonists (“What is Orientalism?”). This paper will analyze the idea of the “other” and the integration of Orientalism within *Frankenstein*, particularly in regards to characters such as Frankenstein's monster and Safie, “the Arabian”.

Frankenstein begins from the perspective of Captain Walton. Through the letters addressed to his sister, the reader is told the story of how Victor Frankenstein was discovered by members of the ship's crew. Frankenstein's retelling of his story—and the monster's story— is biased, and the reader cannot be sure whether certain aspects of the story are true, or if any of it took place at all. This framing narrative is an example of how the British people received news of the “Oriental” world, and formed their perspectives on the people within those cultures.

In a more narrow focus, Frankenstein's own views of the world shape the way his story—and the stories within—are told, especially when it comes to his creation. Immediately upon his “birth”, Frankenstein's monster is established as “other” by his own creator. Through Frankenstein's description of this creation, it is established that while he possesses human features, he is still something other than human:

His limbs were in proportion, and I had selected his features as beautiful. Beautiful! Great God! His yellow skin scarcely covered the work of muscles and arteries beneath; his hair was of a lustrous black, and flowing; his teeth of a pearly whiteness; but these luxuriances only formed a more horrid contrast with his watery eyes, that seemed almost of the same colour as the dun-white sockets in which they were set, his shriveled complexion and straight black lips. (Shelley 42)

If compared to the body of Frankenstein himself, the monster is considered deformed; while certain aspects of the monster's appearance are described as being individually pleasant, the focus is on the monster's skin and eyes, two features which are most prominently used

to define race. People of Middle Eastern or Asian descent are often described as having “brown” or “yellow” skin, as if these particular shades are variations of a default. Shelley's use of color within her novel further exemplifies this colorism: Elizabeth is described as having hair of “the brightest living gold” and “cloudless” blue eyes—features that reflect an implied purity—whereas the monster's black hair and “watery” eyes contrast Elizabeth's as dark, undesirable traits (Shelley 20). By defining the monster's coloring as “other”, Frankenstein is able to consider the monster as part of its own race, separate from Frankenstein and all other human beings simply by virtue of appearance, and is therefore making a generalization of an entire race. This, to him, justifies his disgust with his creation and allows him to relay any responsibility he has as its creator.

The first ten chapters of *Frankenstein* are told through the perspective of the creator. This establishes a bias against the monster as the reader can only judge as Frankenstein himself has judged. This can be interpreted as an analogy for the concept of Orientalism. British society created an image of Middle Eastern, East Asian, and South Asian cultures, twisting their people into almost satirical entities, while the cultures themselves had little to no say in the matter (“What is Orientalism?”). By the time the other side of the story was told, it was too late; the picture had been painted and the canvas could not be cleared.

This bias and integration of Orientalism is also present upon the introduction of Safie, who, until several pages into Chapter 13, is only referred to as “the Arabian”. What is interesting is that even the monster, who himself suffers from “othering”, immediately distinguishes Safie as different from the other cottagers, Felix and Agatha: “Her voice was musical but unlike that of either of my friends” (Shelley 101). Safie is greatly objectified by both Felix and the monster. She is considered to be a prize for Felix's work in assisting her father during his imprisonment: “...the captive possessed a treasure which would fully reward his toil and hazard” (Shelley 108). This objectification is prevalent throughout the monster's story; Safie never participates in dialogue and only exists through the descriptions of others as a trophy. Her description as having eyes that were “dark, but gentle” imply an underlying danger within her, as if she has been tamed in some way (Shelley 101).

However, Orientalism is not a one way street. Although Safie is objectified and muted, she is eager to pursue a marriage with Felix and this particular lifestyle in order to remain in a country that allows more freedom to women than her own: “..to Safie, who sickened at the prospect of again returning to Asia and being immured within the walls of a harem...The prospect of marrying a Christian and remaining in a country where women were allowed to take a rank in society was enchanting” (Shelley 109). Through Safie's eagerness to give in to her own objectification, and her implied willingness

to subject to cultural stereotypes in order to encourage Felix's infatuation with her, the complex concept of Orientalism is exemplified.

Through the use of the formed and deformed body, color, and aspects of culture, Mary Shelley's *Frankenstein* is an allegory on the dangers of "othering" and objectification. The use of both dynamic and static characters as examples of this danger provides a well-rounded view of various aspects of Orientalism, and allows readers to question things for themselves. It is through this lens that we must ask ourselves: who is the real monster?

Works Cited

Shelley, Mary. *Frankenstein*. New York: Bantam, 1981. Print.

"What is Orientalism?" *Reclaiming Identity: Dismantling Arab Stereotypes*. Arab American National Museum, January 2014. Web. 13 March, 2015.

The Symbolism in Suffering: Art and the Holocaust

Terri Pinyerd
English 300

From the cave paintings in Lascaux, to Vincent Van Gogh's starry skies, mankind has been adept at expressing emotion through symbolism in the artistic medium for thousands of years. The process of creating an art piece requires unity of mind, body, and spirit. The events of the Holocaust ignited a series of traumatic events - for both the survivors and their loved ones - and perhaps this is why there are so many artworks pertaining to these horrific events. The creation of art allows the artist to express emotions that may be deemed negative - anger, frustration, guilt. In these artworks, symbols become the vessels of emotion. For the purposes of this paper, I will be exploring the symbolism in many of the artworks found within the concentration camps, while comparing them to Art Spiegelman's graphic novel, *Maus*.

To begin with, I will elaborate on a few terms for better understanding. First, Holocaust artwork is, as Dr. Henry W. Pickford, author of *A Sense of Semblance*, defines it, "the class of any artwork that is about the Holocaust, that is, the intentionality or content of which includes reference, direct or indirect, to the Nazi project of humiliation, deprivation, degradation, and extermination against the Jews and other marked groups" (Pickford 3). This includes mediums ranging from the painting to the graphic novel, and everything in between.

Second, there is the concept of signs and symbols. By definition, a symbol is "anything which signifies something else; in this sense all words are symbols" (Abrams 392). Through this definition it becomes apparent that symbols rely on language, and vice versa. This is also stated by Ferdinand de Saussure: "without the help of signs we would be unable to make a clear-cut, consistent distinction between two ideas." (Saussure 5). In art, the way a specific object or word is depicted dictates its position as a symbol; for example, in Van Gogh's piece, "Two Cut Sunflowers," the sunflowers become the symbol by virtue of their solitude and placement on a plain blue background (see fig. 1, Appx. A). By following these definitions, symbolism in Holocaust artwork becomes more apparent and easier to analyze.

Perhaps some of the most symbolic Holocaust artworks are those found within Auschwitz. "The walls of Auschwitz," states Czarnecki, "-- witnesses to this century's worst horrors - contain many different kinds of art: paintings, drawings, scratchings" (Czarnecki xiii). Many depict scenes of torture and labor - historical records of the times. However, many more are simply small, seemingly unrelated images, images that do not

record the everyday life of a Jewish prisoner, but instead represent their internal struggles. It is in these artworks that symbols play a larger role.

One of the most common symbols found in Holocaust artworks is the bird, or more specifically, the dove or pigeon. Traditionally, birds embody the "human desire to break free", and in fairy tales are often depicted as guardians who bring food to people who are good (Biedermann 39). In one Auschwitz artwork, *Pigeon with Message*, a bird is depicted holding a small envelope embellished with a swastika (see fig. 2, Appx. A). The bird as a symbol of freedom in combination with the arrival of a letter could very well be the artist's fantasy of the arrival of good news, such as a pardon. One thing worth noting is the lack of birds depicted in Spiegelman's *Maus*. In fact, the only winged animals shown are the flies surrounding dead bodies (and in certain frames, Art himself), and the briefly depicted Gypsy moth who tells Anya her future (Spiegelman 201-293). However, later in the story Spiegelman draws a scene which shows the camp prisoners in a tranquil natural setting. There are trees all around them and - just across the lake - birds in flight. This is symbolic, as the prisoners - who are now technically free - are being marched away from safety by the Nazis. The birds in flight, just in view, symbolize the freedom that is just within their grasp, but still not close enough.

Subjects of innocence are frequently depicted in Holocaust artwork. Cherubs and kittens are often shown, and this is not odd, considering that "Cats," as Biedermann states, "being difficult to catch or confine, signify liberty" (Biedermann 60). One prison camp artwork shows two kittens bathing (see fig 4. Appx. A). However simple this sketch may seem, it still contains elements of the symbolic - the kittens engaging in the simple act of bathing, a creature comfort that many of the prisoners were not allowed. The artist's idea of freedom may just be that - the ability to partake in the simple things in life.

One thing to note is how Spiegelman represents the Germans as cats. While they are still the villains of the story, they do, in fact, represent liberty. The Germans are not the ones being held prisoner; on the contrary, they make up the majority of those in charge. Still, Spiegelman does not depict his German cats as innocent looking kittens. They are angry, fanged, and frightening. This could play along with belief that cats symbolized evil, lasciviousness, and cruelty, or it could simply be a representation of the binary opposition between cat and mouse, Germans and Jews (Biedermann 59).

Although Spiegelman does not include them in his graphic novel, camels are a common subject in concentration camp art. Also considered to be a symbol of moderation and sobriety, the camel became a symbol of accepting life's burdens humbly and without complaint (Biedermann 56). Camels are also viewed as a symbol of obedience, and perhaps this is why they

are seen depicted frequently on the walls of Auschwitz. However, the camels are not portrayed on their own. In the piece *Camels and Pyramids* (see fig 5, Appx. A), a camel is depicted alongside a man and palm tree in the foreground, with darkened pyramids in the background. This kind of decorative art depicts the exotic and fantastic, and in some respects it is like a mirage or an escape. As Czarnecki states, "This is the one example in this book of a kind of decorative painting that was fairly widespread in Auschwitz, by which the walls were adorned with stripes, 'marbling,' and repeated patterns of various kinds, often stenciled" (Biedermann 58). Whether or not these decorative paintings were commissioned by the German officers is unknown, and so for now it is safe to assume that these were created solely for the pleasure of the artist, as a distraction from the grim reality they faced every day.

Though animals are some of the most commonly depicted symbols in Holocaust artwork, plants such as trees and flowers have their place as well. In many cultures, trees represent life, but there are many variations on the theme (Biedermann 352). A Jewish legend tells that "the progenitor Abraham planted trees everywhere he went, but that they did not thrive; only one, in the land of Canaan, shot up tall. Through it Abraham could tell whether someone believed in the true God or was an idolater. Over the believer the tree would spread its branches and offer its shade for protection" (Biedermann 352). In Spiegelman's *Maus*, lush trees are rarely ever depicted. In fact, most of the trees drawn are dead, leafless, and thin, with very few extended branches. Following the Jewish legend of Abraham and the trees, this could symbolize the lack of belief in the Jewish religion held by the Germans officers in the concentration camps, for most of the trees drawn in *Maus* surround the camps, which are already grim settings. In one instance (see fig. 6, Appx. A), trees make up the entire background, creating a sense of gloom and darkness, as they envelop the surroundings and cover both the prisoners and officers.

As we can see from *Trees* in Appx. A, the dead, leafless tree is a common symbol of death and despair. The tree symbolizes the cycle of life, death, and rebirth, and in this piece we are shown only three dead trees; there is no cycle, only a constant. This bleak depiction of nature contrasts with the more hopeful representation of a sunflower, as depicted by Uri Kochba, one of the few known Holocaust artists (see fig. 8, Appx. A). In this artwork, a man is shown peering out from behind bars at a large sunflower waiting outside the wall. In the "language of flowers," the sunflower's code states: "It turns ever toward the sun. As sunlight is to it, so is your love to my life." In Kochba's piece, the sunflower represents hope in the face of an unthinkable situation. Flowers in general are universal symbols of youth, and because of the arrangement of petals, they are also associated with the sun (Biedermann 135-137). The portrayal of a sunflower in this piece further confirms

this symbolization. If we follow this path, it becomes apparent that the sun is a secondary symbol in Kochba's work. Commonly viewed as the destroyer of darkness, the sun represents victory, life force, and force of will (Biedermann 331).

Eyes are another common symbol in Holocaust artwork. Eyes are considered to be among the most important symbols, associated with "light and intellectual perspicacity; at the same time the eye has long been considered not only a receptive organ but also the transmitter of 'beams,' the image of spiritual expressivity. Evil creatures or those with great magical powers were thought to have eyes whose gaze rendered others powerless or turned them to stone." (Biedermann 122). The representation of the eye as evil is apparent in Van Danzig's drawing, *Fright* (see fig. 9, Appx. A). In this image, a man is depicted running from several evil looking people, possibly demons, while two large eyes take up the background. This gives the viewer the unsettling feeling of being watched, and the eye as a "beam", or the jailer, is exemplified by its size and position in relation to the man in the image.

Another image with a similar representation of evil and power is Holocaust artist Wiesenthal's *Mauthausen Camp* (see fig 10, Appx. A). Here a guard of gigantic proportions is seen looming over the entrance of a giant oven, watching as dozens of camp prisoners march into the flames. He is depicted with long, claw-like fingernails and a remorseless expression, much like a devil of sorts. The presence of a "watchful" eye mirrors that of Van Danzig's *Fright*. This feeling depicted, the feeling of constantly being watched, is apparent in *Maus*. When Vladek was in a cell with his friend Mandelbaum, he came across a Polish man in need of someone with the ability to write in German (Spiegelman 158). The only way prisoners were allowed to send or receive packages was by writing in German so as to allow the officers to intercept and read what was leaving and entering the camps. The constant lack of privacy strips the prisoners of any sense of safety, comfort, and individuality that they may have.

Through analyzing all of these symbols, it becomes apparent that many of these artworks are created with an audience in mind. Whether the artist created with future generations in mind, or if the works were simply a means of keeping one's self sane is of no consequence; the sign is always in address to someone (Easthope 73). The very nature of a symbol lies in its addressing a subject, and in its opposition to something else. As Cixous states: "Thought has always worked through opposition...Through dual, hierarchical oppositions. Superior/Inferior" (Cixous 157). In the case of Holocaust artworks, the opposition is between the Germans and the Jews. Much of the symbolism within artworks, such as Wiesenthal's *Mauthausen Camp* rely on binary opposition. There can be no prisoner without a captor, no oppression without an oppressor; it is through these oppositions that the symbolism of the art pieces

gain their meaning and power. Aside from the subject and substance, there is also opposition in the style of the artworks; the majority of the pieces were done in black and white, the most widely known couple of contrast. Through the play of black and white, and the shades in between, the mood is set for many of these pieces. While a piece that is predominantly black can express darkness, despair, and death, a piece that is predominantly white can express a lack of life, of emotion, etc. - and the feeling of bleakness. Only when a balance is struck does the strength of expression balance out, but in many of these artworks there is no balance, and therein lies the point.

Symbols are all around us, whether we recognize them or not. When artists create, they transform symbols from representations of thought and feeling into vessels of emotion, with vast dimensions and endless planes. Holocaust artwork is a chunk of the art world drenched in history, trauma, and most of all, emotion. From symbols of hope, to symbols of death and despair, the world of Holocaust artwork represents a vast range of emotional capacities. It is through symbols that the artist expresses themselves, and it is through expression that the trauma of events too horrific to imagine can be released to create beauty and understanding.

Works Cited

- Abrams, M.H et al. *A Glossary of Literary Terms*. Stamford: Cengage Learning, 2015. Print
- Biedermann, Prof. Hans. *Dictionary of Symbolism*. New York: Penguin Books Ltd, 1989. Print.
- Cixous, Hélène. "Sorties". *A Critical and Cultural Theory Reader*. Ed. Easthope, Antony, et al. Toronto: UT Press, 1992. 157-167. Print
- Costanza, Mary S. *The Living Witness*. New York: Macmillan, 1982. Print.
- Czarnecki, Joseph P. *Last Traces*. New York: Macmillan, 1989. Print.
- Novitch, Miriam; Shner, Zvi, et al. *Spiritual Resistance*. Philadelphia: Jewish Publication Society, 1981. Print.
- Saussure, Ferdinand de. "Course in General Linguistics". *A Critical and Cultural Theory Reader*. Ed. Easthope, Antony, et al. Toronto: UT Press, 1992. 5-11. Print
- Spiegelman, Art. *Maus*. New York: Pantheon, 2011. Print.
- Van Gogh, Vincent. "Sunflowers". 1887. Metropolitan Museum of Art, New York. The Metropolitan Museum of Art. 9 November, 2014. <<http://www.metmuseum.org>>. Web.

Appendix A¹

¹These materials are included under the fair use exemption and are restricted from further use.

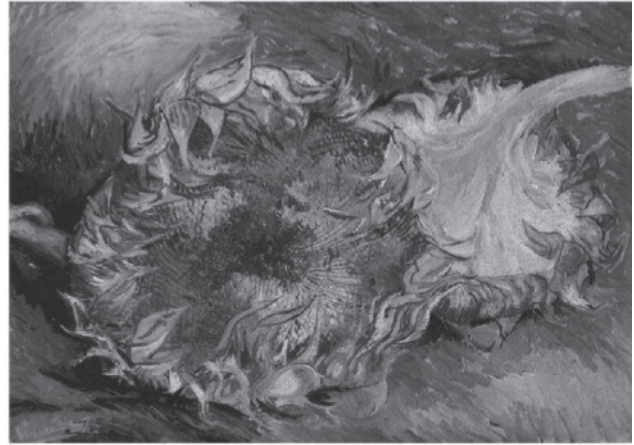


Fig. 1 *Sunflowers*:
Vincent van Gogh (Dutch, Zundert 1853–1890 Auvers-sur-Oise). 1887. Oil on canvas. 17 x 24 in. (43.2 x 61 cm). Paintings. Rogers Fund, 1949. 49.4. (Met)



Fig. 2 *Pigeon with Message*. Artist unknown. Block 11, Cell 26 Main Camp. N/Y. (Czarnecki)

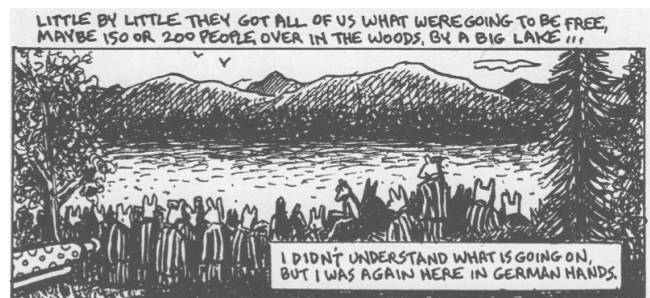


Fig 3. *Maus* (p. 266). Spiegelman, Art. (Spiegelman)

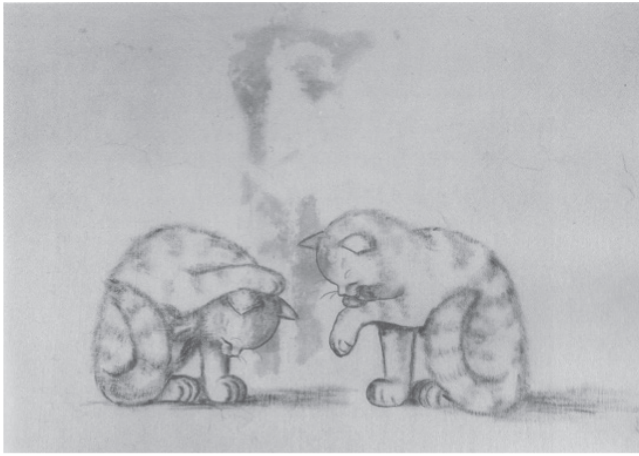


Fig 4. *Kittens*. Artist unknown. Block 7, ground-floor washroom. Main Camp. N/Y. (Czarnecki)



Fig 7. *Trees*. Michel Fink. Charcoal and chalk. 1943. (Novitch)



Fig 5. *Camels and Pyramids*. Artist unknown. Block 14, ground-floor. Main Camp. N/Y. (Czarnecki)



Fig 8. *Hope*. Uri Kochba. Linoleum block on paper. 1940. (Novitch)



Fig 6. *Maus* (p. 63). Spiegelman, Art.

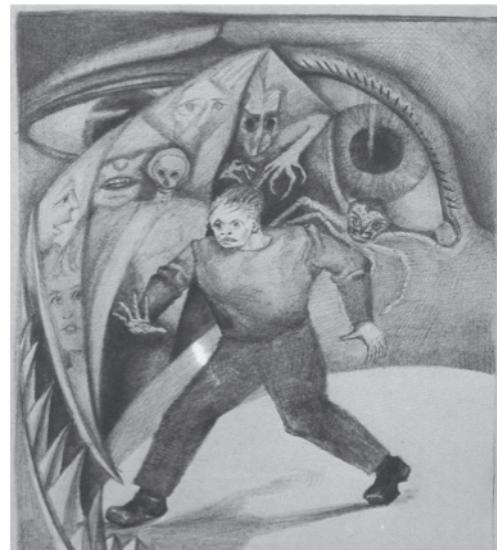


Fig 9. *Fright*. M. M. Van Danzig. Drawn in the lead mine, 1944. (Novitch)

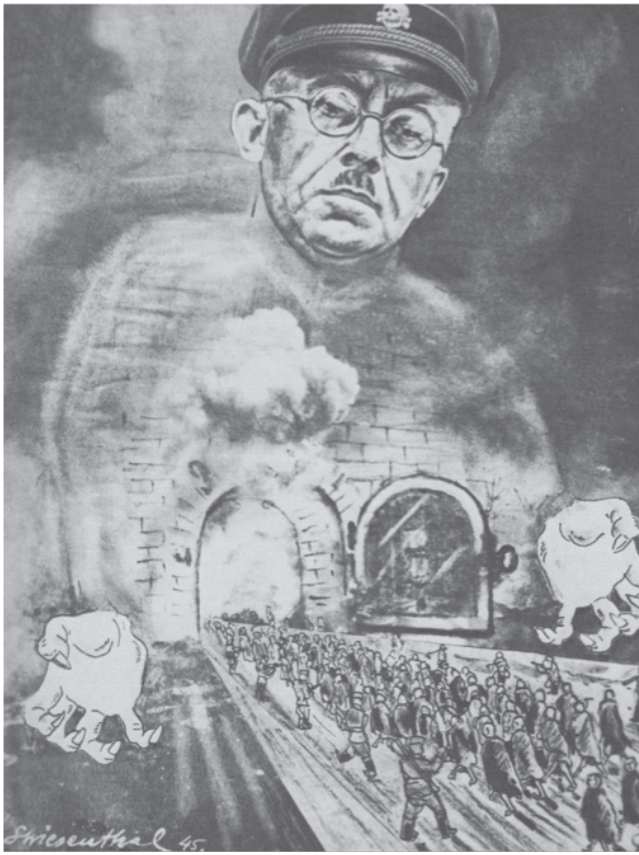


Fig. 10. *Mauthausen Camp*. Drawing, mixed media. Simon Wiesenthal. 1945. (Costanza)

The Effects of Acidified Water on The Olympia Oyster *Ostrea lurida*

Jeremiah Storie
English 225

Abstract

The process known as ocean acidification has been extensively studied and suggests that the oceans will face a dramatic drop in pH in the near future. For many animals such as oysters that live in the ocean and have calcium carbonate shells, ocean acidification poses a great threat to their very survival in the future. In order to understand if ocean acidification will affect the Olympia oyster's (*Ostrea lurida*) calcification process, approximately 20 oysters were placed into two groups (control and experimental) in two 500ml beakers and were studied for ten weeks. The experimental group was exposed to elevated carbon dioxide levels, which would theoretically acidify the water while the control group had no exposure. Each group was weighed once a week and the data was tested using two 2 sample t-tests. The tests revealed that there was no significant difference in pH, but there was a significant difference in weight, which may suggest the acidified water hindered the oysters' calcification process.

Introduction

Since the emergence of the industrial revolution, carbon dioxide (CO₂) concentrations in the atmosphere have increased exponentially, and have the potential to completely alter our climate, which can affect many living organisms all around the world. (Dickinson, 2011) This process of adding CO₂ created by technology made by humans is referred to as anthropogenic climate change. Anthropogenic climate change has been studied profusely in the past decade, and one byproduct of anthropogenic climate change is a process called ocean acidification (O.A). (Dickinson, 2011)

O.A is a process in which the ocean dissolves CO₂ through many different processes (wave action, wind, etc.), which is a completely natural cycle. The current issue with this process is with rising concentrations of CO₂ in the atmosphere, we expect more carbon dioxide in the oceans. With more CO₂ concentrations in the ocean, CO₂ goes through a complicated process in which CO₂ mixes with water, and then creates carbonic acid (H₂CO₃). (Schiffman, 2013)

With excess carbonic acid in the ocean, animals with calcium based shells and skeletons are at risk. Carbonic acid is known to hinder the calcification processes of animals, which can result in several developmental problems. O.A has been studied on many animals with calcium carbonate shells like oysters, which are an important food and economic source. Calcification of oyster shells is important to oysters'

survival, and with O.A influenced by anthropogenic climate change looming; their very survival is a risk. (Schiffman, 2013)

The Olympic oyster (*Ostrea lurida*) is an economic source to many in the Pacific Northwest and a food source for the people living there (Hettinger, 2012). The Olympic oyster's survival in the future of climate change is unknown, and must be studied. This study will focus on the effects of excess carbon dioxide on the weight of juvenile Olympic oysters to see, the effects of acidified water on the oysters' calcification process, and to determine if excess carbon dioxide creates a significant difference in pH.

Literature Review

Introduction

The ocean's biogeochemical process of absorbing anthropogenic carbon dioxide from the atmosphere has potential to be detrimental to oyster larvae, metabolism, and critical processes for survival.

Section 1: Ocean Acidification on Oyster Larvae

With anthropogenic climate change affecting the ocean's process of absorbing carbon dioxide, we expect to see the overall pH of the ocean to drop significantly in a condition called ocean acidification. This means animals with calcium carbonate (CaCO₃) shells such as oysters will struggle to survive and reproduce. The ability for oysters to have larvae is critical for many oyster species ability to survive in the future, and with ocean acidification, larval oysters could be threatened.

In order to study the effects of ocean acidification on the oyster species *C. gigas*, a study was conducted by Barros et al to study the effect of seawater acidified through carbon dioxide on larval *Crassostrea gigas* (*C. gigas*). The pH of the seawater was dropped down -0.7 and -0.4 pH levels and compared to the control pH. The results of this experiment showed that the larval *C. gigas* in the lowered pH group were much more sensitive to the pH change, which resulted in a lower survival rate. Larval *C. gigas*' exposure to lower pH levels also resulted in lower egg hatching rates, stunted growth, and fertilization rates. This suggests that acidified environments for larval oysters can be detrimental to their growth and survival. (Barros 2012)

Similar to the Barros et al study, *C. gigas* is re-visited in a study conducted by Emma Timmins-Schiffman. This study, like Barros et al, also studied larval *C. gigas* response to elevated partial pressure. The larval *C. gigas* were placed in acidified water in early development, which resulted in oysters having stunted growth rates, which could cause a bottleneck in the oyster life cycle. Along with growth rates of larval *C. gigas*, proteomics of the lipids, glycogen content, and shell integrity were analyzed. The analysis showed that acidified water had no significant impact on lipids and glycogen content, but shell integrity of the oysters was significantly impacted. (Timmins-Schiffman 2014)

Larval development is key to understanding the

impacts of ocean acidification on oysters. To understand this concept further, Li Jiaqi, et al conducted a study on the pacific oyster *C. gigas* and the blood cockle *Arca inflata* in its larval stage and its response to acidified water. The larval bivalves were placed in 3 different pH levels of 7.9, 7.6, and 7.3 and then compared with the larval bivalves in a control pH level of 8.2. The results of the bivalves' exposure to acidified water showed that the oyster larvae had significant damage to shell formation at the pH level of 7.3 and the blood cockle had developmental problems at pH levels of 7.6 and 7.3. This suggests these bivalves will have severe developmental problems in a future of ocean acidification. (Jiaqi, 2014)

With climate change, there are many other factors that can stress oysters life processes, such as carry over effects when oysters spawn. In order to determine if acidified water had an effect on the oyster's larvae when moving from the larval stage to the juvenile stage, Annaliese Hettinger, et al. conducted a study on the oyster species *Ostrea lurida* (In larval form) and its larvae after exposure. Larvae were placed in two pH levels (7.9 and 7.8) and the results of the exposure of the acidified water showed the larvae had significant impacts to shell development. When the larvae moved to the juvenile stage of the life cycle, the same effects from the larval stage carried over to the juvenile stage. This suggests that damage to the critical larval stage of an oyster's life cycle can carry over to the next stage. (Hettinger 2012)

Reproduction is key to survival for every living species on earth, but what will happen to oysters when ocean acidification is factored into their reproduction cycle? To determine if ocean acidification has an effect on an oyster's reproduction cycle, Laura Parker, et al. studied the oyster species *Saccostrea glomerata*, and its response to ocean acidification on spawning. Adult oysters were placed in seawater with elevated pressure of CO₂, and the larvae from the adults were studied. Surprisingly, larvae spawned from the adults that were exposed to acidified water appeared to be larger and developed faster, but had a low survival rate. This study can be useful to determine which species of oysters can acclimate or adapt to ocean acidification. (Parker, 2012)

Climate change poses as a serious threat to oyster larvae, and ocean acidification could dwindle entire populations of oysters. The survival of oyster larvae in acidified water is critical, and with climate change looming, oysters will have to adapt to acidic seawater.

Section 2: Metabolic Responses to Ocean Acidification

Metabolic processes are critical to every living organism on this earth. With anthropogenic climate change quickly becoming reality, many oysters could face complications with ocean acidification fueled by climate change. This section discusses several aspects of how climate change can modify and hinder oysters' metabolic processes.

Climate change can bring more than just acidification. Current projections for estuaries will

feature lower salinity levels than normal, which is a byproduct of ocean acidification. In order to study these affects on the estuary oyster *C. virginica*, Gary Dickinson, et al conducted a study on juvenile oyster's response to lower salinity and higher concentrations of carbon dioxide. The study mostly focused on glycogen and lipid storage, homeostasis, and ATP levels. With the exposure of increased concentrations of carbon dioxide and lower salinity levels, the juvenile oysters responded with higher mortality, reduction of glycogen and lipid stores, and reduction of tissue growth. This resulted in the juvenile *C. virginica* to have shells that are prone to breaking, and more energy was required to maintain homeostasis. (Dickinson, 2011)

Metabolic responses to ocean acidification have been documented and discussed earlier (Timmins-Schiffman 2014, Dickinson 2011) and is detrimental to the survival of some oyster species. In order to determine if ocean acidification affects larval *C. gigas*, Lei Wei, et al. conducted a study on increased partial pressure of carbon dioxide and its effects on the metabolic system of the oyster. The results of this experiment showed that increased partial pressure of carbon dioxide had several effects on the metabolic system of larval *C. gigas*. The results suggest that ocean acidification could hinder development to primary metabolisms, calcium homeostasis in tissues, and influence nucleotide metabolism in the gills. All of the areas affected by ocean acidification are crucial to an oyster's survival, and need to be studied further. (Wei, 2014)

As shown in the articles discussed, climate change poses as a serious threat to oysters' critical metabolic processes. With anthropogenic climate change in our near future, oysters' ability to perform critical metabolic processes could be hindered.

Section 3: Ocean Acidification's Effects on Critical Oyster Processes

Ocean acidification is a threat to oysters' critical processes in their life cycle. Life processes such as calcification and byssal thread generation could also be threatened by ocean acidification. This section will cover how ocean acidification could threaten these critical life processes.

Calcification in oysters is an incredibly important stage in the oyster life cycle, as it develops the crucial shell needed for survival. To determine if ocean acidification has an effect on the calcification in oysters, Emma Timmins-Schiffman, et al. did a study on the oyster *C. gigas* in the larval stage and its response to elevated partial pressure of CO₂ (PCO₂) on it's calcification process. Oysters were placed in three different levels of elevated PCO₂ at ambient (400 µatm CO₂), midCO₂ (700 µatm), and highCO₂ (1,000 µatm). Results showed that oysters had to spend more energy calcifying at the highCO₂ level, which took the larvae 3 days to calcify and resulted in smaller larvae, while the other levels (ambient and mid) less time to fully calcify

and develop to full size. (Timmins-Schiffman 2013)

Many of the articles analyzed have shown that ocean acidification is a process that generally hinders oysters abilities to perform processes for life. The study conducted by Vengatesen Thiyagarajan and Ginger Wai Kuen Ko proved otherwise. The oyster species *C. angulata* (in larval stage) was subjected to multiple climate change induced stressors such as low pH (between 8.1-7.4), low salinity (24-34 ppt), and high temperature (24°C and 30°C). The oyster's ability to properly calcify was the primary response studied. The results surprisingly showed that larval *C. angulata* was able to properly calcify in both low salinity levels and high temperatures, regardless of how low the pH was. This study may provide insight to how certain species can develop resilience to climate change induced stressors. (Thiyagarajan, 2012)

Byssal threads are important features on bivalves like oysters, as they are the support system that keeps them glued to substrates. The effect of ocean acidification on the byssal threads of oysters is not well studied, which is why Heather Welladsen, et al. conducted a study on the pearl oyster *Pinctada fucata*, and its response to acidified water on the byssal threads. Oysters were subjected to two pH levels of 7.8 and 7.6, fueled by gaseous CO₂, and byssal threads were examined after exposure. Results showed that the byssal threads from the oysters in the pH level of 7.6 had significantly thinner byssal threads than the one in the control. This is important as the byssal threads are key to the support structure of an oyster and its life as a sessile bivalve. Acidified water may hinder oysters' ability to produce strong threads. (Welladsen, 2011)

Life processes such as calcification and byssal thread generation are crucial to many species of oysters. The articles discussed in this section show that ocean acidification poses a threat to these critical life processes, and entire species could be wiped out entirely if they do not acclimate.

Conclusion

With the grim future of climate change, several species of oysters could be subjected to stressors primarily due to ocean acidification. The life processes of the oysters discussed in the articles could be significantly altered and changed forever. Species such as *Crassostrea* are a commercially valuable oyster, and with climate change threatening their survival, billions of dollars could be lost.

Methods

Experimental setup:

To conduct this experiment, approximately 20 live adult Olympia oysters (*Ostrea lurida*) were purchased from Taylor Shellfish Farms in Seattle, Washington and were used as subjects for the experiment. The oysters were divided into two groups of ten oysters: the

control group, which had no exposure to CO₂ and the experimental group, which were exposed to elevated levels of CO₂ for ten weeks. Each group was placed into two 500ml beakers filled with seawater (Obtained locally) and aquarium bubblers for oxygen circulation. The experimental group was then exposed to excess carbon dioxide by a yeast (30g), sugar (10g), and water (500ml) mix inside a disposable plastic bottle with a PVC tube fed into the experimental beaker. Seawater was replaced in both beakers weekly.

Data collection and observation:

The oysters were studied for a length of ten weeks, and data was collected once every week. To study the effects of O.A, pH was determined by using simple pH strips and was compared using a pH color chart. Reduction of calcification was recorded by weighing the oysters with a pocket scale and comparing the experimental group with the control.

Statistical analyses:

To test the significant differences between the control group and experimental group, two, non-pooled 2 sample t-tests using the statistical analyses program Minitab were used for determining pH change and weight reduction. In order to normalize the weight reduction data, a reciprocal transformation function was used and successfully normalized the data.

The statistical hypothesis for both were:

pH: H₀: $\mu_1(\text{control}) = \mu_2(\text{experimental})$

Ha: $\mu_1(\text{control}) \neq \mu_2(\text{experimental})$

Weight reduction: H₀: $\mu_1(\text{control}) = \mu_2(\text{experimental})$

Ha: $\mu_1(\text{control}) \neq \mu_2(\text{experimental})$

Results

Data for pH change:

control	experiment
7.2	7.2
7.2	7.6
6.8	7.6
6.8	7.2
6.8	7.6
7.2	7.6
6.8	7.8
6.8	7.6
6.8	7.8
6.8	7.6

Two-Sample T-Test and CI: control, experiment

Two-sample T for control vs experiment

	N	Mean	StDev	SE Mean
control	10	6.920	0.193	0.061
experiment	10	7.560	0.207	0.065

Difference = mu (control) - mu (experiment)
 Estimate for difference: -0.6400
 95% CI for difference: (-0.8287, -0.4513)
 T-Test of difference = 0 (vs not =): T-Value = -7.16
 P-Value = 0.000 DF = 17

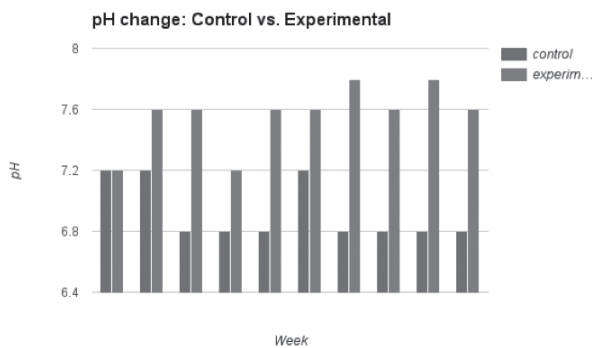
Power and Sample Size

2-Sample t Test

Testing mean 1 = mean 2 (versus not =)
 Calculating power for mean 1 = mean 2 + difference
 Alpha = 0.05 Assumed standard deviation = 0.2066

Difference	Sample Size	Power
0.64	10	1.00000

The sample size is for each group.



Data for Weight reduction:

control	experiment
2.1	2.1
2.5	2.5
2.8	2.6
5.4	5
5.6	5
5	4.8
5.3	5
5.5	4.8
2.8	2.4
2.6	2.6

With transformation:

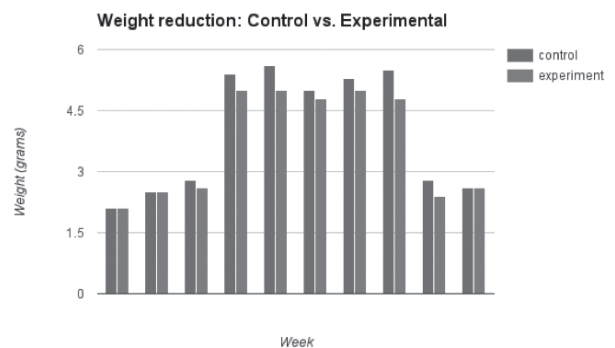
Recip control	recip experimental
0.476190476	0.476190476
0.4	0.4
0.357142857	0.384615385
0.185185185	0.2
0.178571429	0.2
0.2	0.208333333
0.188679245	0.2
0.181818182	0.208333333
0.357142857	0.416666667
0.384615385	0.384615385

Two-Sample T-Test and CI: Recip control, recip experimental

Two-sample T for Recip control vs recip experimental

	N	Mean	StDev	SE Mean
Recip control	10	0.291	0.115	0.036
recip experimental	10	0.308	0.113	0.036

Difference = mu (Recip control) - mu (recip experimental)
 Estimate for difference: -0.0169
 95% CI for difference: (-0.1244, 0.0905)
 T-Test of difference = 0 (vs not =): T-Value = -0.33
 P-Value = 0.743 DF = 17



The data obtained from pH differences analyzed by Minitab shows that there was no significant difference (p-value (0.00) α (0.5), accept alternative hypothesis) between the control group and the experimental group. The power/sample size test showed that we have a power of 1.000, which means the sample size is sufficient enough. The data obtained from the weight reduction showed that there was a significant difference (p-value (0.743) >math>\alpha</math> (0.05), accept null hypothesis)

Findings

The results obtained from the two tests were peculiar. The results from the pH test seemed to be statistically insignificant, but the test from the weight reduction showed there was a significant difference between the control and the experimental groups. Another notable observation is the stark differences and spikes between the control pH group and the experimental pH group. On some days when the data was recorded, the experimental group appeared to have higher pH levels than the control, indicating the experimental group was less acidic than the control. The raw data from the weight reduction had some interesting observations as well. For about 5 weeks, the oysters in both groups weighed more than they previously did, but this could be attributed to an error in weighing the oysters.

Discussion

Overall, this experiment had its flaws, but it may suggest that excess carbon dioxide can have inhibitive processes on calcification, which can reduce the weight of oysters. The results from this experiment may be utilized in the future, because the Olympia oysters (*Ostrea lurida*) are a food and economic source for many in the Pacific Northwest and with ocean acidification effects in the near future, millions of dollars and people's jobs could be lost.

There were several limitations in this study that need to be addressed. One major limitation of this study could be the source of carbon dioxide to acidify the water. If other ways of acidifying the water were used (ex: Jiaqi, 2014), the results could be more direct and understandable. Another limitation of this study is how loss of calcified shell was observed. As stated in the findings section, there were some anomalies in the recorded weights. This may have been attributed to the scale, which could have been miscalibrated and/or broken. One last limitation observed may have been the livelihood of the oysters themselves. The oysters were kept at room temperature in seawater collected at local beaches, which may have not been enough to keep them healthy throughout the whole study.

Conclusion

In conclusion, this study may help to clarify what happens when adult oysters are exposed to excess carbon dioxide. Even with this study's several limitations, it still suggests that excess carbon dioxide can have hindering effects on oyster's calcification processes. The calcification process that oysters use is under serious threat with climate change looming, and needs to be studied further.

References

- Barros, P, Sobral, P, Range, P, Chícharo, L, & Matias, D. (2013). Effects of sea-water acidification on fertilization and larval development of the oyster *Crassostrea gigas*. *Journal Exp Mar Biol Ecol*, 440, 200-206.
- Dickinson, G H, Ivanina, A. V, Matoo, O. B, Pörtner, H. O, Lannig, G, Bock, C, ... & Sokolova, I. M. (2012). Interactive effects of salinity and elevated CO₂ levels on juvenile eastern oysters, *Crassostrea virginica*. *J Exp. Biol*, 215(1), 29-43.
- Hettinger, A, Sanford, E, Hill, T. M, Russell, A. D, Sato, K. N, Hoey, J., ... & Gaylord, B. (2012). Persistent carry-over effects of planktonic exposure to ocean acidification in the Olympia oyster. *Ecology*, 93(12), 2758-2768.
- Li, J, Jiang, Z, Zhang, J, Mao, Y, Bian, D, & Fang, J. (2014). The potential of ocean acidification on suppressing larval development in the Pacific oyster *Crassostrea gigas* and blood cockle *Arca inflata* Reeve. *Chin J Oceanol Limn*, 32, 1307-1313.
- Parker, L. M, Ross, P. M, O'Connor, W. A, Borysko, L, Raftos, D. A, & Pörtner, H. O. (2012). Adult exposure influences offspring response to ocean acidification in oysters. *Global Change Biol*, 18(1), 82-92.
- Thiyagarajan, V, & Ko, G. W. K. (2012). Larval growth response of the Portuguese oyster (*Crassostrea angulata*) to multiple climate change stressors. *Aquaculture*, 370, 90-95.
- Timmins-Schiffman, E. B (2014). The Effects of Ocean Acidification on Multiple Life History Stages of the Pacific Oyster, *Crassostrea gigas*: Implications for Physiological Trade-offs (Doctoral dissertation, University of Washington).
- Timmins-Schiffman, E, O'Donnell, M. J, Friedman, C. S, & Roberts, S. B. (2013). Elevated pCO₂ causes developmental delay in early larval Pacific oysters, *Crassostrea gigas*. *Mar Biol*, 160(8), 1973-1982.
- Wei, L, Wang, Q, Wu, H, Ji, C, & Zhao, J. (2015). Proteomic and metabolomic responses of Pacific oyster *Crassostrea gigas* to elevated pCO₂ exposure. *J Proteomics*, 112, 83-94.
- Welladsen, H. M, Heimann, K, & Southgate, P. C. (2011). The effects of exposure to near-future levels of ocean acidification on activity and byssus production of the Akoya Pearl Oyster, *Pinctada fucata*. *Journal Shellfish Res*, 30(1), 85-88.

A Grimm Evolution

Kylee Sullivan
English 345

From the time we are young we are introduced to fairytales; stories about princesses and princes, of magic and talking animals, and cautionary tales saying to always do the right thing and to know better than to trust a stranger. Many children are introduced to the concept of fairytales from bedtime stories or from the film adaptations made by Disney. However, if you look closer at fairytales, namely those collected by the Brothers Grimm, you will see just how dark they truly are. How could it be possible that the stories we grew up with as children have such a dark background when we ourselves are so used to them being about all things good and happily ever after? And, if they were so dark to begin with, why have these stories been adapted again and again over the years?

To start off, we need to clarify that the Brothers Grimm did not *create* the fairytales everyone has come to attribute them to; they were told these stories by their peers and decided to record them. Even so, it's hard to say whether or not the stories were ever recorded prior to the Brothers Grimm or had even existed prior to being told to Wilhelm and Jacob Grimm. Despite the lack of evidence that these stories *had* been around for years "the Grimms firmly believed and actively asserted that they had existed...reasoning that their absence from written records proved their presence in an...oral tradition" (Joosen 199). Because of the Brothers Grimm's written adaptation of these oral tales, we were given most of the fairytales we know and love today.

These tales, though, started off much more graphic and terrifying than the stories we know and love today. So much so that those who read the Grimm versions are often "hardly prepared for the graphic descriptions of murder, mutilation, cannibalism, infanticide, and incest that fill the pages of these bedtime stories for children" (Tatar 3). This, of course, can be explained by the fact that there have been so *many* adaptations and retellings of these classic stories that it can be easy to confuse which were the ones recorded by the Brothers Grimm and which were the ones censored with the intention to be told to children in later years.

We of course know about the Disney film adaptations of various Grimm fairytales through the years. With a new movie focusing on a new fairytale coming out almost every year, it's nearly impossible not to take these adaptations into account. However, when you consider who the target audience of these films are, it's easy to see why they were re-imagined in a certain way. Disney movies are primarily aimed toward young children, so it does of course make sense to censor the source material. No child would walk away from a movie based on Little Red Riding Hood without nightmares if the movie chose to include the graphic scene where the

Huntsman cuts open the Wolf's stomach to save Little Red and her grandmother and throws it in the river full of stones while the Wolf is still alive. This does not mean, however, that there have never been adaptations of various fairytales that aren't darker than their Disney counterparts.

One adaptation in particular that does fall on the slightly darker scale is a book series that is *aimed* at older children. Michael Buckley's series *The Sisters Grimm* tells the story of 11-year-old Sabrina Grimm and her 8-year-old sister Daphne. The books begin with letting us know that Sabrina and Daphne's parents went missing and the only clue to their disappearance was a blood red handprint left on their car window. After escaping from every horrible foster home they were sent to (descriptions are made of the young girls being cuffed to radiators and kept in dog cages in some instances) the girls are put in the custody of an elderly woman named Relda Grimm and her companion Mr. Canis in a town called Ferryport Landing, New York. The woman claims to be the girls' grandmother despite Sabrina and Daphne being told by their father that he did not have any living relatives.

Granny Relda then tells the girls the truth behind their family: they are the last living descendants of Wilhelm Grimm, one of the Brothers Grimm, and act as fairytale detectives for the citizens of Ferryport Landing. These citizens, called Everafters, are actually fairytale characters who have been alive for hundreds of years and who live alongside the unknowing human population that also make up the town of Ferryport Landing. However, the Everafters have a well-known distaste for the Grimm family. This is explained in Buckley's *A Very Grimm Guide* in the following tale:

To protect the Everafters and keep peace, Wilhelm (Grimm) turned to a powerful witch named Baba Yaga. Together the two cast a spell that confined the fairy-tale characters within the town's borders. But, Baba Yaga made Wilhelm pay a price for his prison. If the Grimm family dies out or abandons the town, the Everafters will regain their freedom. (Buckley 14)

This, of course, makes Granny Relda and the girls public enemy number one among most of the community. At first, Sabrina refuses to believe Relda and tries to escape with Daphne but, upon being attacked by pixies and nearly being crushed by giants, decides it would be safer to stay with Granny Relda and Mr. Canis.

What makes *The Sisters Grimm* unique is that the series doesn't just focus on fairytales from the Grimm stories, but also characters from William Shakespeare's plays, which is made evident with Sabrina and Daphne's closest ally Puck the Trickster King from *A Midsummer Night's Dream*. It also introduces characters previously believed to be evil as good guys and good guys play the antagonist role. Their grandmother's companion, Mr. Canis, turns out to be the Big Bad Wolf who has sworn

his loyalty to the family while Mayor William Charming (Prince Charming) is one of the biggest advocates to kill or drive out the Grimm family for a good portion of the series.

It's also interesting to note that, despite being aimed for older children, the book still deals with a lot of surprisingly dark topics such as kidnapping, a form of addiction, death, and war near the end of the series. And, while the death scenes may not be graphic by any means, the readers are still stunned at times when characters we previously knew and adored are killed off without warning in a tragic way. Does this mean the books are bad? Not by any means. It may just shock the reader upon reading the series for the first time who are expecting a light hearted tale of two sisters and their grandmother.

Another re-imagining of Grimm fairytales that follows in a similar vein of The Sisters Grimm, but is not aimed for children, is a video game. Near the end of 2013, Telltale Games created a game called The Wolf Among Us; in it, you play the role of Sheriff Bigby Wolf (the Big Bad Wolf), a man who is in charge of keeping the living fairytale characters, called Fables, in line and out of trouble. The game begins with getting a call from Mr. Toad about a domestic disturbance in his building and you break up a fight between the Woodsman and a Fable prostitute with a ribbon around her neck. Bigby later tries to help this girl who is clearly in trouble, but when asked about what exactly is going on responds with the words "these lips are sealed." The game progresses peacefully for the first half hour of gameplay until Bigby is awoken by Miss Snow White saying there's an emergency. You, as Bigby, then find the Fable girl's decapitated head on your doorstep. After identifying the girl as Allerleirauh, going by the name Faith, the rest of the game is spent with Bigby trying to solve her murder.

You, as the player, have many choices throughout the game that will either benefit you or hinder you later, such as, whether or not you choose to harm certain characters and which form of dialogue you choose when speaking to the other characters. The entire game is spent as a slight run around with many false leads with only one thing that keeps you on track: every girl who worked with Faith has the same ribbon around their neck and when asked questions they can usually only reply with the words "these lips are sealed." The game, unlike The Sisters Grimm is very graphic when it comes to violence, death, and gore almost to the point of being cruel. However, it is to be noted that because it is a game that is designed to be similar to a "choose your own adventure" game, you do have a choice on whether or not you want to make Bigby do any of these violent acts.

What do these two adaptations have in common? They both feature fairytale characters previously believed to be villains (namely the Big Bad Wolf) as the heroes of these stories; something we are actually starting to see a copious amount of in media.

We are starting to see stories that tell the villain's, such as, the Broadway play Wicked and the film Maleficent, becoming more popular as the years progress. Why is it we are now starting to want to have the "villain's" side of the story?

My theory is this: as we have begun to progress in technology and have gained open access to just about every form of information at the touch of our fingertips, it is getting harder to see things as purely black and white as they used to be. Before, we were more willing to believe what our media told us and designated as a clear "bad guy." Now, however, we have more access to not only people in our own country but outside of it. In relation to my theory, we are starting to see the people who were formerly considered our "enemies" as potential friends who have been dehumanized by the media so much to the point that we believed that whatever it is we were doing to these other people was justified. Thanks to social media in particular, such as, Twitter, Facebook, and Tumblr, people are getting a chance to see beyond the propaganda and into the lives of actual people being affected by whatever controversial event is happening at the time. Therefore, the line between "good" and "evil" created over the years by society has been getting crossed and blurred more. It would make sense for us to want to know the "villain's" side of the story, because what we previously believed could be false. To some, this is very alarming. While there does tend to be a lot of leeway when readapting a classic fairytale, there are some who do not like it *because* it doesn't follow the "traditional" classic. Zipes explains this in his book The Brothers Grimm in this way:

Newly written fairy tales, especially those that are innovative and radical, are unusual, exceptional, strange, and artificial because they do not conform to the patterns set by the classical fairy tale...We are safe with the familiar. We shun the new, the real innovations. (Zipes, "The Brothers Grimm," 208)

There is also something to be said about how much the Grimm stories have changed over the years as far as being retold so that *female* villains have started having their side of the story told. These women were previously demonized in their stories for being independent and ambitious. Even legends outside of fairytales had similar themes to it; the legend of Adam's first wife, Lilith, being a good example. After being created by God from the same earth as Adam, "fighting ensued between the couple because (Lilith) would not 'lie below' Adam during intercourse" (Carvalho 26). Once Adam denounces her equality to him, Lilith fled from Eden never to return. Lilith literally becomes a demon for refusing to submit or be anything less than equal to Adam; something that nowadays seems like it would be a completely understandable grievance to have against your husband. Zipes explains this by writing "if Lilith's story summarizes the genesis of the female monster...

the Grimm tale of 'Little Snow White' dramatizes the essential but equivocal relationship between the angel-woman and the monster-woman" (Zipes, "Don't Bet on the Prince", 201). This, in a way, conditioned readers to believe that a woman who was strong-willed was evil while the shy and docile women were preferable to men and encouraged young girls to be like the princesses they would read about and watch.

Furthermore, we have been seeing additional encouragement from various retellings of fairytales for young girls to be independent and strong-willed, thus making her the hero. Movies like Tim Burton's adaptation of Alice in Wonderland and the Disney film Snow White and the Huntsman are two great examples of this; even The Sisters Grimm focuses more on Sabrina Grimm's story more than any other character and is quick to point out her bravery and flaws at the same time. As Bacchilega says "the choice to contrast fairytale and realist elements with each other in the telling of a story...necessarily involves taking a position about make-believe and reality" (Bacchilega 118); meaning that young girls can look at these characters and truly believe that they could be the heroes of their own stories for once.

Fairytales are truly interesting in that they show what morals were held close to home depending on when the story was adapted. In a way, fairytales are important historical documentations that take the reader back in time to provide them with a peek into how people used to think. While we don't necessarily use fairytales for cautionary purposes anymore, we do still use them to teach our children about how the world used to be, for better and for worse. Zipes summarizes this nicely by writing that "we have used and continue to use the fairy tale as a metaphorical mode of communication. It is a socially symbolic act of representation and communication" (Zipes, "Why Fairy Tales Stick", 95). As we progress further into the future, it will be interesting to see how fairytales are readapted and broadened over time.

Works Cited

- Bacchilega, Cristina. *Fairy Tales Transformed?: Twenty-first-century Adaptations and the Politics of Wonder*. Michigan.: Wayne State University Press, 2013. Print.
- Buckley, Michael. *A Very Grimm Guide: Inside the World of the Sisters Grimm, Everafters, Ferryport Landing, and Everything in Between*. New York: Amulet, 2012. Print.
- Carvalho, Diana. "Woman Has Two Faces: Re-Examining Eve and Lilith in Jewish Feminist Thought." *Academia*. University of Denver, June 2009. Web. 23 Mar. 2016.
- Joosen, Vanessa, and Gillian Lathey. *Grimms' Tales around the Globe: The Dynamics of Their International Reception*. Michigan.: Wayne State University Press, 2014. Print.
- Tatar, Maria. *The Hard Facts of the Grimms' Fairy Tales*. Princeton, NJ: Princeton UP, 1987. Print.
- Zipes, Jack. *Don't Bet on the Prince: Contemporary Feminist Fairy Tales in North America and England*. New York: Methuen, 1986. Print.
- Zipes, Jack. *The Brothers Grimm: From Enchanted Forests to the Modern World*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan, 2002. Print.
- Zipes, Jack. *Why Fairy Tales Stick: The Evolution and Relevance of a Genre*. New York: Routledge, 2006. Print.

Gilded Freedom: U. S. Government Exclusion of Chinese Migrants, 1848-1882

Robert Villanueva
History 382

Inscribed within the U.S. Library of Congress archives, nineteenth century American expansionist policy is noted for enslavement of African Americans, oppression of Mexican Americans, and the systemic decimation of Native Americans, instilling a legacy of bigotry that exist in the United States today. Seldom discussed in college lectures, the Chinese Exclusion Act of 1882 depicts another tragic event in U.S history, when Chinese migrants were falsely accused of causing America's economic hardships. This study will examine the social and political developments that led to the Chinese Exclusion Act in 1882, which became the first immigration law to deny entry and U.S. citizenship to a group based on its ethnic and national origin, as stated in Sections 14 and 15: "That hereafter no State court or court of the United States shall admit Chinese to citizenship;" whereby "...the words Chinese laborers, wherever used in this act shall be construed to mean both skilled and unskilled laborers and Chinese employed in mining."¹ The Chinese, at first, worked calmly alongside whites in the San Francisco business sector, railway industry, and goldmines, until the California gold rush of 1848 bottomed out and the economic panic of 1873 raised anti-Chinese sentiments. The closure of goldmines, recession, prejudice, and job competition, indeed, led to the Chinese Exclusion Act; yet, evidence suggests that Gilded Age politicians were primarily culpable for pushing the U.S. Government, judicial system, and many white Americans, into indorsing a national anti-Chinese migrant campaign. Although the United States Government initially welcomed Chinese migrants into its nation, Gilded Age politicians were primarily responsible for instigating a racist anti-Chinese movement that ended with President Chester A. Arthur signing the Chinese Exclusion Act on May 6, 1882.²

This paper intends to describe how Gilded Age politicians used American exceptionalism and Manifest Destiny ideals to sway many white Americans and the federal government into enacting a ten year moratorium on Chinese immigration. U.S. politicians, during this era, used race as a pretext to falsely accuse Chinese migrants of devaluing American standards, when in fact, many merchants helped stimulate the nation's economy. The Page Act (1875), Chinese Exclusion Act transcript (1882), court documents, newspaper tabloids, and political speeches will be examined, to perhaps hold these politicians responsible for excluding Chinese migrant.

The origins of American bigotry originated from Puritan Minister John Winthrop's 1629 "City upon a hill" sermon on exceptionalism that stated: "We shall

finde [sic] that the God of Israel is among us, when ten of us shall be able to resist a thousand of our enemies [Indians]..." in which this "Model of Christian Charity" would later justify Indian decimation.³ A first known example of this came on May 26, 1637, when Captains John Mason and John Underhill led a Puritan militia into Mystic River, Connecticut, and massacred 400 Pequot Indian villagers, bringing upon a white xenophobic construct of hatred for future Americans to follow.⁴

Historian Alvin Josephy Jr. stated that British Puritan colonists of New England aimed "... to instruct the peaceful and exterminate those who resisted," resting on the belief that all uninhabited lands of 'savage Indians' were rightly given to them by God, whereupon American politicians adopted this exceptionalism concept to justify black slavery, American Indian decimation, and persecute other distinct ethnic groups.⁵ This initial period in American history, in essence, embedded a fixed social construct of white supremacist bigotry in the United States.

After defeating the British in the American Revolution in 1776, the United States began an expansionist program to broaden its nation's borders, from which journalist John O'Sullivan defined as Manifest Destiny doctrine in 1845, which read:

The far-reaching, the boundless future will be the era of American greatness. In its magnificent domain of space and time, the nation of many nations is destined to manifest to mankind the excellence of divine principles; to establish on earth the noblest temple ever dedicated to the worship of the Most High -- the Sacred and the True. Its floor shall be a hemisphere -- its roof the firmament of the star-studded heavens, and its congregation a Union of many Republics, comprising hundreds of happy millions, calling, owning no man master, but governed by God's natural and moral law of equality, the law of brotherhood -- of "peace and good will amongst men."⁶

Andrew Jackson, for instance, was responsible for relocating 46,000 southern Indians west across the Mississippi River (including existent treaties),⁷ during his two presidential terms (1811-1839). According to historian Russell Thornton, most of the 100,000 Native Americans that relocated west by the mid-1800's, were members of the Five Southern Cherokee, Choctaw, Chickasaw, Seminole, and Creek Tribes. Since all eastern territories were secured, the United States Government focused on incorporating Mexico's southwestern provinces.⁸

The year 1848 marked a turning point in American expansion policy when the United States won its battle with Mexico, resulting with Mexican officials signing the Treaty of Guadalupe Hidalgo on February 2, which ceded 500,000 square miles of their northern territory (California, Arizona, Texas, New Mexico, and portions of Colorado, Utah, and Nevada) to the United

States for \$15 million in return.⁹ According to historian Rodolfo Acuña, the United States “got a colony two and half times as large as France from this incorporation of Mexican land,” which contained large reserves of silver, zinc, oil, uranium, copper, and gold.¹⁰

Gold was also discovered in California during this year by James W. Marshall and John Sutter, bringing an influx of land speculators, merchants, and prospectors from the eastern half of the United States, who began shaping boomtown economies.¹¹ After Britain defeated China in the Opium War, many Chinese citizens experienced land foreclosures, increased taxes, peasant rebellions, overpopulation, and high joblessness, inspiring thousands of desperate men to flee to the United States, where a chance at prosperity awaited them in the California goldmines.¹²

Demand for cheap labor urged ship owner Cornelius Koopmanschap to import thousands of Chinese men to work in the California gold mines, railway, and farming industries. By 1849, 8,000 to 10,000 prospectors staked mining claims, and roughly one-fourth of the 85,000 men who worked in the goldmines migrated from foreign countries.¹³ Unlike the Chinese merchant class who settled in San Francisco prior to 1848, the 20,000 Chinese who entered California by 1852 came from the poverty stricken provinces of Donggnan, Xiangshan, Siyi, and Sangic.¹⁴

The first of many biased laws came on April 13, 1850, when the California State Legislature enacted the 1850 Foreign Miners Tax, which imposed stiff \$20 monthly fees to keep Mexican and Chinese laborers from competing with white miners.¹⁵ The State of California assumed that taxing these foreign miners would avert future conflicts, yet whites continued to accuse the Mexicans and Chinese of stealing their gold. The vigilantism and lynching that arose from job competition forced many Chinese to forfeit their mining claims to whites.¹⁶ Acuña stated “[t]hat the Gold Rush was also why California led the nation in mob violence during the 1850s, and according to scholars set the template for today’s violence against immigrants.”¹⁷

As a result of violence and hundreds of thousands of tax dollars paid to California legislators, many Chinese migrant laborers decided to leave the goldmines and relocate to San Francisco, where they could legally vote and attend public schools. Many of these displaced Chinese migrants, nevertheless, opened restaurants, produce markets, laundry houses, and thriving import-export businesses, where they sold shrimp, oysters, dried vegetables, noodles, rice, tea, and sugar to their countrymen and white patrons residing in the *Chinatown* district.¹⁸

In 1852 California Governor John McDougal described the Chinese as “one of the worthy of our newly adopted citizens,” which clarified how American politicians, at first, viewed the Chinese.¹⁹ However, when John Bigler was elected governor later that year, he made derisive comments against both Chinese migrants

and merchants. In defense of his people, San Francisco restaurant owner Norman Asing sent a letter to Governor Bigler in April 1852 that read:

Sir: I am a Chinaman, a republican, and a lover of free institutions; am much attached to the principles of the government.” “.... [Y]our late message have been thus far to prejudice the public mind against my people,” which you state “...that to enhance the prosperity and preserve the tranquility of this State, Asiatic immigration must be checked.” “... [Y]ou have degraded the Negro, because of your holding him in involuntary servitude,” from which “...amongst this class you would endeavor to place us.” “...And we beg to remark, that so far as the history of our race in California goes, it stamps with the test of truth the fact that we are not the degraded race you would make us. We came here amongst you as mechanics and traders.²⁰

Rising hostility against Chinese laborers over jobs prompted white miners to petition Sacramento, resulting with the State of California Legislative Committee noting that “[t]he concentration, within our State limits, of vast numbers of the Asiatic races...dissimilar to ourselves [sic] in customs, language, and education... [are merely] servile contract laborers,” whose refusal to become U.S. citizens devalues American working-class ethics.²¹ In 1855, the California legislature passed a law that denied naturalized citizenship to all incoming Chinese migrants, for which historian Yucheng Qin stated that “...some white miners even expressed interest in wiping out all the Chinese.”²² Evidence arguably proves that Gilded Age politicians used this race-baiting tactic to undermine the rising economic mobility of this Asiatic group.

Anglo xenophobia continued to escalate in the 1860’s after goldmine owners threatened to replace white miners with Chinese laborers, after union delegates refused to use dynamite to quarry rocks. Under enormous pressure, union bosses hesitantly agreed to use the lethal explosives, and take salary cuts as well, which conflicted with white standard labor laws. Shoe, cigar, and clothing manufacturers also threatened to replace white workers with Chinese, if union bosses failed to conform to their labor rules, resulting with working class Americans demanding that the State of California set limit on Chinese immigration.²³

Railroad executive Charles Crocker defended the Chinese laborers by attesting that they were “very trusty” and “intelligent” people who had an inherent “... aptitude and capacity for hard work;” yet, his statement could not prevent California Governor John Bigler and Senator Phillip Roach from forming an alliance with white miners during the 1860’s.²⁴ In an effort to avoid ongoing criticism, a majority of California’s 49,310 Chinese residents entered low paying jobs in the manufacturing, agriculture, construction, and Central Pacific Railroad industries.²⁵

The economic depression in 1873 intensified racial tensions, however, the Chinese merchants continued to enlarge their import-export trading businesses in San Francisco, such as Macondary & Company, who generated \$500,000 to \$600,000 in yearly profits.²⁶ Marine Losses Adjustor Cornelius B.S. Gibbs stated before the U.S. Joint Special Committee to Investigate Chinese Immigration: "As men of integrity, I have never met a more honorable, high minded, correct and truthful set of men than the Chinese merchants of our city," yet the gilded tide of American bigotry would eventually set upon the shores of San Francisco Bay in 1875.²⁷

As the Gold Rush was coming to a close, violent attacks against Chinese migrants erupted within the mining camps, where, in one particular incident, a mob of white vigilantes robbed \$30,000 in gold dust from Chinese miners.²⁸ With support from both Governor Bixley and Senator Roach, white working class Americans began to use race as a pretext to arbitrarily attack Chinese migrant laborers. Politicians in California also drew national attention from both Republican and Democratic parties, who uniformly avowed to limit Chinese immigration.²⁹ Anti-Chinese activism, therefore, united Americans from all economic levels, resultant from Gilded Age politicians using the support from national newspapers to fabricate negative images of Chinese, such as a *New York Star* article that depicted Chinese migrants as "unnatural and filthy," and the *Cincinnati Gazette* depicting them "as a dependent, ignorant, animal machine."³⁰

This urged President Calvin Coolidge to accuse politicians of instigating a national anti-Chinese campaign to win votes, in a letter that read: "The clamor of an alien race in a single state—taken up by politicians for their own ends—was sufficient to change the policy of a nation and to commit the United States to a race discrimination at variance with our professed theories of government," which inherently defiled a Bill of Rights statement that "all men are created equal."³¹ Despite Coolidge's opposing statement, a majority of politicians and white Americans during this Gilded Age of industrial development condoned Chinese exclusion.

A congressman stated, in order "[t]o protect our laboring classes...the gate...must be closed," whereupon Chinese exclusion became the platform for Gilded Age politicians to indorse.³² National unrest over Chinese migrants urged the U.S. Congress to enact the Page Act in 1875, which became the first immigration law to restrict entry to Chinese people.³³ This federal policy also denied immigration to the physically disabled, prostitutes, communists, mentally ill, and other Asiatic groups, in which Section 1 denied admission to "any subject of China, Japan, or any Oriental country".... who may perhaps enter the U.S. for "lewd and immoral purposes; and if there be such contract or agreement, and said consul-general or consul shall not deliver the required permit or certificate" to be allowed entry into the United States.³⁴

The depression arrived in San Francisco in 1875, when white business owners began accusing Chinese merchants of lowering wages and controlling commerce. Complete havoc erupted in the city, in which 250 Chinese migrants were stoned by hostile whites on San Francisco's Front Street Wharf.³⁵ Many fearful Chinese continued to flee the mining camps and seek refuge in San Francisco, where the Chinese Merchants Association (Six Chinese Companies-*Huiguan*), provided food and lodging for them.³⁶ San Francisco's gilded city finally exposed its white racist undertones, with whites attacking both Chinese migrants and merchants. Senator James Gillespie stated: "As soon as the Chinese shall discover that they have a safe and firm footing in California, they will flock here in such vast number and swamp the white race, because their numbers are inexhaustible and their country over peopled by at least 10,000,000."³⁷

In 1876, anti-Chinese immigration activists took the 'Chinese problem' before a California State Senate Hearing, when a white shoe manufacturer testified that "[f]or businessmen to employ Chinese is simply putting nails in their coffins, because they gain the experience, then go off into their own businesses and compete against us."³⁸ California legislators seemingly listened to these petitions in order to rouse the American people, judicial system, and U.S. Government into joining their anti-Chinese immigration movement.

The havoc on the streets of San Francisco reached the U.S. eastern seaboard, in which a *New York Herald* article related the Chinese migrant class "...to the beastliness, the filth, squalor, leprosy, venereal disease, the lawlessness, perjury and violence" that "...is eating into the moral of the country."³⁹ U.S. Supreme Court Justice John Marshall Harlan's also asserted that the Chinese were "a race so different from our own that we do not permit those belonging to it to become citizens of the United States"⁴⁰ Evidence suggests that California politicians Bixley, Roach, and Gillespie were racists, who urged both the white working class and judicial system into forming a national Chinese exclusion campaign.

Gilded Age politicians stirred a successful national anti-Chinese campaign that included white Americans from all social sectors, which set the path toward Chinese exclusion. It was Republican Senator James G. Blaine who rallied national support against Chinese, when he told Congress that [w]e have this day to choose...whether our legislation shall be in the interest of the American free laborer or for the servile laborer from China."⁴¹ The *New York Tribune* also printed a comment by Blaine, who proclaimed that Chinese immigration "... cannot come to us without plenteously sowing the seeds of moral and physical disease, destitution, and death."⁴²

The Six Chinese Companies were comprised of established Chinese American businessmen, who provided funeral, medical, employment, and legal representation to its members, in addition to offering economic and social services to migrants.⁴³ The Six

Chinese Companies became the next target of hostile whites, in which they were accused of slaveholding Chinese laborers and trafficking prostitutes, which upset the Chinese business community. The Six Chinese Companies, therefore, forwarded two leaflets to the U.S. Congress, asserting that they "never brought or caused to be brought one of their countrymen to this land under or by any servile or contract labor," but rather, "...they helped their destitute colleagues return to China and Hong Kong on steam ships and planned to keep the number of Chinamen here at a minimum figure...."⁴⁴ Historian Andrew Gyory stated that Blaine "...single-handedly made racist attacks on Chinese immigrants an honorable act. His racist words in 1879 elevated the issue nationally from the streets of San Francisco to the Senate of the United States."⁴⁵

Bipartisanship loyalty during this Gilded Age era, in essence, preserved America's legacy of bigotry, whereupon discrimination against people of African, Mexican, and Chinese ancestry was commonly practiced. Historian Erika Lee stated that "[c]losing America's gates to various 'alien invasions' was additionally instrumental in articulating a definition of American national identity from which Americans learned to define American-ness [white privilege]."⁴⁶

Similar to methods used by the Puritans of New England and prior U.S. presidents to decimate both Native American and African peoples, Gilded Age politicians rallied public support to socioeconomically disempower Chinese people—regardless if they were born in the U.S. Although the gold bust, panic of 1873, job competition, and racism, provided an impetus to pass the 1882 Chinese Exclusion Act, Gilded Age politicians are liable for creating an anti-Chinese smoking mirror to conceal the truth from the American public. The Panic of 1873, for instance, actually began when the United States Government failed to regulate the oversupply of cotton, resulting with the bankruptcy of New York financial banker Jay Cooke and Company, high interstate taxes, foreclosures, falling farm prices, wage cuts, and high unemployment.⁴⁷

California became a hotbed for violence, where mobs of white vigilantes entered the city of San Francisco and mining encampments to lynch, rob, and torch the homes of the Chinese migrant laborers. Historians Judy Yung, Gordon Chang, and Him Lai stated that "[t]heir goal to drive the Chinese out of all areas of profitable employment and ultimately out of the country was finally realized with the help of opportunistic politicians who pressured Congress to pass the Chinese Exclusion Act," upon President Chester A. Arthur's signature on May 6, 1882.⁴⁸

Known as the "triumph of nativism" by some historians, the Chinese Exclusion Act of 1882 is noted for being the first immigration policy that denied entry to a particular ethnic group—under the notion that they "...endangered the good order of certain localities [white Americans]."⁴⁹ The Chinese Exclusion Act set future

immigration standards, resulting with the National Origins Act in 1924, which banned U.S. citizenship and restricted immigration to all Asiatic groups, as well as Eastern and Southern Europeans.⁵⁰ Only two percent of people from each nation gained entry into the U.S., which lowered yearly quotas from 358,000 to 164,000.⁵¹

In an effort to rebuild East Asian relations with China, the U.S. Congress, nevertheless, repealed the Chinese Exclusion Act by a narrow margin of 42-40.⁵² Signed into law by Franklin Delano Roosevelt on December 17, 1943, the Chinese Exclusion Act was finally nullified; however, Chinese immigration was still limited to only two percent per year.⁵³ The repeal was actually a conscious move by the U.S. to align with China during its war with Japan, in which. Congressman Walter H. Hudd stated that if the Chinese were not limited to a hundred and five immigration quota, Congress would have disputed the repeal.⁵⁴ This annulment helped the United States strengthen its East Asian policy objectives with China.⁵⁵ Roosevelt boldly stated:

It is with particular pride and pleasure that I have today signed the bill repealing the Chinese exclusion acts...An unfortunate barrier between allies has been removed. The war effort in the Far East can now be carried on with a greater vigor and a larger understanding of our common purpose.⁵⁶

Although the United States Government repealed the Chinese Exclusion Act of 1882, Chinese Americans continued to be discriminated against by a majority of white Americans. Social equality for Chinese Americans came, to an extent, during the Civil Rights Movement, when the Immigration Act of 1965 replaced the 1924 National Origins Act. This new policy granted open immigration quotas and U.S. citizenship to Chinese Americans and other Asiatic groups,⁵⁷ as well as help initiate a new profound tolerance toward Americans of color.

As a result, Congress's passage of House Resolution 683 on June 18, 2012, expressed regret for its aggression against Chinese Americans during exclusion. However, the California Senate presented Joint Resolution No. 23 to Congress on August 28, 2014, petitioning them to formally apologize to Chinese Americans, as stipulated in Joint Resolution No. 23:

WHEREAS, It is important that the United States Congress make a formal and sincere apology for the enactment of the discriminatory laws that adversely affected Chinese Americans, so that democracy, justice, and equality for all of its citizens can be achieved, and to strengthen the diversity in the United States that contributes to the country's economic, cultural, technological, academic, and political growth; now, therefore, be it. Resolved by the Senate and the Assembly of the State of California, jointly, That the Legislature

requests Congress to adopt resolutions of apology to the Chinese American community for the enactment of the Chinese exclusion laws...⁵⁸

Chinese exclusion denotes a tragic story in U. S. history, in which Chinese people were falsely accused of taking jobs from whites, monopolizing commerce, and refusing to assimilate. In truth, Chinese people during this era actually contributed to the America economy; yet, they were disliked, robbed, beaten, and lynched by mobs of white workers. Job competition, decline in gold production, and the panic of 1873, indeed, helped stir racist views against Chinese; yet, politicians are mainly to blame for enacting the 1882 Chinese Exclusion act—via the use of racist speeches, newspapers, petitioning Congress, and Anglo American.

In closing, Chinese migrants arrived during the most turbulent period in U.S. history, when Manifest Destiny outlined a course of Anglo Saxon expansion, and the California Gold Rush sent an influx of bankers, businessmen, speculators, and fortune seekers into the western frontier. Although there were politicians who opposed Chinese exclusion, an overwhelming majority of Gilded Age legislators, such as Blaine, Bixley, Roach, and Gillespie, are clearly responsible for pushing Congress into enacting the 1882 Chinese Exclusion Act. These politicians used a xenophobic platform, similar to Puritan exceptionalism ideals, to falsely blame the Chinese for the nation's economic woes. The Chinese who entered the U. S. during the nineteenth century wanted an equal chance to succeed; yet, they soon learned that only Anglo Saxons were granted this privilege. The United States can no longer mask the bigotry beneath its nation's gilded freedom, because many foreign nations now know about the atrocities imposed upon Americans of color. Historian Godfrey Hodgson best described the fate of American prejudice, by stating:

The point at which the principles of American democracy are reduced to mere boasting and bullying, justified by a cynical "realism," is the point at which the practice of American democracy, at home as well as abroad, is in mortal danger. It is also the point at which the best of the exceptionalism in the American tradition has been corrupted into the worst. We can only hope that mortal danger will be avoided.⁵⁹

Therefore, it is imperative that the U.S. Government make a formal apology to the Chinese American community, because this courteous gesture would take the nation one step closer toward ensuring democracy for all Americans, regardless of one's ethnic origin, race, religion, and gender, to enjoy.

Notes

- ¹ "The Chinese Exclusion Act, 1882," Our Documents. com, Last modified, 1989. <http://www.ourdocuments.gov/doc.php?flash=true&doc=4>
- ² Ibid.
- ³ Godfrey Hodgson, *Myth of American Exceptionalism* (New Haven: Yale University Press, 2009), 1
- ⁴ Ibid, 12.
- ⁵ Alvin M. Josephy Jr., *Now That the Buffalo's Gone: A Study of Today's American Indians* (Oklahoma: University of Press, 1989), 61.
- ⁶ John O'Sullivan, *Manifest Destiny* (Civics on Line, 1839). <http://www.civics-online.org>
- ⁷ Chris J. Magoc, *Imperialism and Expansion in American History: A Social, Political, and Cultural Encyclopedia and Document Collection* and David Bernstein (ABC-CLIO: Santa Barbara, 2015), 607.
- ⁸ Russell Thornton, "Cherokee Population Loses During the Trail of Tears: A New Perspective and a New Estimate," *Ethnohistory* 58, no 4 (Autumn 1984): 289, accessed February 18, 2016, <http://www.jstor.org/stable/482714>
- ⁹ Rodolfo Acuña, *Occupied America: The History of Chicanos* (New Jersey: Pearson, 2015) 51.
- ¹⁰ Ibid, 53.
- ¹¹ John Soennichsen, *The Chinese Exclusion Act of 1882* (Santa Barbara: Greenwood, 2011), 7-8.
- ¹² Judy Jung, Chang H. Gordon, and Lai H. Mark, *Chinese American Voices: From the Gold Rush to the Present* (Los Angeles: University of California Press, 2006), 1-2.
- ¹³ John Soennichsen, *The Chinese Exclusion Act of 1882* (Santa Barbara: Greenwood, 2011), 8.
- ¹⁴ Ibid, 8.
- ¹⁵ Ibid, 15.
- ¹⁶ Rodolfo Acuña, *Occupied America: The History of Chicanos* (New Jersey: Pearson, 2015), 137.
- ¹⁷ Ibid, 137.
- ¹⁸ John Soennichsen, *The Chinese Exclusion Act of 1882* (Santa Barbara: Greenwood, 2011), 15-16.
- ¹⁹ Yucheng, Qin, *The Diplomacy of Nationalism: The Six Companies and China's Policy Toward Exclusion* (Honolulu: University of Hawaii Press, 2009), 24-26.
- ²⁰ Judy Jung, Chang H. Gordon, and Lai H. Mark, *Chinese American Voices: From the Gold Rush to the Present* (Los Angeles: University of California Press, 2006), 9-10.

- ²¹ Yucheng Qin, *The Diplomacy of Nationalism: The Six Companies and China's Policy Toward Exclusion* (Honolulu: University of Hawaii Press, 2009), 24-26.
- ²² *Ibid*, 27.
- ²³ Andrew Gyory, *Closing the Gate: Race, Politics, and the Chinese Exclusion Act* (Chapel Hill: University of North Carolina Press, 1998), 7.
- ²⁴ *Ibid*, 7.
- ²⁵ *Ibid*, 7.
- ²⁶ *Ibid*, 58-59.
- ²⁷ *Ibid*, 58-59.
- ²⁸ John Soennichsen, *The Chinese Exclusion Act of 1882* (Santa Barbara: Greenwood, 2011), 16-17.
- ²⁹ *Ibid*, 27.
- ³⁰ Andrew Gyory, *Closing the Gate: Race, Politics, and the Chinese Exclusion Act* (Chapel Hill: University of North Carolina Press, 1998), 18.
- ³¹ Andrew Gyory, *Closing the Gate: Race, Politics, and the Chinese Exclusion Act* (Chapel Hill: University of North Carolina Press, 1998), 8.
- ³² *Ibid*, 1.
- ³³ John Soennichsen, *The Chinese Exclusion Act of 1882* (Santa Barbara: Greenwood, 2011), 124.
- ³⁴ *Ibid*, 124.
- ³⁵ Yucheng, Qin, *The Diplomacy of Nationalism: The Six Chinese Companies and China's Policy Toward Exclusion* (Honolulu: University of Hawaii Press, 2009), 60.
- ³⁶ *Ibid*, 60.
- ³⁷ *Ibid*, 60.
- ³⁸ *Ibid*, 59.
- ³⁹ John Soennichsen, *The Chinese Exclusion Act of 1882* (Santa Barbara: Greenwood, 2011), 61. The Zhonghua Huiguan (Chinese Six Companies) was a conglomeration of businessmen from smaller district associations (*huiguan*), who provided jobs and social services to Chinese migrants.
- ⁴⁰ *The Supreme Court Reporter: Volume 16* (St. Paul: West Publishing Company, 1896), 1147.
- ⁴¹ Andrew Gyory, *Closing the Gate: Race, Politics, and the Chinese Exclusion Act* (Chapel Hill: University of North Carolina Press, 1998), 3-4.
- ⁴² *Ibid*, 3-4.
- ⁴³ "Chew Heong v. United States: Chinese Exclusion and the Federal Courts" *Federal Judicial Center*, accessed March 29, 2016, http://www.fjc.gov/history/home.nsf/page/tu_exclusion_bio_companies.html
- ⁴⁴ Andrew Gyory, *Closing the Gate: Race, Politics, and the Chinese Exclusion Act* (Chapel Hill: University of North Carolina Press, 1998), 69, 81.
- ⁴⁵ *Ibid*, 4.
- ⁴⁶ Erika Lee, *At America's Gates: Chinese Immigration during the Exclusion Era, 1882-1943* (Chapel Hill: The University of North Carolina Press, 2003), 22.
- ⁴⁷ "Chinese Exclusion Act: 1882." *Our Documents.com*, Last modified 1989. <http://www.ourdocuments.gov/doc.php?flash=true&doc=4>
- ⁴⁸ *Ibid*.
- ⁴⁹ "The Panic of 1873" (*American Experience*) Last modified 2013. <http://www.pbs.org/wgbh/american-experience/features/general-article/grant-panic/>
- ⁵⁰ "The National Origins Act of 1924: Immigration and Definition," Study.com, last modified 2016, accessed February 19, 2016, <http://study.com/academy/lesson/the-national-origins-act-of-1924-immigration-definition.html>
- ⁵¹ *Ibid*.
- ⁵² Xiaohua Ma, "A Democracy at War: The American Campaign to Repeal Chinese Exclusion in 1943" *The Japanese Journal of American Studies*, no. 9 (1998):138, accessed February 15, 2016.
- ⁵³ *Ibid*, 138.
- ⁵⁴ *Ibid*, 138.
- ⁵⁵ *Ibid*, 138.
- ⁵⁶ Ma, 121.
- ⁵⁷ Ma, 139.
- ⁵⁸ Senate Joint Resolution No 23, Chapter 134: *Relative to Chinese Americans in California, August 28, 2014, California Legislative Information*, (California, 2014), http://leginfolegislature.ca.gov/faces/billNavClient.xhtml?bill_id=2013201405JR23
- ⁵⁹ Godfrey Hodgson, *The Myth of American Exceptionalism* (New Haven: Yale University Press, 2009), 190.

Bibliography

- Acuña, Rodolfo. *Occupied America: The History of Chicanos*. New Jersey: Pearson, 2015.
- "Chew Heong v. United States: Chinese Exclusion and the Federal Courts." *Federal Judicial Center*. Accessed March 29, 2016. http://www.fjc.gov/history/home.nsf/page/tu_exclusion_bio_companies.html
- "Chinese Exclusion Act, 1882." Our Documents.com. Last modified 1989. <http://www.ourdocuments.gov/doc.php?flash=true&doc=47>
- Gyory, Andrew. *Closing the Gate*. Chapel Hill: University of North Carolina Press, 1998.
- Jung, Judy, Chang H. Gordon, and Lai H. Mark. *Chinese American Voices: From the Gold Rush to the Present*. University of California Press, 2006.
- Lee, Erika. *At America's Gates: Chinese Immigration during the Exclusion Era, 1882-1943*. Chapel Hill: The University of North Carolina Press, 2003.
- Ma, Xiaohua. "A Democracy at War: The American Campaign to Repeal Chinese Exclusion in 1943." *The Japanese Journal of American Studies*, no. 9 (1998):121.
- Magoc, Chris J. and David Bernstein. *Imperialism and Expansion in American History: A Social, Political, and Cultural Encyclopedia and Document Collection and David Bernstein*. ABC-CLIO: Santa Barbara, 2015, 607.
- Qin, Yucheng. *The Diplomacy of Nationalism: The Six Companies and China's Policy Toward Exclusion*. Honolulu: University of Hawaii Press, 2009.
- Railton, Ben. *The Chinese Exclusion Act*. New York: Palgrave Macmillan, 2013.
- Senate Joint Resolution No 23, Chapter 134: *Relative to Chinese Americans in California, August 28, 2014. California Legislative Information*. California, 2014. http://leginfolegislature.ca.gov/faces/billNavClient.xhtml?bill_id=2013201405JR23
- Soennichsen, John. *The Chinese Exclusion Act of 1882*. Santa Barbara: Greenwood, 2011.
- "The National Origins Act of 1924: Immigration and Definition." Study.com, last modified 2016. Accessed February 19, 2016. <http://study.com/academy/lesson/the-national-origins-act-of-1924-immigration-definition.html>
- "The Panic of 1873," (*American Experience*). Last modified 2013. <http://www.pbs.org/wgbh/americanexperience/features/general-article/grant-panic/>
- The Supreme Court Reporter*. Vol 16. St. Paul: West Publishing Company, 1896.
- Thornton Russell. "Cherokee Population Loses During the Trail of Tears: A New Perspective and a New Estimate." *Ethnohistory* 58, no 4 (1984): 289, accessed February 18, 2016. <http://www.jstor.org/stable/482714>

The Positive Impacts of Fairy Tales for Children

Leilani VisikoKnox-Johnson
English 345

Children's literature helps a young child make sense of what it is to be human and helps them understand the world around them. The fairy tale genre provides ways for children to receive important messages. Although there are some themes in fairy tales that are unrealistic, the overall effect is positive and offers fundamental elements for children's development. Based on the Jungian interpretation, fairy tales teach children how to deal with basic human conflicts, desires, and relationships in a healthy way; acquiring these skills can ultimately impact a child's health, quality of life, or even influence its values and beliefs in the future. The Jungian interpretation, developed by psychotherapist Carl Jung, is a symbolic approach that creates a dialectical relationship between consciousness and the unconscious. Those who use the Jungian interpretation do not perceive therapy as a typical client-therapist relationship wherein the client is treated, but rather perceive themselves as guides to help another person delve into the unconscious. Jungian therapy, also called analytical psychotherapy, treats essentially all unconscious sources such as dreams, fantasies, daydreams, even paintings and drawings.

One of the central reasons that fairy tales are important is that they aid in child development. Fairy tales are often shaped to test children's initiative. Not only is reading the story essential, but having the child act out the story is also just as important for developing a child's consciousness and for his or her moral development. L.I. El'koninova was interested in children's mental development and the types of behavior they displayed when acting out a fairy tale. The experimental results from this study in Moscow drew the conclusion that a vivid enactment of an integral story plot becomes possible when a child not only intuitively understands that what happens in make-believe stories is in fact make-believe, but also believes in the reality of the story. It was found that younger children (ages 3-4) cannot play out the part of a story completely because for them it is too real; nor are 6-7-year-olds able to do this because for them the story is too make-believe. Therefore, an integral and vivid enactment of a story occurs at about the age of five, because at this age children are best able to establish a balance between their experience of the reality of the story and their experience of the make-believe quality of what takes place in the story and the performance when it is acted out. In make-believe performances the child acquires the experience of being a subject (becoming something or someone else), which comes to him or her as an internal picture of an initiative-taking action. A child develops initiative through overcoming behavioral

stereotypes and through restraining impulsive actions. Although it was concluded that children are able to test out initiative extensively at about the age of five, this does not mean that fairy tales are not important before this age. In fact, the vocabulary characteristics of the semantics of a fairy tale begin to be part of a child's play performance at around age four (El'koninova 85-86). These findings are important, because it provides crucial information about developing children and how fairy tales are a valid part of learning, especially because there is a specific age in which children can differentiate reality versus make-believe.

Fairy tales not only aid in child development, but they also offer a rich source of material to draw from in a therapeutic manner. This provides a great way of accessing children's imagination by exploring memories of fairy tales and using them to address painful or unsettling issues in a nonthreatening, playful manner. For instance, the struggle between good and evil is a frequent theme among fairy tales all around the world. In a therapeutic sense, this can be interpreted as internal conflict or the tension between the id and ego. Many children and young people may suffer from internal conflict whether it is from bullying, teasing, problems at home, etc. Analyzing fairy tales where internal conflict is a major theme can help the therapist determine ways to help his or her client. For example, victims of abuse or neglect experience the triumph of evil over good; this is usually the other way round when it comes to fairy tales. Enabling a young person to identify with a fairy tale or allowing them to make up their own version could be a useful means of unlocking feelings of mistrust or guilt (Walker 81-84). This can be better appreciated through the analysis of a project titled "A Fairy Tale Workshop in a Pediatric Oncology Ward." This workshop is part of a more complex intervention at a Pediatric Oncology and Hematology Ward in Naples, Italy, which provides treatment for children suffering from cerebral neoplasia. An ill child is often unable to express his or her anxieties and ask for explanations about the situation that he or she is experiencing (Adamo 263).

In the Italian study, children were offered the opportunity to get in touch safely with danger and death anxieties through the use of tale-telling. For example, *The Three Little Pigs* provides children a way of exploring the solidity and resistance of the intrapsychic container; the child's own internal *house* (Adamo 267). In this story each pig builds a house; one made of straw, one made of sticks, and the third made of bricks. The house resembles the child's own body and the big bad wolf resembles the sickness. The ill children experience little control, if any over their body due to their illness and this story helps them face their fears and explore their anxieties. In the story, the houses made of straw and sticks are too weak to defeat the wolf. This is similar to what the children are feeling within their own bodies; therefore they can relate their own experience to the story.

It is important to note that each child identifies with different characters, according to the anxieties that he or she is coping with and his or her defensive strategies. For instance, after listening to *Little Red Riding Hood*, Giacomo, who is three years old, imitates the wolf and draws it with its mouth wide-open. The identification with the bad wolf in the story enables the child to express his aggression towards a situation, which he fears may overwhelm him. In contrast, Marco, who is seven years old, reacts to the same fairy tale in a different way. He draws a wolf which is the size of an ant, showing in this way his attempt to deny the seriousness of his condition. In these examples, the children have read the same fairy tale, but their reactions are quite different. On the other hand, two children might read different books, but they both may have similar reactions. For instance, after listening to Hans Christian Andersen's *The Ugly Duckling*, Vittorio (10 years old) makes several attempts to draw a head. He never seems satisfied with the result and keeps on rubbing it out. The sense of dissatisfaction and rejection of the drawing may have a wide range of readings, such as Vittorio's difficulty in accepting his own body following the transformations caused by the illness. In *The Ugly Duckling*, the duckling is different from the others and no one wants to be around him, because they think he is ugly. The duckling feels helpless and unhappy. But when he looks at his reflection in the pond he finds that he is beautiful. Vittorio's continuous rubbing out of the drawing seems to express his wish to make his ill head magically disappear, and to substitute it with a new undamaged one. *The Ugly Duckling* is a story about accepting oneself. As children endure the illness that is taking control of their body, stories like this can help them find acceptance within themselves; just like the duckling did. Another boy named Alfredo also seems to be expressing similar anxieties about the deterioration of his body when, while doing a drawing related to the fairy tale *Puss in Boots*, he tries to rip up the sheet of paper and writes in one corner "throw away in the rubbish" (Adamo 268-269). The behaviors of these children show that they can utilize a fairy tale in order to express his or her anxieties, fears and defenses based on their own experiences.

A third example of a fairy tale, which children can identify with, is *Snow White and the Seven Dwarves*. After reading the story the children seem alarmed by the character of the stepmother who carries out attacks on Snow White. None of the children draw the stepmother but instead depict both Snow White and the castle in which she lives. For the children, the stepmother might reflect their illness or perhaps the face of a particular doctor, nurse or even their parents who "torment" the children's bodies by putting them through painful treatments. The fairy tales used in this workshop allow children to express their feelings of aggression towards their illness, their parents, and/or the medical staff, without fear of retaliation. At times, the need to rebel against the constrictions imposed by the illness and by

hospital regulations drives the children to identify with characters who are bad or undisciplined. It is critical that children are able to release the anxieties and fears that come with illnesses. Even when the child identifies with the negative characters in the fairy tale, the child can learn to cope with threats, conflicts and their anxieties linked to the illness, and this has a positive impact on their quality of life (Adamo 268, 270).

In contrast, some people may think of fairy tales as being dangerous for children and young persons. For example, psychotherapist Susan Darker-Smith's research showed that girls who hear fairy tale classics such as *Cinderella* and *Beauty and the Beast* when they are children are more likely to stay in destructive relationships as adults. Many young children who grow up in homes where they are read fairy tales often identify with the book characters as role models. Opponents say that these characters provide them with a template for future submissive behavior. Darker-Smith interviewed domestic violence victims in Leicester, UK who repeatedly told her that they believe "if their love is strong enough they can change their partner's behavior" and many of them also identify with the characters in the stories (Darker-Smith 35). Thus, opponents could argue that victims of abuse who identify with fairy tales such as *Cinderella* or *Beauty and the Beast* are at risk for staying with an abusive partner if they believe that their love can change their partner's abusive behavior. Some opponents, such as Patsky Skeen et al., might also argue that *Cinderella* gives children and young people a negative connotation about stepfamilies. The stepmother and stepsisters who give Cinderella the dreadful household tasks and even try to prevent her from receiving the attention of a young prince are portrayed as evil, wicked, and coldhearted. Skeen argues that *Cinderella* adversely affects popular views about stepfamilies. The relationships portrayed in this fairy tale misrepresent the kinds of relationships that exist among many stepfamilies today. Stepfamily relationships are different from primary family relationships, but the chances for success are not as grim as they were in *Cinderella*. The nature of the stepfamily network is different from the unbroken family network and the transition from an unbroken family to a stepfamily is not an easy one, however, it is possible for most blended families to manage their lives with reasonable success. Although, the Cinderella fairy tale might cause children to misunderstand stepfamilies, this misinterpretation can be reduced with good communication and good role modeling (Skeen et al. 121). For example, if a young child has a new stepmom and/or stepsiblings and they have recently heard or read the story of Cinderella, they might perceive their stepfamily as being evil. Thus, it is important to be in tune with what books they are reading and the life situations they are experiencing, especially with younger children because they are especially susceptible to believing what they read or hear. It would also be beneficial for parents to talk with their child

about their readings.

Although opponents argue that fairy tales may be dangerous in terms of their underlying messages, the overall impact that fairy tales have on children's lives does more good than harm. A positive of fairy tales is they can help with disorders that most people wouldn't think are treatable by "reading a book," but in fact have positive effects. For instance, at the age of puberty, a young girl's confidence plummets and eating disorders often develop around this time. Eating disorders are developmental dysfunctions that occur when one's self is abandoned. People suffering from an eating disorder will become obsessed with what they eat, how much they eat, and focus their thoughts to one area: food. A study was done to show that fairy tales offer possible solutions for young people struggling with transitional problems and anxieties by allowing the eating-disordered client to project his or her desired identity onto the fairy tale and draw self-control from the process (Hill 584). Often what the clients cannot say about themselves, they can instead verbalize about fairy tale characters; in other words favorite fairy tales can function as mirrors of ourselves. In this study, one eating-disordered client stated that *Cinderella* was her favorite fairy tale because Cinderella overcame her social status. Used as a projective tool, this response would indicate that the client needed to overcome her sense of having an inferior status. She also stated that she liked how the animals helped Cinderella in the forest. Considering the client's response from a Jungian perspective, the forest scene is a representative of the unconscious. While, the animals are a metaphorical demonstration of the unconscious instinct to follow one's inner drive when reasoning fails. This means that the client was possibly projecting her own need to be supported and rescued through identification with Cinderella (Hill 585).

As part of this therapeutic process, the counselor should initiate opportunities for the client to connect parts of themselves to both the fairy tale characters and identified scenes in the fairy tale. This offers clients an opportunity to bond their sense of self, their anxieties, and their developmental fears by reflecting the story onto themselves. Transference often occurs in eating-disordered clients when unresolved self-control is directed at significant others. Transference is the redirection of feelings and desires (especially of those unconsciously retained from childhood) toward a new object or person. The fairy tale therefore becomes a substitute object of transference in which the clients can transfer their anger and fears onto the fairy tale rather than another person or loved one (Hill 585). Facing these conflicts with the use of the fairy tale will help the clients with their own problem resolution because in the process of helping the fairy tale character out of the conflict in the story, clients are also creating a method to rescue themselves. Thus, if connection is firmly established between the client and the fairy tale, the fairy tale figure (such as Cinderella) becomes a powerful tool for the counselor to use as a

motivational force (Hill 586). To put it briefly, the client can learn to identify and adopt resolutions to problems such as eating disorders with the use of fairy tales.

Not only do fairy tales help children in hospitals with illnesses and young adolescents struggling with eating disorders, but they also have an influence on adults later in life based on what stories they read as a child. One study examined 264 students (80 men and 184 women) in the Educational Psychology sequence at Louisiana State University. The participants were asked to summarize their favorite childhood story, to report the circumstances of first encountering it, and to compare past and present impressions of it. The fairy tale category included the old, anonymously-composed folk tales, fables, myths, and epics, like *Little Red Riding Hood*, *The Grasshopper and the Cricket*, *Jason and the Golden Fleece*, as well as the so-called "new tales of magic" such as *The Wizard of Oz*, *B'r'er Rabbit*, and *Little Black Sambo*. The results showed that more than half of the women's preferences were fairy tales such as *Cinderella* (chosen by 32) and *Snow White and the Seven Dwarfs* (chosen by 17). Less than a third of the men named fairy tales and there was no one fairy story as popular with men as there was with women. It was also found that the male selections showed a contrasting taste for stories in which the chief characters were male or, sometimes, animal, as in *Jack and the Beanstalk* and *The Three Little Pigs* (Collier 98-99).

In the fairy tales most often chosen by the women, the heroines like Cinderella and Snow White tend to be naive, helpless, and persecuted by an older woman like a wicked stepmother, witch, or bad fairy. Rather than through their own actions, they were protected from their persecutors by unusual agents such as a fairy godmother, a good fairy, or dwarfs. Lastly, because of their beauty, virtue, or suffering, they were rescued by a prince with no other apparent function other than to rescue the damsel in distress and find true love. Furthermore, men chose fairy tales about half as often as women. Men usually selected tales with a dominant male or one that had animal characters who were threatened by giants or by impersonal physical dangers. In fact, when an older woman was present, she was likely to be benign or helpful as in *Jack and the Beanstalk* where the giant's wife protects Jack. The resolutions in the stories chosen by males were also less passive, less magical, and there was less physical attraction and suffering than those in the women's stories. Also, compared to the fairy tales that women generally chose the outcomes were achieved through physical daring, strength, or ingenuity, as in *The Gingerbread Man*, *Pinnocchio*, *Jason and the Golden Fleece*, *Robin Hood*, *The Story of Roland*, and *Hansel and Gretel*. These results demonstrate a major sex difference (Collier 99). Several factors might account for this sex difference such as the cultural emphasis on feminine passivity-dependence and on masculine activity-independence. Another factor could be of a greater cultural emphasis on "realism" for men than

for women; therefore men might have had a greater tendency to forget or conceal any interest in the stories of open make-believe. It can be concluded that the types of stories preferred and the manner of reporting them appear to reflect cultural sex-role expectancies.

In closing, children who are exposed to fairy tales can benefit greatly from them. Fairy tales are an important part of a child's development, especially in terms of their consciousness and moral development. On another note, counselors and therapists can use fairytales as a means of allowing children with illnesses to cope with their anxieties. It should be noted however, that those who are not trained and are inexperienced in treating persons should not do so. In those cases, one could make a positive contribution to recovery by making accurate referrals and providing educational assistance. Children usually don't know how to deal with basic human conflicts, desires, and relationships. Fairy tales offer a healthy way of dealing with these conflicts and finding a resolution to them, as demonstrated with eating-disordered patients. The sex differences seen in Collier's study demonstrate a cultural norm typically displayed among women and men. Sex differences are often learned in early childhood and this could have an impact on them later in life whether it is negative or positive. As a counselor or therapist, utilizing valuable tools such as fairy tales can have a major impact on children's health, their quality of life, or even influence their values and beliefs in the future. Thus, fairy tales provide a way of expressing oneself within the confines of a text and a story and helps one reach a resolution in times of conflicting states of mind. These situations are intrinsic to the individual's emotional and social development which can represent complex problems or inhibiting obstacles.

Works Cited

- Adamo, Simonetta M. G.Serpieri, Serenella
AdamoDe Falco, RaffaellaDi Cicco, TeresaFoggia,
RaffaellaGiacometti, PatriziaSiani, Gerarda. "Tom
Thumb in Hospital: The Fairy Tale Workshop in
a Paediatric Oncology and Haematology Ward."
Psychodynamic Practice 14.3 (2008): 263-280.
Psychology and Behavioral Sciences Collection.
Web. 22 July 2015.
- Collier, Mary J., Gaier, Eugene L. "Adult Reactions to
Preferred Childhood Stories." *Child Development*
29:1 (1985): 97-103. Psychology and Behavioral
Sciences Collection. Web. 22 July 2015.
- El'koninova, L.I. "Fairy-Tale Semantics in the Play of
Preschoolers." *Journal of Russian & East European
Psychology* 39.4 (2001): 66. Psychology and
Behavioral Sciences Collection. Web. 28 July 2015.
- Darker-Smith, Susan. "Fairy tale Dangers." *Counselling &
Psychotherapy Journal* 16.4 (2005): 35. Psychology
and Behavioral Sciences Collection. Web. 22 July
2015.
- Hill, L. "Fairy Tales: Visions for Problem Resolution
in Eating Disorders." *Journal Of Counseling &
Development* 70.5 (1992): 584. Psychology and
Behavioral Sciences Collection. Web. 22 July 2015.
- Skeen, Patsy, Covi, Robert B.Robinson, Bryan E.
"Stepfamilies: A Review of the Literature with
Suggestions for Practitioners." *Journal of Counseling
& Development* 64.2 (1985): 121. Psychology and
Behavioral Sciences Collection. Web. 22 July 2015.
- Walker, Steven. "Young People's Mental Health:
The Spiritual Power of Fairy Stories, Myths and
Legends." *Mental Health, Religion & Culture* 13.1
(2010): 81-92. Psychology and Behavioral Sciences
Collection. Web. 22 July 2015.

Sea Turtle Energetics

Christina Wine
English 225

Introduction

Energetics is a very important field of study in that it can determine the amount of usable energy in a given source (e.g. food or residual yolk) and comparing it to energy expended by the animal, the requirements of the animal can be calculated. Along with growth and travel, large amounts of energy go into reproduction and maintaining homeostasis, the steady state organisms work to achieve in order to survive within certain conditions (Encyclopaedia Britannica 2015). For sea turtles, this includes staying warm in relatively cold water.

Hawaiian Hawksbills

Hawksbill turtles were red-listed by the International Union for the Conservation of Nature by reason of an observed 80% population decline (Meylan and Donnelly 1999). Forage studies have shown that Hawaiian hawksbills eat algae and sponges (Parker et al. 2009), but data is very limited. This study attempted to lay some baseline for population calculation and tracking. The hypothesis guesses that sponge and algae will have equally low rates of energy density per unit dry mass and richer energy density for tunicates.

Leatherback metabolism

Out of all the recorded sea turtles in the world, the giant leatherbacks can range the furthest. They endure great temperature gradients from zero to thirty degrees Celsius and spend much of their time out at sea foraging for cold gelatinous prey. The temperature gradient isn't limited to latitudinal and longitudinal zones, but also spans the more sudden temperature difference between surface and sunless zones during deep food-hunting dives. Jones and Bostrom (2007) researched the way leatherbacks keep warm. They hypothesized that the giant reptiles use behavioral controls as a main strategy to maintain desired body temperature. Leatherbacks do have heat exchangers within their bodies like tunas do, which run hot blood from the core outward to the layer in contact with the surroundings to keep from overheating the internal organs or having their extremities get too cold, and so they are able to swim with cold flippers (and reverse the process to release heat from the large paddles when necessary). Their great mass (typical numbers are 300 to 500 kg for nesting adults) grants a large "thermal inertia," a "dampening effect" brought on by the relatively small surface area ratio of large bodies. (Jones and Bostrom 2007). This research team wanted to go beyond the purely physiological explanation proposed by "gigantothermy," which supposes that leatherbacks regulate homeostatic temperatures without a speedy metabolism by internal bodily means like circulation controls and insulation.

Recognizing that these turtles don't spend much time basking in the sun like land-based water reptiles (e.g. crocodiles and marine iguanas, which can actually haul out and escape water's high rate of conduction), Jones and Bostrom proposed that leatherbacks harvest the heat of friction to warm themselves as they drag their bulky bodies through the water. The team used the cast of an adult-size (340 kg) leatherback carcass to measure drag, leaving the majority of details like skin folds and wrinkles intact. They placed the cast in a wind tunnel and used a flow constant to convert wind velocity to water velocity. Modeling a turtle as a two-layered cylinder, they calculated a very livable gradient of body temperature to surrounding temperature correlating to increases in swim speed. Along with their personal research, Jones and Bostrom brought up another behavioral adaptation: that leatherbacks have been known to bring prey up to the surface before consuming it. This smart feeding behavior saves heat loss by warming the soon-to-be-ingested water. Thus the large latitudinal range, purely pelagic lifestyle, and cold, low-calorie diet of these giant creatures can be correlated by actions as well as physiology.

Another attempt to explain the calorie mysteries of leatherbacks was undertaken by Davenport and Balasz (1991). They suggested that rather than subsisting on calorie-poor mucopolysaccharides (jelly) alone, which would require an enormous daily intake and a lot of work to process, the turtles feed opportunistically on choice portions including prey such as tunicates or sea squirts and gonads. Although it is known that leatherbacks are able to eat the equivalent of 20 or 30 % of their body weight a day, this team helped flesh out theories of how such massive bodies are maintained on cold watery food. It would seem that rather than drinking gummy water, the leatherbacks are drinking a nutritious fish soup! Zooplankton studies show that pyrosomes alone, which are colonial tunicates, contain two to six times as much energy per gram dry mass as other jellies (Jones et al. 2012). This study will help to lay a baseline for pure (empty of rich prey) pyrosomes. It hypothesizes that the energy density of pyrosomes will surpass that of salps and other gelatinous material.

Hatchling metabolism

Researchers Edwin Price et al. (2007) designed a study to understand some of the mysteries of how leatherback and olive ridley hatchlings survive the harsh conditions of their early life. Leatherback, green, hawksbill, and loggerhead sea turtles are born underground, buried in a dark, hypoxic (low oxygen), hypercapnic (high carbon dioxide) environment with many times their height and weight in sand (up to a meter thick) piled above and siblings all around. The babies develop for 60+ days before emerging from the egg (Al-Bahry et al. 2009). After taking 4—7 days to climb through the gas-exchange-limiting beach sand matrix to the surface, they start an ocean life of diving

for food, shelter, and a road to travel on. Price et al. (2007) believe that babies start to hold their breath while still exhuming themselves from their sandy nests, reflecting adult diving turtle behavior rather than a separate “fossorial” (burrowing animal) mammal-like breathing strategy (Price et al. 2007). The team measured hatchling breathing rates using a closed chamber system. Distinctions became apparent between the two families. Unlike olive ridleys, leatherback breathing patterns didn't show much response to oxygen removal (the hypoxic stimulus). Leatherbacks also showed less response to a spike in carbon dioxide (hypercapnic stimulus), possibly indicative of an adaptation to deeper nests and of the distinction of hunting styles (leatherbacks go diving in active search of food, olive ridleys “float and wait”). In general, hatchling respiratory behaviors reflected adult lifestyles, though on a smaller scale.

T. Todd Jones et al. (Jones et al. 2007) created a project to collect information about the “frenz[ie]d” first stage of growth and development. Jones and his team used residual yolk to fuel a voyage so important they can't stop to feed. This is the stage where hatchlings of all sea turtle species race to the sea and swim nonstop to enter the “nearshore” currents or gyres that can carry them around like pieces of living driftwood. Once turtles from the Chelonid family (including green turtle *Chelonia mydas*, olive ridley *Lepidochelys olivacea*, and Kemp's Ridley *Lepidochelys kempii*) catch that ride, they stay to forage “passively” for up to 10 years! (Leatherbacks stay away from shore for the long term, only coming in to nest (Jones et al. 2007)).

Jones et al. wanted to study the changeover from “frenzy” to “steady state” in terms of “metabolic cost.” They tracked movements of emergent hatchlings while swimming and while quiescent. Determination of resting, swimming, and maximum metabolic rates aligned along species lines: olive ridleys are designed to “float and wait,” free to replenish their oxygen stores at the surface without risking forage opportunity, but leatherbacks are built for continuous swimming with the forelimbs. This study will attempt to provide some baseline data on residual yolk. The hypothesis is that yolk is high in energy, richer per unit dry mass than the hatchlings. As an alternative to respirometry, Hasley et al. (2011) used accelerometry to determine hatchling metabolism in loggerhead (*Caretta caretta*) and green turtle hatchlings, with significant results. Their results might help with conservation efforts, because the data is able to describe struggling turtles that get caught in fishnets.

Conservation efforts

Shillinger et al. (2008) produced an amazing project tracking migrating leatherbacks. The large (ninety percent over only twenty years) population decrease in leatherbacks due to human activities like fishing (leatherbacks are often killed as bycatch), land occupation, and turtle-egg harvesting has spurred on

recent conservation research. The researchers' dataset of positions from satellite trackers on leatherbacks allowed a map to be formed. The positional plot showed a “migration corridor” traced by adults heading to and from nest sites and South Pacific Gyre foraging sites. This is great news for conservation because the more that is known about behavioral patterns, the more human restriction laws can be streamlined to fit the times and places where endangered turtles need them most.

Hart et al. (2015) conducted a similar study on green sea turtles (*Chelonia mydas*), which are less endangered but just as important. Because they are more abundant, they are easier to research, which might aid in saving other, rarer species of similar body and behavior. The team used mapping software to analyze the influence of humans on turtle pathways. Because laws do not follow turtles across political lines (e.g. from California to Baja California), international cooperation is needed.

A review by Wallace and Jones (2008) underlines the importance of metabolism research. The authors divide up the field into three categories: “energetics and energy budgets, diving physiology, and thermoregulation,” which can tell about nesting and reproductive behaviors and allow humans to predict population size. Quantifying the amount of energy in a given mass allows us to create efficient mass-related laws that can be justified to the legislative bodies who need to follow them. Knowing the distance baby sea turtles can travel on a given amount of residual yolk can help us track them. Knowing the amount of energy in a clutch of ready eggs helps us to calculate motherly needs and nesting season patterns. Knowing the amount of energy a leatherback turtle needs and comparing it to the energy in a jellyfish bloom allows us to calculate the length of time a seasonal marine protected area needs to stay open so that leatherback mothers can gather enough energy to reproduce and head away from extinction. Wallace et al. (2011) emphasizes the fact that all species of sea turtle range from Vulnerable to Critically Endangered (or Data Deficient, which might not be any better) and measures need to be taken to protect them.

Methods

Site Selection

This project did not involve collection, only processing. Because they are protected by law, turtle samples and their respective sites were limited to opportunistic collection of deceased animals. *Chelonia mydas* eggs and egg follicles were collected from the body of a nesting female recovered from the scene of an Oahu poaching incident. Hatchling samples were obtained from individuals who had died in the nest. Hawksbill diet items were received already dry, sent in from sampled hawksbill GI tracts from individuals around Hawaii. Gelatinous zooplankton samples were collected via plankton tows on research cruises around Hawaii and American Samoa. Pyrosomes and salps were

separated out from these frozen samples and analyzed. Additional pyrosomes extracted from the stomachs of lancetfish caught on Hawaii Longline Fishery hooks were also analyzed.

Hawksbill diet energetics

Roughly 0.5000 g of each dried sample was powdered, mixed with benzoic acid, and pressed into a pellet for combustion. If enough sample was present, replicates were obtained. Samples were also ashed in a muffle furnace at 600 degrees Celsius for 6 hours. If limited by mass, only one or the other was conducted.

Hatchling and egg energy density

Samples included residual yolk and bodies of *Eretmochelys imbricata* and *Chelonia mydas* hatchlings who had died of natural causes, and follicles and eggs extracted from a pregnant *Chelonia mydas* mother who was recovered from a poaching incident on Oahu. Eggs were dissected into shell, yolk, and albumen and dried in crucibles in a drying oven until a constant mass was reached. Hatchlings were kept whole for drying. Wet and dry masses were collected to determine percent total body water.

Once dry, samples were powdered with a Magic Bullet or mortar and pestle and stored in vials. Powdered samples were pressed into pellets using a pellet press and bombed in a Parr 1341 plain jacket calorimeter. Peak change in temperature was used to calculate the amount of calories present in a sample. Benzoic acid was used to aid combustion at first, but oily substances like yolk proved to ignite and burn completely even without a catalyst. Mass of sample in each pellet (corrected for benzoic acid, when applicable) was used to determine energy density in kilojoules per gram.

Dry, powdered samples were also burned in a muffle furnace to determine percent ash content. For some small (e.g. tiny amounts of residual yolk) samples, only ash content was determined. Bomb calorimetry was not conducted for samples under 500 milligrams, and ash was not conducted for sample under 200 milligrams.

Leatherback forage energetics

Samples included pyrosomes (*Pyrosoma*), salps (*Salpa*) from plankton tows conducted on research cruises. Wet samples were massed, measured, and dried in a drying oven until constant mass. Wet and dry masses were collected to determine percent total body water.

Once dry, samples were powdered using a mortar and pestle and stored in vials. Powdered samples were mixed with benzoic acid and pressed into pellets using a pellet press. Pellets were analyzed via oxygen bomb calorimetry using a Parr 1341 plain jacket calorimeter. Peak change in temperature was used to calculate the amount of calories present in a sample. The mass of sample in each pellet (corrected for benzoic acid) was used to determine energy density in kilojoules

per gram. Samples were also heated in a muffle furnace at 600 degrees Celsius for 6 hours to determine percent ash content.

Since most individual plankton did not make the 500 milligram cutoff for bomb calorimetry once dry, similar-looking pyrosomes and salps from the same tow were combined for calorimetry and sometimes for ashing. This dramatically decreased the number of data points, but was necessary. Not all samples had enough mass for both types of analysis.

Data and Results

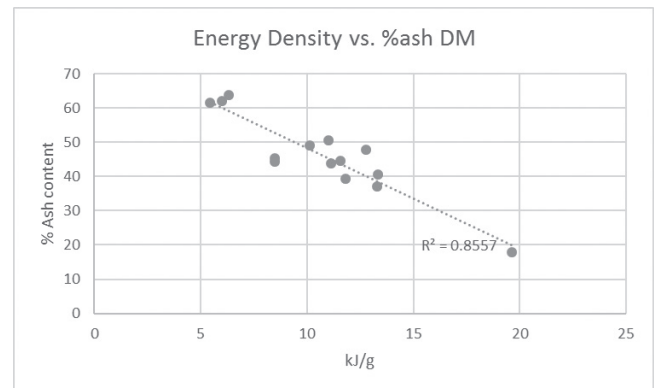


Fig. 1 Energy density vs. percent ash content of hawksbill diet item samples.

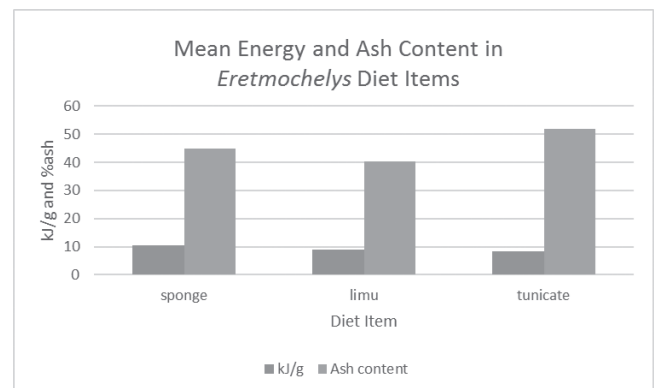


Fig 1-B Mean energy densities and percent ash per dry mass in hawksbill diet samples for various sponges (n= 19 for energy density analysis, n=24 for ash analysis), assorted species of seaweed (species, n= 17, n=14), and tunicates (n=8, n=7).

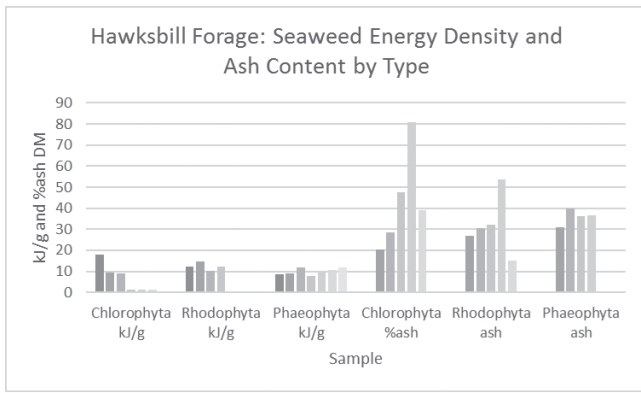


Fig 1-C A closer look at the analyzed seaweed samples, arranged by phylum. Each column represents one sample.

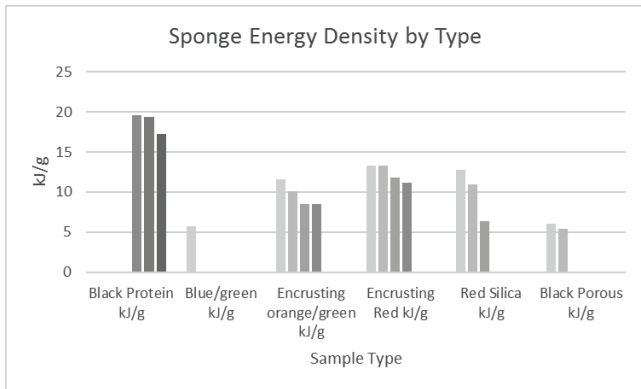


Fig. 2 Hawksbill Forage: Comparison of the energy density of some sponge samples (n=19)

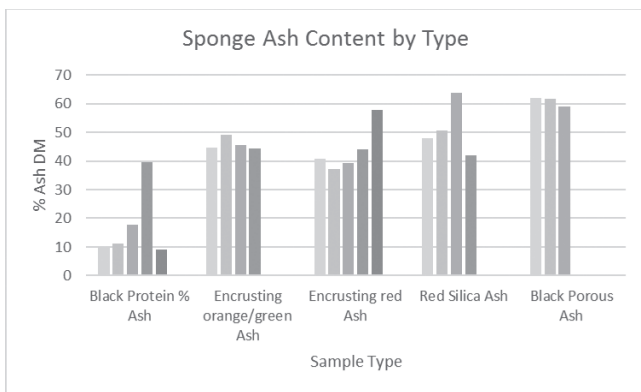


Fig 3. Hawksbill Forage: Ash content of the energy density of sponge samples (n=24).

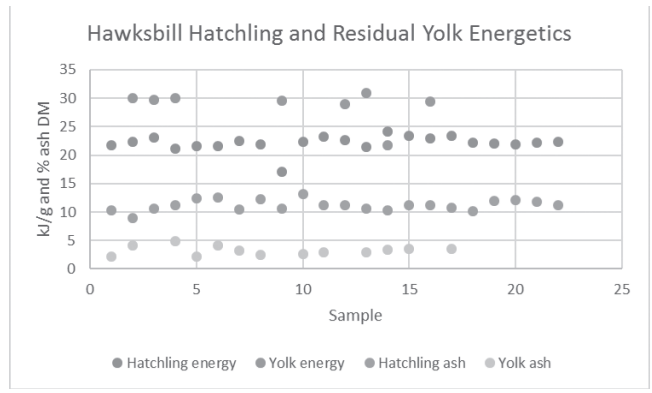


Fig. 5 Energetic analysis results for hawksbill hatchlings (n= 22) and residual yolk.

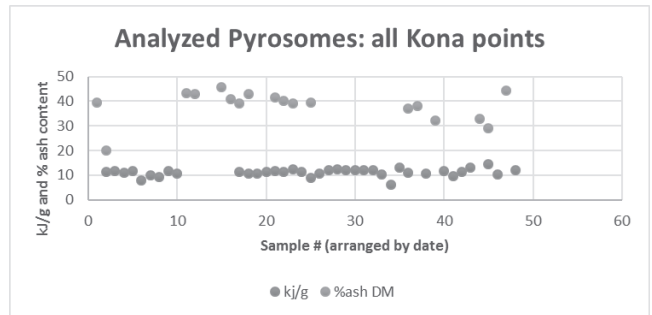


Fig. 6 Pyrosome analysis for samples from tows conducted on the Oscar Elton Sette OSE1104 cruise off the Kona coast. Due to low mass, some samples were only analyzed in one way (either ash only or calorimetry only).

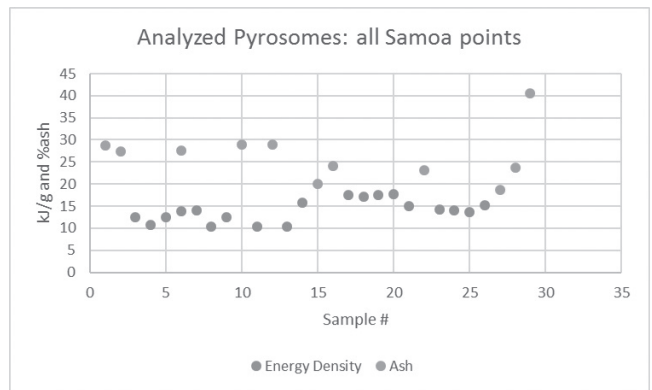


Fig. 7 Pyrosome analysis for samples from tows conducted on the Oscar Elton Sette SE1201 cruise in American Samoa waters. (n=29)

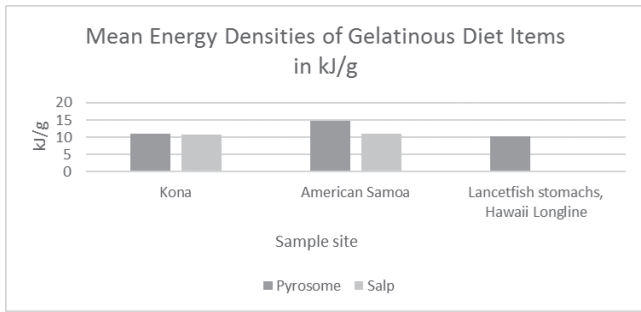


Fig. 8 Mean energetic values for pyrosomes ($n_{\text{Kona}} = 33$, $n_{\text{Samoa}} = 29$, $n_{\text{lancetfish}} = 3$) and salps ($n_{\text{Kona}} = 4$, $n_{\text{Samoa}} = 4$) in kJ/g.

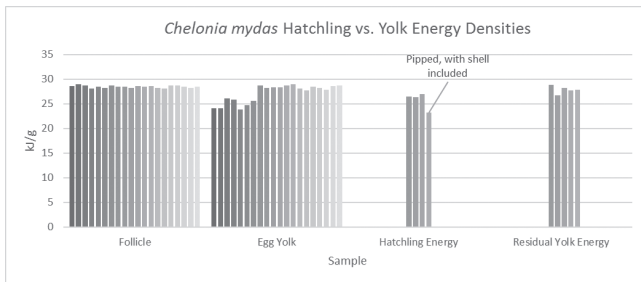


Fig. 9 Comparison of energy densities for the first 20 follicles, yolk from 20 dissected eggs, 4 hatchlings, and 5 residual yolk samples.

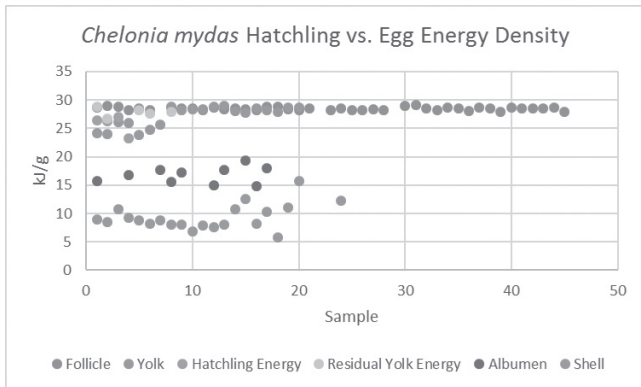


Fig. 10 Comparison of energy densities for green turtle hatchlings, follicles, dissected eggs, and residual yolk. Each point represents one sample. 20 eggs were analyzed, but not all albumen samples were analyzed because not all of them made the 500-milligram mark. The 21st shell point is comprised of unidentified shell fragments that “popped” out of their drying dishes in the oven. All follicle points are shown here.

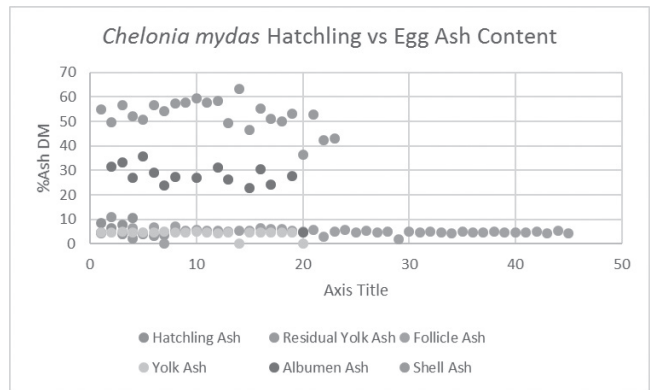


Fig. 11 Comparison of percent ash per dry mass of green turtle hatchlings, follicles, dissected eggs, and residual yolk. Each point represents one analyzed sample. 20 eggs were analyzed, but some albumen samples were not analyzed because of low mass. Shell points 21—23 represent 1 group of unidentified green eggshell fragments and 2 eggshells that were removed from pipped green hatchlings. All follicle points are shown here.

Discussion of Results:

Fig 1-B show that, contrary to the hypothesis, sponges are higher in energy than algae, and that tunicates are the lowest of the three. Also, Fig 1-C explains that not all algae are created equal in terms of energy density and ash content.

Hatchling and egg energy density shows that follicles and yolk contain roughly the same amount of energy per gram and a very low percent ash content (Figure 9). (Contrary to the hypothesis, green hatchlings contained roughly the same amount of energy as yolk in all its forms). However, the mother also needs to produce the higher-ash material of the shell and albumen (Figures 10 and 11). Assuming that indigestible materials must be provided by her body, she must gather enough water, minerals, and energy in the form of fat in order to produce both the yolk that goes almost completely into the offspring and the shell and albumen that are left behind. This is considerable even if some materials are able to come in with the water through the shell from the surrounding nest sand (Wallace 2009). More research is definitely necessary here. It is interesting and wonderful (and in agreement with the hypothesis) that in the case of the hawksbill, hatchlings appear to increase substantially in ash content and decrease in energy density as they develop from their yolk (Fig. 5).

Contrary to the proposed hypothesis, salps and pyrosomes are close in energy density (Fig 8). Many of the sampled salps were giant compared to the pyrosomes, and an opportunist might find salps easier to catch.

Conclusions and Future Research

It makes sense that hawksbills might be diet-limited if they are seeking sponges over algae. Hawaii might not have enough of the right kinds of sponges to support growth in its hawksbill population. More research is needed, particularly in the area of forage observations. Perhaps protections that would boost key types of sponges' populations could be enacted.

Although the sample size was small, this study suggests that salps are a food source to be considered! Not only are they relatively energy rich, but salps probably also contain prey items like bonus energy boosts.

For both hawksbill and green sea turtles, parental investment is serious. The amount of energy that must be stored up to lay a clutch of eggs is staggering. Only by more study can we determine the amount of fat that can be stored away as "excess" so that a female can successfully lay hundreds of healthy eggs and survive without starving to death or growing so weak that she dies. Even by the most generous rough estimates of the algae data points, one can conclude that it takes a great deal of algae to make a baby turtle. More data can be applied toward nesting prediction and food-based population modeling.

Acknowledgements

PYSO & NCCOS intern committees

Don Kobayashi for providing plankton samples

International Fisheries Program for providing Hawaii Longline Fishery samples

NOAA Turtle Research Program (T. Todd Jones, George Balazs, Kyle Van Houtan, Shawn Murakawa, Shandell Brunson, OGH) for facilitating samples of diet, egg, and hatchling turtles

DMWR American Samoa for facilitating collection of Hawksbill prey items

Southwest Fisheries Science Center for facilitating collection of leatherback prey items

Frank Parrish and Don Kobayashi for co-mentoring with T. Todd Jones

Chris Boggs, Keith Bigelow, and Frank Parrish for allowing the incredible opportunity to intern in their programs

References

- Al-Bahry S, Mhmoud I, Elshafie A, Al-Harthy A, Al-Ghafri S, Al-Amri I, Alkindi A (2009) Bacterial flora and antibiotic resistance from eggs of green turtles *Chelonia mydas*: An indication of polluted effluents. *Mar Pollut Bull* 58:720—725
- Bostrom BL, Jones DR (2007) Exercise warms adult leatherback turtles. *Comp Biochem Physiol – A Mol Integr Physiol* 147:323—331
- Davenport J, Balasz G (1991) “Fiery Bodies”—Are pyrosomas an important component of the diet of leatherback turtles? *Br Herpetol Soc Bull* 37:33—38
- The Editors of Encyclopaedia Britannica. (2015). Biology: Homeostasis. <http://www.britannica.com/science/homeostasis> Web. Accessed October 2015.
- Hart CE, Blanco GS, Coyne MS, Delgado-Trejo C, Godley BJ, Jones TT, Resendiz A, Seminoff J a., Witt MJ, Nichols WJ (2015) Multinational Tagging Efforts Illustrate Regional Scale of Distribution and Threats for East Pacific Green Turtles (*Chelonia mydas* agassizii). *PloS One* 10:e0116225.
- Hasley LG, Jones TT, Jones DR, Liebsch N, Booth DT (2011) Measuring Energy Expenditure in Sub-Adult and Hatchling Sea Turtles via Accelerometry. *PLoS One* 6:e22311
- Jones TT, Reina RD, Darveau C a., Lutz PL (2007) Ontogeny of energetics in leatherback (*Dermochelys coriacea*) and olive ridley (*Lepidochelys olivacea*) sea turtle hatchlings. *Comp Biochem Physiol – A Mol Integr Physiol* 147: 313—322
- Kittinger JN, van Houton KS, McClenachan LE, Lawrence AL (2013) Using historical data to assess the biogeography of population recovery. *Ecography (Cop)* 36:868—872
- Meylan, Anne B., Donnelly M (1999) Status justification for listing the hawksbill turtle (*Eretmochelys imbricata*) as critically endangered on the 1996 IUCN Red List of Threatened Animals. *Chelonian Conserv boil* 3: 200—224
- Parker DM, Balazs GH, King CS, Katahira L, Gilmartin W (2009) Short-Range movements of Hawksbill turtles (*Eretmochelys imbricata*) from Nesting to Foraging Areas within the Hawaiian Islands I. *Pacific Sci* 63:371—382
- Price ER, Paladino FV, Strohl KP, Santidrian TP, Klann K, Spotila JR (2007) Respiration in neonate sea turtles. *Comp Biochem Physiol – A Mol Integr Physiol* 146:422—428
- Read TC, Wantiez L, Werry JM, Farman R, Petro G, Limpus CJ (2014) Migrations of green turtles (*Chelonia mydas*) between nesting and foraging grounds across the Coral Sea. *PLoS One* 9:1—10
- Shillinger GL, Palacios DM, Bailey H, Bograd SJ, Swithenbank AM, Gaspar P, Wallace BP, Spotila JR, Paladino F V., Piedra R, Eckert S a., Block B a. (2008) Persistent Leatherback Turtle Migrations Present Opportunities for Conservation. *PLoS Biol* 6:e171
- Wallace BP, Sotherland PR, Tomillo PS, Bouchard SS, Reina RD, Spotila JR, Paladino F V. (2006) Egg components, egg size, and hatchling size in leatherback turtles. *Comp Biochem Physiol Part A Mol Integr Physiol* 145:524—532
- Wallace BP, Jones TT (2008) What makes marine turtles go: A review of metabolic rates and their consequences. *J Exp Mar Bio Ecol* 356:8—24
- Wallace BP, Dimatteo AD, Bolten AB, Chaloupka MY, Hutchinson BJ, Abreu-Grobis FA, Mortimer J a., Seminoff J a., Amorocho D, Bjorndal K a., Bourjea J, Bowen BW, Briseno Duenas R, Casale P, Choudhury BC, Costa A, Dutton PH, Fallabrino A, Finkbeiner EM, Girard A, Girondot M, Hamann M, Hurley BJ, Lopez-Mendilaharsu M, Marcovaldi MA, Musick J a., Nel R, Pilcher NJ, Troeng S, Witherington B, Mast RB (2011) Global Conservation Priorities for Marine Turtles. *PLoS One* 6:e24510



UNIVERSITY
of HAWAII
HILO



UNIVERSITY of HAWAII
HAWAII
COMMUNITY COLLEGE

THIS PUBLICATION IS AVAILABLE IN ALTERNATE FORMAT UPON REQUEST.
THE UNIVERSITY OF HAWAII IS AN EQUAL OPPORTUNITY AFFIRMATIVE ACTION INSTITUTION.