

CITY TECH WRITER

Volume 12 2017

**Outstanding Student Writing
From All Disciplines**

**Suzanne Miller & Megan Behrent
Editors**

Cover by: Kacper Zawadzki

Art Director: Lloyd Carr

About the Cover:

I've always been fascinated with shape, color and movement. In composing this piece, my goal was to experiment with these visual design elements to create a piece that captures the community of City Tech and its various writing disciplines. Our diverse community is constantly in motion and being shaped with each passing semester. These are the works of the students who shape our school.

—Kacper Zawadzki

New York City College of Technology
City University of New York

Preface

Welcome to *City Tech Writer*, Volume 12! Once again, our students have given us a range of experiences and ideas to contemplate. Chock full of intense and passionate pieces, this volume comprises essays that peer into the past, wrestle with the present, and glimpse the future: a human face is put on the refugee, the struggle of the PTSD victim is illuminated, and the Dreamer's journey is considered. Fake news, the rise of computerized sportswear, the struggle of the honey bee, and the accidental creation of a sci-fi kitten are just some of the ideas in store...

As we go to press, there are many people to thank: the faculty throughout the College who submitted extraordinary writing from their courses; Communication Design Department Chair Mary Ann Biehl for her support; Professor Peter Fikaris, whose communication design students produced many creative cover designs; Kacper Zawadzki, who designed the intriguing cover for this volume; and Ninoshka Mason and Vladimir Pinis, who were finalists for the cover art. We'd also like to thank all the design students who worked on posters for *City Tech Writer*'s "Call for Submissions."

A big thank you goes to Professor Lloyd Carr, the journal's Art Director since its inception, who coordinated the graphics and prepared the cover for production, and whose talent and guidance are deeply appreciated; the Reprographics Center's Lubosh Stepanek, who did a wonderful job of printing the cover, and Myrlene Dieudonne, Assistant Director of Campus Services, who coordinated this support. In addition, a special thanks goes to printers George Pompilio and Peter Pompilio, who produced the volume with skill and care and to Professor Steve Caputo, who helped with various aspects of the journal's production. We are grateful to President Russell Hotzler, Provost Bonne August, Associate Provost Pamela Brown, Dean Vazquez-Poritz, and Dr. Stephen Soiffer for their invaluable support and encouragement. A special thanks goes to the President's Executive Assistant Marilyn Morrison, to the Assistant to the Provost Imelda Perez, and to Administrative Coordinator Chioma Okoye for their help and guidance. We also want to thank the Literary Arts Festival staff (Rob Ostrom, Lucas Kwong, and Jennifer Sears), Patrick Corbett, and English Department Chair Nina Bannett for their support and assistance. Julia Jordan, Rodlyn Daniels, and Marlon Palmer in the Faculty Commons have been extremely helpful with various tasks, including the distribution of the volume. As always, we are grateful to English Department Office Assistants Lily Lam and Laura Kodet for being so generous with their time. Finally, we would like to give a hearty thanks to Professor Jane Mushabac, the founder of *City Tech Writer*.

We hope you enjoy this volume!
Suzanne Miller and Megan Behrent
Editors

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My Hero's Journey

Anastasia Haxhillari

Waking up on April 3, 1999 felt quite different. There was a high-pitched voice coming from the living room. I sat next to my mom on the couch while she was watching the news. There was breaking news that morning about the war in Kosovo. It was an armed conflict between the Republic of Yugoslavia and a Kosovar Albanian rebel group that was supported by NATO. There were 800,000 people expelled from Kosovo and thousands of people killed by Serbian authorities. The images were really shocking and dramatic. I got dressed and decided to go out and get my friend to go to school. As we were walking to catch the school bus, all of a sudden I saw a big line of buses filled with families from Kosovo trying to escape the war. I asked a bystander what was going on, and he told me about the massacre that had recently happened in Kosovo. People were spread out throughout my country trying to find shelter, food, and support from the locals.

I went to school that day feeling distressed and uneasy by the chaos that was present. When I went home after school, I found myself alone at home, thinking about the poor little kids who couldn't find their families. I could hear the sound of wailing children through the window as I was lying down in my room. I could hear people asking: Have you seen my father? Have you seen my sister? Those voices and the images from the news that I saw in the morning kept running through my head. All of a sudden, I heard a knock on my door. I was scared for a moment and took a glance through the magic eye to see who it was. At that time, we lived in a small house on the main street of the city. I saw a little girl, pale-skinned, with blonde hair. She was wearing a jean jacket and had a teary look. I decided to open the door and she approached me with an empty bottle, asking, in a frightened voice, for water. I immediately ran to the kitchen and grabbed a gallon of water and some fruit. I went back and as I gave everything to her, she smiled and gave me a big hug. We started talking to each other and she told me about all the suffering that she had experienced during her entire journey from Kosovo to Albania. Her house was burned. Everything they owned had been destroyed and loaded into trucks and driven away. My mom and dad came home early from work that day. As I introduced them to the girl, they started asking her about her family. She had an older brother and a twin sister. Her parents and her siblings were located in an abandoned building that was given as a shelter to all refugees.

It was getting dark and the temperatures were very low. We accompanied the girl to her parents. Her parents' clothes were covered in dust, ripped, and you could tell by their facial expressions that they had walked several miles and seemed exhausted. The kids' faces were swollen from constant crying. I could see in the girl's eyes no hope. They were strangers to us but they spoke the same language and had the same culture as us. I knew that my parents would do

something to help them. As I thought, my parents decided to open our house and welcome them in the family. Everyone in my family was worried about the current situation, but they decided to assist the Kosovar family and support them with anything they needed. My family made a lot of sacrifices by sharing our house, our food, and our clothes with them. Most importantly, the biggest sacrifice and adjustment was managing our time and creating an efficient household for all.

The Kosovar family stayed with us for six months. After the situation in Kosovo was stabilized and safe again, the family returned to their home. Saying goodbye to them was hard because we got so attached to one another since they became part of our family. We are still in touch with each other and we share the love of a big family. This is what life is all about. There is so much joy available when you know you're having a wonderful impact on someone's life. As far as I can tell, sharing, helping, and welcoming people in crises is an extremely rewarding feeling because this is what makes life meaningful.

Fake News Goes Viral

Michael Barkagan

How many people in the audience use Facebook? Congratulations, you have access to a propaganda tool enabling you to spread information faster than Hitler or Stalin could have dreamed.

The most popular social media platform in the world, Facebook has become a global agent for the democratization of information. The ease of disseminating information via the internet has given birth to a concerning amount of “echo chambers” in which persons give fake stories credibility simply by re-sharing, commenting on, and liking them. The impotence of democracy is the uneducated citizen. People lacking the tools to identify fake news tend to spread it: the effect is cyclical. According to the Pew Research Center, “At least 62% of all U.S. adults get at least some of their news from social media.” Furthermore, “among Millennials, Facebook is far and away the most common source for news about government and politics....17 points higher than the next most consumed source for Millennials (CNN at 44%)” (Wormald). Unlike with CNN, there is zero official accountability for the content posted to Facebook. Facebook users are vulnerable to manipulation because they are burdened with the responsibility of curating information. The 2016 election ignited a heated debate over whether social media sites like Facebook should play a role in censoring “fake news” articles from their sites. It is not strictly my opinion that outright censorship of fake news articles would be antithetical to Facebook's role as an “open platform for information.” This misinformation epidemic, however, cannot be left unchecked. Fictitious news stories shared on Facebook influence the opinions of their readers, therefore, social media platforms must attach a credibility rating to every news article posted and a warning label to all fake news articles. Reuters recently released an algorithm called Reuters News Tracer designed to “detect and verify breaking news on Twitter in real time” (Toor). It is imperative that Facebook focus its research and development (on which it spends over one billion dollars per year) towards creating a like algorithm designed to apply the suggested actions to its content.

How widespread of a problem is “fake news” really? Craig Silverman, Founding Editor of BuzzFeed News, conducted a study that concluded “fake news” outperformed real news stories on Facebook from August 2016 through the end of the election cycle in November. Silverman’s accompanying article states that the

20 top-performing false election stories from hoax sites and hyperpartisan blogs generated 8,711,000 shares, reactions, and comments on Facebook. Within the same time period, the 20 best-performing election stories from 19 major news websites generated a total of 7,367,000 shares, reactions, and comments on Facebook.

Are the advertising dollars generated from clicks the only reason for websites purporting fake news to exist? Can we ascertain a purpose other than

high revenue from this plethora of misinformation? Fake news is extremely partisan. Mark Hachman, Senior Editor of PC World, set out to find just how partisan it is. Mr. Hachman created two Facebook accounts using fresh Gmail addresses and profile name Chris Smith for a Hillary Clinton supporter & the profile name Todd White for a supporter of Donald Trump. For Smith, Hachman “Liked three people: Hillary Clinton, Joe Biden, and President Barack Obama. For White...Donald Trump, Mike Pence, and Newt Gingrich.” Hachman then sequentially Liked the “first, fourth, and seventh” recommended Facebook Pages that appeared each time for the accounts. Hillary’s “Smith ended up with Pages like ‘Exposing Facts to the Misinformed Viewers of Fox News,’ ‘Hillary Clinton, Democratic News,’ and ‘Rude and Rotten Republicans.’ Trump’s White landed “such gems” as ‘Hillary for Prison,’ ‘TRUMP TRAIN,’ and ‘I hate Hippies and their stupid light bulbs.’” Of the 41 posts recommended to Clinton’s Smith, 23 were slanted and none were fake whereas of the 129 posts recommended to Trump’s White, 79 were slanted and 10 were fake (Hachman).

According to Pew Research Center, “20% of social media users say they’ve modified their stance on a social or political issue because of material they saw on social media.” Even if just a small fraction of the people who read fake news in the last three months voted for Hillary Clinton, the election could have had a different outcome. Misinformation causes deterioration. It is paramount not only to the survival of our democracy but also to our immediate safety that we resolve the issue of fake news. Fake news alleging that former Clinton 2016 Campaign Manager, John Podesta, operated a child sex ring out of Comet Ping Pong in Washington, recently led a man to enter the pizzeria pointing a rifle at one of the employees. An incident like this shows how seriously people take fake news. Facebook needs to help its users distinguish between fact and fiction, opinion and illusion. A credibility score and a fake news warning will encourage people to question the veracity of what they read. I stress, there is no overnight solution to the problem of fake news. Fake news is here to stay and it is crucial that we as a society acknowledge it as the serious problem it is. I implore all of you to visit Change.org and sign Katrina Michie’s petition titled “Ask Facebook to Add Warnings to Fake News.” While a change such as this may stifle the spread of fake news to some extent, it will never come close to eradicating it. To truly overcome this crisis, America needs to appropriate more of its tax dollars to revitalizing the fledgling public education system. Educating our country is in effect immunizing it from fake news. Now that we’ve democratized information, let’s democratize knowledge.

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Our Era's Shadows

Edison Sanchez

Technology has undergone many changes in history and has helped shape the views and perceptions of the world today. This idea is closely related to Plato, who helped expose the idea that non-physical forms or ideas represent the highest form of reality, in contrast to thoughts and senses.

Technology today has become extremely influential in the decisions of our daily lives. It not only helps shape what we do as people, but it also has revolutionized the world. Technology has also become a chain in our lives, a concept that Plato once discussed in his notable work the “Allegory of the Cave,” which can be found in Book VII of the *Republic*. Before integrating both ideas of technology and Plato’s concept within the “Allegory of the Cave,” it is essential to understand what Plato’s viewpoint was. The “Allegory of the Cave” was to showcase that “we believe and think we see reality by watching the shadows on the wall” (Fragerotorio, 2016). It’s a story that depicts how individuals were chained inside a cave where the only reality they ever came across was mere shadows of items that passed through behind them, illuminated by a fire. Since those visuals were the only things that they ever came close to seeing, they took it as something real; they thought of it as the truth. We can closely relate this aspect of the story to the media, who play the role of the shadows— in other words, our puppeteers. The “Allegory of the Cave” essentially expresses the idea of learning and knowing through our senses of all things material.

When one individual managed to escape those chains, he became aware of the world of ideas, and it helped him to see his life as a part of the world of ideas. Plato explains his theory of forms “which explains that the world is made up of reflections of more perfect and ideal forms” (Percy, 2003). The theory explains that we must rely on our senses for everything we see in the material world, and everything we see in the material world is only a *reflection* of what something truly is. For example, take our exposure to the media. The relationship between the allegory and people with technology today is that, much like those individuals in the cave who believed everything they saw was the real thing, people nowadays believe anything the media has to tell them. Technology has resulted in the rapid rise of the media, and has introduced multiple ways to come across news stories. People have become so dependent on technology that it has become integrated into their lives; when we are provided information through the media, we aren’t precisely receiving the whole truth, but only sporadic parts. Even if we sense a falsehood, we still take what the media tells us as something true. The media becomes our shadows, and keeps us from encountering the truth.

In addition, the exposure and influence of the media has proven Plato’s observation regarding how we rely on our senses and exclude the true reality of what things are. Our senses have driven us to a state where we don’t accurately analyze any piece of news. Without being able to see the clear picture, we are driven to a false perception where the truth remains hidden.

A relatively good example would be the presidential election of 2016. When Donald Trump announced his run for president of the United States, he did it through remarks that many felt were true. Many believed everything they heard, including extremely negative comments regarding Mexicans and Muslims. When he described Mexicans, not only did he claim that they were “rapists” and “drug dealers,” he made many Americans believe that Mexicans were truly a problem for this country, and that Muslims have some type of involvement in terrorism, causing people to support a ban of Muslims from the United States. When such points are made through the media and it’s broadcasted all around the world, not only do people start discussing the idea, but they start believing that those points are legitimate. The media can lead to the circulation of false information.

Today, stereotypes chain us to a wall: information or remarks made regarding one’s ethnicity or background distorts our view of those groups. People often state that White people are very rich, Asians are really smart, Mexicans are all illegals, Black people are dangerous, and Muslims are terrorists, but this isn’t the case. Some of us work hard to show that we are different, but with false information shown to people, it gets hard. There are many focal points in the media that portray people as “shadows,” and this portrayal isn’t showing us the truth. The Trump campaign also saw the influence of media when countless fake stories and news items were spread about them. An example would be how the campaign believed “that a protester had been paid \$3,500 to go and protest at a Trump rally. And this fed into perceptions that the people who are against Trump were being paid by big interests” (Davies, 2016). The presidential election became our shadows because whether we were pro-Trump or pro-Clinton, we felt the need to believe negative information about the candidate we were opposing for the presidential seat, whether we thought the source was accurate or not.

Another example of believing the shadows produced by technology would be the Columbine Massacre. Eric Harris and Dylan Klebold were two teenagers who were driven to delusions that distanced them from seeing the real world. They were highly influenced by shooting games and it helped them develop a fantasy world that led them to bring the video game into our world. In April of 1999, they open fired and killed multiple people. Their exposure to violent video games led them to believe that their actions were justified, despite the fact that they were not. Plato’s “Allegory of the Cave” still applies to our world today; the media, government, technology, and even religion have become the shadows in our modern society. The media, in general, is influencing just about everyone in modern day society, using celebrities, false advertising, and anything else they can think of just to make sure that we do as they want.

Plato describes the world as if there are a lot of unknown things out there. At the beginning of our lives, we are told multiple things whether they are true or not. Because of distorted news and facts presented in the media, we are at the point where we are even more hidden from the truth in these times than we were decades ago. We have become the prisoners, and the media play the puppeteers in relation to the idea of the “Allegory of the Cave.” The media control every aspect of our lives, unless we stand up and break free and walk out of the cave and become aware of our surroundings. When we are able to think for ourselves and seek the true meaning behind everything without anyone guiding

us to what we ought to think, then we will be finally released from those chains, and we will uncover the truth behind everything. If we continue to pursue endeavors or our lives as if everything appears to be the truth, we are going to be locked inside the cave for a long time. Much like Plato indicated, if we work together, we can set ourselves free and witness the true light. Plato once stated that the light can be blinding, but this is because the revelation of the truth has opened up the possibility to wonder whether what we depict as reality is true. We as people are the prisoners, amazed at our technology and knowledge without knowing the true meaning behind it all.

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The Pledge on the Verge of Lawfulness

Jaroslav Eliah Sýkora

In many public schools across the United States, children are expected to recite the Pledge of Allegiance every morning before the class begins. The Constitution of the United States separates church and state, but “one nation under God,” as it is phrased in the Pledge of Allegiance, suggests that the nation is more a result of divine manifestation and predestination than a product of legal, historic, cultural, economic, military, and technical development. During the last sixty years, many thinkers and truth-seekers have rightly raised the legal question of whether the phrase violates the Constitution. Alongside them, many parents and educators have raised the following questions: Why are children instructed in their schools to recite the Pledge? When was the Pledge introduced to public schools, and what was the historical context? How do children feel about repeating the Pledge every morning? Do they understand the meaning of the words in the Pledge and what they are confessing? How should the “one-nation-under-God” statement be understood? Does it suggest that the USA is a kind of theocratic nation governed by clergymen? It is not clear under *whose* God (or gods) the nation stands. The vast majority of Americans are Christian. How should atheist parents feel about their children confessing that there is a divine power acting in the life of politics? Is there a way to remove the phrase from the Pledge? Is it possible? Is it necessary?

Not long ago, Michael Newdow, one of the most persistent adversaries of the phrase, attracted a lot of public attention with his legal case *Newdow v. Elk Grove Unified Dist.* 542 U.S. ___ (2004). No. 08-205. Supreme Court of the United States. (Sep. 30th, 2004). Newdow was suing his daughter’s public school for imposing on her, through the Pledge, the belief that God exists. In 1998, Newdow, an American attorney and emergency medicine physician, began his campaign to have the phrase “under God” removed from the Pledge of Allegiance. As an atheist, he felt it as a “personal injury” that in his daughter’s public school in Elk Grove, California, the Pledge was recited daily; in his view, this constituted religious indoctrination, leading his daughter to believe that her father’s religious views were wrong. Between 1998 and 2004, Newdow’s claim undertook a long journey through three courts before it arrived at the Supreme Court. The Magistrate and the District Courts found, against Newdow, that the Pledge was constitutional. The Ninth-Circuit Court of Appeals in San Francisco reversed it, holding that the school district’s policy violated the Establishment Clause, and enabled Newdow to bring his claim to the federal court. When the case became publicized in the media, Sandra Banning, the child’s mother, filed a motion to intervene or dismiss, declaring that “she had exclusive legal custody under a state-court order and that, as her daughter’s sole legal custodian, she felt it was not in the child’s interest to be a party to Newdow’s suit.” Newdow never married his daughter’s mother and in the time when he filed his claim, they did

not have a common-law marriage. After that intervention, the Supreme Court concluded that the California law deprived Newdow of the right to sue the school district as “next friend,” i.e. as a noncustodial parent on behalf of his daughter, and dismissed his claim as an issue of domestic relations that should be brought to the state court.

In his article “Pledging Allegiance To My Daughter,” Newdow shares his bitter disagreement with that decision, and says, “nothing I requested was a family law matter.” By the Supreme Court’s dismissal, Newdow concludes, the atheists of the USA were turned into second-class citizens who are not treated equally with the nation’s majority. Newdow writes:

Our Constitution is the rule book that is supposed to guarantee to every citizen that each branch of government will do its duty and uphold his or her rights. In this case, Congress broke the rule that says government may not take a position on questions of religious belief. Then the state court system broke the rule that says that fit parents have a fundamental constitutional right to love and protect their children (as might be appreciated by the fact that no reasonable justification for my loss of legal custody has ever been presented). And now— in the highest court in the land— the federal courts have broken the rule that says they will adjudicate any claim of injury that is properly brought before them.

In a nutshell, Newdow’s article shares with readers of *The New York Times* his deep dissatisfaction with the Supreme Court’s decision. He sees it as an expression of the reluctance of the federal judiciary to agree that the “one-nation-under-God” phrase is unconstitutional, and interprets it as a violation of his rights as a citizen.

The next opinion indirectly supports Michael Newdow’s daughter and her mother, rather than him. It is that of M.H., a special education teacher at a public school in Fort Lee, New Jersey. In a phone interview, she reflected on her experience teaching a class of special education first and second graders. She said, “The school accommodates children from kindergarten to 6th grade. All children in our school not only recite the Pledge of Allegiance daily, but also sing the American Anthem.” When M.H. joined the school five years ago, this morning ritual was already an unavoidable overture of the school day. The children became used to it and grew to love it. M.H. said, “Whenever, for some reason, I forgot the Pledge and the Anthem, the kids would beg for it, and not stop begging until we did it. It’s not a free choice between yes or no anymore. That’s a ‘must’.” She neither witnessed any child refusing to say the Pledge nor experienced any parent questioning the constitutionality of it. She thinks that several factors may combine to explain why sharing the two national symbols in the school has never provoked an incident in her class: the children’s cognitive disabilities as well as their young age make them less likely to analyze the content of the Pledge, and fact that most of the children in the class are Christian causes them to not question the content. (This fact may also make the few non-

Christian children loyal and silent.) During M.H.'s time at the school, she has worked as a substitute teacher in other classes, too, which gave her more opportunities to witness the recitation of the Pledge and singing of the Anthem. M.H. never noticed any sign of revolt against participating in them. However, she remembers that once one of the students mangled the first six words of the Pledge, "I pledge allegiance to the flag," by saying, "I led the pigeons to the flag." Another time, instead of declaring "one nation under God, indivisible," a student pressed his chest proudly and said "one naked individual." M.H. found it charming, but also wondered how well the children in those classes really understand the historical, ideological, patriotic, and theological meaning of these symbols.

In "A Christian Nation? Since When?" Kevin M. Kruse tells us that in the years of its founding, America was not established as a Christian nation. It started to be viewed as such in the 1950s, and this practice has continued. America has never been declared a Christian nation, either at its birth or subsequently, although more than half of the American population thinks that it has always been. Kruse writes: "Religious language has been written into our political culture in countless ways. It is inscribed in our pledge of patriotism, marked on our money, carved into the walls of our courts and our Capitol." People's everyday contact with these biblical symbols and phrases made them believe that America was established as a Christian nation by the founding fathers. The implantation of the idea of the nation's Christian origin into the minds of millions of Americans began in the collapsing economy of the 1930s, as Kruse explains. In opposition to President F. D. Roosevelt's relief programs, collectively known as the New Deal, a largely influential group of corporate leaders promoted the idea that capitalism is the handmaiden of Christianity. The New Deal was labeled as "creeping socialism." The corporate leaders propagated a new ideology that combined elements of Christianity with an anti-federal libertarianism. To influence the public on a large scale, these prominent businessmen turned skilled reverends into their voices and missionaries. Three of them were more ferocious than others: The Rev. James W. Fifiield, who dismissed New Testament warnings about the corrupting nature of wealth, paired capitalism and Christianity, and attacked President Roosevelt's relief programs, labeling them as "pagan statism." He founded an independent Christian-libertarian company promoting his views, called Spiritual Mobilization, Inc. He promoted "freedom under God," and his group preached the gospel of faith and free enterprise. An even more ferocious voice was that of the Rev. Abraham Vereide, who created a national network of prayer groups, whose influence spread to Washington. "He persuaded the House and Senate to start weekly prayer meetings," Kruse writes, so that America would become a God-directed and God-controlled nation. The most eloquent and influential supporter of Christian capitalism was the Rev. Billy Graham, "who made Congress his congregation." At his urging, Congress established an annual National Day of Prayer. Dwight D. Eisenhower's religious rhetoric of "back to God, back to Christ, back to the Bible" strengthened the image of the nation as Christian. Once elected, Eisenhower parted ways with Christian libertarian groups. He employed Jews, Catholics, and Protestants to work together, granting them all freedom under God. However, he instituted the first opening prayers at a cabinet meeting. The

Pentagon, State Department, and other executive agencies quickly instituted prayer services of their own. In 1954, Congress added “under God” to the previously secular Pledge of Allegiance, “In God We Trust” to postage and in 1955 to paper money, and in 1956 the phrase became the nation’s official motto. So the idea that America is and always was a Christian nation under God became the largely accepted truth.

In “One God and the Flag,” William Safire, who is not an atheist, agrees with Newdow that those who believe in God don’t need to inject their faith into a patriotic affirmation and impose it upon all schoolchildren. In his op-ed, Safire admits that “the insertion (of the words “one nation under God”) was a mistake then,” but “knocking the words out long afterward, offending the religious majority, would be a slippery-slope mistake now,” and suggests, as an alternative to Newdow’s effort to have the phrase removed, that courts should require teachers to inform students that they have the right to remain silent for the few seconds during which others recite “under God.”

In his article “One Nation, Enriched by Biblical Wisdom,” David Brooks does not specifically mention Michael Newdow’s hearing at the Supreme Court, although it is obvious he has it in his mind, but rather prefers speaking about the constitutionality of the one-nation-under-God phrase more generally. Arguing for the positive role of religion in political life, he uses one period of American history as an illustration. He learned the lesson from David L. Chappell, author of *A Stone of Hope*, a monograph about the Civil Rights Movement. Chappell, Brooks says, argues that the Civil Rights Movement was a religious movement with a political element. Chappell identified two major groups of the movement that struggled to gain equal civil rights for all Americans: 1. Secular white mainstream liberals from the North (writers, activists), and 2. Religious blacks from the South. The former believed in achieving social changes for blacks by education and economic development, which they, as a secular force, could not accomplish; the latter by religious revival, which proved to be much more successful. Brooks quotes Chappell saying, “Because the experience of the Hebrew prophets had taught them to be pessimistic about humanity, the civil rights leaders knew they had to be spiritually aggressive if they wanted to get anything done.” From that, Brooks draws his thesis that biblical wisdom is deeper and more accurate than the wisdom offered by secular social sciences, regardless of the reader’s religious views. The Bible and its commentaries could be read (and taught in school) to enlarge children’s understanding about what human beings are like, and how they are likely to behave. His thesis leads him to suggest that “prayer should not be permitted in public schools, but maybe theology should be mandatory. Students should be introduced to the prophets, to the Old and New Testaments, to the Koran, to a few of the commentators who argue about these texts.” That would help students understand the phrase “one nation under God” as a tool to strengthen their sense of citizenship.

I admire Newdow’s crusade to have the words “one nation under God” removed from the Constitution because I, like him, find them unconstitutional. But I also agree with Safire, who admits that putting them in the Pledge was a mistake then, and that it would be another mistake now to take them out. Students in public schools have the freedom to stay silent during the recitation of

the Pledge. They are even free not to be in the classroom if their parents officially ask their teacher to allow them to leave during the Pledge recitation. The problem I see with reciting the Pledge lies somewhere else: in mispronouncing its words and misunderstanding its meaning. A student should never say “I led the pigeons to the flag” or “one naked individual,” thinking that is what s/he is supposed to say, believe, and confess. It turns the sense of the daily morning patriotic ritual into a mere mental exercise. I am sure that the ritualized recitation of the two national symbols may serve to calm the students’ behavior, but it can hardly cultivate their sense of citizenship. David Brooks’ suggestion to read the Pledge in the spirit of the Old Testament prophets seems to provide the right answer to that. A sensible and respectful patriotic sentiment strengthened by the spirit of religious hope may make the nation strong and resistant. Therefore, as Brooks suggests, theology, or religious studies, should be a mandatory subject not only in private, religious schools but in public schools too. I find but one difficulty with his proposal: alongside the Bible, he also suggests that students be introduced to the Koran, and I imagine our Muslim brothers and sisters projecting Allah into the Pledge, saying “one nation under Allah.” Because this phrase may not be acceptable to all, I feel inclined to advocate, as Newdow does, that the phrase “one nation under God” be removed from the Pledge.

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CRISPR Kitty

Andre Dorf

“Would any of you care for some yogurt?” asked Professor Weinfield. The entire classroom shot up their hands in unison. Professor Weinfield chose one of his students to come try his new yogurt. This student was a young girl named Stacy.

“Oh boy! I love yogurt!” said Stacy.

Professor Weinfield opened his mini-refrigerator and took out a small pudding-sized cup. He gave it to her and smiled, “Tell the class how it tastes, Stacy.”

Stacy took off the lid and dipped her spoon into the vanilla-flavored yogurt. “Tastes delicious, professor! What’s so interesting about it?”

The professor smiled, “This yogurt is 7 months old.”

The entire class blew up screaming, “Eww!” Stacy was utterly shocked as she realized that this yogurt, which should definitely be expired, was completely ordinary, if not pretty delicious.

“You all might be wondering how something so prone to expiration lasted 7 months. This, my students, is all thanks to CRISPR CAS9 technique. By snipping out certain genomes in genetic codes and installing new genomes, science has allowed us to modify, cure, and completely have control over our genes. For instance, I modified this yogurt to be less vulnerable to expiring. There are countless possibilities of ways to use this technique on the human population and the environment. Anything is possible! However as of now CRISPR CAS9 is not allowed to be used on humans. We do not know what sort of outcome it may have on a human body.”

The entire classroom stared at the professor, shocked that this sort of thing was possible now, wondering to themselves how they would modify their own body if they had the chance. Suddenly the bell rang, and everyone stormed out of the room, except for Stacy.

“I won’t experience any side effects— right, professor?”

“You won’t, this yogurt was certainly safe to eat.”

“Okay!” said Stacy and closed the door after her.

Professor Weinfield stood there for a moment, thinking about when the world would actually take the leap and try CRISPR on a human. He packed up his portfolio and headed out the door, locking it. The drive home gave the professor enough time to come to a conclusion. He was going to perform CRISPR CAS9 on himself the moment he got home. Professor Weinfield was allergic to cats, which really upset him because he loved felines. He decided he would alter his genes and remove the allergy gene for cats! He got home and assembled his CRISPR kit. This was so simple to do that a child could do it. He shuddered at the thought of children altering their own genes. The Professor filled up his syringe with the special solution and readied his arm. With a quick

stab and release, the process was over. Now all he had to do was wait. Since it was already late, he decided to drink a glass of milk and call it a night. Getting comfortable in bed, the Professor drifted off to sleep.

Morning came with chirping birds and a cool breeze coming from his window. The birds' chirping sounded particularly loud and more crisp. Professor Weinfield was going to scratch his eyes but he ended up scratching himself right on the cheek!

“Are these claws on my hands!?” thought the Professor. He pulled off the bed covers, which revealed his cat body. The Professor had transformed into a cat over night! He jumped out his window and disappeared into the city.

To this day, nobody knows what happened to him.

CRISPR stands for “Clustered Regularly Interspaced Short Palindromic Repeats” and is a bio-chemical gene-editing tool.

The Relationship Between Smoking and Periodontal Disease

Hoi Fai Lam

The Greater New York Dental Meeting (GNYDM) is the largest international dental meeting in the United States. It is held at the Jacob K. Javits Convention Center in New York, where thousands of companies from all over the world exhibit their newest technology and inventions for the dental profession and dental students. I was very glad to have an opportunity to attend this meeting. As a dental hygiene student, one of the best places to learn about topics related to dental hygiene, aside from school, is the scientific educational session; this is where dental hygiene students from other schools present their research and work. There were many great topics presented in this session, but the one I was most interested in, and felt deserved first prize, was "The Relationship Between Smoking and Periodontal Disease" from Farmingdale State College. This presentation highlighted the risk of cigarette smoking on our oral cavity by showing a comparison between smokers and non-smokers. I think this poster was the most interesting one because I could relate to the topic. Many of my family members were smokers, and it was hard for them to quit. As a dental hygiene student, I think learning about this topic will help me understand more deeply about smoking and its effect on periodontal disease, and help me to educate my patients about smoking. Dental hygienists review patient medical history in depth, and we are educators when it comes to a patient's oral health. It is important for us to understand the changes in the oral cavity due to smoking in order for us to provide information and guidelines for our patients. We can save lives just by counseling our patients about the risks of smoking and guiding them to consider smoking cessation.

The poster was simple, yet organized. It had pictures to show a healthy sulcus and a periodontal pocket. It also had many tables and charts to show the effect of smoking on gingival enzymes and calcium content. The charts and pictures helped us visually understand the topic. The poster also provided information about periodontal disease, oral manifestations, and how smoking affects periodontal disease. Their topic was well supported by various research, and the poster presenter even simplified the research data into a small chart that could be easily understood by the viewers. Matrix metalloproteinases, also known as MMP-8, is the key enzyme found in patients with chronic periodontitis. Tissue inhibitors metalloproteinases, TIMP-1, inhibit the production of MMPs. The poster referred to a study showing that smokers had almost triple the numbers of MMP-8 and low TIMP-1 (Visvanathan et al., 2014), which demonstrates the effect of smoking on our body on a chemical level. The poster also informed us about the calcium level in the saliva of both smokers and non-smokers. According to Varghese, Hegde, Kashyap, and Maiya, "salivary calcium, due to its affinity for being readily taken up by plaque, is an important factor with

regard to calculus formation and also the level of attachment loss." In addition, their studies showed a significantly higher mean calcium content on smokers compared to non-smokers (Varghese et al., 2015). These studies demonstrate how smoking can increase plaque formation which may lead to periodontal disease.

The presenter was very knowledgeable about the topics and explained just how bad smoking can be for our oral cavity. She said it causes plaque accumulation, and changes in host response and salivary minerals. She clearly explained the function of enzymes MMPs and TIMP-1, which are found in gingival tissue. In addition, she stressed the importance of the dental hygienist's role, and how we can help our patients improve their overall health by educating them about smoking. Not only did the presenter give information about the cause and effect of smoking on the oral cavity, she also provided smoking cessation information and information about treating these patients. I really like that smoking cessation was included on their poster; it helped the viewers to understand the benefits of not smoking. It also provided information regarding gingival health ten to twelve weeks after cessation, allowing viewers to get an idea of how much their overall health would improve when they stop smoking. It is very important for us, the dental hygienists, to guide patients and provide information for patients who are willing to quit smoking. I would like to see myself in the future educating patients about smoking, and helping them to improve not only their oral health but their overall health.

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How Much is a Smile Worth?

Keisha A. Fraser

Dentistry, within the general population, is normally not a branch of medicine most people feel deserves much thought. When I worked in the field, most of the patients only came in when they were in excruciating pain. Before their emergency appointment, they were told—more like a subtle warning—that any abnormalities that needed to be dealt with should be handled sooner rather than later. Not many heeded the warning, often jeopardizing the health of their mouths. I was frustrated by their perceived negligence, but never thought of legitimate reasons for putting off the care they so needed until I had to work the front desk. “Preventive care can be expensive, but it comes at a far lesser price than treatment after something goes wrong” (*U.S. News & World Report*, 2015). A number of our patients were in debt to my boss for procedures like fillings, or extractions. These same people were, not surprisingly, putting off their preventive care so they could pay off what they owed—which only compounded their issues, and the vicious cycle continued.

The Frontline PBS documentary *Dollars and Dentists* covers the ever growing crisis of dental care and the costs. The “silent epidemic” of oral disease within the United States has exposed yet another major failure of our federal, state, and local governments to provide basic care for all of their citizens. Nearly 108 million Americans, nearly one third of the population, are without dental insurance which is extremely alarming (*Oral Health*, 2016). The first part of the documentary covers charity work, and the growth of corporate dentistry. People who don’t have dental insurance and cannot cover out of pocket expenses, have a lack of oral hygiene knowledge, and/or feel as if optimal dental health is not a priority often have issues that were, at one time, easily fixable, but have progressed to the point of needing such extensive care that it becomes unaffordable and irreversible. Almost all of the people in the line for Remote Area Medical (which uses mobile clinics to provide care to underserved areas) were there because of pain. Some had issues that had gotten so bad that any general dentist wouldn’t be able to care for the patient within a reasonable time frame and without the cost being astronomical. These people end up relying on charities to fix or ease their dental woes for no charge or at a significantly lower rate than private practice charges. The work that is done by these charities is, for the most part, very drastic. The charities won’t be seeing these patients for a long period of time, or ever again, so they must tackle as many problems as possible in a timely manner. That means extractions, or multiple extensive fillings. As we have learned in the dental hygiene program, untreated dental and periodontal infections can lead to serious consequences, including death. “Mortality associated with odontogenic infection” (Green et al., 2001), describes a 25-year-old man who neglected to see his dentist to resolve issues that would have spared him from the rapid deterioration of his mouth and the subsequent infection resulting from the lack of care. The hospital also neglected to take films of his

neck even after having been admitted with swelling and hemorrhaging. A mere exposure of his head and neck area, not just a film of his mouth, would have shown that the infection had spread to his neck and aided in the patient's death. When I first read the article, I knew that the patient's death could have been easily avoided. The patient only needed to visit the dentist before his condition went from a slight issue to a matter of life or death. I knew that his death wasn't just due to negligence, but it must have been due to issues such as a lack of money and probably a lack of access to care.

The entire situation is migraine-worthy and taxing on the spirit. Any person with an ounce of morals should not accept the idea that millions of people are putting off necessary basic care just because of money. When I was at Stony Brook University, I took a course on medical ethics. In that class, I read the book *Mama Might be Better Off Dead: The Failure of Healthcare in Urban America* by Laurie Kaye Abraham, which follows an African-American family in an effort to see how health care reforms made on both federal and state levels affected the people who lived below the poverty line. That book initially opened my eyes to our nation's healthcare system and how it constantly fails everyone who is not part of the 1%. "We can't afford to be sick" was one of the statements made in the book (Abraham, 1993). That alone sent my mind reeling as to how deep and diverse this issue can be.

When it comes to dental care in the United States, for many it is subpar. Children are not taken to the dentist until the child has an issue. Not only is the cost of preventive care expensive for most families and a major deterrent in even seeking care, but many parents do not know that their children need to be seen by a dentist within the year of the eruption of their first primary tooth, and every six months afterward. If the previously mentioned timetable was followed maybe the parents wouldn't have to subject their children to intense procedures. Early childhood caries has been on the rise since the 1980s, even after the addition of fluoride in many cities' public water supply (*Early Childhood Caries. AAPD*, 2016). If parents can't afford to take care of their children's teeth, they more than likely don't take care of their own. To put the average American man and woman's struggles into perspective, most adults do not have dental insurance (as mentioned before), so they put off preventive care until they have an issue they can no longer ignore. Some of the procedures—extractions, root canals, etc.—require time off from work, time that was not previously offered to many employees. (Only relatively recently have states started requiring employers to provide paid sick leave.) Medications that are needed before and after procedures cannot be obtained even with the help of insurance, since everyone has other financial responsibilities that take precedence over the condition of their mouths. The money for follow-up procedures and appointments is not easily legitimized spending to the average American faced with financial woes. All of this culminates in a logical enough reason to put off any form of dental care. The general populace is not exaggerating when they say they honestly cannot afford to have any medical or dental issues.

I must admit that it was truly disheartening to hear that not many of my peers knew how dire this situation is. This frightens me since I've worked in high-end offices and interned in a community clinic. Witnessing and, admittedly, once participating in the lack of empathy for communities that cannot readily

afford or access basic healthcare, is far too rampant and only gives people more of a reason to avoid getting dental care. Now that my classmates have been exposed to the national healthcare crisis, I do hope they will approach their work with a newfound sense of duty for equal treatment, and won't pass judgment on anyone.

In a discussion of this topic with my peers, our conversation quickly turned emotional. We just couldn't fathom how the lack of something so simple, such as regular preventative cleanings with the occasional small filling, could lead to young children whose mouths are full of crowns or adults as young as 20-30 years old having to remove all of their teeth. To be a young adult and have to think about dentures for the remainder of your life is absolutely unacceptable. We briefly talked about other nations' universal healthcare systems with an air of bewilderment and were angered by the lack of affordable services offered in the U.S. It seems like common sense that our government continues to skirt around. It is beyond high time to make serious efforts to be sure everyone has access to affordable medical *and* dental care. It is not a simple change at all but something has got to give.

My peers and I understand that nothing in this life is free, and we acknowledge that everyone deserves to be paid for the knowledge they possess and the work they do. It is just truly disheartening to know the issues in medicine and dentistry have no real immediate or long-term solutions. If our government, in addition to the decision-makers in our field, cannot come up with a solution, my peers and I must face the fact that we will be inheriting the problem and will always be trying to find a way to ease the issue or solve it. I personally believe the main issue is the cost of care vs. personal budgets, and, as addressed in the documentary, unnecessary procedures done by dentists or corporate dental chains so they can make a profit. As a group, the only thing we could think of to do is try our best to educate our patients and our communities. We want to stress the idea that preventive care is the best care for everyone, regardless of the cost.

My group represented three countries of origin in our discussion group: Italy, India, and Guyana, so it was interesting to learn how our cultural backgrounds influenced our approaches to dental issues. From Asia, to Europe, and down to South America, we concluded that no one puts much emphasis on dental care. Most issues are ignored, teeth are extracted, decorative gold crowns are placed over rotting teeth, or natural remedies are employed. We also realized that the difference in diet between the United States and where our families are from absolutely plays a role in the frequency of dental issues, how rapidly they progress, and— as odd as it seems— how much easier it is for our families to bounce back from health issues even though they live below the standard of living for the United States. It is a known fact that sugar consumption is on a recent decline worldwide but is still higher than recommended (Walsh, et al., 2011), especially in the industrialized nations. Sugars, in conjunction with oral bacteria, are the cause of carious lesions. Unlike in the United States, people in our respective countries know to drink plenty of water, and frown upon eating or drinking before bed (but if they do, then they know to clean their mouths). In addition, chewing different herbs and leaves that are advantageous for natural dental care, or at least rinsing their mouths after each meal, are customary habits. All of these actions, whether our families are aware of it or not, reduce their

chances of developing caries, protecting their gingiva, and protecting the structures underneath from deterioration due to bacterial infections.

I honestly struggled to write this essay. Not because the topic was difficult, but because it seemed impossible to focus on just one issue. The problem is complex and every issue seems intertwined with the next. The documentary, the article, and other texts shed some more light on an ever-expanding silent crisis with no end in sight. It's enough to make anyone reevaluate their decision to enter any field of medicine, because, as can only be imagined, this is not just a dental issue. I am still determined to help people with the knowledge and skills I've gained. I just hope I can find appropriate ways to address this large issue and still manage to do my job.

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Illegal to Dream

Jing Wen Huang

You're back in your senior year of high school applying to college. You find out you have to pay out-of-state tuition in a state you grew up in. You can't get any federally funded financial aid or a scholarship. Your prospective colleges decrease because you can't pay for them. You can't ever work a job if you graduate. Unfortunately, this is a real academic roadblock for some students. They spend twelve years in school like the rest of us and then are told, "Stop, that's far enough. You have no documents. You're an illegal immigrant." Their parents brought them to America when they were too young to understand their status. They grew up like every citizen and permanent resident until the day they were told the truth.

An undocumented immigrant is someone who violates immigration laws in the country they move to, whether it is physically crossing a border or overstaying a temporary visa. Nationwide, there were 11.3 million unauthorized immigrants in 2014 according to Pew Research data. They make up 3.5% of the population and 5% of the work force. Six states account for 60% of undocumented immigrants, with New York State ranking fourth (Krogstad et al.) There is no clear solution as to how to bring the undocumented out of the shadows. Many of them are working in our city and paid in cash, or in the case of undocumented youth, are studying.

Europe has the same problem but they have programs called "normalizations" that grant the undocumented legal papers. As reported in *The Arizona Republic*, Spain has one of the biggest normalization programs in the European Union. In 2005, nearly 700,000 undocumented workers were granted temporary work permits. The purpose of the program was to bring immigrants out of the underground cash economy. According to the International Center for Migration Policy Development, the number of foreign workers registered in Spain's social security system jumped from 800,000 to over 1.4 million immediately. It generated about \$123 million more each in income tax and social security revenues. Despite the economic benefits, normalizations are controversial, even in Europe.

Instead of a controversial mass normalization program, the American Congress tried to target a smaller demographic: undocumented students who are here through no fault of their own. The Development, Relief, and Education for Alien Minors Act, also called the Dream Act, is like a mini-normalization. It is legislation proposed in 2001 that failed to pass multiple times. To qualify, the person, or Dreamer, must have been sixteen years or under when they entered the country, have continuously lived in the U.S. for at least five years, have graduated from a U.S. high school or obtained a GED, be of good moral character, have never been arrested, and they must spend two years in a university or the military. If passed, it would give Dreamers a chance to earn their citizenship as well as provide them with basic documentation like a social security number.

Passing the Dream Act would tremendously help the 2% of CUNY freshmen who are undocumented. In CUNY's Office of Policy Research study, in a sample of 9,000 baccalaureate students, a strong relationship was found between choice of major and immigration status. Students from immigrant families were more likely to major in business or engineering. Undocumented students were as prepared as citizens academically, but they were less likely to complete a bachelor's degree. Overall, this means a Dreamer at CUNY is more likely to major in economically viable subjects, gets the same grades, and pay more for college, but is less likely to complete their degree in four years. With no work permit, they could be working under the table all their lives.

Some people will say they deserve it. There are those who believe we would be rewarding lawbreakers if the Dream Act ever passed. It would be mass amnesty. On the contrary, it would not be a mass amnesty. The Dream Act is tailored to those who were educated in America and have lived here most of their lives. Are we really going to punish and deport people who are American in all but status for entering the country as children when they had no choice?

Just the cost of deportation is unfeasible. Terrence Park, a Korean Dreamer and biostatistics major from UC Berkeley, demonstrated on YouTube how much it costs to deport undocumented youths. There are 1,764,542 potential beneficiaries of the Dream Act. It costs \$23,000 to deport one person. It would thus cost \$40,584,466,000 taxpayer dollars to deport everyone. On the other hand, the American Immigration Council states that passing the Dream Act and allowing Dreamers to work legally at better jobs could add \$1.4 to \$3.6 trillion in taxable income to the economy.

We already have undocumented students in our schools like Clarisse, who tells CUNY Newswire she wants to open up a women's health clinic one day. Clarisse came to America as a child from the Caribbean and has been here for nineteen years. She has a bachelor's degree in nursing and a master's degree in public health. She is pursuing her goal of getting a doctorate degree to teach and conduct research at John Hopkins University. Why not integrate Clarisse into the economy like Spain did with their normalization program? New York state senators and representatives generally support the Dream Act, but given that it has been fifteen years since it was proposed, it would not hurt to write to your congressmen to encourage them to pass this piece of legislation. Dreamers are our friends, neighbors, and classmates. It hurts us all if they cannot live their lives to their fullest potential.

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Learning to be Fit

Asia Skye Bauland

You could say I had an average high school experience. I grew up in a small town on Long Island where everybody knew everybody. Sometimes I like to think of it as scenes from the hit movie *Grease* with the group of friends I had and our particular dynamics. The sad part is that I was the "Jan" of the group. In other words, I liked to eat. My friends always frolicked along the beach in their itty-bitty yellow bikinis while I lay covered in my one piece, horrified at my body and highly resenting my friends for their quick metabolisms. Yes, I was the fat one. And no, I was not happy about it.

Luckily, I was never bullied in school for being overweight and I always had a lot of friends. No one ever called me "fat girl" or bothered me about my weight (except my younger brothers), but I still knew I had a problem. Every time my friends and I would get ready together to go out, they would all try on each other's clothes. They would swap jeans, tee shirts, shoes, bras, etc. I distinctly remember this because I was never involved, of course. No pair of size zero jeans was going to fit my size ten waist. It humiliated me. At times, I would even stay home as a result of feeling too ashamed of my body to even step foot in public. My friends always tried to make me feel better by telling me I looked beautiful the way I was, but I couldn't control the emotions I felt about being fat. I couldn't stop the sweat starting to form under my arms if I was wearing something too tight that exposed my non-toned figure, or the dizziness in my head if I was feeling uncomfortable in front of other girls with those "perfect" bodies. It took a toll on me physically and mentally on a daily basis.

When my friends convinced me to run on the high school track team with them, I was excited to start moving around and to actually start doing something proactive with my body. I wasn't the fastest person on the team, but I liked the idea of maybe shedding the extra weight and maybe looking normal for once. Unfortunately, I never took track too seriously and I never changed my eating habits. The frustration I had after running all the time and not seeing a result after two years was enough to stifle my motivation. I gave up track along with my hope of ever feeling confident in my skin. I started working instead and doing what I did best, which was using my noggin to get somewhere in life. Eventually, I graduated high school with high honors. And then I started college.

My first stop was The University of North Carolina at Wilmington, which was a large public school on the east coast of North Carolina. Located right on the beach, you can imagine the population of this area. I didn't even think about being the only girl on campus who had brown hair and wore a size XL shirt until I had set up my new room and was going through orientation with the other girls in my dorm. Apparently, blonde hair, tanned skin, size double zero jeans and a low IQ were the requirements to live there. Here I was, trying to start a new life with confidence and all I could see was every insecurity I ever had staring right at me. These weren't my childhood friends. They were a foreign

group of girls who made me understand the term "isolation." Needless to say, I didn't last very long at UNCW. The sadness I felt in high school had evolved into a deep depression. My inner angst toward myself grew darker every day. My grades began to slip. I had sleepless nights and panic stricken days. I knew I needed a change.

When I moved back home, I attended Suffolk Community College. It was at this time in my life that I found solace. A hometown friend asked me to join her in doing an exercise class there on campus. I needed a gym credit, and I was comfortable around her, so why not? In this class, we were assigned a personal trainer who was actually a student about to graduate with a fitness degree. We were partnered with a trainer who specialized in what we wanted to get out of the class. I wrote simply that I wanted to lose weight. When I realized my trainer was an attractive student named Eric, I was hesitant. But looking back now, that experience was one of the best things that ever happened to me.

On the first day of class, we did measurements. Eric took my weight, measured my body fat percentage and also my waistline. Together, we went over my personal goals and how to achieve them. Because it was required, I was forced to go and couldn't make up silly excuses. Before this class, I had never really exercised or known how to. I felt like quitting so many times. Exercising was draining. But Eric was persistent, hopeful, and made me feel important. One thing he told me that I will never forget was to stop telling myself I couldn't do it and to take this as a challenge, to prove to myself and the rest of the world that I was so much more than just an overweight college student. This was my motivation, and I literally ran with it. He showed me the different muscles and how they worked. He taught me about nutrition and gave me so much information about eating healthily. We went over breathing exercises and how important breathing is when it comes to working your body. I learned how to move my body in a certain way to "feel the burn" and would become very sore the next day. Water became my best friend. I had never known how vital water is to our everyday diet and our metabolism as well as to our overall health. Eric designed workouts specifically for me such as running exercises, the use of workout balls and ropes, weights and core training. Every workout targeted a specific part of my body that I had never exercised before. Eric worked with me and really cared about helping me achieve what I would later call a miracle.

A specific exercise that took me over a few months to master was squatting. I was never really the coordinated type and so learning how to squat using balance and concentration was not easy. Squatting is when you position your legs shoulder width apart, bend your knees low to the ground and stick out your buttocks. This sounds funny, and at first I couldn't make the movement without laughing. The cackling didn't help while I was falling backwards on my heels, never being able to keep my feet flat on the ground. Squatting is meant to strengthen the muscles in your thighs, hips, buttocks and core. It's a wonderful workout when done correctly. Eric was very patient with me in learning how to squat because he knew it would be a significant workout for me. First, I began practicing how to squat against the wall for support on my back. Eric kept repeating, "Concentrate on what you're doing and feel your muscles working." As I stated earlier, breathing is essential to exercising—keeping a steady flow of oxygen, while balancing and concentrating on your muscles, takes some time to

get used to. After slowly working on the wall, I attempted to squat freestyle again. It was a little easier, but I would still fall back on my heels. This is when I learned how important your entire body is when it comes to every single exercise. I had to position my arms, head, shoulders and my back certain ways in order to keep my balance all the way down and back up. Zeroing in on performing the exact movement and imagining the way I wanted my body to move helped me learn how to squat, and provided motivation!

I knew I had to take advantage of this opportunity so I began making changes outside of class. Using the nutrition knowledge I had learned, I began to buy my own healthy foods and really tried to eat better. This didn't happen overnight and even today I still struggle with making healthy decisions. After reading a few posts on the blog titled "My Fitness Pal: Hello Healthy," I realized I'm not alone when it comes to cheat days ("Hello Healthy"). Apparently there is a certain philosophy about eating your so-called "forbidden foods," such as chocolate, a few days per month. This gives you a chance to satisfy your cravings, replenish your willpower and even boost your metabolism. I gave myself strict boundaries when it came to eating and it wasn't easy. But I am happy to know that it's perfectly healthy to have a day or two off. Because I was only going to the exercise class twice a week, I decided to make it a priority to visit the gym at least five days a week on my own time. There, I would do the same exercises I was doing with Eric and also create some of my own workouts. My schedule was very busy. I was working full time, going to school full time and now learning to exercise and be healthy full time. It was a breakthrough.

According to The American Heart Association website, there is a huge correlation between depression, anxiety, insomnia and exercising (Uffman 1). Studies have found that people who do not exercise at least 150 minutes per week have an increased chance of being depressed, anxious and sleep deprived. The website also mentions that people who exercise daily tend to live up to seven years longer than inactive individuals. It's amazing to know how simple exercises can improve both physical health and mental wellness. I was also fascinated by research conducted in Brazil where researchers studied the impact of childhood obesity on adult obesity (Monteiro 1). As stated in the article,

The prevalence of obesity in pediatric populations is increasing at an accelerated rate in many countries and has become a major health concern. Childhood obesity is one of the main predictor factors of adult obesity, with a high risk that an obese adolescent will become an obese adult. (4)

During the study, over 60 adolescents between the age of 15 and 17 who were considered "obese" were monitored over the course of 10 years. Each year, they were required to record and submit their current body fat percentage and total body mass. The results were astonishing. By the end of 10 years, about 85% of the group were still considered obese. Such information is very scary to me. If I had not made a dramatic change in my life to fix my weight, I might have been obese into my adulthood!

But my new way of life brought out something in me I never knew I had. I was actually happy and I could enjoy myself unlike ever before. I had never felt

so amazing in my life. My pants size was dropping down, my shirts were beginning to look baggy on me, and I could finally see my cheekbones. Everyone who saw me told me I was looking fantastic. Even my skin was clearing up! This makes sense because in a book titled *The Fitness and Exercise Sourcebook* by Laura Larsen, she mentions how daily exercise decreases stress levels, which in turn can decrease your acne (167). I looked like a whole new person and I felt like one too. I was finally seeing my future clearly. My new goal was to eventually move into New York City and study a whole new major, which became hospitality management.

There are no words to describe the feeling of hope and pure happiness that came into my life after I learned to exercise. By the time the class ended, I had lost over 40 pounds, as well as 55% of my body fat, and dropped two pant sizes. I'm happy to say that to this day, I exercise and maintain my health on a daily basis. All I needed was a little push, determination and an angel named Eric to teach me not only how to exercise but to love myself!

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Promoting Physical Activity in Jackson Heights, Queens: A Memo

Gisela Morocho

MEMO

To: Chris Constantino, Executive Director, and Senior Staff
From: Gisela Morocho, Chief Operating Officer
Date: April 8, 2016
Subject: Promoting Physical Activity in Jackson Heights, Queens

This memo will provide information about the need for a community-based collaboration to increase physical activity among adults living in Jackson Heights.

The *Patient Protection and Affordable Care Act* of 2010 (*PPACA*) requires the improvement of quality and delivery of health care. In order to be in compliance with *PPACA* requirements, Elmhurst Hospital could promote health in its surrounding community: Jackson Heights, Queens. The community is predominantly Hispanic (64%). Almost half of the total Jackson Heights population speaks a language other than English and has limited English proficiency. The main language spoken is Spanish. The residents of Jackson Heights have a high rate of obesity (20%), which is a preventable condition (King et al., 2015). Obesity leads to illnesses such as heart failure and diabetes (De Lade, 2016).

A walkthrough assessment of the hospital's community was done to better understand the community's resource needs. The Jackson Heights community has residential buildings and homes. It also has high accessibility to public transportation, a playground, several religious entities, and community organizations that focus on immigration services and housing services. The community lacks affordable community fitness centers and health clubs that promote physical activity in adults.

In order to offer resources that promote physical activity in adults, Elmhurst Hospital can expand its existing health education program to include physical education. The funding for the expansion could be acquired through grants, donations, and organizing charity walks and runs. Additionally, Elmhurst Hospital could operate the program with volunteer labor by offering internships to bilingual students or recent graduates of physical education programs. Elmhurst Hospital could also partner with religious entities and community organizations to extend the physical education program outside the hospital. Studies show that religious entities serve as sources of social support and leadership in their communities and therefore are effective settings for implementing health interventions (Tussing-Humphreys et al., 2013). In order to

efficiently target the predominant Hispanic community, Elmhurst Hospital could prioritize partnering with bilingual religious entities.

The expansions of the health education program and the partnership with religious entities may promote physical activity, and consequently reduce the rate of obesity and its related illnesses in Jackson Heights.

Please feel free to provide me with any feedback, ask any questions or add any ideas. I will be available to discuss this in more detail at the next senior staff meeting. Thank you for your time.

Attachment: References

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Queer Planet

Candice Powell & Olga Soloveychik

Contrary to what has been written in scientific journals, sexuality is not binary. This statement applies to human beings and other animals within Kingdom Animalia. Research, although seemingly scant, proves this to be true. Its scarcity is due to the fact that scientific knowledge is social knowledge. In this essay, we will discuss the biological discovery of homosexuality in animals, its contributing factors and society's response to this revelation.

Homosexual behavior in animals is a discovery that conflicts with an old paradigm regarding the influence of biological, environmental and social factors on sexual behavior. Society's reluctance to accept scientific observations of homosexual acts in nature as credible dates back to a period in history when homosexual frontrunners who made important contributions to science spent their lives shrouding their personal lives in secrecy for fear of character assassination or worse, conviction. This was the case for Britain's Alan Turing. Turing, a distinguished mathematician, was castrated after being convicted of "gross indecency" (homosexual activity between men) during the 1900s, when homosexuality was considered a criminal offense in Britain (Littauer, 2016).

Darwin, Linnaeus and other great minds are well-known for theorizing the origin of similar traits, habits and behaviors of humans and other mammals. Throughout the first half of the 20th century, some researchers expressed the idea that what some consider to be homosexuality in animals is nothing other than our need to project homosexual behaviors onto them (Terry, 2000) thereby rejecting any scientific research relating to homosexuality. This was the case during George Murray Levick's expedition on the Ross Sea (1911-1922). Also hailing from Britain, Levick observed homosexual behavior in penguins, but could not publish his findings concerning this "astonishing depravity" because it would have been too salacious for publication at that time (Rosenfeld, 2016).

While some researchers chose not to publish their findings, others have been able to pinpoint a few environmental aspects linking queer behaviors within the animal kingdom to the environment and publish their findings. One of these examples is the octopus, a cephalopod mollusk, which has a relatively short life span. Consequently, the female octopi prefer mating with older males that have a proven high survival rate. As a result, the younger males adapt to their inability to access female octopi by engaging in homosexual behavior which allows them to discard superfluous sperm from their bodies (Lutz and Voight, 1994).

In contrast, biological variations within a species allow us to discuss gender in less rigid terms than sex which implies a strictly binary concept. There are certain physiological and psychological characteristics associated with sex attributed to the amount of hormones present in an individual's body, generally androgens for males and estrogen for females. Neuroanatomist Simon LeVay first noted in 1959 that animal homosexuality can be rooted in biology based on an individual's hormone levels. As a result, society circumscribes the behavior to

each sex based on the hormones received by nature. Thus, animals born with an unusual hormonal variation can demonstrate reversed sex roles and homosexuality. Later, in 1991, LeVay discovered that hormonal abnormalities in early embryonic development affect the size of INAH3, part of the hypothalamus that can promote homosexuality (Gerall, Goy and Phoenix, 1959). He used monkeys and rats to develop his studies to explain how homosexuality is wired in the brain from the moment we are born (Terry, 2000). Despite this biological predisposition in animals being well researched and documented, there are still scientists in 2016 who disagree with discoveries relating to homosexuality.

While America's Lesbian Gay Bisexual Transgender movement has gained a tremendous momentum within the last 30 years, Britain has recently established the Turing Law which retroactively and, in some cases, posthumously pardoned thousands of males for homosexual behavior in an attempt to rectify its homophobic past (Chan, 2016). Homosexuality is thus a concept that is difficult to ignore, resulting in a cornucopia of scientists who are now publishing their findings in an attempt better understand it from a scientific perspective. This increased curiosity reaffirms a portion of Dr. Geoff Zylstra's lecture in which he states, "Scientific knowledge is a social knowledge"; homosexuality appears to be something new only because society was not ready to accept the preliminary discoveries that occurred approximately 100 years ago.

In conclusion, with this newfound awareness and acceptance, research on homosexuality will finally receive the respect and attention that it deserves. The origin of similar traits can be applied and accepted, as commonalities are drawn between *Homo sapiens* and other animals. Researchers will now publish their studies freely since it has been determined that these findings provide a greater insight not just into animals but into ourselves as well.

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Learning to Read and Write: Frederick Douglass's Journey to Freedom

Chen Xin Lin

Most people in modern times think that reading and writing are unessential, and they complain about why they need to be educated. In other words, they do not appreciate these skills. For example, in my life, I used to wonder why I needed to be educated and why I couldn't stay ignorant and live under a rock; however, one day, I saw a quotation on the subway: "the limit of your language is the limits of your world." It struck my heart with clarity. I came to appreciate that learning how to read and write is essential because doing so enables people to communicate, express, and understand the meaning of life and the world. Similar to my illumination, Frederick Douglass in "Learning to Read and Write" describes his realization that reading and writing are essential to him in understanding his surroundings, the truth about slavery, and the secret meaning of his life. He didn't see reading and writing as unessential, but rather significant and beneficial. He is appreciative and thankful for these skills. In his experience, he believes that learning to read and write is his way to relieve his pain about "being a slave for life." He quickly finds out that reading and writing are the only ways he can be free from slavery.

At first the mistress teaches Douglass how to read and write; however, she stops teaching Douglass due to her husband's restrictions on slaves. Douglass is controlled by his mistress not allowing him to read the newspaper. He notes,

The first step in her downward course was in her ceasing to instruct me. She now commenced to practice her husband's precepts. She finally became even more violent in her opposition than her husband himself. She was not satisfied with simply doing well as he had commanded; she seemed anxious to do better. Nothing seemed to make her more angry than to see me with a newspaper. She seemed to think that here lay the danger. I have had her rush at me with a face made all up of fury; and snatch from me a newspaper, in a manner that fully revealed her apprehension. She was an apt woman; and a little experience soon demonstrated, to her satisfaction, that education and slavery were incompatible with each other. (119)

Douglass explains that his mistress stops teaching him after her husband told her not to do so. Douglass's mistress now follows her husband's tradition, which is following the status quo and not allowing slaves to be educated. His mistress has become even more evil than her husband, which causes the mistress to be very nasty to Douglass. The mistress is not satisfied with herself, so she forces the slave to do more than "simply doing well" as a way to torture them. In other words, the mistress wants to exhaust the slaves and puts a lot of effort into this

project. The mistress dislikes Douglass when he reads the newspaper due to the “danger” of the newspaper. She is afraid that the slaves will learn how to rebel from reading articles in the newspaper about slave rebellions. Furthermore, the mistress now knows that “education and slavery are incompatible.” Douglass also realizes this fact and doesn’t give up learning by himself.

After the mistress stops teaching Douglass, he cleverly comes up with a plan to learn how to read and write even though he is forbidden to do so by his owner. In the following paragraph, he adopts some friends—the poor white children—in order to pursue how to read and write. He explains,

When I was sent of errands, I always took my book with me, and by going one part of my errands quickly, I found time to get a lesson before my return. I used also to carry bread with me, enough of which was always in the house, and to which I was always welcome; for I was much better off in this regard than many of the poor white children in our neighborhood. This bread I used to bestow upon the hungry little urchins, who, in return, would give me more valuable bread of knowledge. (119)

Douglass notes that he had to come up with an astute plan, which was making friends with the poor white children on the street, to gain his knowledge to read. When Douglass is sent to run errands, he brilliantly carries his book with him so that he has a chance of improving his reading skills. He always carries bait (bread) with him so that he can lure his catch (poor white children) to teach him the “bread of knowledge” in return. In other words, the “bread of knowledge” for Douglass is learning how to read and write with the help from the poor white children. Douglass continues to be engaged in reading and writing hoping that one day he will be free. Furthermore, these poor white children teach Douglass how to read each day until he is successful reading by himself.

After he learns how to read and write, Douglass comes to realize that he is “a slave for life”; however, Douglass hopes that something will happen by chance that will set him free. Douglass states, “I used to talk this matter of slavery over with them. I would sometimes say to them, I wished I could be as free as they would be when they got to be men. ‘You will be free as soon as you are twenty-one, *but I am a slave for life*. Have not I as good a right to be free as you have?’” (120). Douglass tells the poor white children that he wishes to be as free as the poor white children when he hits twenty-one. In other words, he now understands that he will be slave forever even after he knows how to read and write. Douglass cannot accept the fact that he’s a slave for life. He describes how “These words used to trouble them; they would express for me the liveliest sympathy, and console me with the hope that something would occur by which I might be free” (120). The thought that hurts Douglass the most is that he will remain “a slave for life”; however, he has the spirit from these words which gives him energy in hoping that a miracle will happen, which will make him free. He is searching for an opportunity that makes him free from slavery.

After gaining reading skills from practicing with *The Columbian Orator*, Douglass finally discovers the word “abolition” and wants to know what it means. He then uncovers what “abolition” means by hearing chatter and news that run throughout his town. He writes about his depressed mental state,

While in this state of mind, I was eager to hear anyone speak of slavery. I was a ready listener. Every little while, I could hear something about abolitionists. It was some time before I found what the word meant. It was always used in such connection as to make it an interesting word to me. If a slave ran away and succeeded in getting clear, or if a slave killed his master, set fire to a barn, or did anything very wrong in the mind of a slaveholder, it was spoken of as the fruit of *abolition*. Hearing the word in this connection very often, I set about learning what it meant. The dictionary afforded me little or no help. I found it was “the act of abolishing”; but then I did not know what was to be abolished. Here I was perplexed. (121-122)

Douglass notices that he was curious to hear anything about slavery, including the word “abolition,” but he gathers little information from his surroundings. He puts the clues together and understands the meaning of the word “abolitionists.” In other words, “fruit of *abolition*” refers to anything that frees slaves from their owners. He is so eager that he wants to know what it means by looking it up in the dictionary. Nevertheless, he doesn’t know what “the act of abolishing” means. He is confused or “perplexed” by the definition in the dictionary about “abolitionists,” but Douglass didn’t give up searching for a deeper meaning of the word.

Douglass finds out the true meaning of the word “abolitionists” after patiently waiting for any news from the North. He says,

I did not dare to ask anyone about its meaning, for I was satisfied that it was something they wanted me to know little about. After a patient waiting, I got one of our city newspapers, containing an account of the number of petitions from the north, praying for abolition of slavery in District of Columbia, and of the slave trade between States. From this time I understood the words abolition and abolitionist, and always drew near when that word was spoken, expecting to hear something of importance to myself and fellow-slaves. The light broke in upon me by degree (122).

Douglass does not want to ask anyone about the word “abolitionists” because he knows that his owner wants slaves to know very little to nothing about the word. Douglass is unsatisfied with the dictionary’s definition and he is determined to know more. He listens closely to anyone who is speaking about “abolitionists” and “abolition” in his town and subsequently sees light from heaven shining on him, which gives him strength to fight until he is free from slavery.

Overall, people in modern times should appreciate education and freedom and stop complaining with sentences like “I don’t want to be educated” or “I don’t want to be a knowledgeable person.” Modern people who don’t appreciate language and who take reading for granted should remember the pain of slavery from Douglass’s period of time. As Ludwig Wittgenstein says, “The limits of my language mean the limits of my world.” Anyone who understands this will understand the significance of language. This sentence means that when

a person's knowledge is limited, they are restricted in their ability to fight against oppression. Furthermore, if a person is limited in using language, then they might have a difficult time expressing themselves, understanding the deeper meaning of a situation, and distinguishing right from wrong. A person that knows very little about their language is vulnerable to being manipulated by another intelligent person. Therefore, be grateful for your education, freedom, and knowledge about the surrounding world.

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To Combat Terror, We Also Need Understanding and Compassion

Daniel Fanning

There but for the grace of God, goes John Bradford. (Bradford)

Nothing is easier than to denounce the evildoer; nothing is more difficult than to understand him. (Dostoyevsky)

A suicide attack on the Iraqi embassy in Beirut, Lebanon on December 15, 1981 was the precursor to the modern era of suicide bombings. Few remember the event, even though 61 people were killed in the fratricide attack by the Iraqi Shi'a Islamic Dawa Party. The bombing was of little interest to anyone outside of the diplomatic and intelligence communities, and even if the 'Iran Watchers' picked up on the full implications of the attack, they were not heeded. That started to change some sixteen months later, when 63 people were killed in the U.S. Embassy bombing in Beirut on April 18, 1983. Even then, the dawning of a new age of terrorism was not fully apparent, and simple yet effective counter-measures were not taken, a fact which did not go unnoticed. On October 23, 1983, 241 U.S. and 58 French peacekeeping soldiers were killed in the Beirut barracks bombing of the Multinational Force in Lebanon. The U.S. had had enough, and four months later all U.S. troops were withdrawn from Lebanon, never to return. This fact also did not go unnoticed. The attacks, a strategic and tactical success for both perpetrators and sponsor, were studied worldwide and became a source of inspiration for other terrorist organizations. Thus started the modern era of what has been described as the "ultimate asymmetric weapon" (Van Natta); suicide bombings account for only 3% of terrorist classified incidents, but account for 48% of terrorism related casualties (Pape).

Suicide terrorism, as a form of asymmetric warfare is as horribly effective as it is both perplexing and irrational. In order to combat it, we must understand the motivation and mindset of those involved, from the bomber himself to the recruiter and organization that enlisted him, to the society and the socio-political context, which supported and shaped him. Suicide bombing operates within a society that values, empathizes with, and offers tacit and/or overt support to the bomber and his cause without which suicide bombing would not be feasible. We must ask ourselves what motivates that society to support terrorist acts.

Suicide bombers are not creatures from outer space, they are human; they have lives and emotions, people that they love, and mothers who nurtured and cherished them. They knew joy as well as pain and suffering, yet they chose death or suffering, for both themselves and their victims, over life. Something in their life brought them to a point where they were willing to detonate a shrapnel-laden explosive device strapped to their bodies, in the midst of total strangers.

In the film *Paradise Now* directed by the Palestinian director, Hany Abu-Assad, we get a glimpse into the life of Said and Khaled, two Palestinian friends from Nablus in the Israel occupied west bank of the river Jordan, a small area of 22,000 square miles between the states of Israel and Jordan that is home to 2.5 million Palestinians. The film succeeds in humanizing the suicide bombers without romanticizing their actions. We are offered a plausible explanation for the decision by Said to explode himself on a bus in Israel. Said is motivated by a sense of nationalism, a wish to atone for the sins of his father (a collaborator with the Israelis), and a sense of frustration and malaise with his life, that is shared by many Palestinians who are disillusioned with the “peace process” (JMCC). Said prefers a violent death over a difficult life. He walks away from a sweet girl who is smitten with him, and for whom he has feelings, denying himself the degree of happiness and self-fulfillment he might attain with her, preferring not to start a new cycle of life that might yield continued pain and frustration.

The Israeli/Palestinian conflict has a long history, but people learn little from history. They are thus doomed to repeat it. A suicide attack, whether it is Samson amongst the Philistines, a Shi’a amongst the infidels, or a Palestinian amongst Israeli Jews, is an event that a wise man carefully notes; not only because of its tactical effectiveness, but more importantly because of the desperation that led to it. A wise man accumulates enemies frugally, and strides to prevent those that he has from becoming desperate. Israel today follows a policy of settlement expansion in the West Bank in a race of demographics against Palestinian population growth in the area. Some 410,000 Jewish settlers live in the West Bank, with an additional 375,000 living in East Jerusalem (Arutz Sheva). While the numbers will never match those of the Palestinian population, the settlements require massive allocation of scarce resources and funds, and are a source of grating frustration for the Palestinian residents of the West Bank. The motivation is not only one of an ideological settlement of the whole of “Eretz Israel” (Biblical and greater Israel), but a pragmatic mistrust of Palestinian and greater Arab intentions toward the Jewish residents of Israel proper (pre-1967 borders). Extremist Palestinian sources regularly state their intention (in Arabic) to clear the lands between the Jordan River and the Mediterranean sea of Jewish residents (PMW). Those same sources, when speaking in English are much more conciliatory. Jewish settlement of the West Bank thus represents a bulkhead against malevolent Palestinian intentions. The alternative of peaceful cooperation with the Palestinians is mistrusted, and no longer seriously contemplated. It died with the Oslo accords and Yitzhak Rabin in 1995.

Terrorism is an effective tool of asymmetric warfare. Thomas Schelling describes “the rationality of irrationality.” An act that is irrational for the suicide bomber is a rational act for the organization that sent him. Chaim Kaufmann argues that ethnic wars are typically fought over the control of territory and are much more violent than ideological contests fought over political or party affiliation. In such a war, neither side seeks to engender sympathy and win over the “hearts and minds” of the people on the other side. Suicide bombings have a strong psychological effect upon the target audience. They demonstrate desperation, determination, and the threat of further acts of random, irrational violence. Suicide Terrorism is a strategic act in an asymmetric war between a terrorist organization with popular support and a democratic state actor that is

susceptible to the whims of its citizens. Terrorist acts also generate support for the terrorist organization from within the sympathetic populace (Bloom) without which terrorism cannot survive (Pape). The strategic goal of suicide bombing is to force a democratic state to make concessions, usually to those seeking self-determination. This has become a worldwide pattern from Hamas in Israel to the Black widows in Chechnya, from Hezbollah in Lebanon to the Tamil Tigers of Sri Lanka.

The media plays a central role in the effectiveness of terrorism. The effect of terrorism upon the civilian population of a democratic state cannot be achieved without media participation and freedom of the press, which are tenets of the democratic state. Suicide terrorism seeks to cause such pain to the occupying power that the resolve of its civilian population will weaken, causing them to protest against their government to call for capitulation to the demands of the terrorist organization. A democratically elected government must eventually bow to the wishes of its citizens. Elections are a frequently reoccurring threat to a government's power and opposition parties are quick to use popular resentment of government policy to further their own interests.

The factors that motivate a suicide bomber are difficult to define. Ariel Merari contends that a psychological profile of a suicide bomber is not possible. Palestinian suicide bombers are not necessarily poor and many are well educated and from stable non-disadvantaged families (Kushner). Nolan reports on suicide bombers in the two year period from 1994 to 1996 and offers the following profile: middle children from large and religious families, single, in their early twenties with exposure to Islamic fundamentalist education, with a close relative who was killed in the Intifada (uprising) against Israel. They possess a strong nationalistic identity, accompanied by a sense of malaise. They are not likely to be either working or currently studying (Nolan). The logic and appeal of self-immolation is that the perpetrator has been left no choice; he has been reduced to such a condition by the oppressor, that he can only direct his anger at himself in protest, and in so doing the perpetrator becomes the victim and the oppressor becomes the perpetrator, who is shamed by the self-immolation.

Without addressing the root causes, terrorism will, in one form or another continue in any given scenario where a frustrated ethnic group feels itself to be mistreated by an external and ethnically different group. People in the Middle East are particularly sensitive to the humiliation of being controlled by a foreign power. The Crusaders have not been forgotten and the idea that is accepted in the West of a benevolent occupier, acting temporarily for the removal of evil and the greater good of the local populace, is a fallacy that is not shared by that populace. The intertwined destinies of Israel and the Palestinians is a more complicated case with mutual mistrust so high as to render a peace process extremely difficult. Both sides are quick to point out what the other side needs to do to achieve peace; both sides are loath to take any step that would benefit the other, erroneously believing that they can defeat the other through demographics, terror, technology or faith. Both sides are mistaken. Upon acceptance of the inevitability of the other's existence, the myriad benefits of peace can be reaped. We cannot hate without making ourselves miserable. The wave of religious fundamentalism that has swept the Middle East over the last few decades must take a back seat to pragmatism. Both Palestinians and Israelis must care more for their children than

for their principles. It will happen eventually; the only question is how much people are willing to suffer before accepting the inevitable.

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The Curse of the American Military: Post-Traumatic Stress Disorder

Alexey Kiriluk

On March 6, 2009, John Thuesen, a former Marine, called the police and reported two gunshot victims. When the dispatcher asked him what happened, he said: "I got mad at my girlfriend, and I shot her" (Vicens 1). John Thuesen suffered greatly from post-traumatic stress disorder (PTSD) from the war in Iraq; however, the court didn't see PTSD as a legitimate excuse and on May 28, 2010, Thuesen was sentenced to death. Nowadays, PTSD is common, as 7.8% of Americans suffer from it every year (Haskell 7-8). If you are not familiar with population numbers, 7.8% of the total population of America is 24.5 million. Furthermore, serving in the military greatly increases your chances of getting PTSD. According to statistics, 21% of military members suffer from PTSD (Haskell 8). Translating that percentage into a number, we get that 294,000 military members are affected by PTSD. Post-traumatic stress disorder is dangerous, and the government should take serious measures to decrease risk among military members and improve healthcare procedures to treat PTSD.

Why are military members so affected by PTSD? According to Caroline Macera, military members develop PTSD from combat exposure. Let's take a look at a complicated example from her article "Postdeployment Symptom Changes And Traumatic Brain Injury And/Or Posttraumatic Stress Disorder In Men": Private Johnson was sent to Afghanistan as part of a marine mine removal team. His team member and battle-buddy David, who was his friend from middle school, was blown up by a terrorist with an RPG (rocket-propelled grenade) while Private Johnson was 15 yards away from him. This is a true story. The experience some military members have gone through is unbelievably shocking. So, would you think Private Johnson just continued to live his normal life after he saw his old friend blown apart by the grenade? No. His mind is corrupted with bad thoughts; he tries to come up with scenarios of how he would have saved him and what he could have done differently. It is a vicious circle: the survivor thinks about the tragedy, starts finding ways that would have helped, and then blames himself. Unfortunately, combat exposure happens far too routinely in modern Iraq and Afghanistan. Convoys are attacked by terrorists on a daily basis. American soldiers have to deal with IEDs (improvised explosive devices) which can be found anywhere; for example, on roads or in residents' houses. All these are high-risk situations which affect a person's brain and greatly increase the chance of developing PTSD.

PTSD could be dangerous for you and people around you. As an illuminating example, I chose a movie "American Sniper" which is based on a true story. Despite the fact that the movie is fiction, it contains many documentary-type scenes and events, especially regarding the life of Chris Kyle.

The character is based on the story of the deadliest American sniper, who killed more than 200 terrorists in Iraq. Nevertheless, Chris Kyle comes back from Iraq, giving up military life for his new civilian one with his wife and kids. However, everything is not so rosy and wonderful. Kyle suffers from flashbacks; he has problems controlling his anger, and he seems to be hypervigilant and hyperactive. Everybody around him, even his wife, recognizes that but doesn't know how to deal with it, which leads to a misunderstanding. Although PTSD can cause these issues, that it is just half of Kyle's story. The movie doesn't show that Chris Kyle had been meeting with retired veterans on the shooting range to "maintain skills." One day he was helping 25-year old Marine Eddie Routh who suffered from PTSD and schizophrenia. Kyle's plan was to take Eddie to shooting ranges and let him shoot and, potentially, decrease the PTSD. The tragedy happened. On February 2, 2013, Chris Kyle was shot by Eddie Routh with a .45-caliber pistol which belonged to Kyle. As it turned out, Eddie Routh killed him just because Kyle didn't talk to him on the way to the range. This tragic story clearly shows PTSD's full potential and proves that it has to be treated more intensively.

PTSD strongly affects the brain and the science behind it is complicated. To speak the truth, PTSD is a huge amount of stress that a person's brain cannot live with. PTSD starts to develop in the cases of serious stress when a person cannot overcome the depression and keeps it inside. The hippocampus is in charge of short-term and long-term memories. In most cases involving PTSD, the hippocampus is affected by a high level of stress and adrenaline and stops working properly (Timms 2). As a result, short-term memory is not able to process or delete these short-term bad memories of combat exposure, and they are stored in your head. You can think about these as importunate advertisements that always pop up right in front of the screen and cannot be skipped or dismissed. At the same time, the part of your brain called the amygdala, which is in charge of your stress control, can stop functioning properly in response to any sound, smell or memory of combat exposure and decide to signal your body about possible danger by producing a humongous amount of adrenaline (Hammer 2). Lastly, the prefrontal cortex, your body's decision maker, gets affected by bad memories and a high level of adrenaline and starts to make decisions as if you are in danger (Hammer 2). Furthermore, the constant high level of adrenaline causes additional irritation, hostility, and insomnia (Timms 3). In short, continuous stress and a high level of adrenaline cause bad memories to get stuck in the head which makes the brain signal the body about danger, and the body starts to pump up the adrenaline which closes this vicious circle. PTSD is not easy to overcome, but it is possible to do so when using new equipment and methods.

People think of PTSD as something that is irreversible and cannot be treated. Today, there are a few traditional ways to treat PTSD. The most common methods are psychotherapy and medication (antidepressants) (Timms 5). Psychotherapy includes visiting a therapist for at least 90 minutes, 12 weeks in a row. Usually, psychotherapy includes a regular conversation between patient and psychologist, allowing patients to unload their thoughts and to talk about their everyday concerns. Another treatment is antidepressants, which can have the same amount of side effects as positive effects. Antidepressants influence neurotransmitters, making them more efficient. Neurotransmitters are in charge of producing the hormone of happiness, called serotonin. In other words,

antidepressants increase the amount of “happiness” in your body which could eliminate many symptoms of PTSD such as insomnia, fear, hostility and so on. Some of the possible side effects are anxiousness, restlessness, and suicide (Timms 6). All methods are imperfect and can be called frequently unsuccessful. According to Natalie Wade, only around 50% of people get rid of PTSD after using any of the treatments I have mentioned above. There are also a few more modern methods such as Body-Focused Therapy (BFT) and Cognitive Behavioral Therapy (CBT). Cognitive Behavioral Therapy is a new, short-term program that involves visiting a special therapist. Each session lasts for 50 minutes once a week. The difference between CBT and psychotherapy is that in CBT you and your therapist focus on your thoughts, beliefs, and images. It also emphasizes the importance of positive thinking and how it is related to our emotional condition (Martin 1). However, CBT is really specific and may work only for small percentages of patients (around 10%). BFT is a program which focuses on the patient’s body as well as his thoughts and beliefs. In BFT, patients learn how the body and mind are interconnected and how they influence one another. Current PTSD treatment needs further development to improve the quality of healthcare to help as many military members as we can.

To conclude, PTSD is still a serious problem among military members. We were able to reduce the percentage of PTSD among military members from 51% in the Second World War to 39% in the Vietnam War and to 21% as of right now (PTSD: National Center for PTSD). Nevertheless, 21% is still a great amount of people, and further improvements are required. Due to ongoing combat in Iraq and Afghanistan many former military members with PTSD (like Eddie Routh and John Thuesen) are still committing crimes because of their unhealthy mental condition. New methods of treating PTSD are needed because it solves problems like crime, violence and sexual abuse. The government should reduce the risk for military personnel and invest more time and money into PTSD research.

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Topdog/Underdog

Dani D.

Topdog/Underdog by Suzan-Lori Parks is a tragic play set in the “here and now” starring two brothers, ironically named Lincoln and Booth, whose characters reflect off one another as they struggle to survive adult life in an economically competitive and racially charged United States. The play tackles the charms and pushbacks that a heated sibling rivalry can entail. A major theme of the play, like a lot of tragic plays, has to do with social status and self-esteem. Lincoln and Booth are two brothers who were abandoned by their parents at a developmental age, and this life changing event sets them up for an adulthood of problems that stem from personal insecurity.

Lincoln and Booth need to work to pay off a room Booth rents. Lincoln is a retired three-card monte hustler. He lives at his brother’s place and works as an Abe Lincoln impersonator, the president he is named after. Booth spends his time trying to learn to hustle. He spent his childhood watching his brother play three-card monte, and wants to be just like him. The only problem is—he isn’t good at it. Both brothers tend to complete each other in their personalities. Lincoln is more reserved and wants to live an honest life now that his card days are done. He often thinks of his past when he had a wife and a good gig going as a hustler. Booth is more of a playful character and wants to enjoy the finer things while seeing himself as a successful hustler even though he’s not. He likes to exaggerate his appearance outside the room with fancy suits and his stories about having an amazing sex life when talking to Lincoln. The way it appears, Lincoln is the underdog and Booth is the top dog. Lincoln needs Booth or he will be homeless. Booth gets them the suits and the whiskey. But in dialogue it is revealed Lincoln is the top dog and not Booth. While Booth might own the figurative table, Lincoln holds the figurative cards. Lincoln is able to hustle his brother a few different times and control conversations so they go his way. He tells his brother that his brown tie matches Booth’s suit better than his own. The result is that Lincoln gets the tie he originally wanted anyway. The brothers display a rivalry based on insecurity. Booth calls out Lincoln and tells him he made love to his wife who came on to him first. They loathe each other but also don’t want to lose one another—a fear that is most likely based on the departure of their parents at such formative teenage years.

Children who are abandoned tend to internalize feelings of guilt or shame, setting them up for failure later in life. In a *Psychology Today* article, Claudia Black describes childhood emotional abandonment as, “occurring when a child has to hide a part of who he or she is in order to be accepted, or to not be rejected.” This is compounded by the overall lonely situation the brothers are in. Lincoln, when talking to Booth about their parents, says, “Maybe they got 2 new kid. 2 boys. Different from us though, better.” The idea that he is to blame for their abandonment is something he has internalized. He needed to lie to himself

through the card games and the joking to cover up his true feelings of worthlessness. They both put on an act because they both lack self-assurance, but Lincoln gets what he wants while Booth gets used. Booth wants to be like Lincoln because he has even less of a chance at success than his older brother. He was younger than Lincoln when their parents left and he relied on Lincoln as a kid. He envies Lincoln for being the top dog but loves him for the brother he is supposed to be. Booth is the tragic character of the play.

John Wilkes Booth, the man who assassinated President Abe Lincoln, was a confederate sympathizer and was convinced Lincoln would overthrow the constitution and destroy the South. He killed Lincoln because Lincoln threatened his closely held beliefs of southern prosperity through slavery. He killed Abe Lincoln out of political insecurity, similar to Booth the underdog. Lincoln the top dog, however, is not very similar to Abe, excluding his name. Suzan-Lori Parks describes the character of Lincoln as follows: “this young man remembers who he is, and what his calling is, and his calling is to play the cards again. This proves to be very difficult for him. If he could just not remember who he is and keep on impersonating Abraham Lincoln, he would be all right. But it’s not enough.” Lincoln might look up to honest Abe Lincoln, but he himself cannot fend off the hustling lifestyle. And everything comes to fruition in the last scene, scene six. Lincoln has played his cards and had a good day making money. His brother comes home silently and witnesses his role model’s true colors. Lincoln cares only for himself, not sharing his wealth with his younger brother.

For Lincoln, Booth is more of a tool than a person, he controls the situation and gets what he wanted from the start. He always undermines his little brother while letting Booth feel like he’s in control. Lincoln is a truly manipulative character who keeps his cards close only to get an ending we the audience all saw coming— whereas Booth allows his own insecurities to drive him to insanity in the final scene. He sees Lincoln happy after a day of money making, so he tests his brother’s love. He tells his brother that Grace, a woman who stands up Booth earlier in the play, wants to marry him and have his kid. He asks Lincoln to move out sooner or later to make space. Lincoln shows his colors here, willing to leave Booth’s life altogether that very night. Lincoln would just drop Booth no sweat without even telling his little brother about his rejuvenated hustling career, even though he knows Booth wants to be a hustler himself. Booth finally sees how selfish his older brother really is, and challenges him to a game of cards where he loses his inheritance. At the end, Booth breaks character; the façade wears off. Booth isn’t trying to contain himself anymore. He confesses to Lincoln that he shot Grace, and proceeds to assassinate Lincoln. He rants at his brother’s body about those who have looked down on him and stolen from him, but mostly rants against his brother, whose shadow is his emotional jail cell. Booth has been stuck in arrested development.

When children lose their care takers at an early age they are not given a fair chance to succeed. Lincoln and Booth were set up to fail from the beginning and this play really highlights how deep and complex some disguises are and how they hide us from our true selves. Insecurity and low self-esteem can derail anyone’s goals, but when a child is exposed to extreme amounts of guilt and shame he will internalize it and build off it creating an unstable future just like the two brothers here in this play. Through race, politics, relationships and the

past, what haunts each brother the most is being less than the other. Insecurity and feelings of worthlessness can set men against each other and as we can see with the ironically named brothers Lincoln and Booth, some people's fates are sealed from birth.

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Becca McCharen-Tran for Chromat

MarVena M. Bhagratee & Isabel Lantigua

Introduction

Becca McCharen-Tran is a Queer contemporary designer based in Bushwick, New York. She is the founder and designer for the brand Chromat, which is known for their cage-like garments and 3D printing. Chromat has appeared at New York Fashion Week in 2015, 2016, and is expected to present for Spring, 2017. McCharen-Tran's runway and print models typically consist of women who are transgender and plus-sized; designing for these women as well as having them model her clothing on the runway is what she is known for. She is also known for having an architectural eye when it comes to her garments. She has a deep love for scaffolding and looks at the body as a worksite, just like an architect would look at an unfinished building. Furthermore, McCharen-Tran is now experimenting with fashion technology which combines fashion and communication that is responsive to movement and/or the environment.

Who exactly is Becca McCharen-Tran?

McCharen-Tran is a small town girl from Lynchburg, Virginia. She was born on May 27, 1985. Today, she is the designer and founder of Chromat. She is just as surprised as anyone that she has made it this far in her career, considering she never intended to become a fashion designer. She has experience with designing garments and also has a solid background in architectural design. McCharen-Tran studied architecture at the University of Virginia. During this time, she had no major fashion influence around her, so one may wonder how her love for fashion came into being. Here is how: at the University of Virginia, McCharen-Tran took a costume designing course, which, in turn, helped her to get a part-time job as a seamstress in the costume shop. While there, she sewed Victorian corsets and made Shakespearean costumes. Little did McCharen-Tran know that this was one of the biggest steps she would take towards her career in fashion. After McCharen-Tran graduated from the University of Virginia with her architecture degree, she moved to Portland, Oregon, where she worked for architects. She loved it there because "it was like this hipster Utopia— with bikes and good coffee" (Cross, 2012). After her adventures in Portland, she joined the Peace Corps and was stationed in El Salvador, where she worked in urban planning and development. Unfortunately, her trip was cut short after contracting dengue fever due to a mosquito bite. She was in the hospital for about a month until she was able to go home to her parents in Virginia (Cross, 2012). McCharen-Tran recovered, and eventually she got a job at City Hall in urban development. After work, with a lot of free time on her hands, she decided to start creating garments. She would sew garments for her friends and herself for fun. She played around with fabrics she gathered from the bridal section of the

Goodwill store located not too far from where she lived. McCharen-Tran even staged a fashion show which she entitled “Indigenous Lynchburg.”

The Inspiration for Chromat

McCharen-Tran’s designing talent is pure and raw. She never attended a fashion institute or had a mentor to walk her through it all. According to a *New York Called* interview, McCharen-Tran said, “I think Chromat is such a different kind of garment and the fact that I didn’t go to fashion design school reflects that we don’t design traditional fashion garments. It helped me to differentiate the brand” (Cross, 2012). McCharen-Tran also believes that the process between architecture and fashion is not all that different. During her architectural days, McCharen-Tran developed a deep interest in scaffolding, which definitely shows in her design— in that most of her garments are surrounded by a black, cage-like structure around the bodice of the wearer.

Introduction into the Fashion World

How did McCharen-Tran take her first step into the fashion world? Well, it all started with something as simple as one of her co-workers from City Hall introducing her to his daughter, who was a designer residing in New York City. At this point, McCharen-Tran was very interested in seeing where her designs could take her, so she paid his daughter a visit. McCharen-Tran’s new friend was opening up a pop-up shop called International Playground, and McCharen-Tran took a few of her pieces to the shop and placed them out to sell. After a short period, her pieces became a hit and were written about on blogs. They continued to be sold through International Playground, which eventually became a retail store. International Playground kept receiving orders for McCharen-Tran’s garments. While she continued her job at City Hall, she was still able to pack and ship orders she received via International Playground. She still sells through them today.

The Ultimate Commitment

In 2010, McCharen-Tran moved to a small apartment in New York’s Chinatown. At this time she was jobless, so she continued to make and ship her designs to buyers through International Playground. While she was doing this, she was still looking for a full time job. She searched for months until, finally, she realized that fashion was an actual job! That was when she decided to take her passion for fashion and make it into her career. In order for her to grow her business, she moved to Bushwick, New York, where Chromat is still based today. Chromat makes swimwear, sportswear, lingerie and signature architectural cages. “Chromat is focused on empowering women of all shapes and sizes through perfectly fit garments for every body” (Chromat, 2016). Most know McCharen-Tran as “one of the wildest designers who makes sexy pieces using straps and braces that look more like scaffolding than clothes” (Adams, 2014). Chromat appeared for the first time at New York Fashion Week in the fall of 2015, and in March, 2016, McCharen-Tran worked with Intel to prepare her spring line. McCharen-Tran is a member of the LGBT community and identifies herself as Queer, refusing to conform to any specific gender. Today she is married to Christine Tran, who produces all of McCharen-Tran’s runway shows.

The Target Market of Chromat

In the beginning stages of creating Chromat, McCharen-Tran designed garments in an attempt to experiment with the human body structure. She was not necessarily looking to defy odds or start the latest trend, but, over time, she did. The brand became popular and she was curious as to who her customer base was, so she moved from her hometown in Virginia to New York City to meet them in person. If one were to ask McCharen-Tran who her muse is today, she would easily say it is any woman who is strong and powerful. She would state that her muses come in all shapes and sizes and are from diverse cultural backgrounds (Deczynski, 2015). She is not inspired by one type of woman but, instead, by the various women she encounters in her everyday life.

McCharen-Tran's Muses

Chromat's target market can be described as women who are seen as uncharted. These women have body figures and lifestyles that have not necessarily been explored by the fashion industry. McCharen-Tran has said that "Chromat babes come from all different backgrounds and there are so many different looks that should be represented..." (Maiorana, 2015). She is all about the female-empowerment, positive-body-image movement and happily showcases it time and time again in her collections and in the women she casts in her runway shows and ad campaigns. McCharen-Tran likes to work with plus-size women, transgender women, and women with bionic legs because she enjoys seeing the people who inspire her on her runway (Kahn, 2016). These are the women she designs for— everyday women we come across at work, on the train, in our families and so forth. "I'm so against all white, straight, skinny girl runways. That just doesn't reflect my reality and who I am and who the Chromat woman is" (Feldman, 2015). McCharen-Tran clearly wants to show an appreciation for *all* her customers by incorporating them in her brand's image.

Fashion for All

McCharen-Tran plays a huge role in the fashion industry by supporting and advocating the movement to cast diverse models as well as making clothes for them. Still pretty new to the fashion game, she has already debuted a line for plus-size women— something that well-known brands with years of experience under their belts have yet to execute. Chromat *Curve* was introduced in the fall of 2014. It was created to minimize size-exclusivity because there is no reason why the size of a woman should dictate whether or not she is able to wear these pieces (Curve, 2014). They proudly offer custom sizing for no additional cost— so curvaceous women everywhere have a shot at being a #ChromatBabe. For Chromat to target this audience is not only a huge step but also a smart move. The average woman's size in the United States is currently between 16 and 18, according to research from Washington State University, and plus-size women's apparel sales have outpaced total women's clothing sales for the past three years (Banjo, 2016). Therefore, the Chromat *Curve* line could definitely have a great number of followers.

McCharen-Tran has a keen eye for the future of clothing and is out to impress the world with her collections, in that she basically gives her garments a

brain. For the Fall-Winter 2016 season, Chromat debuted the *Lumina Collection* which was a collaborative collection with Intel. The clothes in this collection, which showcased a mixture of athletic-wear and lingerie inspired pieces, were not only impressive but exciting as well, considering they lit up when triggered by the model's hand gestures. For their Spring-Summer 2016 collection, they debuted the Aeros Sports Bra which is the first sportswear prototype built with Intel technology. This sports bra opens vents to cool the body down when it senses heat or sweat (Anyanwu, 2015). These types of garments are perfect for different groups of people such as those who like to run at night (due to the built-in LED lighting) and entertainers.

Conclusion

The ideal Chromat customer, according to McCharen-Tran, is someone who is fearless and bold. To wear her designs, one must be confident and cannot be afraid to stand out. McCharen-Tran is out to change the future of fashion. Her audience consists of those who are not afraid to try new things and anyone curious about how technology can be incorporated into one's garments to help one function better. Chromat is supported by those interested in a brand that is out to break the mold. Feminists can appreciate a brand that is relevant to the times and whose owner foresees a future where there are as many female designers as there are male ones. The LGBT community also recognizes McCharen-Tran's passion to include them in the brand as opposed to just allowing them to be an inspiration to her. Her collections are mostly inspired by the city she lives in— New York City— a fast, active, and creative playground, and the Chromat collections definitely express it. McCharen-Tran handmakes most of her garments in her Brooklyn studio; the rest are made in the Garment District of Manhattan. And yes, you read that correctly: to date, she still creates most of her pieces by hand. This is done because the designs can often be so complex that factories aren't confident enough to produce them. But that's exactly why the Chromat brand is as popular as it is today— McCharen-Tran and her team are willing to go the extra mile to create intricate pieces for the world.

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The Decline of the Honey Bee in a Struggling Society: The Gruesome Reality

Cynthia Ung

Fresh from the farm to your dinner plate, it's almost guaranteed that today's honey bees are responsible for most of the fruits and vegetables we consume. Nearly one third of world crops rely on these honey bees for pollination. But it is a startlingly reality that, over the last decade, researchers and farmers have observed a staggering decline of our yellow and black striped comrades at unprecedented rates across the United States and globally. Although they are not the only pollinators, many global biologists and economists agree that the purpose they serve as pollinators and domestic livestock is vital to the continued survival of human society as we know it. Commercial pesticides, specifically neonicotinoids, are a major contributor to the honey bee population decline. Proponents of legislation that would serve to protect honey bees argue that because they are not the only pollinators, they are not as vital as many suggest. As a species, honey bees are not in current danger of extinction, but their substantial contribution to commercial agriculture and our diets is in critical danger. Unless the federal government and agricultural corporations take an active role in ensuring that pesticides harmful to honey bees are effectively removed from commercial use, we risk the collapse of a delicate and irreplaceable industry that is finely in tune with nature.

Vital to our livelihoods: the honey bee empire

Honey bees, while approximately the size of an infant's thumb, contribute substantially to the economy of the United States and are vital to keeping native flowers, as well as fruits, nuts, and vegetables in balance in our diets. And yet, according to a White House statement released online, *The Economic Challenge Posed by Declining Pollinator Populations*,

[o]ver the past few decades, there has been a significant loss of pollinators—including birds, bats, and butterflies—from the environment. The problem is serious and poses a significant challenge that needs to be addressed to ensure the sustainability of our food production systems, avoid additional economic impacts on the agricultural sector, and protect the health of the environment. (“Fact Sheet”)

The threat the pollinator decline poses to domestic agriculture, the statement emphasizes, lies in the reality that the honey bee almost exclusively pollinates some crops, such as almonds and apples, and more than 90% of all crops rely

primarily on honey bees for their pollination. Most chilling, California's almond industry by itself yields 80% of the worldwide almond production and is worth \$4.8 billion each year (whitehouse.gov). To eliminate the honey bee population, then, would surely spell disaster to a delicate economy and agriculture industry that many hardworking families rely on for income.

Genocide of honey bees: the effect of neonicotinoids

In a journal article, "Declining Bee Populations Pose A Threat to Global Agriculture," journalist and environmental writer Elizabeth Grossman states that a recently conducted study had found that:

...unprecedented levels of agricultural pesticides — some at toxic levels — in honeybee colonies is prompting entomologists to look more closely at the role of neonicotinoids in current bee declines... some studies have indicated that neonicotinoids can lead to a sharp decline in queen [the sole reproducing female of a hive] bees in colonies and can also interfere with the ability of bees to navigate back to their hives. (Grossman)

With this in mind, we understand that neonicotinoids, which are used in over 95% of our agricultural crops and remain within the plants long after being treated with the chemicals, have been proven to be a lethal neurological inhibitor in bee populations. With its lack of regulation, many are unaware of the harmful effects this pesticide has on bees and may unintentionally kill millions of commercial and wild bee populations. It is a cruel, barbaric fate; if death is not immediate, the honey bees will be slowly poisoned while rotting alive.

A hive divided: proponents and opponents of the honey bees

One could argue that there is too much emphasis on the honey bee, which is not the only pollinator at risk. This is not to say that the honey bees are not important. In "6 Misconceptions About Saving the Bees," Kaitlin Stack Whitney notes that much of the current discussion about pollinators has been focused on honey bees in particular. Yet, most other pollinators are wild populations, and these largely unaccounted for bee species are solitary and independent of the hive. She introduces the idea that, "if we want to save pollinators [in order] to save the global food supply, [scientists] need to study and understand the contributions of all pollinators, not just honey bees" (Whitney). As wild honey bee populations cannot be as easily monitored as commercial honey bees, there are, admittedly, some inconsistencies within these scientific reports. But it remains evident that wild populations are in danger, as shown from the disappearance of entire colonies within large areas.

On the more extreme end of the positions surrounding the honey bee decline, are a few observers who believe that honey bees are not as vital to our ecosystems as many leading researchers argue. In "Honey Bees Are Not Essential to Our Ecosystem," the blogger Alex Wild establishes his brief but clear position that, the honey bee was:

brought to our continent by European settlers in the 1600's. Before then, our ecosystems functioned with several thousand species of native bees.

Many of which are still around. You might know them as bumble bees, mining bees, leafcutting bees, and others. Colony Collapse Disorder—which affects only honey bees—is a serious problem. Many fruit & nut crops depend on honey bee pollination. But the loss of a third of honey bee colonies is primarily a concern for agricultural interests. Our ecosystems are not going to unravel just because a single imported species gets less common.

Therefore, one could argue that as the ecosystem has functioned seemingly fine without the honey bee in the past, we need not worry about its demise today. However, it is rather ludicrous for these misinformed opponents to completely ignore not only the scientific data that proves that pesticides are in fact annihilating honey bees populations, but also the substantial economic contribution of the honey bees.

Saving honey bees through public education and government involvement

It is very difficult to deny that the contribution of honey bees to our economy and environment is as vital today as ever before. While it will take years for legislation to be passed that completely eliminates the offending pesticides from commercial use, the government has taken action by publicly acknowledging that “the problem is serious and poses a significant challenge that needs to be addressed to ensure ... sustainability [within our nation].” The Environmental Protection Agency (EPA) has also worked closely with pesticide and agricultural equipment manufacturers aiming to minimize neonicotinoid contact with honey bee populations during their peak flight times (“Fact Sheet”). To address any remaining concerns, the government should consider spreading awareness to farmers and the general public about the proper use of pesticides. For a stricter approach to ensuring that this legislation is followed, the government may also consider imposing fines on repeat offenders. As for the health conscious public, gardeners may consider organic or rooftop gardening to encourage honey bee populations in the nearby area and promote a healthier lifestyle. Together, our collective efforts to protect honey bee populations will ensure that we may continue listening to the gentle humming of the bees in our parks and gardens, and that we may continue to maintain the delicate, mutually beneficial relationship between man and nature.

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Breast is Best

Candice Powell

Breastfeeding is the natural act of a woman nourishing an infant with milk produced by her own body and expressed from her breasts. In spite of it being natural and it being something that ought to go hand in hand with childbirth, breastfeeding has become a sensational topic, salacious even, in recent years. Although the nutritional content of breast milk has been documented to be healthier, nursing mothers still experience duress. The general public's view on this matter has sparked a movement whose slogan, "Breast is best!" encourages mothers to breastfeed instead of succumbing to public pressure to bottle feed their infants. In this essay, I will discuss the nutritional benefits of breastfeeding vs. formula feeding along with the way in which current public policies are having an impact on women and their decision to nurse.

Differences between breast and formula-fed infants remain fairly minimal until months 2-12 when breastfed infants end up being leaner than formula-fed infants after their first year of life. It is at the 4-5-month demarcation when formula-fed infants show higher plasma levels of insulin, insulin-like growth factors, and certain amino acids in their blood than breastfed infants do. Higher protein intake at this point has been confirmed to be an important risk factor for obesity later in life. Unlike formula feeding, breastfeeding has been associated with lesser weight gain over the course of the infant's life. This is partially due to leptin-containing human milk, which has been found to play a role in post-natal programming of body weight and the regulation of muscle thermogenesis (Melnik, 2012), which refers to the heat produced within muscle tissue, and also due to the fact that formula-fed infants can easily be overfed because there is a relatively endless supply of formula. An infant who is breastfed is only able to consume the amount of milk that its nursing mother can produce throughout a 24-hour timespan, reducing not only his or her chances of becoming obese later in life, but also the risks of type 2 diabetes, as well as breast and ovarian cancers for the mother (Nguyen and Hawkins, 2013).

Several barriers to breastfeeding were identified in 2011 after the US Surgeon General's *Call to Action to Support Breastfeeding*, namely, the mother's need to return to work and/or school and the embarrassment experienced by the mother over breastfeeding in a public place. The former group's challenges included insufficient and/or irregular break times and a lack of private and clean facilities to express and store breast milk (Nguyen and Hawkins, 2013). The latter group of women can actually be asked to stop nursing their child, if they are in a public place where breastfeeding policies are not supported by legislation. Enacted in 2010, the Patient Protection and Affordable Care Act became the first federal legislation to support women in their decision to breastfeed.

In spite of this federal legislation being passed, discrepancies in how state and federal laws protect women continue to exist:

While 92% of states had legislation permitting women to breastfeed in any public or private location and 57% exempted breastfeeding from indecency laws, less than half of states encouraged or required employers to provide break time and accommodations, prohibited employment discrimination based on breastfeeding, or offered breastfeeding women exemption from jury duty.” (Nguyen and Hawkins, 2013)

This shows the need for public awareness to be raised via campaigns advocating a woman’s right to breastfeed and informing people that breast is, indeed, best for both mother and child. Although laws have been established to protect women, they remain ineffective if the public is unaware of their existence.

Research continues to support women breastfeeding. The health benefits alone trump the formula-feeding experience for both mother and child. Public policies by way of legislation have been enacted to protect breastfeeding mothers; however, federal and state laws render themselves useless if the general public is unaware of both the benefits of breastfeeding—and the fact that a criminal act is being committed when accommodations are not provided to the nursing mother. Increased public awareness is required to allow a mother to nurse comfortably and confidently in a public space.

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My Family's Life Sentence

Jendayi Chambers-Bandele

My Uncle K.'s jail sentence was probably one of the most life-altering changes in my family's life. He was only 16 and even though I was just born when it happened, it still changed the dynamic of the family. My sisters grew up with him and my aunts loved and cared for him dearly. His arrest especially affected his daughter, my cousin, N, who had never even met him until recently. He missed out on most of our lives. We did a good job of building a relationship with him, calling him and visiting frequently, picking up the pieces from where he left off when he left the whole family.

He has been in jail since N. and I were born and will not be getting out until next year. He missed a huge chunk of his life (almost 20 years) and I know it's going to be hard for him to make the transition when he gets out, having missed a majority of his adult life. I don't imagine that you learn much in jail, or progress as a human being. I don't imagine churches or classes like you see on TV. If anything, I feel like you are most likely to relapse and increase recidivism, especially if you are in jail for so long. I also know it's going to be kind of hard for N. since they spent so many years apart from each other. Neither of us ever met him as a child, but it was more important that she had never met or spoken to him until seven years ago, since he was her father. My family first connected with N. also, about seven years ago. It was important for us to know her, especially for the sake of her father's missed presence. My mother invited her to our house. It was cool when I met her. She was wild, funny, and goofy, much like I had imagined her father would be. Even though she was more of a laid-back tomboy, we got along well. She told us that even though she had never met her father, her mother would tell her about all the crazy memories they had together and what he was like. All of that has changed since N. speaks to her father frequently now.

My mother, although very far in age from her brother, would tell me how much of a turbulent childhood he had. Growing up in the rowdy parts of Flatbush, he went to school with my sister at Prospect Heights High School. He used to physically fight his teachers, skip school, get in trouble with the cops and steal. Whenever he got in trouble, he would go to my mother's house on Flatbush Ave. She always told me how bad he was, how he did not listen to authority at all and always got into fights, even being expelled from several schools. One time, he went to her house when he was hiding from the cops and stayed for a while. He had no guidance and his mother left him and his other sisters when he was about ten. He was a troubled child, and I guess my family took responsibility for his actions because they were not able to help him and guide him. With more help and guidance, he would not be in as bad a position as he is in now; he would not be paying so much for something he unknowingly, carelessly did in his teens. In 1998, he and his friends decided to kidnap and assault someone who was, unbeknownst to them, a federal prosecutor. They also had a gun, and proceeded

to rob him in the streets of Greenwich Village, Manhattan. My mother told me that it was all over the news when it happened.

I remember my first time visiting him which was also my first time visiting a prison. It was upstate New York, a far drive. Even though I had never seen him before, I knew I had an uncle from hearing many stories. Prison was just as I had imagined it: dirty, unsanitary, depressing and dull. The walls were dusty olive green and the security guards looked so mean, like they weren't getting paid enough to deal with the people there. I was about twelve. I went with my mom, my sisters, my niece, and N. Uncle K. was chubby but didn't look sloppy. He hugged and greeted us awkwardly, which we expected. He also never got any visits, so I knew he was surprised and happy to see us. We introduced ourselves, spoke, and shared funny, stupid, senseless childhood stories with him. His speech was slurred and mumbled. He was still in his 16-year-old state of mind, which was the age at which he was convicted. He seemed to not care much for why he was in there, or it just seemed like he wasn't doing much thinking at all. He was very nonchalant and distant, maybe because he was overwhelmed with how much his nieces and daughter had grown and how much life had continued while he was in prison. I decided to look at my surroundings, to see what it was like for other families. As I looked around, I saw couples grasping each other with deep emotion, embracing each other's missed presence. I saw little girls with their families, and even babies. I saw people crying. It was just a weird place to be, especially if you were not used to such a setting.

We try to visit as much as we can. They always seem to move him further and further away. He was at Wende Correctional Facility in Alden, New York, then Greenhaven Correctional Facility in Stormville, New York. During his incarceration, he was even admitted to a mental institution where he was diagnosed with schizophrenia, which people seem to think might explain his violent behavior. My mother told me he takes medication, which explains his slurred speech. Right now, he is at Auburn Correctional Facility in Auburn, NY, about six hours away. We try to go and make a family outing out of it, bringing my aunts and cousins. We rent a hotel, watch movies, go out to eat, and do other fun activities, like bowling. Sometimes, we go with my aunts and their children. We try to make it a family-bonding trip, especially since we do not see them often. One time, we all drove to Skaneateles, a high-class area, and went on a boat tour around the Finger Lakes where we saw these nice houses that the presidents used to rent. The next time we went, it was just my mom, one of my sisters, my niece and a cousin. My niece and I decided to stay in the hotel and watch movies while they went to visit him. I didn't feel like going inside the jail at that point, because I was fed up with the long process.

As the visits got more consistent, I noticed he got better: he seemed happier, he conversed more, and he showed more emotion. We all laughed more and we had more things to talk about, like school, our personal lives, and his personal life before jail. I remember asking him what type of relationship he had with N.'s mother. He gave me a confused, wondering look, as if he had to think about it. He said, with a shrug, "we were just having fun, I didn't think it would lead to anything" because they were only teenagers. I thought that was pretty funny. The last few times N. didn't come with us, but she talks on the phone with him. He calls us frequently now, every Saturday or Sunday for 30 minutes. My

mother usually puts her sisters on the line, so they can all talk with him and catch up.

Eventually, I stopped going. I didn't like the depressing feelings the trip evoked. It was dull and stripped away my happiness. The drive there was long, the process to get in was long, and there were so many rules (you couldn't wear sleeveless clothing, an underwire bra, a belt, or any metal of any sort). It was just so inconvenient and time consuming to me. Whenever he calls, I get to talk to him, but it's still awkward. We talk about the same stuff all the time, and have the same conversations. We ask each other questions like: "How's school?" "What you been up to?" "What did you do for (recent holiday)?" "What do you watch on TV?" "What movies are out that you want to see?" I am used to it because there is nothing else to talk about, really, but I am glad we both make an effort to get to know each other more.

Although he has been out of our lives for a while, we still try to be there for him as a supportive family. Although I may not like jail, I am sure it is not fun for him being in there for over a decade, so I try to be as present as possible. He isn't quite aware of the fate of his sentence either, which makes it harder. He was up for parole review last year, but they told him since he spent time in the mental institution, it didn't count towards his jail time, so he had to serve a little more time. His behavior is good, he says; he doesn't bother anybody, he's quiet, and tries to stay out of trouble at all times. I'm glad he has a relationship with my cousins and me, especially with his daughter. Since she knows more about her father, she is more open and accepting of her life. Fortunately, he should be getting out very soon. He was recently granted parole, but cannot leave until his counselor finds proper facilities in which to place him so they can monitor him, make sure that he takes his medication, and ensure that he takes steps toward a better life. Since my family talks to him often, it'll be like he never went anywhere.

The Analysis of Visual Perception in Graphic Design Principles I

Oscar Gonzalez

Upon enrolling in this course, expectations were high. Among them were those cliché vanishing-point drawings that led to sketches of my own. I was under the impression that I would relearn every art class in one term with a catch, a challenge. I was very eager for such intensive art workshop sessions that would force me to tap into my creativity. Personally, I tend to be ambitious in regard to visual representations of my creativity so when my mind processed the simplicity of a mere box as a first project, I was in laughter. However, it proved to be challenging. The more we worked on a square, the better our precision became. Every dot of ink was crucial: one bleed and the square's perception loses its value. The white space itself also dictates what the mind registers at first glance. When the focal point is tampered with, the feeling is lost.

For our first project we had to measure a 2" square positioned in the top center of a sheet of Bristol with equal margins. The objective was to learn how to control the negative space of the paper to make the box stand out further. Once we understood the concept, we were thrown another challenge. We had to execute it precisely without any change in tone and the alignment had to be as sharp as a blade. This was quite a challenge.

These projects transitioned into 3D perceptions. We recreated our squares but shifted the direction of the edges. A 1/32" or 1/16" subtracted from the sides of the box, from a distance, appeared to be aimed at the center with a diminishing effect as perspective. The box suddenly had a destination—it was showing us it was fading to the vanishing point of perspective. This was our first attempt at the inception of illusion created through perspective.

Afterwards, we transitioned into patterns. As with our previous works, we tampered with yet another aspect in art: repetition. We had to create an illusion that there was more to what we were seeing. Sure, it wasn't a full all-around pattern but it gave the impression and illusion it was starting, as we read everything from left to right. I created a rectangle, narrowed down a square and added a slit of empty space. From our reading style, looking at this slit in a rectangle gave an impression that there was a continuation. What followed? Another square? Or was there a missing half that completed what would've been a second square?

As we approached mid-semester, our challenges were kicked up a notch. We had to start using color, and were forced to create our own palette from experimental mixing. The process was challenging. One has to tamper with a precise water dosage to apply to the gouache paint. The pigment itself was too precious to waste. Once we understood the technical calculation, we had to then learn how to experiment with dark and light achromatic tones. Getting nearly identical but distinct enough tones was a challenge. The tones had to distinctively

be light or dark. The two tones had to be close in color to give an illusion of smooth transition, as our eyes became sensitive to the nuances of subtle contrast.

Once we understood how to transition colors, the challenge heightened. Instead of experimenting with Gray tones, we created an illusion of a transition between two colors. It was not a simple pick-and-choose assignment, because the catch was to use colors with a similar tone. For example, one cannot use Blue and Red unless both were of dark tones (categories such as Navy and Burgundy) or with an equal brightness (Flame Red and Sky Blue). They had to work together and both the artist and viewer had to feel it. Practice makes perfect. Getting a decent match was not sufficient. The work had to be redeveloped until we learned to understand the “how and why” some colors just don't work. In learning to create optical illusions, we also had to learn not to be controlled by the narrative of the project's story.

As for our final project, perfect design in proportion and tone was to dictate. We had to create a symbolic piece of digital art that embodied the message “going green.” For my piece I chose to create a plant sprouting the world out of a plastic bottle. The world can run and thrive by recycling materials once it has wasted all remaining natural resources.

Course Experience in Graphic Design Principles I

Irina Mashuryan

This year I started my new journey into the world of art and design. This is the first time I went to study at a college in the United States. My first lesson was Graphic Design Principles I. Before the start of classes, I read and looked on the Internet for information about what we will learn in this particular course. I expected to expand my knowledge and then implement what I learned into practice. My expectations were met even more than I could have imagined.

From the first lesson, we started to improve our visual perception of graphical objects. We studied the nuances and subtle differences of perception, depending on where the graphic object was located on the sheet, and learned how to control the negative space. Correct size and proportions of the graphic object are also important; they give the opportunity to direct the viewer's attention to where we want it to be. We also studied the peculiarities of perception of people from different civilizations. For example: the people from Western civilizations read from left to right; therefore, the location of the focal point of perception is on the left or in the center, above the middle of the sheet. Exercises for the development of visual perception and continuous work on the technical skills of drawing taught us to create the illusion of symmetry, pattern, and 3-D.

We began with a study of achromatic tones, and then continued with monochromatic colors in a pictorial composition. We learned the difference between primary, secondary, and tertiary colors. We also learned about complementary colors, the temperature of colors, and tints. We finished the lessons of colors with our own illustrations, where we could use all these new skills. The theoretical part of our lessons allowed us to get acquainted with the works of the top designers in the field of advertising, clothing, furniture, and other consumer goods. Many of them, I think, are real works of art such as advertising by Ester Grass Vergara and Haidee Findlay-Levin. Our lessons were accompanied by a study of special art terminology, for instance, "Form Follows Function," "Chiaroscuro," and "Pictorial Balance." Furthermore the theoretical part of the lessons provided us with the history of modern design, which is based on the philosophy of the Bauhaus school. The founders of this school created a postulate: "Less is more," and many of the most successful works of contemporary designers conform to this standard.

When I attended orientation day, the Chair of the Communication Design Department, Mary Ann Biehl, told me: "You will have a fun here." After half of a semester studying Graphic Design Principles I, I can confirm this message. I had, I have, and I think will have more fun with this and all other subjects, because it is a joy and pleasure to learn all these things that makes our life more beautiful and comfortable.

A Formal Analysis of Auguste Rodin's *The Hand of God*

Tashi Wangdu

Auguste Rodin (1840-1917) modeled and carved his series of sculptures called *The Hand of God* between 1896 and 1907. Among the three known marble versions, I am going to analyze one, which was purchased directly from Rodin himself by Samuel P. Colt of Rhode Island. After his death it was purchased by the Rhode Island School of Design (RISD) Museum and is currently exhibited in this museum in Providence, RI.

Rodin's *The Hand of God* is a sculpture of a right hand which seems to be modeling a pair of human figures, one male and one female, from a clod of earth. The hand itself emerges from a block of roughly chiseled marble. When I look at a picture of the sculpture, it reminds me of my illustration class professor. He used to say that the human hand is one of the most expressive organs. Just looking at the hand gesture in a painting or an illustration, you can tell a lot of the story. Certain hand gestures express our love and friendliness and certain other gestures might get you into trouble! I myself really agree with him when I think of the whole language that can be created with hand gestures, for example, sign language.

The sculpture of the big right hand has a smooth surface and curvilinear forms for every muscle and the skin of the hand, making us believe that it is alive and real. The way it holds the molding earth, it seems natural to think a sculptor is at work. The rough, unfinished side of the earth is resting on four fingers while the finished part of the smooth portion is facing upward to the artist himself, and the thumb is slightly touching the surface, as if it is gently and carefully smoothing the surface. All these gestures of the hand give us a feeling that it is in motion and in the process of making those human figures. The contrast between the look and feel of the underworked roughly chiseled portion, the smooth shining luster of the hand and the emerging forms of two human bodies not only emphasizes the subjects themselves but it differentiates between the nature of the medium and the skill and craftsmanship of the sculptor himself.

The choice of marble as the medium for this particular piece is perfect in many senses. The color of the marble appears as milky white, representing not only purity and the divine but also life and birth. The contrast between the texture of the rough earthly matter and the smooth and beautifully modeled figures demonstrates a relationship between the lifeless form of a stone and a form that is organic and full of life. Looking at the brightest light reflection on the edge of the fingers and the top of the muscles or nerves provides the form with beautiful, curvilinear lines that define the shape from the rest of the medium. It seems to me that the big rough marble on the bottom and the hand are slightly away from the vertical center, but this is somehow counterbalanced by the two human figures

and the rest of the clod of earth. This gives the final form an asymmetrically balanced look and weight which is held in this space easily and naturally.

To Rodin and his community of believers around the world, this sculpture must have a deep meaning and very powerful message. Regardless of the message he intended to express, all we know for sure is that it is a representation of God's creation of human beings. As the name by which the sculpture is widely known suggests, the big right hand represents God creating the first two humans in the world, Adam and Eve. Maybe Rodin wanted to remind his people who created them or maybe he wanted to give them a feeling that they live in the presence of God!

Whether one agrees with the representation or the symbolism of the sculpture is very much dependent on one's social, cultural and religious background. As a Tibetan myself, I come from a country in Asia where 99% of the population follows Buddhism. As Buddhists, we don't believe in God's creation but rather self-creation through evolution. Thus, the way I look at the sculpture and the message that I receive may be a little different. To me, it represents the idea that we all came from Mother Nature. Just as Rodin skillfully carved the marble into organic forms, we all came into life with the perfect condition of Mother Nature. It seems to me as though the hand itself, as it emerges from the marble and gives life to the struggling human figure, is a representation of the cycle of life. We were formed from nature and we give birth to a new generation; when we die, we will disappear into nature itself. It also reminds us how nature has provided us with life and how this circle of life will remain vital to future generations. Rodin's *The Hand of God* is an inarguable example of design concepts of the 20th century in which minimalism was the most powerful influence, not only in the art world, but in the lifestyle of everyday human beings. It is simple in terms of color and form but with a huge meaning and impact on the audience even to this day.

Rodin's *The Hand of God* can be many things to many different people, but we can decisively conclude that it has not only worked in the past but continues to inspire many artists to follow in his footsteps. It is a masterpiece from the past, which can transcend the gap between generations and stand firmly as an inspiration to the creative world of the past, present and future.

Effective Ways of Teaching Bioinformatics to Undergraduates

Victor O. Adedara & Kabir D. Omolaja

Bioinformatics is a new and emerging field that utilizes computer technology to manage and analyze biological information. The use of bioinformatics is a shift from the traditional research methods in which wet laboratories were used. Bioinformatics uses computational approaches and skills to solve biological questions (Neumann, 2006). The use of bioinformatics in the contemporary classroom is inevitable, thus the teachers need to include this approach in biology classes. There are several effective methods that can be used to teach bioinformatics to undergraduates as will be discussed below.

To ensure that bioinformatics is effectively taught to undergraduates, instructors and students should be equipped with the competencies that allow them to use resources and data in ways that resonate with current research practices. The instructors should ensure that students explore web-based bioinformatics resources to increase their digital literacy thus reducing any fear of contact with scientific resources, such as analysis tools and databases. Additionally, it is crucial to use materials such as downloadable PowerPoint presentations with lesson plans to boost the instructor's ability to teach the course material.

The first method proposed by Parke (2013) is the use of *high performance computing* (HPC), which involves the use of high performance or fast computers to solve scientific or biological problems. An example of an HPC system is the XSEDE that is used for computing and data sharing. HPC is important in teaching bioinformatics because it increases the capacity of collecting Big Data and the data needs to be analyzed accurately and fast. Bioinformatics involves the analysis of large amounts of data that cannot be accomplished with ordinary computing.

In identifying the most appropriate bioinformatics teaching strategy, it is important for the instructor to be aware of the knowledge level of the students. Introducing bioinformatics to students requires the use of customized tools and databases that are taught by instruction in real-time bioinformatics labs (Neumann, 2006). For more advanced undergraduate students, more complex tools and databases such as Student Workbench (bioquest.org), a web-based tool used to analyze molecular data, can be utilized.

Students, just like scientists and researchers, can be bioinformatics users who not only need an introduction to bioinformatics, but also continuous training to keep them updated with the evolving technology. The training proposed by Schneider (2010) is valuable because it addresses the challenges in training, such as differences in trainee backgrounds and lack of materials, and provides the necessary solutions to these challenges. In Wood and Gebhardt (2013), a different type of training is proposed: The European Learning Laboratory for the Life

Sciences (ELLS) training courses called LearningLABs, which enable the exchange of new information locally and internationally to help students access real-life biological data and get exposed to contemporary research methods (4). LearningLABs are crucial in introducing core concepts of computational biology as well as providing the opportunity for research. Through LearningLABs, instructors show their students the connection between cutting-edge research and curricular topics, thus bringing science to life and inspiring student interest in bioinformatics. Teachers should encourage student participation to ensure that they further their skills.

Wood and Gebhardt (2013) explain that LearningLAB teaching courses for instructors offer practical expertise and theoretical knowledge in providing students with bioinformatics concepts. The ELLS ensures that students engage directly with instructors, thereby shortening the time it takes to furnish students with new scientific findings. Therefore, lecturers act as transformers of knowledge by taking information from the source to the students as “living science.” As such, the lecturers ensure that students gain interest in bioinformatics thus becoming inspired to become future scientists.

Form and Lewitter (2011) propose the use of *inquiry-based learning* in teaching bioinformatics that involves solving real-world problems (1). Inquiry-based learning involves the use of questions and scenarios to present facts to students. This type of learning helps the students learn the subject in their own way. The authors propose rules of teaching bioinformatics that include empowering students, addressing different learning styles and linking activities to pre-existing science curricula.

Students prefer *computer-based learning* compared to traditional learning and they find bioinformatics more interesting when working in pairs or groups (Machluf, 2016). Even though students find it more attractive and appealing to use computer-based learning, the teacher plays a critical role in introducing bioinformatics, guiding students in understanding an activity and providing personalized feedback instead of the automatic feedback from a bioinformatics website (Machluf, 2016).

Collaborative bioinformatics is also supported by Goodman and Dekhytar (2014) in what they refer to as cross-disciplinary peer instruction or *in-concert teaching*: collaborative learning in which students in life science work interdependently with students in computer science to solve bioinformatics problems or issues. Goodman and Dekhytar (2014) propose an in-concert teaching approach to introduce students to computational thinking through collaborative projects that use software development. They see their approach as emphasizing interdisciplinary communication development, as well as collaboration skills for bioinformatics. To apply the in-concert teaching approach to bioinformatics, the teacher should build an introductory programming course and engage students in problem analysis, implementation, design, and solution evaluation. The teacher then focuses on the problem-solving process thus making the approach suitable for exposing students to bioinformatics for computational skills. Therefore, the students are taught two different courses, with a shared laboratory component and discipline-specific lectures, in a concerted way (Goodman & Dekhytar, 2014). The approach involves two lecturers jointly creating the course materials in a coordinated way although the courses are

taught from each instructor's respective field. During laboratory assignments, students from both classes work together thus bringing in discipline-specific skills and knowledge. The approach thus involves the concerted efforts of lecturers and students from distinct disciplines working towards a mutual goal.

Form and Lewitter (2011) agree that the right *technology* is essential to teach bioinformatics to college students effectively. As such, computational tools, if used early enough would be effective in teaching future biologists. For example, through the BLAST program, students learn biological structure analysis through various computer programs. These programs handle and manipulate huge amounts of data within a short period of time. However, the instructor should expose the students to a simplified mock-up data analysis using paper and pencil. The exercise may involve protein sequence comparison to reach a relatedness score before using BLAST. To help students understand the BLAST output, the instructor should present information in different ways, such as using colorful graphical interface, sequence alignments, and a "hit list" in chart format.

Another way of teaching bioinformatics to students is by using *virtual reality techniques*. These techniques are essential in facilitating an interface with the external environment, as well as generating an artificial ambiance to the students. The instructor visualizes the information as a 3D correlative disposition to create student interest and thus enhance learning interface. The virtual reality techniques help students to understand the applicability of bioinformatics, thereby improving the learning outcomes in therapeutics, biochemistry, anatomy, and pharmacology. As such, students learn about data storage and scanning tools, which are essential in MRI data mining in addition to delineating correlations of brain findings using analytical software.

Virtual reality is essential in supporting multiple users at the same time thereby promoting collaborative and interactive learning. Therefore, virtual reality techniques, as opposed to a purely teacher-initiated learning, boost a student's initiative to study. Instructors should also embrace the recent advances in tablet and mobile technology as learning mediums to equip students with materials and educational links for improved outcomes.

In summary, students can deepen their bioinformatics knowledge through exposure to computational thinking. Instructor collaboration is essential to teaching the course with expertise from different disciplines. Instructor moderation is crucial in teaching bioinformatics as is computer-based learning. Students can learn bioinformatics through high-performance computing, which uses fast computers to solve biological problems. Further, inquiry-based learning can also assist students in effectively grasping bioinformatics concepts since they are involved in solving real-world problems with modern skills. Other useful techniques for teaching bioinformatics include virtual reality technologies, which promote interactive and collaborative learning.

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One Man With a Gun Can Control a Hundred Without One

Krystal De Souza

We must impose stricter gun laws to regulate the purchasing of firearms in the U.S. to help decrease the number of gun homicides. Gun violence is at an all-time high in the United States and costs the American economy approximately 229 billion dollars yearly, according to the Law Center to Prevent Gun Violence; that is equivalent to 700 dollars per American, per year (Gun Violence Statistics). The federal firearm legislation, and the local state gun laws, have come under much scrutiny and it is about time we delve deeper into the purchasing process of firearms. A simple background check is not enough. The screening process definitely needs revamping. I strongly believe that implementing certain gun laws used by countries (such as Canada) where gun violence and homicides are very low will benefit the United States and potentially save lives.

Based on studies performed over the years, the use of firearms in Canadian homicides has declined significantly since legislative changes in gun control and capital punishment have been implemented. Furthermore, these studies have noted that the decline in the rate of firearm homicides is mainly due to a drop in the rate of homicides committed with a handgun, rifle, or shotgun (Ahmed). Unlike Canada, the United States is experiencing epidemic levels of gun violence, claiming over 30,000 lives annually, as noted by the U.S. Centers for Disease Control and Prevention. Out of those 30,000 lives, approximately 10,945 of them were due to gun homicides in 2014 (“All Injuries”).

A 2016 study done by the Sydney School of Public Health estimates that the total number of guns (both legal and illegal) held by civilians in the United States is between 270 and 310 million, and the United States is ranked at number one in the world (among 178 countries) as having the highest number of privately owned guns (Alpers et. al.). According to www.smartgunlaws.org, “guns kept in the home are more likely to be involved in a fatal or nonfatal unintentional shooting, criminal assault, or suicide attempt than to be used to injure or kill in self-defense,” which basically means it is more likely that an innocent person will be killed or injured in the home rather than a threatening intruder. Even though most gun owners claim that one of the main reasons they purchase firearms is for self-defense, there’s a possibility that they can be injured from this very firearm even without the presence of an intruder. Research published in 1998 in the *New England Journal of Medicine* found that living in a home where guns are kept increased an individual’s likelihood of death by homicide by between 40 and 170 percent (Kellermann et al.). Therefore, instead of keeping owners safer from harm, firearms in the home put owners and their families in more danger. In addition, a study published in the *American Journal of*

Epidemiology concluded that the presence of guns in the home increased an individual's risk of death by homicide by 90% (Dahlberg et al.). Furthermore, many of these same firearms in the home are used to commit gun homicides outside the home. Take, for instance, the San Ysidro McDonald's shooting on July 18, 1984, which was considered the fifth deadliest mass shooting in the United States at the time (Peralta, 2016). On that day, 41-year old James Huberty shot and killed 21 people and injured 19 others at a McDonald's in the San Ysidro neighborhood of San Diego, California. According to a family friend of Huberty, his home was "bedecked with loaded firearms to such a degree that wherever Huberty was sitting or standing, he could just reach over and get a gun" (San Ysidro McDonald's Massacre). James Huberty had a history of mental illness and should not have been given the opportunity to purchase firearms considering his condition.

In Canada, gun license applicants are screened using a two-tier process, in addition to background checks. Canadian applicants are required to pass safety tests called the Canadian Firearms Safety Course in order to get a gun license (Ahmed). Because they break down their firearms into three categories (restricted, non-restricted, and prohibited), an additional test called the Canadian Restricted Firearms Course, or CRFC, is required if applying for restricted and prohibited gun licenses. Restricted and prohibited categories include the following: firearms such as rifles that can be fired when telescoped or folded to shorter than 660 mm/26 inches, most 32 and 25 caliber handguns, handguns with a barrel length of 105mm or shorter, fully automatic firearms, converted automatics, and military rifles such as AK47s (Ahmed). Secondly, gun license applicants are required to provide third party character references. Once applicants are issued the gun licenses, the screening process doesn't stop there; screening is ongoing through the process of "continuous eligibility." This is a monitoring function that has a licensee "flagged" for a review of their license should a matter of public safety arise after they have obtained their license (Ahmed). Furthermore, a firearms license expires every five years and it is the owner's responsibility to renew it, at which time they have to go through the two-tier screening process all over again.

The United States, on the other hand, only requires gun license applicants to go through a simple background check. I propose that the U.S. implement a more comprehensive background check and follow testing procedures similar to Canada in all states to properly screen gun applicants as follows:

- Gun applicants should be required to undergo a psychiatric written test (similar to what the NYPD and other government agencies administer to all their candidates). These tests can be administered online. In addition, they will need to meet with a psychiatrist (who will be able to retrieve the applicant's results from this online testing site), and sit down and talk with him or her to ensure that the applicant is, indeed, in the right frame of mind to possess a firearm. The session should be covered by the applicant's insurance; if it is not, then the applicant should pay out of pocket for this session.

- Secondly, third party character references should be another determining factor. Just like an employer verifies a candidate's character by checking with their references, the authorities should be able to verify a gun licensee's character references.
- Thirdly, a license should be required for the possession of semi-automatic assault weapons, fully automatics, pistols and revolvers in *all* states. Currently, private possession of fully automatic weapons, semi-automatic weapons, and handguns such as pistols and revolvers are permitted without a license in almost all jurisdictions (Alpers). This has to change.
- Authorities in some states do not maintain a record of individual civilians who are permitted to acquire, possess, carry, sell or transfer a firearm or ammunition. A system similar to what the government uses to keep track of all drivers' licenses should be implemented for the tracking and upkeep of all gun licenses; otherwise, how can the authorities properly flag a licensee for review should a matter of public safety arise?
- Lastly, it should be standardized throughout all states that all gun licenses *must* have an expiration date.

In the first seven years of the U.S.-Iraq War, over 4,400 American soldiers were killed. Almost as many civilians are killed with guns in the U.S. every seven weeks (Smith). I strongly believe that if we implement stricter gun laws in all states—such as required testing and licensing for all firearms, expiration dates on all firearm licenses in every state, character references, and psychiatric testing for all gun license applicants—we will be on the right track to weed out those individuals who have guns for all the wrong reasons. Implementing a proper system to keep track of all licenses will also help to regulate the amount of people who have no right owning a gun. Where guns are prevalent, there are significantly more homicides, especially gun homicides. If we can regulate the amount of guns on the streets, we will experience a significant decrease in the amount of gun homicides, just as Canada has seen. It's time for a change! They say guns don't kill people: people kill people. However, this doesn't change the fact that the gun is still used as a tool. One man with a gun can control a hundred without one.

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Girlboys

Siera Whitaker

My boyfriend frequently calls me a feminist. For some time, I disagreed with him. “I don’t go on marches, and I don’t hate men! I even watch *Love and Hip Hop*, occasionally. Everyone knows most of the men on that show are womanizers!” I once shrieked, contesting another of his allegations, almost on the verge of foaming at the mouth like a rabid animal. Then one Saturday evening at a two-year old’s birthday party, I was called a feminist while talking with my boyfriend and one of our male friends. I became exhausted from defending myself on this subject, when it occurred to me that I hadn’t known what feminism was—just that it had to do with women despising men because most of the women were lesbians. Somewhere in the vicinity of our media-washed existence, I had heard feminists don’t shave their legs and are unafraid to aggressively ambush those who oppose their views. Somehow, I’d come to give feminism a negative connotation without fully understanding why or seeking some sort of evidence to justify my pessimistic attitude. I realized this was wrong and vacuous, so I researched what feminism meant. Shortly, like a sinner coming to Christ, I became awakened when I realized I *am* a feminist, and all of my previous theories about feminism were bullcrap!

The most shocking discovery about this whole thing is that while feminism is the theory of social, political, and economic gender equality, there is a certain masculinity attached to women who believe they can do things just as equally as men. We get thrown into a category of women who think they don’t need a man for anything and that men can be replaced, or for African American women like me who are feminists, we become the epitome of the “strong Black woman,” as if race has anything to do with our independence and thoughts on gender equality. As a feminist, I am still a woman. I still possess the features of a woman. I believe that women can be heads of households; at the same time, I believe households can be run equally. If my husband wanted to take care of me, I’d let him—to a point. Maybe I don’t fit in with the typical chemical makeup of a patriarchal society because I personally don’t want to depend on anyone else to fully supply me with my needs, but I don’t give less credit to men who are the heads of their households nor do I give them any more credit either. I prefer to be safe, and being safe means being accountable for myself. That doesn’t have to do with me being a woman or a feminist; it has to do with me being a human, trying to meet my most basic needs.

During this process, I’ve learned that every feminist has a unique tale of becoming a feminist; mine began as a girl. As a child, I saw the struggle of power between my parents. My dad was the breadwinner, and he made that clear to everyone, but he made that especially clear to my mom. She waited on him and he supplied the money, but she couldn’t do as she pleased freely. I often wondered why my mom didn’t go out and find a job. But my parents lived in a different time. Our home became unhappy. The unhappiness led to physical

abuse and drug abuse by my parents. The physical abuse and drug abuse led my dad to acquire HIV and my mom to die at fifty-two. Once I became an age that all of this was comprehensible, I realized I had to exceed society's expectations of me as a woman. I would not be a stay-at-home mom with no money of my own. I would get an education, and I would create a career for myself. I would never allow a man to abuse me, hold money over my head, or make me feel unsafe. I refuse to allow society to tell me what I can achieve, so if that makes me a feminist, then so be it.

Feminist—it's simply a term that sheds light on the imbalance among men and women on social, political, and economic levels. The world doesn't set women up to be strong, confident, independent women. It tells us to play with dolls and ovens as children to prep us for becoming wives fit for a patriarchy. It tells us we belong in a suppressed role. It tells us we can never be beautiful or feminine enough, and it imbues us with what beauty is and what it isn't. The world tells us we can't have careers that are as successful or as financially rewarding as men. If we are mothers, we can't put our personal passions and careers ahead of our children, and we need to be home. We can only be first ladies, not have dreams of becoming the first female president of the United States. And if we are feminists, we are like girlboys, because we've amassed too few feminine traits and too many masculine ideals.

How "Eco" is the Ecotourist?

Peter De Temmerman

Introduction

According to the United States Department of Transportation's Bureau of Transportation Statistics (BTS), the average air fare within the United States fell to \$361 in the first quarter of 2016, which is the lowest level since 2010 (BTS, 2016). Low-cost carriers and depressed fuel prices have made domestic, as well as international air travel, almost commonplace for many people worldwide. This is reflected in the billion yearly arrivals cited by the United Nations World Tourism Organization (UNWTO). International arrivals peaked at 1,184 million in 2015, which is some 50 million more than in the previous year (UNWTO, 2016). The same organization estimates that the tourism industry is responsible for 5% of global carbon dioxide emissions. Transportation, with air travel in first place, is believed to be the major culprit, making up 90% of tourism's contribution to global warming (Hares et al., 2010).

Action is always followed by reaction. It is thus no surprise that the ecotourism industry is gaining popularity year by year. What started as an obscure niche—a product of a global environmental movement in the late 1970s, obtained a prominent place only a few decades later, both in the tourism industry and as a research topic in academic studies (Weaver & Lawton, 2007). The International Ecotourism Society (TIES) was founded in 1990 and is nowadays the oldest and largest non-profit organization in the world dedicated to making ecotourism a tool for sustainable tourism development worldwide. Its definition of ecotourism, which will be discussed in this paper, is widely cited in hospitality related research articles. With an increasing number of travelers choosing ecotourism destinations, the question arises if the social, environmental, and educational core values of ecotourism and the definition of the "true" ecotourist, as defined by TIES, correspond with the underlying motives of tourists who choose destinations that promote ecotourism. Or could it be that other, more egocentric factors are at stake? To answer this question, a profile of the typical ecotourism participant will be derived by exploring several ecotourism related research articles and statistics. This profile will be matched with TIES' definition of the true ecotourist; and, based on these findings, recommended strategies for ecotourism destination managers will be suggested.

Ecotourism's Three Core Values

Ecotourism, sustainable tourism and nature-based tourism are all terms that have been widely used since the 1980s. Nowadays, academic researchers generally refer to the definition given by TIES, which defines ecotourism as "Responsible travel to natural areas that conserves the environment, sustains the well---being of the local people, and involves interpretation and education" (TIES, 2016). To qualify as ecotourism, three core values should be fulfilled: (a) it should involve travel to natural areas, (b) ecological, socio-

cultural and economic sustainability should be the focus when it comes to managing ecotourism destinations; local communities should be empowered and bio-cultural diversity should be conserved and enhanced, and (c) learning and education should be the focus of visitor and staff interactions with those attractions (Weaver & Lawton, 2007).

Who is the Ecotourist?

Although The International Tourist Society claims that ecotourism attracts travelers of all ages and interests (2016), statistical data and research can be found that draw a more specific profile. According to these findings, ecotourism participants tend to be older, more affluent, and higher educated than 'average' tourists (Weaver 2007; Perkins & Brown, 2012). Although it is important for ecotourism marketers to have an idea about the profile of present and future customers, results show that values, beliefs and interests, and not demographic characteristics of the ecotourism participant, are the most accurate predictor for pro-environmental behavior and concern (Uysal & Jurowski, 1994).

Behavioral Attributes of True Ecotourists versus Ecotourism Participants

The true ecotourist, according to TIES (2016), can be described as follows: "Travelers who choose ecotourism are responsible consumers interested in social, economic and environmental sustainability. Seeking authentic local experiences and opportunities to give back to the communities they visit, many ecotourists participate in voluntourism activities. Increasingly, ecotourists are also seeking to minimize the carbon footprint of their travel, traveling with climate in mind by planning wisely and choosing consciously."

Based on this definition of the true ecotourist, some attributes clearly distinguish the ecotourist from what we can call the mass tourist. First of all, there must be an interest in not only the environment, but also in the social and economical development and the culture of the area visited. Secondly, the true ecotourist should possess positive attitudes and values towards an environmentally responsible lifestyle, including a choice of transportation that minimizes the carbon footprint as much as possible.

A study by Perkins and Brown (2012) compares the values and interests of two types of Australia's Gold Coast tourists: visitors of Seaworld, a wildlife theme park, and visitors of a World Heritage National Park, an ecotourism venue. Using established psychological models, the authors categorize visitors according to their value orientation: self-transcendent (altruistic) versus self-enhanced (egoistic). Within the self-transcendent values cluster, the authors make a difference between two sub-types: biospheric (ecocentric view; recognizing the wellbeing of nature for its own sake) and socio-altruistic (anthropocentric view; nature's value being primarily understood in terms of its benefit to humans). The results of Perkins and Brown's (2012) study show that visitors of the ecotourism venue had significantly stronger biospheric values than visitors of the mainstream venue, confirming the hypothesis of strong biospheric values being the most important predictor for interest in ecotourism.

Whether speaking of ecotourism or mass tourism, the question remains: are ecotourism participants, even those with biospheric oriented values, really willing to give up travel related benefits for nature's own sake, given the consumptive nature of traveling itself?

Travel Benefits versus Environmental Concerns

It seems that the consumption-oriented nature of tourism itself is such that travel behavior is directed by the fulfillment of personal needs. As a consequence, from an ecotourism participant's point of view, the chance of conflict between travel motivation, guided by the satisfaction of personal needs, and environmental friendly behavior, is inevitably high. Transportation is the best illustration of this conflict. In many cases, reaching a tourism destination involves dealing with a considerable travel distance, which itself has a negative impact on the environment. Looking at the top five ecotourism destinations for US travelers in 2013, it is clear that some serious polluting air travel is involved. Costa Rica (49%) is the most popular destination amongst ecotourism participants from the United States, followed by South Africa (12%), the Galapagos Islands which are part of Ecuador (8%), Peru (7%), and Belize (6%) (Travel Guard, 2013). Although this data does not show the means of travel used by those tourists, common sense indicates that the majority didn't go by bicycle, but opted for polluting air travel instead. With this in mind, the words 'eco' and 'tourist' seem to be a meaningless marriage, despite the ecofriendly intentions of ecotourism participants once they reach their destinations.

A study by Hares et al. (2010) confirms the fact that travelers are not willing to change travel behavior, even when they identified air travel as a major cause of climate change. The authors used exploratory research amongst four focus groups in the UK: students, parents with young children, working professionals, and retirees. Although air travel was given as the third most common response when asked about the impact of their own lives on climate change, participants were resistant to choose holiday destinations closer to home that would have a lesser impact on the environment. Whereas they were willing to show environmental friendly behavior in situations that demand less inconvenience at a lower cost (such as recycling), they were not willing to give up the social and cultural benefits related to travel, since restrictions related to traveling were regarded as highly inconvenient or cost intensive (Hares et al., 2010). A study conducted by NatCen Social Research (2013) in the UK confirms the previous findings. Amongst eight different answer categories, a majority of respondents (36%) disagreed or strongly disagreed with the idea of reducing personal air travel in order to reduce their impact on climate change.

Implications for Ecotourism Suppliers

Given that environmental concern seem to be subordinated to personal benefits related to traveling, it seems more meaningful to use the term 'ecotourism participant' instead of 'ecotourist' while referring to visitors of ecotourism destinations. Nonetheless, ecotourism destinations still have an important role in mainstreaming environmentally friendly efforts in the hospitality industry. Furthermore, destination managers can implement certain strategies to find a successful environmental-economical balance.

Pricing strategies

One possible strategy is implementing pricing strategies. Since the environment itself is one of the most important pull factors for ecotourism destination areas, it is of uttermost importance to preserve it. A possible way of preserving is by reducing the number of visitors without reducing tourism revenues, a strategy suggested by Viteri Mejía and Brandt (2015) to manage tourism in the Galapagos Islands. Through in-depth, semi-structured interviews of visitors to the islands, the authors found that tourists are willing to pay up to two and a half times more for tours that guarantee a higher level of protection against invasive species. Similar results are presented by several other researchers: Esparon et al. (2014) found that visitors to Australia's Great Barrier Reef responded positively to a 20% increase in local prices if this would help prevent environmental degradation.

Quality control

Other authors underline the importance of establishing an effective system of quality control to battle the problem of 'greenwashing' (organizations, in ecotourism that market themselves as more green than they actually are) and gaining legitimacy amongst customers (Weaver, 2007). This could be realized by implementing a worldwide, recognized ecotourism certification program, following the example of Australia's advanced ecotourism accreditation status (Perkins & Brown, 2012). This status should only be awarded to those venues that comply with the three core values that define ecotourism destinations.

Conclusion

Ecotourism, which started as a niche-product of a global environmental movement, has nowadays become an important player in the travel industry. Nonetheless, research suggests the word ecotourist seems to be an oxymoron, since the consuming nature of tourism itself is the main obstacle to meeting TIES' definition of the true ecotourist. In this respect, it seems more realistic to use the term ecotourism participant.

This finding does not nullify the achievements of ecotourism destinations worldwide. Rather than being concerned about the profile of visitors they attract, ecotourism destination managers could implement strategies to find a successful environmental-economical balance. Since visitors are willing to pay a premium to prevent environmental degradation (Esparon et al., 2014; Hultman et al., 2015; Viteri Mejía & Brandt, 2015), pricing strategies, and the implementation of an ecotourism quality label are possible ways to achieve this balance.

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Meaningful Beginnings for the Mentally Disabled: The Closing of Willowbrook

Aaliyah Butler

The closing of the Willowbrook State School—a New York State institution for the mentally ill—occurred in September 1987. This scandal was important because it exposed New York State’s neglect of many people with disabilities in the institution. This event refined the nation’s viewpoint on the meaningful lives of the developmentally disabled and helped bring change to the horrifying conditions that they endured at the hands of the state of New York.

The Willowbrook State School was established in 1942 in the mid-island section of Staten Island, New York—one of the five boroughs of New York City. Originally, it was designed to accommodate 4,000 students in various wards including men, women and children. Instead, the school comprised 6,200 students by 1965 and was extremely understaffed with only two workers to about sixty or seventy individuals on each ward (Rivera). The residents living in the Willowbrook institution were neglected in every way possible. They were not provided adequate education, lived in unsanitary conditions, which led to diseases spreading rapidly throughout each ward, and were unsupervised due to understaffing. These conditions resulted in a downhill spiraling of the physical and mental capacity of disabled residents. The lack of physical activity, furthermore, did not benefit the residents. As a result, questions surfaced directed toward the Department of Mental Hygiene as to why they were being mistreated.

Willowbrook’s scandal of neglect quickly increased public awareness—including within the government. In 1965, Senator Robert F. Kennedy and a television crew visited the state institution unannounced to witness the conditions in which residents lived. Describing his visit, Kennedy explained that the residents were living in a “snake-pit.” Kennedy continued by saying the residents were dressed in rags and lived in their own dirt and filth. The Senator’s visit set the stage for news and media to address the harsh conditions uncovered at Willowbrook. The State of New York acknowledged the wrongful actions towards the residents and developed a five-year plan of improvement; however, there were no significant adjustments made (“The Closing of Willowbrook”). After the failed five-year improvement plan, an ABC news investigative reporter, Geraldo Rivera, reverted the spotlight back to Willowbrook in a January 1972 documentary exposé called *Willowbrook: The Last Disgrace*. Also arriving unannounced, Rivera and his camera crew jumped the fence of the Willowbrook State School to reveal the extreme living conditions the mentally ill faced—these conditions being no different than when Senator Kennedy visited seven years prior in 1965. Using raw video footage, Rivera focused the documentary on a

handful of wards—primarily the children's ward. The video included children on the floor, unclothed and some smeared with their own feces. Rivera described the smell of the ward by saying: “It smelled of filth, it smelled of disease, it smelled of death.” Rivera continued to expose Willowbrook State School’s unjust living conditions: overcrowding, the lack of physical activity, unsanitary environments, as well as insufficient clothing, nutritional and hygienic support. Following this short film, parents of the residents in the Willowbrook State School quickly took action and filed a federal lawsuit against the state of New York on March 17, 1972 (“The Closing of Willowbrook”).

New York Association for Retarded Children (ARC) v. Rockefeller became the class action suit between the Willowbrook residents and the State of New York in 1972. Families were outraged with the conditions of the residents and hoped for “dramatic improvement or to shut the school down” (*New York Times* 25 Nov 1984). The plaintiffs (primarily families of the residents) came to the conclusion that the residents’ constitutional rights were being violated—specifically the Eighth Amendment and Fourteenth Amendment. The Fourteenth Amendment, the Equal Protection Clause, states the laws of a state must treat a person the same way they would any other individual in like circumstances. Since residents weren't receiving any education throughout their horrid days at Willowbrook, the plaintiffs argued that there was a clear violation of the Fourteenth Amendment. Nonetheless, Judge Judd denied the accusations sought against New York State (“The Closing of Willowbrook”). Referring back to the extreme living conditions the residents were faced with on a daily basis, it was found that there had, however, been a violation of the Eighth Amendment which prohibits cruel and unusual punishment. Judge Judd declared that the residents of Willowbrook require protection against harm and, “civilized standards of humane decency” (*New York State ARC v. Rockefeller*). The judge then ruled in favor of the plaintiffs and granted “preliminary relief” on April 10th, 1973 (*New York Times* 25 Nov 1984). This request included increasing medical and recreational staff, prohibiting seclusion, maintaining functioning toilets and progress reports. Following this relief, various trials proceeded to negotiate further improvements at Willowbrook State School. In *The Willowbrook Wars: Bringing the Mentally Disabled Into the Community*, David and Sheila Rothman describe how a lead attorney for the 5,400 residents of Willowbrook, Bruce Ennis, visited the developmental center “barely three weeks” after the preliminary relief (102). Ennis had come to see a lack of progress and believed the defendants failed to see the necessity of change (Rothman 103). On April 30, 1975 the case was settled with the Willowbrook Consent Decree signed by Judge Judd. Rather than shutting down the institution, the decree set guidelines regarding “resident living, the environment, programming and evaluation, hiring of personnel, education, recreation, food and nutrition, dental and medical care, therapy services, use of restraints, conditions for residents to provide labor to the facility, and conditions for research and experimental treatment” (“The Closing of Willowbrook”). There was little to no improvement inside the Willowbrook facility. Because of this, the population of Willowbrook residents was gradually reduced.

In 1983, New York State decided to close the institution. On September 17, 1987, the Staten Island Developmental Center (formerly known as the Willowbrook State School) released the last of their residents and shut down

permanently. Today in New York City, there are many organizations that place people with disabilities in community-based housing. Judith Gorbea, a former New York State Resident Care Specialist (RCS) on Staten Island, who worked among various group homes dealing with intellectual and other advanced developmental individuals, explains the plan of care provided by New York State: "There were three to four residents to one staff member. In certain homes, the residents helped with food preparation and had family style meals. Some also helped with daily chores." This helped the residents learn and gain a sense of independence. Gorbea continues, "Residents either attended school or worked depending on their individual plan of care." She also mentions how the individuals would go out into the community for entertainment as well as vacations (Gorbea). There has been a drastic change in the care for people with disabilities since the days of the Willowbrook State School. The closing of the Willowbrook State School was a turning point for many other developmental centers. In "Milestones in OMRDD's History Related to Willowbrook," statistics show that in December 1988 (over a year after the closing of Willowbrook), there were "16,000 persons living in community residences...Less than 9,240 persons living in developmental centers." These statistics show the overall improvement in New York State centers and the increase in residents living in the community. In present day New York City, instead of being institutionalized, individuals with disabilities now live meaningful lives amongst the general population.

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NP and P Packaged in Complexity

Byron Oswaldo Ullauri

In this note, we explore an important concept within the field of mathematics and computer science that is ubiquitous, namely the NP problems. We begin with algorithms that are constantly used to solve various problems; an example being those that require complicated data processing. In such cases, mathematicians and computer scientists have not always been able to solve or find the most effective way of approaching a problem. As a result, a significant part of both fields requires the study of problems as related to the algorithms by which they are solved and tested. By definition, an algorithm describes a method that can efficiently solve a problem. In computational terms, this efficiency refers to the amount of time it takes to run the algorithm relative to the input used, formally known as an algorithm's time complexity. In relation to this, it's generally agreed upon that problems which are solvable within polynomial time, a run time time resulting from "a simple polynomial function of the size of the input" (6), use efficient algorithms to do so. The overlying theory that accompanies these statements is known as Complexity Theory. It states that their level of difficulty can classify problems. The different possible classes that problems can fit into include NP, P, NP-Hard, and NP-Complete problems.

NP-Problems, or Nondeterministic Polynomial, describe the class of problems that can be solved and verified as correct within polynomial time. In other words, this class encompasses problems that can be solved through the use of inefficient methods and proof, but can be efficiently verified as having a valid proof. An example of such a problem is found in a case where you are given an array of numbers and are asked if it is possible to split it into two parts that when added form an equal sum (3). In order to solve this problem, you would have to check numerous subsets, then add the numbers on each side, and see if both sums are equal. Although you will eventually reach a conclusion, depending on the size of the array, the amount of time it would take to iterate through this would be increasingly inefficient. On the other hand, if you were able to split the array into two equal sums, checking your approach and solution would just involve a couple steps of adding and comparing the sum on each side, thus making it possible to efficiently verify it.

P-Problems are a subset of problems within NP such that they encompass problems that can be both solved and verified efficiently. The P in this class stands for polynomial time referring to the number of steps used in the algorithm. As previously mentioned, algorithms which are solved within polynomial time are considered efficient. Consequently, P-Problems are also considered NP since their solution is already efficient, meaning the solution's verification would not require the need for a proof. Examples of P-Problems include those found in basic arithmetic or finding the digits in the value of Pi.

NP-Hard problems are defined as being those whose solution can be slightly modified into solving any NP-Problem. This means that a problem is considered NP-Hard when there exists an NP problem that can be reduced to it (within polynomial time) (7). According to Wolfram MathWorld, an NP-Hard problem is described as being “at least as hard as any NP-problem.” Examples of NP-Hard problems also include the subset sum problem mentioned before and a problem known as the “Traveling Salesman Problem,” which will be defined as NP-Complete.

Finally, the last class of problems is known as NP-Complete. They comprise problems which are both NP and NP-Hard. As a result, these types of problems are what are considered the most “difficult” NP problems. An example of an NP-Complete problem is the “Traveling Salesman Problem.” It states that a salesman passing through n cities must find a path resulting in the least total distance traveled if he/she wants to be the most efficient. No general method of solution has been found although proposed solutions have been made within them, solutions make use of the Hamiltonian Cycle, “a closed loop through a graph that visits each node exactly once” (1). Instead, the only verifiable way of solving this problem is to check all possible solutions, which at best results in exponential time (4).

Ultimately, Complexity Theory gives rise to a question that is still unanswered: are all NP-problems actually P-problems? The underlying principle behind this question is that if it is true, then all problems we consider NP actually have efficient algorithms that we have yet to discover. This phenomenon is known as the P vs NP question. In the past, a Linear Programming problem thought to be NP was proven to be P by Leonid Khachiyan. His ground-breaking ellipsoid algorithm found ways to minimize convex functions using iterative methods which when applied to linear optimization was found to be highly effective (5). The fact that Khachiyan was able to change a problem’s NP classification leaves the P vs NP question completely open for debate.

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My Metaphorical Coney Island

Mariam Qayyum

Coney Island is one of the most iconic places to visit when traveling to or living in Brooklyn, New York. It consists of a beach, boardwalk and amusement park. Everyone has their own Coney Island; a place which they can call their own. Coney Island, for me, is the place itself, but it also reminds me a lot of my four years in high school. Coney Island was one of the places in New York City where my father, Abdul, visited from Pakistan when he first travelled to New York City in 1981. He would walk across the boardwalk to clear his mind. He still loves to go there at least once a year. It's a tradition in my family to go to Coney Island during the summer. We have a picnic on the beach and go on a bunch of rides at Astroland. Many of my memories as a child were formed there. I loved walking across the boardwalk or the beach, but the amusement park, not so much. I always had a terrible fear of rollercoasters, but I still rode them with my brothers, Arslan and Usman, and my sister, Mozima. Coney Island had an impact on me as a person. It was fun place while growing up, but high school for me was more of a challenge. My metaphorical Coney Island is Midwood High School at Brooklyn College. It is located at 2839 Bedford Avenue in Brooklyn, New York. I attended Midwood from September 2012 to June 2016. It is one of the only high schools with a college campus located right next to it. The college beside it is called Brooklyn College. Even though the beginning of my high school years were among my worst moments, I also had good times there that I'll remember always.

Although my high school, Midwood, felt like my personal Coney Island, to me it really felt like the Cyclone, one of the oldest roller coasters built in 1924. The first day of school always gave me a feeling of anxiety as if I had been buckled on the Cyclone and the coaster was starting to elevate upwards. The feeling of danger erupts. The feeling of wanting to maybe replay time and go back takes over, but going on a roller coaster is a part of life that everyone experiences at least once. The Cyclone also gave Katie Roiphe an unsafe feeling (Roiphe 11). The ride sparked bad memories about her husband and her father. In her work, "A Coney Island of the Mind", she states, "Once the ride starts, it does not feel safe. It shakes and moans" (Roiphe 11). When looking down at the boardwalk, she remembered her father and how she never got to know anything about his childhood. The Cyclone also reminded her of her marriage. Roiphe eventually married her date at Coney Island long ago. She later married him and ended up divorcing him. It was a risk for her like riding the coaster. She reminisces about her life through her first date. Just like Roiphe, I stepped out of my comfort zone when I went on the Cyclone ride at Midwood. It was like all my mistakes and accomplishments from high school were put together in one ride.

Coney Island during the night becomes a dangerous place. People tend to blend in with the dark; for me, it was better to be with a crowd than alone. Being alone for me turned into a nightmare. Nothing was visible besides the neon signs

pointing in the direction of the Haunted House or the Freak Show house. Just the sight of the Cyclone in the dark with its faded sign would give me an anxious feeling. My first two years at Midwood were like *Warriors*, a movie from 1979 about a gang fighting and surviving from the Bronx to their homeland of Coney Island. It was a time of danger mixed with scary encounters for me as I was finding my way home. As a freshman, I was at the bottom of the food chain. I knew no one and no one knew me. Things started going down hill from the start like when the Cyclone zooms down the rails. As the wind rushed through my hair, I got a blinding pain in the pit of my stomach. A couple weeks into school I encountered my bully, Jason, from my middle school, Andries Hudde Junior High School. Jason and I were in the same grade. He was a Black kid around 5'7" and always wore a baggy shirt with skinny jeans. I was scared to go to school some days or even get out of bed. All eyes watched me as I walked through the halls. I was shoved into the lockers or the walls of the school. When I would see any of the bullies in the halls, I walked the other way, but the encounter afterwards would be worse. All the taunts and verbal abuse got to me. I was slowly dying inside, getting that pain in the pit of my stomach, which always starts when trouble arises. I didn't feel safe in the one place I also called my home.

Although as a freshman I tried to make friends in school, as sophomore year arrived I grew more antisocial. My life felt like the roller coaster was slamming me left and right with no breaks in between. I remember on December 2012 when I took my biggest risk. I was walking through the empty halls of Midwood on the third floor. I had just finished being tutored in math. I heard footsteps behind me, but I never looked back to see who it was. A few moments later, I was pushed to the bulletin board. I wasn't able to recognize the perpetrators. Since their oversized hoods gave their faces a dark shadow, I wasn't able to identify who was who. They repeatedly pushed me to the ground, spit on me and cursed at me. I tried to fight back, but it was clearly no use since it was three against one. They walked away after a while. I dusted myself, grabbing my belongings and walked home covered in dirt and bruises. I walked straight into the bathroom and locked the door. I grabbed a small sharp piece of metal from the razor on top of the cabinets. I scraped it quickly against the skin of my thighs, closing my eyes as it started to sting. The pain started quickly, but I forgot the reason I wanted to do it in the first place. I placed everything where it belonged and walked out of the room like nothing ever happened and went on with my day. I figured that could've been my escape from all the bullying, but surely I was wrong to risk my health in that way. As the days passed, things started to get worse. As the speed of the Cyclone increased so did the number of scars on my body. The scars went from my arms down to the ankles of my feet. My grades and my appetite decreased. I began to wear nothing but long sleeves or jackets. Even though I kept to myself, my friends and parents noticed a change in me. They noticed that I wasn't as happy or giggly as I was before. I was a living, walking zombie. The truth came out months later when a teacher of mine saw my wrists. My counselor was soon made aware of the situation and the fact that the bullying was still going on during that time. After a couple of hours, my parents were notified of the situation as well. My mother was the first in my family to know what had happened. When I came home that day, no one spoke until after 8

pm when my father asked me why I did it. I told him how I was feeling like I didn't belong. My parents were in shock to hear me say this, but they didn't question me in a way that made me feel like a bad person. My father lifted both of my sleeves and rubbed an ointment all over the cuts on my arms to prevent permanent scarring. He looked me in the eyes and said, "You are my daughter and I love you no matter what, but don't destroy your body over someone who isn't supposed to have any effect on you." I sat in between them both as my mother kissed my forehead. I knew that they both were trying hard not to cry in front of me. Back at school, I reported the identity of one of the bullies to the deans but I didn't know the other two. He ended up suspended from the school. The dean that helped me was one of the Assistant Principals of Midwood. He had helped many of my friends before with their problems, so I knew that he was a really helpful person. After I identified Jason, he told me, "He's not worth it. He's just a kid that has nothing better to do in his life and feels like he's a king when he does things like that. But he's not and he will never bother you again. That's a promise." The next day I walked into school feeling exhilarated like on the Superman ride in Ride Playland. I felt free of worries like a load of bricks had fallen off my shoulders.

During the night when all the lights are off, Coney Island seems to be a dangerous place, but during the day it's like any other amusement park or beach. There are joyful screams of families on the rides and couples holding hands on the boardwalk. It is a place families go to for fun, to make memories, and for people to take their minds off things and relax. This is how Midwood was for me after that talk with the dean and my parents. Midwood was scary to me in the beginning, but by my junior year it was much better. The bullies weren't going to harm me any more. Over the summer, before my junior year, I began to take boxing classes and picked up a few moves in self-defense. I was also in therapy where I talked about my feelings and how to become more confident in myself. It did help me as a person to grow stronger and love myself even more. Being in all honors classes, I knew that I had to work hard in school, and I did. I tried out for different sports teams and met many new people who became friends. I knew the deans, teachers and my friends had my back. One of the best friendships I ever had was with Osarhuwense. We were friends in elementary school, but grew apart when we went to different middle schools. Surprisingly, we met again in high school and now we are best friends. She introduced me to many of her other friends: Rosia, Sanaa, Umber and many more who are my close friends now. Since I had trust issues, it was hard to open up to anyone in the beginning, but they earned my trust and showed me that it isn't bad to have someone who you can talk to and who you can feel safe around without any sign of judgment.

Whenever my family and I went to Coney Island in the summer, my father and I had a tradition. We would ride the water slide every single time; it was something only the two of us would do. We would scream with laughter. I felt the closest to my father then since he went away for business a lot. Walking across the boardwalk with cotton candy in my hand and my dad by my side, he told me about the first time he came here in his late twenties from Pakistan. Ever since the incident, my dad and I have our one-to-one talks quite often. My parents helped me get through many tough things.

In the middle of my junior year, Jason came back to Midwood. I knew that he couldn't hurt me anymore. The thought of him being back did bring back unwanted memories, but I stayed sane and strong. I went on with my last two years as a junior and senior, enjoying every part of it with my friends and making new memories to look back on. Jason's return didn't affect me and I know now that people bully others to make themselves feel better.

Though my early high school days were crappy as crappy can be, the next years till graduation were close to perfect. I was completely reinvented as a person. I was not the same girl that had first walked into the school as the shy freshman girl. My parents and I grew stronger and I could tell them anything, knowing they would help me. I developed a close relationship with some of my teachers and deans. I felt safe in school again. I gained a group of friends that I could trust with anything. I went to them for advice and vice versa. My friends became my boardwalk where I could rant out my problems or thoughts. It was one of the ways I learned to not harm myself anymore. I wrote essays and stories as a way of expressing myself. It was a refreshing kind of feeling, like the salty breeze passing by on the beach when my family had our annual picnics at Brighton Beach on Coney Island. High School started out as a scary place but soon became a place I could call my home again. I became a different person for the better—that young girl who was afraid of the Cyclone is still there, but she doesn't run things anymore.

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The Secret

Victoria R. Lawrence

I want to tell you about my father. Ralph Mills was a tall man, about six foot four. He had caramel-brown skin and well-trimmed sideburns. He was what was called a “pretty man” in Trinidad, a fact he embraced fully. He was into bodybuilding and had a muscular body, big biceps with thick, heavy shoulders. The bodybuilding was to keep up the façade of being young, so he could attract young women. He wore his hair close cut and was vain enough to dye what was left jet-black. He was an impeccable dresser.

I remember one night my father and mother were going to a formal gala. He wore a white, crisp shirt, that he ironed himself so the shirt would fall smoothly on his chest, and, for a pop of color, he wore a blood-red tie to accentuate the dark suit. His suit, while not being too tight, was form fitting to flatter his physique. He finished off the look with a pair of Stacy Adams pointy tip shoes and an expensive cologne, Paco Rabanne. After the look was completely put together, he admired himself in the mirror to make sure nothing was out of place. I remember he took longer than my mother to get dressed.

My father was lax in his responsibility to his family and very selfish in his behavior: he chose to come to America illegally; he chose not to get an education or vocational training; he chose to marry my mother for his green card. My mother managed to get him employment at the hospital where she worked, but he failed in that job. He took whatever work he could find and, in the end, I doubt my father regretted his final job choice.

As a child, I was never told what my father did for a living, but I always wondered why he was at home during times when other fathers were at work. At that time, I didn’t know (or care) that people worked all hours of the night.

I graduated from Boys and Girls High School in June of 1991. I was 18 years old. Several weeks after graduation, my mother sat me down on her bed in her bedroom and began to tell me about my father and what he did for a living. “I want to tell you,” my mother said, “before you hear it from someone else.”

I said, “OK...”

Then my mother said, “Your father works in the Adult Entertainment Industry.” She paused— then said, “Porn...pornography. He worked in a peep show on 42nd Street called Peepland, a shoddy place with a big neon eye above the door. He was an actor in them with women from various peep shows in the area. These were heterosexual films with adults. It was there,” my mother continued, “that your father made contacts that got him into porn films and into performing live sexual acts on stage.” At the time, I didn’t know that his business choice paid quite well; when I found out how much he made, I was furious. I did not understand why none of that money ever went to easing the burden on my mother.

I think my mother was more hurt by the fact that she never suspected the truth until a family friend brought it to her attention. Whatever reaction my

mother was expecting from me, she'd rather I express it in her presence. I was angry, hurt, and in a deep state of shock. It took an hour before I could calm down. I cried a lot on my mother's shoulder and didn't know why it bothered me, as my father and I were not on good terms. Looking back, I would say it was because of the hurt I saw in my mother's eyes. It was that hurt that prompted me to confront my father.

It was a warm summer day when I left the house, and the street was very busy with people enjoying the sunshine. I only noticed it vaguely as my mind was going over what I was going to say to my father. I had a hard time remembering what my whole speech was supposed to be, but I did remember snippets of it. I wanted to ask him why porn? And, didn't he love my mother and me? I wanted to ask him if he wanted other women, why get married? My mother had mentioned he never got his diploma, and I wanted to know why not since it could lead to a better job. A better job meant my mother would not have to work so hard. I kept changing the order in which I wanted to ask these questions.

I used to listen to my mother and father argue and then hear my mother vent after he left, so the things I noticed were connected to the things she considered wrong. I really had no idea or concept of what she was talking about, but as I got older it started to make sense. At the top of my list was the fact he came home from work just before Thanksgiving the year before without any money for dinner. A few days later, my mother found a round trip ticket to Trinidad set for February when they celebrate carnival. That was the straw that caused him to be put out of the house.

I arrived at Times Square and walked up the block to the establishment known as Peepland. The building had a huge, red, neon sign in the shape of an eye above the front door. I took a deep breath, then entered an area with a thick, red curtain to my right. On my left was a counter occupied by a large, dark-skinned black man. He wore a black, opened-neck shirt and a black cowboy hat—one of those fancy ones with a silver band around it. He looked at me with a half-amused expression on his face. "Can I help you, miss?" When I gave him my father's name, he looked at me and said, "Who?"

I remember at that point hearing my brother say that my father used another name at work, so I told him I was there to see Sweet Lee. He looked at me oddly but picked up the mic and called Sweet Lee. He asked me who I was, and I told him that I was Sweet Lee's daughter.

My father stepped through the curtain a few minutes later and stopped. His mouth dropped open. "What are you doing here?" He grabbed my arm and escorted me outside.

I pulled away from him, and the speech I had prepared just vanished. My first words were very sarcastic, "Well, Sweet Lee, we need to talk." I could tell by the look on his face he had two questions running through his mind: How did I know his name? What did we have to talk about?

Curse words that I heard throughout my life started pouring out: "You Fucking Dirty Dog, How Dare You Treat My Mother With Such Disrespect? Porn Films? Really?" My father stood there with his mouth closed and eyes down not saying a word. I waited for a few seconds then realized I would never get an answer, so I turned and walked away.

Many years later, in April 1996, I moved back to New York City from Atlanta, Georgia. I was working as a receptionist at Conde Naste, Bon Appetit, and I met my future husband, Michael Lawrence. He is older than me by 22 years with wavy, brown hair and soft brown eyes. He is six feet tall with a medium build and has a light brown complexion. I found his sense of humor and intelligence very attractive. We were friends for several years and then started dating.

One day, we were talking and I mentioned my father and asked him if he would like to see a picture. I brought the picture out and he said, "I know him." I thought he was joking until he told me where my father worked. Michael had been a projectionist in a theater up the street and knew most of the people in the area. I told him about my confrontation, and he stopped me before I got very far: "Wait, that was you?" He heard about the whole thing from the cowboy hat-wearing black man at the desk. He told me that the entire crew came up when they heard Sweet Lee's daughter was there and stood inside the door listening to every word I said to my father. I must have been loud because Michael said they told him they could hear the entire fight.

I always had a negative view of men in part due to my father, but also due to my mother's negative views on men. I expected all men to lie and cheat which made me very cautious when it came to dealing with them. I found that most men did not keep their word and were more interested in my body than in me. My father had been irresponsible and I knew that I wanted a man that was just the opposite. My father never shared his financial status with my mother and treated it as if it were a national security secret. He did not work with her as a team which forced her to go it on her own. I was also very curious about him, but my father could not answer most of my questions.

When I met Michael Lawrence, I found a man that changed my whole outlook. He wanted a partner and he shared his financial information from the day we started dating. He kept his word, took care of household bills, and most importantly, he listened to me.

Writing from the CUNY Language Immersion Program (CLIP)

A New, White Landscape

Angie Portilla Unigarro

While we drank hot coffee and looked out the window, my brother, my mother and I talked about Christmas. The day was icy and we could only see fog enveloping the street. Suddenly, small snowflakes began to fall, one after another. In a short time, the street was full of snow and my brother and I decided to go outside. Once in the street, we were alone. As the snow fell and covered everything—the street, cars, buildings and trees—I took off my glove and grabbed some snow as it fell from the sky. I watched those little snowflakes unravel in my hand, dissolving into nothing, leaving only a wet footprint. I thought about how my life had changed since I had arrived in this country, in the same way I could feel the snow quickly melting in my hand.

I sat down on the steps of my house and admired, for a long time, the beautiful, new white landscape.

Home

Qi

At dawn I woke up, put on my black backpack with a North Face logo, and went to the bus stop. When the bus arrived, I wondered if I should say good morning to the bus driver. But people were scanning their metro cards and they quickly walked past the driver, so I did the same thing. It was my first time on a U.S. bus and I sat in the corner like a scared little mouse. Eventually, I realized I had forgotten which stop to get off at. Did I have amnesia? When I finally got off at the wrong bus stop, a memory popped up. This stop was far from my school! I would be late to first period so I ran.

When I walked through the front door of my new high school, I thought I looked like a sweaty athlete that had just finished the 100-meter race. When I saw a police officer, I said to myself, “Be calm, everything will be okay.” I said hello to him with a big smile and when he spoke to me I had to use my body language to tell him I didn’t speak English.

I ran to my classroom, opened the door, ready to say hello to my classmates and teacher. But when the teacher asked me something I could only respond, “No English.” A Chinese student offered to translate. “What are you doing here?” he asked. I told him I was a new student and he explained the

teacher wanted to know my name. But I didn't know how to pronounce my name in English.

Finally, the bell rang. I heard in Chinese, "Follow me to the cafeteria for lunch!" There were no lunch breaks in China but I followed him anyway. After I sat down on the cafeteria chairs, all the Chinese classmates came over and offered to share their food with me. That morning I had believed everyone would laugh at my accent, and at me, but actually everyone treated me like a family member.

I am an Only Child

Thanyamon Williams

Not so long ago, after I earned a bachelor's degree in Thailand, I was sitting at the dinner table with my mom. She asked me what I was going to do with my life. Was I was going to stay in Thailand or move to New York? At the end of a very long conversation, I told her that I would love to go to New York City. I was surprised by her response. I did not think that she would let me leave her side, because I had never left her before.

I knew my mom would cry alone in her room sometimes because my absence would make her grieve. But she would never tell me about her bitter tears.

I will always respect my mom for her suffering and for her encouragement to do what I wish with my life

The Secret of Henna

Hetaf Alokam

Henna is important to many girls in the Middle East. Women and girls use it for parties, weddings and holidays. Women take the henna paste, made from the dried plant, and paint designs on their hands. I think little girls like it more than adults.

I don't know exactly why, but I remember when I was ten years old my mom used to do henna for me at night. I used to stay up all night waiting for the morning to come, because I wanted to wash the dried henna off to see the designs underneath. Later in the day, I would go to my cousin's house to see which henna was better, hers or mine.

Now that I'm nineteen years old I still like henna and I do henna for holidays and parties but I don't feel the same way about henna as I did when I was ten. Although I still feel happy when I'm putting on henna, I don't feel the same excitement because I'm so used to it. Now I look at the designs only one

time in the morning and then I eat breakfast. Sometimes in the middle of the day, I even forget that I have henna on my hand until someone says, "I like your henna," and I say "Oh, thank you."

Binta Inspired Me

Thierno Issa Bah

It was four years ago in Guinea. I was playing football in the street with my friends. Binta came with her two children selling cooked fish. My friend Raoul bounced the ball on her table. All the fish fell down. We stopped the game and we walked over to her. I asked her, "How much is it?" While her children cried a lot, I said, "Don't cry we are going to pay for everything."

Binta was angry and said, "You think it is only for money my kids cry?" Do you know how much time I lost making this fish? I don't want your money. Continue your game. I am okay."

We continued playing. But I was not feeling good. I asked myself, why didn't she want to take this money? And, why was she angry with me? I just wanted to pay for her fish.

I stopped playing and walked to her. I asked her questions and she told me, "It isn't because I don't need money. I am thirty-five years old and I have four kids. My husband died five years ago. I walk ten miles every day to meet the needs of my children. I want them to go to a school like you do. I don't want them to live in misery. So, of course I want and I need your money but an apology would have done me better. I respect myself and I respect everybody. I prefer my dignity more than money. So, to answer your question, I don't want your money because you did not ask for forgiveness."

I was lost. I thought about everything she said and it was true and I felt bad. I promised myself to do better in my life. In the evening, Raoul and I went where she lived and we asked for forgiveness.

I will always remember Binta because there are important things that cannot be bought.

The Role of Women in *Six Degrees of Separation* and *Detroit*

Anderson Calderon

Six Degrees of Separation (1990), a play by John Guare, tells the story of an encounter that the main characters, Ouisa and Flan, have with a young man by the name of Paul. Paul, who is shrouded in enigma, lurks through the streets of Manhattan impersonating the son of the famous actor, Sidney Poitier. At first, when Ouisa and Flan meet Paul, they are immediately charmed, instantly striking up a relationship simply based on the young man's made-up past. The true problem arises when they realize Paul is an imposter; Flan becomes hysterical, claiming the couple could have been killed, as Paul had brought a street hustler to the apartment to have sex with him. Meanwhile, Ouisa, while disturbed as well, realizes that she enjoys the levity in Paul's life. Contrary to Flan, whose relationship with Paul ends as soon as he realizes Paul has been pretending to be the son of the famous actor Sydney Poitier, Ouisa's relationship with Paul grows as she is intrigued by his lifestyle that has otherwise been foreign to her for her whole life. Interestingly enough, the effect Paul has on Ouisa serves to build her character and give the audience a better sense of the desires of a wife who appears to have everything in life. Flan, on the other hand, is more laid-back and focused; he plays the role of the husband content with life and is unable to excite his wife in the same way that gambling with art excites him. Consequently, this leads Ouisa to have an epiphany as she realizes that while she may have every material thing she wants, she is still a bird in a cage, while Paul teases her by soaring in freedom.

The play *Detroit* (2011) by Lisa D'Amour follows the story of Mary and Ben, a couple in their forties who are going through a midlife crisis, due to Ben being laid off from work and Mary struggling for excitement in her life. The couple soon strike up a relationship with their new neighbors, Sharon and Kenny, who claim to be recovering drug addicts living in a house which Kenny's uncle gave them. It is quickly established in the play that Sharon and Kenny are the more outgoing of the two couples, most likely due to their history with drugs and their struggles growing up with less than satisfactory parents. The result of the relationship between the two couples is that Mary quickly fills a void she feels in her life, in contrast to Ben, who is not fazed by the fact that he has been laid off from work. Much to Mary's dismay, Ben is more than happy to be spending his days on the couch watching TV, which consequently aggravates Mary's alcohol addiction. In these circumstances, Mary plays the role of the distressed wife hoping for a drastic change in her life, which is achieved through the help of Sharon and Kenny. As a result, Mary finds solace whenever she is with her neighbors and enjoys the sense of levity they give her during a difficult time in her life. Ultimately, the play ends with Mary and Ben's house burning down while partying with Sharon and Kenny. While the latter flee and never return,

Mary finds that she has been freed from the cycle of “work and pay bills” that she so desperately tried to break out of. Meanwhile, Ben shows a lack of reaction, continuing to play the role of a supporter and bystander to his wife’s midlife crisis.

Ultimately, the role of women in both *Detroit* and *Six Degrees of Separation* is limited to the stereotypical dependent wife, though both Mary and Ouisa grow as they break away from their responsibilities and expose themselves to new experiences. Arguably, both plays draw inspiration from a pre-women’s rights era, as both wives struggle to cope with limited freedom while their husbands are free to follow their desires.

While not established at first, Ouisa, after her encounter with Paul, has a growing feeling of dissatisfaction with her life. Originally presented as an art dealer and wife in an upper-class family, her role is eventually downgraded to that of a dependent woman who feels she lacks something intangible yet vital to her happiness. Once Paul finishes cooking and serves Ouisa, her husband, and their guest Geoffrey, the three are surprised to see how talented Paul is at creating exquisite meals. Evidently, it is his cooking that sets off Ouisa’s admiration for him. While not directly stated, the audience can infer that neither Ouisa nor Flan are capable of cooking delicious meals out of “An old jar of sun-dried tomatoes” (27) or, “Leftovers—tuna fish—olives—onions—” (27). This, in turn suggests that Ouisa is not self-sufficient like Paul. Rather, it is Paul’s self-sufficiency that adds to Ouisa’s admiration for the young man. Her inability to cook can then be seen as an important factor when Ouisa and Flan originally planned to take Geoffrey out to eat. Furthermore, despite only just having met Paul, Ouisa states, “I just loved the kid so much. I wanted to reach out to him” (31), which is a very powerful and odd statement, taking into account that the two just met. Arguably, it is Ouisa’s desire to be more like Paul that truly is the center of such an unforeseeable epiphany for Ouisa. Despite being an upper class woman married to a fellow wealthy art dealer, she finds herself incapable of doing trifling, unchallenging chores such as cooking.

Surprisingly, even after Paul’s true character is revealed, Ouisa continues talking to Paul after she is contacted by him. In their conversation, Paul asks,

Paul. Would you help me?

Ouisa. What would you want me to do?

Paul. Stay with you.

Ouisa. That’s impossible.

Paul. Why?

Ouisa. My husband feels you betrayed him.

Paul. Do you?

Ouisa. You were a lunatic! And picking that dreck off the street. Are you suicidal? Do you have AIDS? Are you infected? (98)

When Paul asks Ouisa if she feels betrayed, she responds with concern, as opposed to resentment. It is in their conversation that the difference between Ouisa and Flan is established. While Flan clearly shows he is not interested in ever associating himself with Paul, Ouisa asks questions regarding his well-being. Furthermore, the questions can be seen as serving a double purpose. To explain, Ouisa not only asks if Paul is all right simply out of concern, she also

wants to know what the consequences are for his kind of lifestyle. This is because this is the very lifestyle she realizes she desperately wants, which is only realized after she met Paul. In addition, Paul describes the night he had at their home by telling Ouisa, "I was so happy. I wanted to add sex to it. Don't you do that?" (108). There is then a brief pause and Ouisa replies, "No" (108). Once again, Paul brings to Ouisa's attention the lack of the quality in her life. Her quick response is meant to change the subject but in turn, the simplicity of her reply brings attention to her otherwise unknown and probably non-existent sex life. In brief, Paul's nature brings out a desire in Ouisa, a desire that is fed by the fact that her lifestyle as a gambler is simply not enough to satisfy her, as opposed to Flan. Due to this, Ouisa interrogates Paul in hope of catching a glimpse of the life she never had.

Parallel to the events in *Six Degrees of Separation*, the play *Detroit* also reduces the role of the female protagonist Mary to that of a wife who is helpless in achieving personal happiness. Immediately as the play begins, Mary's inner conflict is shown when Ben says, "Ha! We don't have any friends" (15), for which Mary rebukes him. The lack of an actual social life is what originally prompted Mary to invite her neighbors Kenny and Sharon, which eventually leads to an odyssey of sorts through which Mary finds that she truly enjoys life in the comfort of friends. One such example is when she tells her husband, "We fucking hiked!!!" (74), immediately showing excitement upon her arrival. Sharon then says, "We thought we could party here" (74) and Mary follows up by saying, "We thought maybe we'd grill" (74). Evidently, Sharon is used to promote character growth in relation to Mary as the latter becomes much more extroverted the more time she spends with her neighbors. Also, Mary begins to explore new ways of entertaining herself by hiking or partying, which were activities she was otherwise not used to participating in. Consequently, Mary's relationship with Sharon causes exponential growth in her and as a result, Mary changes from the typical wife in the midst of a mid-life crisis to a mature woman remembering to enjoy life and try new things.

On the other hand, Ben plays a smaller yet significant role when compared to his wife. Ben is more laidback and content with his current circumstances in life. Despite being laid off from work, Ben is more than happy to sit around on the couch watching television. Unfortunately, this is a common image of American men who, more often than not, are described as having a "lazy" and "fat" attitude. The characteristics of Ben only serve to compliment the same stereotypical portrayal of his wife and to progress the story. Ben's ambitious ideas but lack of action is seen when he fantasizes about starting a financial website. His wife Mary explains to Sharon and Kenny, "He's designing a website. The whole business is going to run right inside of it" (9). Mary's suggestion that the business will be run via the internet with no actual labor hints at Ben's laziness early on in the play. Throughout the meetings the two couples have, Ben claims to be working on the website, but it is eventually revealed he has nothing but the idea. His behavior is reminiscent of the stereotypical American who seeks opportunities associated with entrepreneurship but rarely ever has the plans come into fruition. Furthermore, in contrast to Mary, the introduction of Kenny and Sharon do not stimulate any character growth in Ben.

Instead, growth is directed towards Mary who, as aforementioned, plays a typical middle-aged wife unable to help herself in the everlasting pursuit of happiness.

To conclude, both *Six Degrees of Separation* and *Detroit* introduce the audience to a stereotypical wife going through a midlife crisis. The redundancy of this sort of portrayal of women in the media is unfortunate, but the two plays more than make up for that by introducing characters who cause the heroines to step out of their traditional comfort zone. Such is the relationship of Paul and Ouisa, which mirrors that of Sharon and Kenny. Undoubtedly, the true heart of the play lies in the appearance of symbolically free-spirited humans like Paul and Sharon. Their introduction is what sets off a reaction that transforms regular wives into human beings with the will to pursue what brings them joy. Also portrayed in a stereotypical manner, Flan and Ben are showcased as men focused on the desirable and pleasurable things in life. Due to this persona, both husbands have little to no effect on the internal struggles of their respective wives. Both plays conclude with a cliffhanger, thus suggesting that the fate of the two wives is irrelevant. Although a definitive ending is not given, the experience that Mary and Ouisa went through can be described as eye-opening. It is the events of the play that are truly significant as seen in the growth of both wives. Ouisa and Mary are both introduced to a different kind of lifestyle and, while not always directly stated, both wives show some desire to harbor the freedom of their more carefree counterparts.

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The Cherry Orchard: Acting Analysis

Rafael Collado

Throughout *The Cherry Orchard*, actors assumed very specific mannerisms and behaviors to enhance the individuality of their characters. Two actors that set their characters apart were Chuck Cooper, who played Pishchik, and Diane Lane, who played Lyubov Ranevskaya. The play revolves around the fate of the Ranevskaya family's cherry orchard and Madame Ranevskaya's unwillingness to sell the estate in order to pay off the mortgage. Through their voice, movement and physical appearance, the actors were able to deliver solid character performances independent of the plot.

Chuck Cooper voiced his character in a high-volume, high-pitched tone. Regardless of the mood of the scene, Pishchik maintained his whimsical mode of speech. From the character's arrival at the house in the beginning to the celebration post-intermission, Cooper spoke in this high tone. Slightly increasing this tone facilitated making Pishchik seem drunk at the party, therefore making this voice a vital tool in Cooper's acting. In contrast, when playing Barney Hull, the Mayor of Columbia County in *House of Cards*, Cooper assumes a much deeper and more serious tone commonly found in politicians. In his dialogue with Kevin Spacey (in which Cooper discusses his intentions to manipulate Congress), Cooper uses an entirely deep and sinister tone, the complete opposite of his tone as Pishchik.

As owner of the estate, Diane Lane played on Ranevskaya's privilege by assuming an assertive and elevated tone of voice. When she spoke to Firs, she addressed him as one would address a child. Similar to Pishchik, Ranevskaya's tone remained elevated regardless of her mood. Her tone should not be confused with the volume in which she spoke. As an actress in the recent film *Man of Steel*, Lane portrayed Martha Kent, the adoptive mother of Clark Kent (Superman). Her voice, while still slightly elevated, was much softer and grounded. This might reflect their different classes as Madame Ranevskaya is an aristocrat while Martha Kent is a simple farmer. There was an optimistic presence in both characters as Lane used a more dramatic, high-pitched voice when she became distraught as Madame Ranevskaya, but a silent and more tearful approach as a distraught Martha Kent.

In terms of movement, Chuck Cooper and Diane Lane used the stage differently. Chuck Cooper's Pishchik was dominating with his animated certainty and cheerful jokes. Cooper also gave his character a subtle waddle adding to the character's gluttonous vibe. The waddle became more exaggerated due to Pishchik's drowsiness after taking Ranevskaya's medication. Also, during the costume party, Pishchik's drunkenness was enhanced by Cooper's exaggerated movements. Pishchik's overall movement onstage asserted his dismissive attitude towards his own debts and obligations. Cooper's Barney Hull, on the other hand, maintains a solid and static posture in *House of Cards* further promoting his

serious and pragmatic nature. His movement is subtle and calculated, giving him an air of power in comparison to Pishchik whose continuous borrowing from Ranevskaya portrayed him as a shameless beggar. Diane Lane's Madame Ranevskaya, while unquestionably privileged, still showed compassion towards others regardless of status. Lane made eye contact with all actors throughout the play to convey this compassion. Her airy gait was very telling of her nature to flee. She often bounced from one character to another, from her daughter Anya to her brother Leonid, from Lopakhin to her adopted daughter Varya, expressing her joys for life despite her current hardships. When she was confronted by Lopakhin about splitting the estate into cottages, she ran away from the idea. When she received a letter from her lover from Paris, she ripped it up without ever reading it. The celebration she threw during the time of the estate's auction was the most convincing evidence of her tendency to run away. Her depiction of Martha Kent, while also a mother, was much more realistic, decisive and head-on in terms of movement. She, too, was loving towards her children, but Martha Kent was assertive where Ranevskaya was not. Kent's posture was the result of a life as a farmer from Kansas as she was shown plotting new plants on her land.

While other actors wore simpler outfits for their characters in *The Cherry Orchard*, Chuck Cooper's character sported exaggerated attire from three-piece suits to a jester's costume, pushing the idea that Pishchik was trapped in a luxury he could not afford. Similarly, Cooper's Barney Hull, as a politician, wore suits; but while Pishchik struggles to equate the man with the suit, Hull's stability as mayor spares him that struggle. Diane Lane's character, on the other hand, dressed in much simpler garb. Expressing the simplistic nature of Ranevskaya was of the utmost importance in this play. While simple, the clothing seemed expensive and of high quality, conveying just how wealthy Ranevskaya and her family truly had been. During their arrival at the house in the beginning of the play, Lane's character wore what seemed like expensive outer garments such as a fur coat, scarf, and gloves. Similarly, her clothing during the picnic scene in the cherry orchard was also that of a wealthy woman; she wore a sundress, a sunhat, and an umbrella. In contrast, Lane's Martha Kent often wore denim and plaid button-downs along with a straw hat to protect her from the sun as she tended to her farm land. She wore work boots and never minded getting soil or dirt on her clothes due to her lifestyle.

Chuck Cooper and Diane Lane's ability to play such drastically different roles exemplifies the versatility needed to be an actor suited for both live performances and film.

The Resistance: Book 1

Da'Sean D. Williams

My name is Douglas Masterson. I am 16 years young, 5'6" tall, and weigh 65.77 kg. I have dark brown hair, forest green-colored eyes, and an IQ that has been said to be immeasurable. At least, that is what my father used to say. Since the day I was born, people have been astonished by my intelligence. I was able to speak, read, and write at only a few months old. At the age of six, I had almost managed to hack into some of my parent's *Top-Secret* computer files before they found me and carried me out of their study.

My parents were both scientists. My father was German, though nobody uses such ethnic labels anymore, and was a well-known inventor and architect. My mother was British and was a successful chemist and biologist. My father was slightly overweight and had a full head of thick, well-combed hair and a thick brown beard; his hair was the same shade of brown as mine. My mother was slimmer with black hair and bright green eyes, more luminescent than my own.

They had spent a great portion of my childhood showing me the wonders of science and teaching me almost everything they knew. Academically, I was always at the top of my classes, with straight A's, and honor awards, but I always felt alone and secluded from everyone around me. At first they avoided me; my parents were well off and I was the smartest kid in the school. As I got older, some of my classmates took an interest in my academic talents, or at least that is what they wanted me to think. So I made sure that their grades fell significantly when they tried to act friendly and asked me to "help with their homework."

I was seven, when I first met Sampson, an eight-year-old, African-American boy in my class. Back then he wore a red beanie cap, shoes and shirt with dark brown jeans and a pair of sunglasses. Our teacher had assigned me to help him with his schoolwork. We did not get along well at first, mostly due to me making any homework problems we went over sound more complicated than they were. But after I learned how to simplify things for him, his grades improved and we became best friends. He even gave me my nickname 'Dug' which almost everyone now calls me.

When I was twelve, my parents brought home my newly adopted brother, a ten-year-old Japanese boy named Zack Ongaku. I remember his messy, unnaturally colored blue hair and matching, soulless blue eyes the night he arrived. According to my parents, he had been in a horrible accident that claimed everyone in his family. Several days went by and he stayed in his room, not talking to anyone, not even my parents. I occasionally went to try and converse with him, usually while bringing him his meals, but he usually ignored me. I did, however, hear him crying whenever I walked past his room.

After a few months had passed, I came home and I heard music coming from his room. Judging from the sound, I realized he was playing a violin. Zack had not left his room much since he had been here but I thought it was good he

was actually doing something constructive, given his apparent trauma. I continued into the kitchen. My parents had left snacks in the fridge since they were still at work. As I did my homework in the dining room, Zack continued to play his violin. For over an hour, the same melancholic melody played and over time I noticed it was getting louder.

As the music continued, I saw the walls around me begin to crumble and they eventually fell apart. For a second, I was standing in a dark, endless void; a moment later, I found myself in a dark forest. I looked up and saw nothing but the storm clouds gathering in the night sky. The rain came down almost instantaneously, soaking me and my clothes within seconds. Zack's music was no longer audible; all I could hear were the numerous claps of thunder occurring all around me.

After trekking through mud and endless trees for what felt like hours, I found myself in front of a large mansion. I could hear music coming from inside, but it was not the somber music I had heard Zack play, no, instead, it was exultant and festive.

I slowly approached the mansion but retreated behind a tree when I noticed that people dressed in black overcoats were approaching the house. I was almost certain one of them had seen me, but none of them came over to investigate. I watched one kick the door open and what happened next was utterly horrifying. Gunshots were fired and several of the servants who attempted to flee through the front door were gunned down. I could only watch and listen as the screams were drowned out by the echoing gunfire.

Without thinking, I slowly approached the estate; it was then that I noticed I was not in control of my actions. I felt as if I were looking through the eyes of someone else. Someone then grabbed my arm. I turned around to see there were three people behind me: two men and a woman, their faces covered by hoods. But I noticed that one of them, the one who grabbed me, had blue hair visibly hanging from the inside of his hood.

"Zack, come on! We have to get you out of here!" he said to me. Why did he think I was Zack? Before I could object, the mansion exploded; the shockwave sent me hurtling to the ground.

Everything went white and I immediately found myself back at the dining room table. I felt like I had woken up from a dream. I checked my body, I was bone-dry. A hallucination? What happened to me? I thought that maybe I had eaten something I shouldn't have, but I felt normal. Upstairs, Zack was still playing his violin, but the song was less dismal, though not as upbeat as I had hoped. Without a second thought, almost as if I was being called, I walked upstairs and made my way to Zack's room.

Before I even had the chance to knock on the door, Zack ran out and hugged me. At first I was too shocked to react; Zack had not done so much as speak to me since he had arrived here. As he started crying, I just stood there, trapped. But what I had just experienced piqued my curiosity. Of all of the thoughts racing through my head, there was one thing that I knew for certain. Somehow, this boy had shown me his past.

After his sniffing had subsided, I led him to the kitchen and cleaned off all the tears and snot from his face with a rag. We then spent the next hour getting to know each other. I told him about my time at school, how I was the smartest

student there, the few friends I had, and how I met Sampson. His face actually lit up the more I talked. After a few minutes, he started going on about his life before my parents brought him here. It was not long until the word “Nexus” came up and he slowed down. He started talking about the night he last saw his father and the rest of his family before going completely silent.

I put my hand on his shoulder and reassured him he could take his time but that word, ‘Nexus,’ kept replaying in my head. I knew I had heard it somewhere before, but my thoughts were too scattered for me to remember. After dinner that night, I was in my room, video-chatting with Sampson. I told him about what had occurred earlier that day and to my surprise, he believed every word of it.

“I don’t know if it was a dream or a vivid hallucination, but it was so realistic,” I told him. “I could feel the rain, the cold air, even the heat of the fire!”

He lit a cigarette. “That’s not something you see every day... or at all. Did you see or hear anything out of the ordinary?” He exhaled a cloud of smoke.

“Nothing outside the realm of possibility.” I answered. “But while Zack and I were talking, the word ‘Nexus’ came up. I know I have heard it before, but I cannot remember where.”

“That’s a scary thought. Nexus, right? Sampson took a long drag on his cigarette before he continued. “Wait!” he coughed up another cloud of smoke, “Don’t your parents work for it?”

“Oh right!” I slapped my forehead. I could not believe I had forgotten that one blatant detail. “They do, but is it not odd that they would bring Zack here with them? Not only that, but the very word seems to bring back some very beastly memories for him.”

“My step-douche works there too, or works *for it*, if you can believe that.” Sampson took a long drag on his cigarette before putting it out. “Well, good luck with helping him get over it. I need to get to bed. Anyway, I’ll meet you at your place tomorrow.”

“Alright, I’ll see you then.” I yawned. “And you should quit that habit of yours. It will kill you.”

“Yeah, right!”

After he cut the signal, I lay in my bed, not tired in the slightest. There were too many things on my mind. I contemplated everything that had transpired the past two weeks but my mind kept going back to the Nexus. *What could the Nexus have to do with Zack? I thought to myself. And what kind of connection do my parents have with him?*

A few hours later, at precisely 3:32 am, I woke up from a dreamless sleep to the sound of Zack’s thunderous snoring a few rooms down the hall, I made a note to soundproof the walls.

Knowing I would not be able to fall asleep for a while, I dragged myself out of bed and headed downstairs to the kitchen for a drink of water. The house was dark and quiet, aside from Zack’s snoring, and my parents were either sleeping in their room or out working overtime. They usually left us in the house unsupervised whenever they made some kind of breakthrough in their research.

I made my way into the kitchen and turned on the faucet when I suddenly heard something coming from beneath the house, but the house did not have a basement. The sound was...different...from anything I had ever heard before and

for a second, I felt as if I was being called by it, whatever it was. I could still hear Zack snoring upstairs so I was certain he was not the cause of the noise.

Almost as if I were in a daze, I discovered the sound was coming from somewhere in my parents' study. I looked around but there was nothing unusual in sight. However, the sound got louder as I approached the bookshelves on the wall opposite of my father's desk. I carefully looked through the books; at first there was nothing out of the ordinary but then I found something interesting. Hidden behind the books on the third shelf, there was a keypad carefully camouflaged into the wall.

Judging from the design, it needed a 10-digit passcode in order to be unlocked. Without thinking, I reached for it. The instant I touched it, the numbers on the panel's screen became shambolic; green numbers rapidly began to fill the screen, not stopping for a second. I removed my hand from the panel and it instantly returned to normal. "What the bloody hell was that?" I asked myself.

"It would appear that you *do* possess that ability." I turned around and found my father was behind me, wearing his evening robe. "It looks like my suspicions were true, *mein Sohn*."

"What are you talking about? What ability?" My father rarely spoke German, only during fits of stress or uncertainty.

Without another a word, my father reached for the panel and began to punch in the code. "I was hoping to show you this when you were older but given the circumstances, this is probably for the best." When he finished inputting the code, the wall moved to the side, revealing a staircase that led underground. "Come. We have much to discuss."

LULY Halal Cart

Irvin Gutierrez

As I prepare Sunday night, going into my sock drawer, choosing a hat, and black sweater, all I can think of is how tired I already feel thinking the next day is Monday. Eager to wake up but too eager to sleep, I set four different alarms for the following day. Yeah, Monday is the best day of the week...said no one ever. At 5 am, the air hits my ankles, so I imagine it might be a chilly Monday morning. As I walk across Fort Greene Park to reach Myrtle Avenue, I feel a sense of peace for it's not rowdy or loud yet. After walking down Myrtle Avenue, I finally reach the corner of Jay Street and there she is: "The Luly Halal Food Truck," covered in blue wrapping with sphinx images alongside pyramids. A tiny metal door is flung open with an orange cone next to it. That's where the generator is kept. We keep the little door open to prevent the generator from overheating. If it does over heat, the first couple of hours of work are done in darkness, making it hard to see. As I get closer, I can hear the sounds of the overnight construction crew hard at work. And yet, it's still calm.

The cart is like a kitchen compressed to fit into a tiny metal box. As I slide the back door facing the sidewalk curb, I make a quick inspection. To my left, is the grill and fryer; in front is the stove and ice box and then the steam box to the right of the stove. To the right, are shelves with an assortment of pastries and donuts. Behind the shelves, my co-worker cuts bagels while he waits for the coffee machine to brew. After a quick glance I get a sense of what I need to prepare. The inventory van, as we like to call it, is parked right behind the food truck. There, I pick up a block of cheese, butter, cream cheese, eggs, bacon, sausage, lamb, lemon, ketchup and onions. I gather my supplies and then I finally step into the cart. As I stand over the grill, I carefully do my setup, placing the eggs over ice as well as the butter and cream cheese. The grill is ready and hot; I begin to prep the bacon and sausages for the breakfast sandwiches to be made later. I take my block of cheese and take it apart. I lay the slices over one another on a sheet of foil to create what would appear to be a six-point star shape. It can get pretty annoying when it gets busy to reach for a slice of cheese for an egg sandwich if one disregards this step. Cold cheese is the worst when you start to feel rushed and seconds turn to minutes in the blink of an eye.

Besides egg sandwiches, we also serve muffins, pastries, donuts, hot drinks, a variety of commercial cold drinks, gyros, falafel, lamb/chicken over rice and much more! By now, the smell of turkey bacon is so aromatic that a customer who ordered a large coffee begins to exclaim in delight that he could smell the turkey coming out of the A train on Jay Street. I myself get hungry now. My co-worker is already sipping on his tea and enjoying a nice slice of marble pound cake, for his morning duties are now complete with a bit of time to spare. Inside Luly, we like to mentally divide the cart in half by station so we know what work we're responsible for. For him it's the coffee machine and pastries. For me it's the grill and making hot food. Eventually when it gets too busy, we disregard this imaginary border and jump to either side, making work easier and faster, for

timing is everything in this business! But of course all of this is possible because we always work as a TEAM!

Mondays and Fridays are normally slow days at Luly on Jay Street. On Tuesdays business gets a little too busy. Business normally begins around 8am, or earlier. Our customers include bankers, teachers, students, retirees, people reporting for jury duty and others. Some are people who come with a blank stare and ask a million questions as if they're buying a home. Each person has their own personality and special needs. People may look at us and automatically assume that we have the brain of a starfish. Dealing with all of these types of vibrant people is a job in and of itself: whether it's someone complaining that the corner-store has the bread they like or a customer who wants an "egg white sandwich," then advises you to "hold the yolk in the air, count to ten, then add the yolk to their egg whites." They say there are two types of people in this world: the customer and the cashier.

Through it all, we see the angry retirees and even men who come out of family court upset and hollering because they wanted more sugar in their coffee, but in fact are just mad because they have to pay extra child support. We still keep our composure for we understand and treat everyone with fairness. In front there is an optical solutions business with a man yelling: "EYES GO BAD TOO! CHECK 'EM OUT!" When we see and hear him it's a relief as we now have someone else to laugh and joke with. For us, working at Luly isn't just about being a food vendor. It's about a community and the world around LULY FOOD TRUCK. We like to think our job consists of being a peacemaker, friend, therapist, interpreter, guide, security officer and even a health advisor.

By Wednesday, the energy levels of my co-worker and I are low. Thursdays, for me, are the best days. That's the day I drink more coffee than I should and my body can't keep up with how fast my mind processes the work. They just won't coincide. My co-worker on Thursday mornings usually laughs and says, "Look, you made it, welcome to the jungle, my man," followed by a fist bump. He, by now, already knows this pattern for he too gets tired. But we hang on because this is how we choose to make an honest living. But most importantly we are there for YOU! Through the layers of being tired, annoyed at times, hungry, happy, mad and sometimes sad, we give thanks. There's a man who works at the parking lot who one time said, "Thursdays are used to rejuvenate." It makes me smile and keeps me going through frozen feet in the winter, numb hands, super-hot summers beside the hot grill when the steel sucks in the heat. Thursdays are indeed the new Fridays! If I can make it past Thursday, every other day will be a breeze. For the joy I have on a Thursday is the smile you will see through my tired eyes on a Monday even if the evil guy approaching the window tries to pull a fast one with a juice. Working in this business you come across all types of beings and souls whether good or bad, the police officers, or the ones who hate to see you smile. With us there, I feel like no one will go hungry.

Kitten, Tuna and the Pursuit of Happiness

Olga Gorokhovskiy

It was one of those cold, rainy November days, when lying under a fluffy comforter on your favorite sofa, drinking hot chocolate and watching *Game of Thrones* seemed like the best thing in the world. But most days of the week doing that was merely a dream for me. Steel-colored clouds looked ominous and heavy and they matched the gray, wet streets so well. Nothing in the air reminded me of the cozy, family holidays ahead.

I had a rough day at work. Being a sales person in a medical supply store is even less glamorous than it sounds. Angry customers, unsure of what they want and having troubles with their insurance, definitely liked to take out their emotions on the defenseless salesgirl who wasn't allowed to answer back. I needed to stop by the supermarket to pick up some groceries and get something tasty to make for dinner for my family that evening. "Luckily" I also forgot my umbrella, so I had to hurry because it looked like a flood of nearly biblical proportions was about to start. The grocery store was within walking distance from our house, so, loaded with bags, I walked as fast as I could. And I was almost halfway home, when something small, furry and dirty threw itself at my feet. It startled me. It was a little kitten, no more than a month old. She stood up on her hind legs, looked at me and said: "Meow." I guess it was kitten for "Hi."

The clouds became even more frightening, so I didn't have time at all for the small talk with that poor little thing—I had to hurry up. When I looked back, I saw the kitten following me. Even with her tiny, short legs, she managed to stay very close. Maybe she really wanted to talk, or, what was more likely, she just smelled that delicious piece of fresh tuna I bought for our dinner table. Fearless and very persistent, she chased after me— her five steps to my every one, meowing and looking as cute as a ball of dirt and fur possibly could. "Ok," I said to myself, "my hands are full and I can't take you with me." But that was just an excuse: the real reason why I couldn't take her home was lying somewhere in the middle of the living room stretching and yawning. No, I'm not talking about my husband. I'm talking about a big, fat, bad-tempered cat. Maybe she wasn't evil in general, but she was evil to me. I didn't get on very well with our house cat, because when I moved in she was already there. She considered me her rival who was trying to steal her sofa, canned food, and her master (my husband). Although my husband sometimes took her side, the cat and I finally came to a ceasefire and simply remained neutral toward each other; this elusive and fragile peace could be very easily destroyed by that unashamed fur ball running up behind me. We already had one cat and we didn't have any intentions to take in another one. But the little kitten didn't know anything about that and kept on following me. For sure, she was hungry, cold, and homeless, because I couldn't even tell the exact color of her fur under all the dirt.

The weather was getting worse and worse. Clouds became heavy and dark, and they looked very threatening, which made me walk faster. The kitten tried so hard not to fall behind that I finally felt sorry for her and told myself: “If she follows me all the way home, I will have no choice but to consider taking her in.” So we walked together— me, kitten, and tuna. Nobody wanted to stay outside, and great drops of rain already started plopping onto the asphalt. The kitten looked very tired and started to fall behind. But something kept her going. As if she had faith in my good intentions. And, surprisingly, she made it all the way to my front door. The only thing I had to do was just let her in. Of course, it was a very challenging dilemma, because I didn’t want to destroy the delicate peace with the older cat. I decided to let her in and feed her, and at dinner our whole family— me, my husband, and his parents— would make a final decision about the kitten’s destiny.

Everyone in the house enjoyed a delicious tuna steak dinner that evening and even my kitten got a small piece. My father and mother-in-law did not even question the newest addition to our family, and my husband seemed fine with it as well. And so, by common consent, it was decided to adopt that little poor thing because she looked so small and helpless. There is an old superstition that says stray kittens that come to you on their own and ask to stay bring luck and happiness with them. We didn’t want to scare away our luck and took her in. We put the kitten in the sink and bathed her many times until the true fur color revealed itself— brown-black with a white belly. She was so dirty that we clogged the sink drain. The next day we took her to the vet, and she got all the required shots. We decided to name her Matilda, after the main character in the famous Luc Besson movie *Léon: The Professional*, because she also never gave up. You might want to know what happened to the older cat. Of course, she wasn’t very happy with her new roommate at first and she left “notes” about that on many pieces of furniture in our house. As a mark of protest, she was furiously damaging everything she considered valuable. But, finally, even she was won over by Matilda’s overpowering friendliness. Matilda is a fifteen-pound, grown-up cat now, who is very thankful to me (unlike the older cat). I think when she eats her canned tuna she remembers that rainy November day and just feels happy to be where she is.

So why am I telling you this whole “kitten story”? Sometimes I feel that everything goes wrong— plans get broken, obstacles wait around every corner, and I feel close to giving up. When this happens, I usually look at that lazy fat cat face with its squinty eyes and whiskers and a smile. Now she lives in a big, cozy house; she has a bed, breakfast and even lunch and dinner on demand, a full basket of toys, and her own three-level scratching post. And I recall that little, dirty ball of fur with nothing but a sincere faith in a better tomorrow and, of course, in tuna. If a simple homeless cat could have enough faith to persist and chase after what it wanted— to eventually become a real house cat— then I, too, need to stay focused, have faith, and follow my own “tuna” no matter what.