

The Writing Anthology



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Dear Readers,

Welcome to the 40th edition of *The Writing Anthology*.

Founded in 1981 by now-retired Central College professor Dr. Walter Cannon, *The Writing Anthology* is a collection of exceptional student work from across the liberal arts curriculum. After reviewing dozens of submissions, our team selected the following ten pieces for inclusion in this year's anthology. The difficulty of this selection process is a testament to the excellent quality of student writing at Central College, and we are immensely proud of all the hard work of our peers.

As we all learned this year, change happens quickly. However, transition tends to go slowly, bringing with it feelings of denial, shock, anger, frustration and stress. Transition can also bring us closer together and give us hope. The pieces chosen for this year's anthology can change our perspective and shed light on uncomfortable topics, causing us to reevaluate our thoughts and beliefs. Now more than ever there seems to be an enthusiasm to learn something new, and a longing to explore new ways of conducting established practices. This year's works put forth new ideas, and work to examine difference from multiple angles. As a whole, our team believes this anthology develops a unique statement in this historical moment about the importance of dealing with change and transitions.

Each year, the John Allen Award is awarded to piece of student writing that the selection panel deems to have superior rhetorical competence, high levels of readability, originality and insight. This year, we are pleased to announce that Emma Clodfelter will receive this honor. Emma's essay "The Function of Stabilimenta in Spider Webs" is a intriguing scientific exploration into the possible reasons for spiders' web design. Emma's closely detailed study is fascinating for all disciplines as her writing style is engaging and challenges its readers to consider the natural world around them.

We would like to congratulate all of the student authors on their accomplishments and for producing such excellent work. Additionally, we thank the professors who recognized the talents of their students and submitted these essays to *The Writing Anthology*. Thanks also to Mat Kelly for his discerning eye, and for once again agreeing to design this year's cover. Thank you to all of the talented artists for their outstanding contributions which make *The Writing Anthology* a well-rounded and visually-interesting publication. Finally, we offer our thanks to Steffanie Bonnstetter for her expertise, and to Jordan Bohr and the student workers of Central College Communications Office for their outstanding work in bringing *The Writing Anthology*'s website to life.

Most importantly, we would like to express our gratitude towards our faculty advisors, Dr. Valerie Billing and Dr. Mark Thomas. Thank you for your flexibility and guidance during this historical year of changes.

Once again, thank you to all who made this year's publication possible. We hope you enjoy the 2020 Writing Anthology!

Christa Miller '20 Gabrielle Anderson '22

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^{*} John Allen Award Recipient

Bridging Cultural Difference in Albert Camus's "The Guest"

Marin Harrington

ENGL 362: World Literature Il

Marin reads this story, not as the narrator's existential crisis (as is so common), but as an illustration of how a cultural gap – in this case, between the French and Arab people – can be effectively overcome through a kind of wordless empathy. By looking at the story in this unusual way, Marin breathes new life into it, and reveals how contemporary the story seems.

- Michael Harris

Differences between cultures—whether related to race, nationality, gender, sexual orientation, socioeconomic class, or political affiliation are frequently the root of conflict, and these types of conflicts are often welldocumented. Less discussed are the instances when people unify despite their cultural differences, or, even more profoundly, expand their own worldview by understanding someone else's cultural perspective. Albert Camus's short story "The Guest" is grounded in cultural differences, from the setting in French-colonized Algeria to the relationship between the two main characters: Daru, a school teacher, and the Arab, a prisoner. Despite its 1957 publication and setting in a colony which no longer exists, the story maintains its relevance by exploring the various ways humans can contemplate, empathize, and connect amidst cultural differences, a process

that remains essential in the face of increased globalization

Daru's relationship with his profession as a teacher is a way of reaching across differences, it and highlights the emotional reflection in which he frequently partakes. How people feel is often different from how they want to feel, as evidenced by the loneliness Daru alludes to when his students are not in school because of the region's extreme weather. Describing the scarce light emanating from his classroom window. Daru thinks this weather is still "better than those three days when the thick snow was falling amidst unbroken darkness... Then Daru had spent long hours in his room, leaving it only to go to the shed and feed the chickens or get some coal" (2574). His feelings of isolation are something he wants to escape, and while they exist in part due to the weather, they are also fueled by the absence of his students. He does not judge

his students for their nationality or low socioeconomic class. either. In fact, the class difference between Daru and his students makes him more self-reflective, and he displays empathy towards them. After explaining that the school provides daily food rations to the children yet the children do not have access to these rations when weather prevents them from going to school, Daru refers to the children as "victims" and says he feels like "a lord with his whitewashed walls, his narrow couch, his unpainted shelves, his well, and his weekly provisions of water and food" (2575). He struggles to reconcile the privilege he has over his students and never displays hostility towards them. Daru recognizes the need to try to understand the situations of those who are different from himself, and this informs much of his empathy later in the story.

Daru must also navigate the difference between how he feels about the physical land

upon which he lives and how he feels about the political conflict that overruns the land. He describes the land as "cruel to live in, even without men," but also feels attached to the region because "Daru had been born here. Everywhere else, he felt exiled" (2575). No matter the conditions of the land, Daru is unable to leave it, as moving anywhere else would feel like a displacement rather than a choice. There are also political expectations that accompany living on the land, which create conflict within Daru. He challenges the idea that he must take the Arab to the police simply because Balducci, a Frenchman, orders him to. Daru claims that such a task is not his job, but Balducci tells him that wartime makes people servants to the place they live, citing that, "In wartime people do all kinds of jobs" (2576). The physical space gets swallowed by the political atmosphere, and Daru must figure out how to relate to the physical space with this outside tension. Balducci also holds complacent attitudes towards the poor that conflict with Daru's own guilt about being privileged over his students. When Daru resists Balducci's orders to deliver the Arab to the police, Balducci attempts to persuade him by saying, "After that, all will be over. You'll come back to your pupils and your comfortable life" (2576). The harshness of the land that fuels Daru's pupils' poverty gets

overshadowed by political motivations. Daru's relationship to place is further complicated by the need to assign everyone on the land to a specific political agenda. When debating whether or not he will follow Balducci's orders to take the Arab to prison, Daru asks, "Is [the Arab] against us?" and Balducci responds, "I don't think so. But you can never be sure" (2576). The land is used as a backdrop for political and social divisions, which affects Daru's own relationship to it and forces him to examine the cultural tensions around him.

The most significant way Daru communicates across differences in "The Guest" is through his interactions with the Arab. Upon learning that the Arab supposedly slit his cousin's throat, Daru feels "a sudden wrath against the man, against all men with their rotten spite, their tireless hates, their blood lust" (2577). Yet, Daru treats the Arab humanely despite this frustration. While Daru's politeness towards the Arab manifests itself in small gestures, these still indicate a desire to at the very most connect with—and at the very least not alienate—the Arab. For example, Daru notes that the Arab "might perhaps be untied" before giving him tea and does not re-tie the rope around the Arab's wrists even though Balducci recommends doing so (2577). When Balducci tells Daru to keep a gun near his bed while

the Arab is with him, Daru simply responds, "Why? I have nothing to fear" (2577). Daru also equalizes the relationship between the Arab and himself by speaking to him in Arabic, not French (2578). The Arab is also allowed to sleep in a bed in the same room as Daru despite his criminal status, another attempt to coexist despite cultural differences. It is never entirely clear whether the Arab is innocent or guilty of the crime of which Balducci accuses him: the fact that Daru makes the decision to treat him well despite this perceived 'moral' difference between them conveys an instinct to place humanity and simple acts of goodness above mindlessly following orders simply because they are a cultural expectation.

All these various types of interactions across differences lead Daru to make an ultimate choice about his feelings towards the Arab.

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Despite the contrasts between them, Daru finds himself emotionally closer to—not more distant from—the Arab as the two of them spend more time together. This closeness presents its own challenges, however, as Daru feels that the Arab was "imposing on him a sort of brotherhood he knew well but refused to accept in the present circumstances" (2580).

Due to the power Daru holds over the Arab as his 'transport' to the police and the political climate of the region, the differences between the two are evident and make forging friendship a complicated

endeavor. The human connection, however, is undeniable, as the two sharing a space leads to the development of "a strange alliance," according to Daru (2580). What results, then, is the potential to "fraternize every evening, over and above their differences, in the ancient community of dream and fatigue" (2580). Their differences might not be ignorable, but the humanity the two men find within each other is more prominent. Prior

to showing the Arab the road towards the police and the road towards the nomadic village where the Arab might seek refuge and allowing the Arab to choose the best-suited path,



Catalina Valdez, ceramic

Daru thinks, "[The Arab's] stupid crime revolted him, but to hand him over was contrary to honor" (2580). To Daru, demeaning the Arab's dignity is a worse act than potentially committing a crime. While the Arab decides to take the road towards the prison (but not before trying to warn Daru of something), and the story ends with Daru finding a message that says, "You handed over our brother. You will pay for this," signaling the

danger the Arab tried to help Daru avoid, the two exemplify an attempt—if not more—at kindness across cultures (2852).

"The Guest" by Albert Camus is an exercise in cultural

difference. The story understands the challenges of intercultural interactions and the lifealtering risks that sometimes accompany them, but the work also encourages thoughtfulness

and compassion. While the outcome is bleak for Daru and the Arab, the brief moment in time in which they gain each other's trust is admirable and, unfortunately, rare. Perhaps one day the forces that break the two apart will no longer exist, but only if people first put in the effort to see beyond their differences.

Works Cited

Camus, Albert. "The Guest." *The Norton Anthology of World Literature: The Twentieth Century*, 2nd ed., edited by Sarah Lawall and Maynard Mack, W. W. Norton & Company, 2002, pp. 2574 - 2582.

Race Perceptions in "Recitatif"

Allison Stuenkel

ENGL 160: The Literary Imagination

This paper stands out especially because Allison narrates with such honesty the way in which reading this article helped her think in new ways about both Morrison's story and her reading practices and implicit biases. Her writing is accomplished and sophisticated, and it illustrates the best of how humanities writing can address an audience outside of the academy.

- Valerie Billing

Growing up in the diverse community of Waterloo, Iowa, I have been exposed to people with different cultures, ethnicities. and races than my own. I absolutely love learning about the unique experiences of every individual and trying to be cognizant of my biases. However, the short story "Recitatif" by Toni Morrison truly challenged the unconscious stereotypes I did not know I believed In addition to this story, I read "Black Writing, White Reading: Race and the Politics of Feminist Interpretation" by literary critic Elizabeth Abel, which exposed me to different interpretations about the perceptions of race and femininity in this story. Although my initial reading of "Recitatif" resulted in guilt and self-criticism. Abel's focus on how fantasies and experiences influence our analysis changed my perspective.

The short story "Recitatif" challenges the reader's perceptions of race

and identity by leaving the race of the two main characters ambiguous. The only clue we get from the narrator, Twyla, is that Roberta is "a girl from a whole other race" and together they looked "like salt and pepper" (Morrison 160). Therefore, the audience is left to decide which character is black and which is white. When I read this story originally, I believed that Twyla was black from the first sentence I read. I thought it was made very clear that Twyla was African American. Looking back, I think it was because the author of "Recitatif," Toni Morrison, is black, so I unjustifiably assumed her main character would be of the same race. However, I now can point to specific passages that support my initial reading of the story. One crucial line for me was when Twyla reflected on Roberta's acquired wealth, commenting: "Everything is so easy for them. They think they own the world" (167). Throughout the history of the United States, racism and

segregation played a huge role in how our society functioned. Despite the Civil Rights
Movement, white privilege still exists. Therefore, I interpreted the vague "they" in this line as referring to white people and commenting on the advantage white people have. In another scene, Twyla finds Roberta protesting school integration. The two interact, and Roberta claims her right to protest, asserting "it is a free country," while Twyla retorts, "Not yet,



Mary Busker, copper but it will be" (171). I viewed these comments as Twyla hoping for racial equality through integration, while Roberta rejects the busing due

to racism.

It was not until I discussed this short story with my classmates that I realized that the race of these two characters was never mentioned. At this point, I felt an intense sense of shame and embarrassment. I pride myself in trying to be aware of my biases. However, I made a lot of assumptions by applying my own context to this story. My emotional reactions made me want to explore various interpretations to "Recitatif" and learn how literary critics reacted to the interesting dynamic between characters of different races

The author of the literary critique also made generalizations, but she came up with different results. Elizabeth Abel, who is a white feminist writer, viewed Twyla as white because she focused on the social situations in which the characters find themselves. Abel also mentions that most white readers read Twyla as white, while most black readers read Twyla as black (Abel 471). In Abel's interpretation, Twyla looks towards Roberta's socioeconomic status as something she desires and feels like she deserves. As Abel points out, "Twyla feels vulnerable to Roberta's judgement and perceives Roberta (despite her anxiety about their differences) as possessing something she lacks and craves" (473). Twyla looks at the good food

that Roberta receives and the luxuries of her adulthood and feels inferior despite the fact that American social structures privilege those with white skin. Abel believes that Twyla's sense of social and physical inadequacy is rooted in a white woman's fantasy about the ultimate strength of "black women's potency" (473-474). Abel is using this phrase in reference to Richard Dver's analysis that discourses around blackness possess "spontaneity, emotion, [and] naturalness," and while black discourses see these as general contributions to society, white readers see these as qualities only black people have (qtd in Abel 474, ftn. 4). In Abel's interpretation, Twyla is jealous because she does not possess the same strong qualities that Roberta has. In order to analyze the scene about racial integration, Abel wrote to Toni Morrison who explained that Roberta may not want her upper-class children to go to school with workingclass children. Abel concludes that "Roberta's resistance to busing, then, is based on class rather than race loyalties" (Abel 476). Overall, Abel focuses her argument on how the two characters react to social situations. Analyzing the way the characters make decisions and address their circumstances helped her determine their races.

In contrast, Abel's black feminist colleague Lula Fragd

viewed Twyla as black because she focused on historical context and cultural practices for her interpretation. She read Twyla's name as culturally black and made note that "Jimi Hendrix appealed more to white than to black audiences" (Able 474). Rather than focus on the daughters' interactions, she focuses on their politics as mothers. For example, in the bussing situation, Fragd read Twyla as "politically correct but politically naive and morally conventional" (475). In her interpretation, Twyla supports integration, but does not understand the deep underworking of racism in American society. Roberta, on the other hand, was "the more socially adventurous, if politically conservative" white woman (475). Roberta is adventurous in her life choices but still holds conservative views about integration in schools. Fragd also points to specific instances of coldness from Roberta as "a case of straightforward white racism" and her opposition to integration as "self-interested resistance" (475). Fragd thus reads Roberta as racist and selfish. Abel offers these two different interpretations in her analysis of "Recitatif" to illustrate how we perceive race in literature differently depending on our own identities and experiences.

Abel parallels the competition between these

two female characters with the tensions that arise between white and black feminist writers. Instead of pointing to guilt, Abel uses her literary analysis to open up a conversation about how our racial biases affect every text we encounter. I found this analysis interesting because instead of being rooted in shame. Abel focused on a new learning opportunity. I was intrigued that my interpretation of the character's races did not fit the typical interpretation for a white reader. Nevertheless, my interpretation, as well as Abel's and Fragd's, are all incorrect. As Abel points out, "the text's heterogeneous inscriptions of race resist a totalizing reading" (476). Instead of trying to define race, we need to view race through a new lens. When reading any literary work, it is impossible to avoid our unconscious assumptions, biases, and backgrounds. Therefore, as a critic, I need to be careful when reading race onto characters. Abel argues, "there are as serious, although very different, problems with revaluing the literalness of race as with asserting its figurativeness" (488). Characters that exist in books are not real, so they do not exactly fit the mold of having human qualities. Going forward, I need to be aware of applying stereotypes towards characters that are figuratively black or white.

As a reader, my past experiences influenced my interpretations and perverted my ideas of the characters. A white feminist reader, such as Abel and myself, can run the risk of "potentially reproducing the structure of dominance she wants to subvert" (Abel 488). This dominance can be the institution of racism or even sexism. By inserting my own

As a reader, my past experiences influenced my interpretations and perverted my ideas of the characters.

experiences into this story, I unknowingly reinforced negative structures such as discrimination. When reading this story, as well as throughout my life, I have tried to work against making generalizations and have attempted to challenge racial discrimination. However, by specifically reading Twyla as black, I ended up strengthening the stereotypes that I work so hard to avoid. For example, I was not surprised at all that Twyla's mom "danced all night" and that her idea of a meal "was popcorn and a can of Yoo-Hoo" (Morrison 159, 160). Although neglectful mothers can be of any race, I assumed that Twyla must have the black mom because I grew up with black classmates who had distant mothers with different priorities than their children. By

believing this assumption and applying it to "Recitatif," I was reinforcing another stereotype and trapped Twyla by my interpretation of her mother. As Abel points out, "our inability to avoid inscribing racially inflected investments and agendas limits white feminism's capacity either to impersonate black feminism, and potentially to render it expendable, or to counter its specific credibility" (497). In other words, by imposing my past experiences, I undermined the critical components of Morrison's story.

Similar to Able, midto-late twentieth-century black feminist Audre Lorde was also concerned with attacking structures of dominance and bringing awareness to the racism within the feminist community. At the Second Sex Conference on October 29, 1979, Lorde gave a speech in which she discussed the separation of feminists as a result of racism and homophobia. She argued that in order to work together against sexism, feminists must find unity. Yet, she asserted that "community must not mean a shedding of our differences, nor the pathetic pretense that these differences do not exist;" instead women must "take our differences and make them strengths" (Lorde 215). Feminists must learn from each other in order to fully challenge patriarchal society, and not get tied down by racism. To

counteract our assumptions, we need to "produce our readings cautiously and locate them in a self-conscious and self-critical relation to black feminist criticism" (Abel 498). Personally, I need to be conscientious about how I read characters and how being white influences what I interpret. With every piece of writing I analyze, I should reflect on how my interpretation may be damaging to a non-dominant group, and take steps to reconcile my perceptions.

Throughout "Recitatif" there are unifying moments between the two main characters that move past their racial identity. One character, named Maggie, plays a significant role because she is assigned different races by both of the characters. Twyla contends Maggie "was old and sandy-colored," while Roberta later yells at Twyla for kicking "a poor black lady" (Morrison 161, 172). At first, Maggie serves as a point of contention between the two characters, as Twyla believes that Maggie was not black and cannot recall kicking her, while Roberta remains adamant about her stance. Towards the end of the story, the two characters meet after a long

period of time and after some small talk their attention is brought back to Maggie. At the end of the story Roberta cries, "What the hell happened to Maggie?" (175). Only in the last couple of paragraphs of "Recitatif" is Maggie's race of no importance to these two characters. While they argued throughout the story about her race, it ultimately does not matter whether Maggie was black or white—what remains in their minds is how others treated her. Their mindset moves past race to focus on victimization and guilt. As Abel writes, "race enforces no absolute distinctions between either characters or readers. all of whom occupy diverse subject positions, some shared, some antithetical" (495). Twyla and Roberta are no different in their concern for Maggie. In the end, they are no longer divided by their race—they both share a common feeling of sorrow and worry about Maggie. Another example of their similarities is that both characters are unified in their desire to kill as well as love their absent mothers (Abel 495). Both characters are children of neglect and lived together in St. Bonny's orphanage. When reading, I need to keep

in mind both the uniqueness of people of different races and also their similar experiences. Ultimately, the race of these two characters does not define everything about them—every person is unique. Therefore, our assumptions are typically invalid because of the individual experience of every person and character.

Reading "Recitatif" by Toni Morrison truly opened my eyes to the unconscious stereotypes I possessed and how my past experiences and outlook as a young white woman influenced my interpretations. Through my analysis of Abel's "Black Writing, White Reading: Race and the Politics of Feminist Interpretation," I realized the importance of being reflective. Instead of feeling guilt and shame, I need to realize how my past experiences and social context influence my analysis. I am interested to apply this objective approach to other short stories.

Works Cited

Abel, Elizabeth. "Black Writing, White Reading: Race and the Politics of Feminist Interpretation." *Critical Inquiry*, vol. 19, no. 3, Spring 1993, pp. 470–498. *JSTOR*, www.jstor.org/stable/1343961.

Lorde, Audre. "The Master's Tools Will Never Dismantle The Master's House." *Lesbian Culture: An Anthology*, edited by Julia Penelope & Susan Wolfe, The Crossing Press, 1993, pp. 214-216.

Morrison, Toni. "Recitatif." *The Oxford Book of Women's Writing in the United States*, edited by Linda Wagner-Martin and Cathy N. Davidson, Oxford U P, 1995, pp. 159-175.

Day of the Dead

Lauren McKee

ENGL-290Y: Travel Writing in the Yucatan

Lauren focused on our visit to the cemetery in Zinacantan on the Day of the Dead. Lauren's essay does a great job of immersing the reader in her experience through close observation and attention to detail, and I love how she creates a sense of mystery and wonder, especially with her ending.

-Kim Koza

I stood on the sidewalk where the warm Mexican sun greeted me. The air still held an edge of chilliness, enough that the shadows were cool to stand in A line of enclosed motor taxis waited in the street to take us to the cemetery. My study abroad group and I were in Zinacantán, Chiapas to see the town's cemetery during Dia de Los Muertos, or Day of the Dead. I had specifically signed up for the fall semester because of this festival. The students from my college who had studied abroad during the fall semester in Mexico said Dia de Los Muertos was an unforgettable experience.

The Day of the Dead is celebrated to honor the spirits of loved ones who have died. Here, death is something that is celebrated, unlike in the United States where grieving often takes place behind closed doors. People believe that on Dia de Los Muertos their deceased family members come back to visit them. In order for the spirits to cross over into the land of the living, family members must place a photo of them on an altar. The celebration is a sacred time and tradition for many in Mexico.

My friends and I all climbed into the same motor taxi. I instantly warmed up as we all desperately crammed together to fit into the taxi. As the driver started up the mountain toward the cemetery, the wind gently blew my hair across my face. I peeked through the thick plastic door that enclosed the taxi to look at the mountains as we drove. The fresh air and the view of the mountains were intoxicating. The warmth and the swaying of the taxi threatened to lull me to sleep. Instead of sleeping, I thought about San Juan Chamula, where we had visited the town's church. I had no pictures to show my family of the town, only the images I had committed to memory. Lisa Munro, our study abroad director, explained that the town forbids photography because oftentimes tourists take pictures of Indigenous people without their consent. I am grateful that we didn't have the opportunity to use our cell phones because what we saw could not be captured in a photo. The outside of the church had a Catholic style, with tall stained glass windows; however, the inside

told a different story.

When I stepped inside the church it became evident that Mayan and Catholic traditions had been mixed together. The smell of incense permeated the room, and emerald green pine needles lined every inch of the floor. Warmth slowly spread throughout my body as the heat from the burning candles and peoples' breath filled the room. I peered in astonishment, through the heavy smoke created by the incense, at the

I am grateful that we didn't have the opportunity to use our cell phones because what we saw could not be captured in a photo.

various statues of Catholic saints adorned with yellow and orange marigolds. Some people were smiling and laughing in the church, while others sat solemnly among the pine needles. The sound of guitars and accordions swirled around the room, along with the light that filtered through the stained glass windows. I tried my best to make myself small in the church. I wasn't entirely comfortable being in a place

that was irrefutably sacred for others.

When we stepped outside the church, men and women were walking through the town's square. The men were dressed in blue jeans and had on black woven wool ponchos with white cowboy hats. They seemed like cliche western cowboys who would ride off into the sunset without

looking back. Most of the women had their midnight black hair braided and wore black wool skirts. The women had on different embroidered shirts. but almost all wore a shawl that covered their shoulders. These were the traditional outfits for Mayan men and women of that area

As we walked back towards the van, a Kaeanne Louks, acrylic, 11" x 14" woman in the back of a pickup smiled. I quickly looked over my shoulder, sure that she wasn't smiling at me, but, when I looked back, she was closer this time and she looked me straight in the eyes as she smiled. I saw her gold tooth and sparkling brown eyes. She looked at me with pure delight and kindness. Her wrinkled face had been tanned by the sun. As the truck drove by I felt the impulse to run after it and hold her hand. I looked around. hoping someone else had seen her as well. I was disappointed to realize that everyone seemed lost in their own thoughts and

were reflecting on what they had experienced.

As our motor taxi reached the top of the mountain, my heart began to beat faster; I had waited for months for this moment. When we reached our destination, we climbed out of the taxi and began to walk up the steep, rocky hill that led to the cemetery. I was embarrassed



as I watched Mayan women carry their babies and walk gracefully down the hill, and I told myself I was only winded because of the high altitude. When I reached the top, I could see over the largest part of the cemetery. Hundreds of flowers, each a different shade of dandelion yellow, violet purple, and tiger orange, were placed on gravestones. The flowers had been beautifully and lovingly arranged. Families sat next to their loved ones' graves as they ate and drank. They were visiting with their loved ones, dead and alive. Voices filled the air, along with the laughter

of children holding kites and running through the cemetery.

The view of the mountains made me feel small as I wandered further into the cemetery. We were high enough that I could see clouds below us in the distance. As I turned, taking in the view of the cemetery again, I saw an old man doing the same. His eves glistened as he took in

> the scene. He wore a tan jacket and well-worn cowboy boots. His face was shadowed by a large cowboy hat, and he seemed absorbed in old memories. He looked like a man who had seen and endured many trials in his life. I wondered if he had grown up in Zinacantán and visited this cemetery

since he was a little boy. No one appeared to notice the old man. As I stood there, he looked at

Families sat next to their loved ones' graves as they ate and drank. They were visiting with their loved ones, dead and alive.

me, or rather through me, and then walked away. I watched as he disappeared into a group of people and I asked myself if I had seen a ghost. Deep in the mountains, in a cemetery filled with hundreds of flowers, I was no longer sure what was real and what was not.

Blurred Boundaries: Soldiers/ Terrorists, War/Peace

Barbara Engleheart

"Every society seemed to exhibit both peaceful and violent behaviour, however various the interpretations placed upon them. 'We are all capable of violence' is one of those truisms that seems to be, in fact, true, at least as far as societies as wholes are concerned" (Mahmood, 1996: 15 f.).

In modern societies, violence is typically categorized into justified violence, or violence necessary for "the greater good," versus violence as evil, criminal and unjustified. There are two constructs for which this differentiation has been naturalized so strongly that we usually would not even consider drawing parallels between them: soldiers and terrorists.

One of my best friends from high school is now a soldier in the Israeli army, and having known her for many years, I recognize that her decision to enter the military service does not make her a criminal, let alone a terrorist; however, upon closer examination, it becomes increasingly clear that the line of legitimization of violence, i.e. the line between soldiers and criminals, becomes blurry when considering periods of war. Especially when reading the book Buried Secrets by Victoria Sanford (2005),

ANTH 370: The Anthropology of Violence

This is an essay composed for my upper-level seminar on The Anthropology of Violence. In it, Barbara Engelhart uses an interview with an American soldier as prompt for further reflection on how we define a soldier (versus a terrorist) and furthermore how we think more broadly about war and peace.

-Cynthia Mahmood

2019)

soldiers into a mission against Taliban fighters in the region. He says:

A lot of the villagers we talked to, the locals we talked to, were pro-Taliban, had enjoyed the Taliban's governance and how fast they solve some of their problems. And there was this creeping realization that maybe this isn't gonna work. Whatever 'this' is. It was maybe a little off...". When the reporter asks "And off what?", he hesitantly answers "I don't think they wanted us there. (The Daily,

The purpose of this paragraph is by no means to question the problematic nature of Taliban violence; however, it demonstrates quite well the colonizing effect of "peace missions" that do not regard the context of the local culture. In the case of Afghanistan, the attempt to establish a strong centralized government, thereby striving towards more

which addresses the genocide in Guatemala, the complexity and fluidity of concepts like "guerrilla fighters," "civilian," and "soldier" become obvious. When taking away the socially constructed connotations of these terms, a need for distinguishing critera arises. Questions such as "what makes the general public believe that some forms of violence are more justified than others?", "which characteristics are drawn upon to differentiate soldiers from criminals?", and, in consequence, "how are the concepts of "heroism" and "terrorism" constructed?" inevitably arise.

To illustrate the ambiguity inherent in the role of soldiers, I want to start with the analysis of an interview with a U.S. veteran who served in the Afghanistan war. He talks to a reporter of The Daily about a military deployment in 2008 in Marjah, an agricultural town located in southern Afghanistan, in which he led a group of eight

equality in society and in this way adapting it to Western standards, did not sufficiently take into account pre-existing political structures and the fact that power in this country was traditionally dispersed rather than centralized. While military officers on site early on expressed doubts about the mission and the soldiers recognized the skepticism of the population in Marjah in the face of their presence, the U.S. government decided on the continuation of the war at all costs. The soldier explains: "truth was rarely welcome, bad news was often stifled. every data point was altered to depict the best picture possible. Surveys, for example, were totally unreliable but reinforced that everything we were doing was right and we became a selflicking ice-cream cone" (The Daily, 2019). Considering this remark, it becomes questionable whether the inhabitants of the town, which was affected by U.S. military missions that often involved civilian casualties, saw the soldiers as saviors. Rather, from the point of view of locals, the U.S. military might have reminded them more of terrorist acts. The second question this quote raises is how it can happen and be accepted that people far removed from the actual violence are given the power to make decisions on courses of action, while the opinions of local people remain disregarded. While agents on site expressed their

doubts and were likely aware of the problematic nature of the mission, superiors required its continuation. This problem goes hand in hand with the fact that even though soldiers



Anna Brooks, marker, 9" x 12"

are commonly perceived to have more power than ordinary citizens, they are actually subjected to the volition of higher officers, who, in turn, are commanded by governments. Looking at it this way, it seems that these soldiers' freedom of action might be even more limited by governments than that of civilians. Further on in the interview, the reporter asks: "I'm curious what you are feeling when you start reading these documents inside this secret history of the war in Afghanistan in which commanding officers in many cases, I have to imagine your superiors, are candidly expressing their own doubts and misgivings about the mission that you and your colleagues were on" (The Daily, 2019).

After a brief pause for thought, the veteran answers:

Yeah, it's tough. I mean all these years later you kind of have these two directions where you either say it was all worth it: That we were fighting for something that was important and worth my friends'—our friends'—lives. Or you start peeling it apart and looking at everything. In some attempts, you figure out why we did what we did.

And then something like this comes out. These documents that kind of just stare at you. The people that you kind of trusted. That said 'Hey this battle will go down in history. This is the turning point in the war. 'You know, as an 18-yearold, as a 19-year-old, you wanna believe that. That's ... you think what you're doing is some net-positive. You think the bombs that you drop, the people that you kill ... that they should have died. But, you know... here we are, it's 2019, we're negotiating, the U.S. is negotiating with the Taliban. Who is to say that Marjah had to happen at all? (The Daily, 2019)

This quote illustrates the arbitrariness with which people in the case of Marjah were killed by soldiers without a clearly-defined purpose, thereby again making a clear distinction between soldier and criminal from the perspective of locals questionable. From the outside,

not least due to simplified or distorted representations of war missions by the media. one might get the impression of purposeful, thoroughly thought-through operations in which every soldier knows about the frame conditions that they will find themselves in. Actual accounts of war experiences, however, often revolve around confusion, "snapshots of memories," and insecurity about the next steps (The Daily, 2019). One question I can't answer for myself is how anyone can bear the irresponsible decision of keeping the truth from soldiers in order to influence their decisions. The soldier's account of the situation gives the impression that the reality of war was actively concealed from him and his companions, while the myth of the need to establish a more just society with a central government was utilized to justify the military campaign.

In this sense, the mythology of heroism was spread to motivate young men to take up the counterintuitive task of risking life and causing death. The American soldier at Marjah explicitly mentions two incentives that were given to him by superiors: that of being part of a historically significant event and of the "turning point in war," both of which seem to be closely connected to wanting to be remembered and honored by future generations as a hero in the creation of a

"more just world." Ironically, while this narrative about U.S. soldiers might be shared with the general public at home, other militant groups with exactly the same incentive sacrificing their own life for a more just world for oppressed communities—are categorized as terrorist organizations by the U.S. This irony could define the Taliban, the U.S. enemy in Afghanistan (which is celebrated by a wide swath of Afghan society), or the militant Sikhs of India studied by Cynthia Mahmood. This situation is also well-depicted by Tim O'Brien in The Things They Carried (1990) in the Vietnam era, in which he evokes a warscape in which no heroes exist; all is blood, filth, and guilt, and justified and unjustified violence can no longer be differentiated.

Certain parallels with the described experiences of the U.S. soldier can be found in Dr. Cynthia Mahmood's account of the militant Sikhs who have been trying to establish their own state in which they are no longer suppressed by the Indian government (Mahmood, 1996). Young Sikhs feel the weight of all history on their shoulders when they venture into battle; they are seen as "terrorists" by Indian authorities but as heroic revolutionaries by their own communities. "One man's freedom fighter is another man's terrorist" only begins to scratch the surface, writes Mahmood. What we have here

are two universes of discourse that slip past each other during any attempts at "peace talks," traditionally described.

Once the originating narrative of heroism begins to fray, we run into trouble. The American soldier at Marjah becomes disillusioned when he finds out that critical information has been kept from him. The militant Sikh drops his strict moral standard when he comes to learn that other fighters, some prominent, have tortured, kidnapped, and performed other atrocities in the name of victory. As Mahmood describes, the perception of the battles or specific military missions as being of "extraordinary quality" may lead to the assumption that "ordinary morality does not apply" (Mahmood, 1996: 205). When the "quotidian moral hesitation" is replaced by what resembles all kinds of sacrifices "for the greater good," the scale for acceptable behavior might be altered significantly. The likelihood for soldiers to commit atrocities in the absence of quotidian morality is, as has been witnessed in various instances (e.g. My Lai in Vietnam, the Dachau massacre, the Rape of Nanking, the Guatemalan genocide, etc.) increases. While this is an example of a shift in perception in which soldiers become criminals, Mahmood (1996) demonstrates the opposite transition—terrorists shifting towards a self-perception as

soldiers: "Where breaking the laws of a (perceived) unlawful power is seen as a revolutionary act, criminality itself becomes militancy. The boundary between crime and political action blurs, because every flaunting of the law is experienced as an assertion of sovereignty" (Mahmood, 1996: 204). Here again, the trope of heroism in the fight against an "unlawful power," e.g. a government, replaces the image of a criminal or terrorist. This reasoning also offers an explanation of a shift in the moral standards of militants: "... this conscious refusal to play the game of the oppressor, the decision to start a new game of one's own, with one's own rules and not India's, is what is responsible for the failure of militant Sikhs to condemn rather obvious atrocities committed by other militants" (Mahmood, 1996: 205). Again, the consideration of the "broader picture," of "the greater good," and the perception of war missions as "epoch-making" seems to reduce the inhibition level to exercise violence, while at the same time enhancing the tolerance for violence.

Coming back to the fluidity of concepts such as soldier, civilian, terrorist, and hero, I want to bring in another example of collective violence in which these categories became, at times, indistinct: the genocide in Guatemala. The accounts of witnesses

of this outburst of violence in the book Buried Secrets (Sanford, 2005) demonstrate how slippery the relationships between victim and perpetrator, peacekeeper and murderer, civilian and soldier, civilian and guerrilla can become in times of war. Is this the "fog" we so often hear of? Even the author/anthropologist has to continually think about and negotiate her role.

One especially striking example that illustrates the transition of just one person between most of these roles is the Mam-Mayan survivor Mateo. Sanford writes about him:

By the time he reached fourteen years of age, he had survived a massacre, buried his father in the mountains, joined the guerrilla and fought with them in the mountains for one year, and spent two years in a refugee camp in Mexico. Just before his fifteenth birthday, within one month of his return to Guatemala, he was forcibly recruited into the Guatemalan army where he was a soldier following the orders from superiors for more than one year. (Sanford, 2005: 202)

Even this brief passage undermines the troubling justification proposed by the Guatemalan army that the killing of a specific social group, in this case of communists, proceeded purposefully and is thus justified. As Mateo's testimony shows, his role in the genocide had shifted from civilian to guerrilla to refugee to soldier before his 17th birthday. Even though this might be an extreme example, it still shows that the differentiation between justified and unjustified violence, and thus the army's "assertions of the military's 'right' to kill communists" (202), becomes nonsensical.

The conclusion that can be drawn from these examples is that the assertion of violence, even if depicted as justified or necessary by a state, has to be evaluated critically. In the case of Guatemala's society, in particular, the Mayan part of the population suffered greatly not only at the hands of guerrilla fighters, but also, or even particularly, from state terrorism. Rather than protecting the non-violent parts of society, the Guatemalan state (backed by the United States) largely contributed to the genocide. Furthermore, it has been shown that government officials ordering (killing) missions are usually far removed from the place of execution of these missions and consequently run the risk of lacking realistic assessment of the situation on the ground—a scenario that occurred in the case of the Marjah mission in Afghanistan as well.

In line with these considerations, Mahmood voices another crucial insight about the problematic

effect of framing groups of society as terrorists. She writes: "Hysterical calls to condemn terrorism from a distance, to find better ways of technologically defeating terrorists as we find ourselves less and less capable of politically defeating them. are of a piece with the failure of imagination that considers freedom fighters as nothing more than serial murderers" (Mahmood, 1996: 22). It becomes clear that a blind condemnation of terrorism cannot be the solution to the Sikh problem in India. Rather, the historical context of and the treatment of Sikhs in previous decades needs to be taken into consideration. One aspect of re-establishing peace then seems to be to understand acts of violence in all their complexity. Labeling and categorizing certain people under the umbrella term "terrorists," on the other hand, causes problems on all sides: people on the outside are more likely to experience irrational fear of the unknown, unpredictable, evil terrorist that makes any constructive approach to talking about this violence difficult. Militants—in this case, individuals from the Sikh community—are more likely to feel treated even more unjustly and misunderstood. which will certainly not reduce their motivation to fight. One interviewee of the militant Sikh community even went as far as to say that the

ascription of the status of a criminal is psychologically more painful than the physical pain of torture: "What hurts is being treated like a criminal, not the roller on one's legs" (Mahmood, 1996: 210). As this man's pain suggests, categorizing the socially marginalized and excluded as criminals is unlikely to create conditions in which dialogue can lead us from war to peace.

In this context. Mahmood's conclusion that "[the] simplistic trope of the Sikh-as-terrorist has done enough damage both to India itself and to the academic study of India; it's time that it be replaced by a 'thicker' conception" is one guideline for the perception of collective violence that might allow for a more efficient and more productive approach to the restoration of peace (Mahmood, 1996: 275). "Conflict transformation" is perhaps the better term here, as we know that conflicts are rarely "resolved" but may indeed be "transformed" to a more positive and coexistent state (Lederach 2005).

This is where the anthropological study of war and peace enters state and military discourse. Anthropologists like Mahmood, Sanford, and Lederach enter warzones without preconceptions and get to know combatants face-to-face. These anthropologists recognize the similarities among young

boys who fight in all kinds of conflicts, although their home communities rarely want to accept these commonalities. In Violence in War and Peace (2004), Nancy Scheper-Hughes and Philippe Bourgois use a collection of anthropological work to explore the fact that violence itself occurs in both wartime and peacetime, as societies define them. The title intrigues, and is part of the blurriness that we now recognize inheres in human violence. How do we get from a state of more to a state of less violence?

Furthermore, when considering my epigraph above, it seems that neither war nor peace should be understood as an extraordinary state. Violence of various levels and qualities seems to be a part of human life that does not disappear. Neither prayer nor celebration provides the magic required to turn one into the other. If anything, anthropologists who study violence know that it is quotidian, courageous, and face-to-face effort that can move us slowly further away from bullets and toward conversation. Constant scrutiny of seemingly justified violence, awareness of ongoing power struggles, compromise and cooperation, and reflection and evaluation, as well as a balanced inclusion of the voices of all parties involved might be some of the tools that contribute to sustaining peace (Jordan, 2015: 587). Conflict

is an enduring part of human nature, but it can be transformed toward positive and purposeful change (Lederach 2005).

A final aspect I consider fundamental for all of the aspects of peacekeeping mentioned above is memory. As time passes, some of the atrocities humans have committed will be forgotten. From generation to generation, histories of violence will recede from consciousness. At first we might think, "Oh, but what is wrong with that? Isn't it good that people forget about violent, uncomfortable past events in order to forgive? Will the memory of horror not just be a burden to future and present generations?" As a student in an Austrian middle school learning about the Holocaust, I remember asking myself, "Why tell us about these atrocities in that much detail? Should we now feel bad because our ancestors might have participated in these crimes against humanity? Can't we just let it go?" These national memories of violence were always connected to a certain consternation, a guilty conscience or embarrassment for the actions

of the predominantly Germanspeaking population that was involved in the genocide. Even now, when traveling to other countries and hearing people address the topic of the Nazi regime, I always feel a certain kind of guilt, a certain accusation, and sometimes I even feel that people want me to take some kind of responsibility or at least to acknowledge the fates of people affected, due to the fact that I am from Austria. This is to say that yes, in some ways I think memory might have negative effects and is undeniably contented to negative feelings. Then, however, I ask myself: what is the alternative?

If we forget the horror that came along with violence, what motivation do we have to prevent it from happening again? What can ensure "Never Again"? Even though the notion of humans as inherently aggressive and inherently programmed to be violent is too simplistic an explanation for the rise of violent conflicts (Nordstrom, 1998), I can think of too many other motives, mostly resulting from ideological differences that lead to collective violence.

As instances of genocide have shown, these motives are far from basic animalistic instincts such as survival or competition. On the contrary, sometimes they even seem "noble" when considered in isolation from their effects: creating a "better" society is one motive brought up frequently in this context. Zygmunt Bauman (2000) has even compared the motivations of genocidaires like the Nazis to those of gardeners, who believe that in pruning weeds they are creating a beautiful flower garden. From this perspective, it becomes clear that the collective memory of outbursts of violence that kill millions plays a crucial part in the prevention of their repetition.

From the American soldier at Marjah, who may wonder now whether he is a hero or a criminal, to the militant Sikh who bravely stands up to an oppressive Indian government but is jailed as a terrorist, human beings are complex, and society's evaluation of them even more complex. The anthropologist chooses understanding first. That alone is a full-time, lifelong task.

References

Bauman, Z. (2000). Modernity And The Holocaust. Ithaca, Ny: Cornell Univ. Press.

The Daily. (2019). [Podcast]. Retrieved 30 November 2019, From Https://Www.nytimes.com/2019/12/16/ Podcasts/The-Daily/Afghanistan.html

Jordan, K. (2015). War Propaganda, War Crimes, And Post-Conflict Justice In Serbia: An Ethnographic Account, The International Journal Of Human Rights, 19:5, 572-591, Doi: 10.1080/13642987.2014.992882 Lederach, John Paul. (2005). The Moral Imagination; The Art And Soul Of Building Peace. Oxford University. Mahmood, C. K. (1996). Fighting For Faith And Nation: Dialogues With Sikh Militants. Philadelphia, Pa.:

University Of Pennsylvania Press.

Nordstrom, C. (1998). Deadly Myths Of Aggression, Aggressive Behavior, 24, 147 – 159. Notre Dame, Indiana. O'brien, T. (1990). The Things They Carried: A Work Of Fiction. Boston: Houghton Mifflin.

Sanford, V. (2005). Buried Secrets: Human Rights And Truth In Guatemala.. New York: Palgrave Macmillan.

Scheper-Hughes, N., & Bourgois, P. (2004), Eds. Violence In War And Peace. Malden, Ma: Blackwell Pub.

Young...Love?

Madaline Hucks

PSYC-240: Psychology of Gender

In this reflection paper by Madaline Hucks on domestic abuse, she poignantly, authentically, and vividly describes how her own experiences in a past relationship map onto the "Power and Control Wheel" of abuse and the circular stages of domestic violence. Madaline's paper showcases an accurate and all-too-real understanding of intimate partner abuse and she deftly weaves together course content, emotion, and raw personal experience into a powerful narrative that will stick with you long after you have read it.

- Randall Renstrom

Adolescence is a time when both boys and girls are discovering themselves and interacting with their peers in new ways. First kisses and hand-holding are hallmarks of this time, and one's first "puppy love" may take over their hormonal and dramatic selves. But what happens when this lovesick admiration goes wrong? Domestic abuse is often thought of as a violent altercation between two adults, but it can take many different forms. This type of abuse between people in any sort of intimate relationship is characterized by a cycle of power and control. Sadly, domestic abuse is not limited to adults and can be seen in teenage relationships as

well. At the tender age of 16, I entered into what would be my first long-term relationship. It was much darker than a typical first love is expected to be. Following the power and control wheel model (figure 1), this is my evaluation of my first experience with young... love?

The first point on the

wheel is intimidation, which uses words and actions to make one feel fearful, in addition to destruction of property. For the sake of this paper, let's call this boy Jason. Jason was much larger than my then-slender five feet and four inches, towering over me at six-foot-two with a muscular build. If I did anything that displeased him, he would look at me with daggers



James De Young, nickel

in his eyes. Glancing in another person's direction in public or challenging anything he said in front of others required some degree of punishment in his eyes. Jason held my hand whenever possible to show ownership of me. Even if my actions were unintentional, anything I did that irritated him

would earn an immediate, bone-crushingly intense squeeze to my slim fingers, forcefully intertwined with his. If I was caught driving somewhere I was not "supposed to," or with people he did not approve of, he made threats of hiding my keys. One day, an argument in my parents' garage ended in him taking my key fob and smashing it to pieces on the

concrete floor. Needless to say, I did not drive anywhere for awhile.

The next piece of the wheel is emotional abuse, which includes putting one down, name calling, playing mind games, causing feelings of guilt and making one feel as if they are going "crazy." Jason was very manipulative when it comes

to this topic. My naturally dark locks were not well suited to him. He made me feel so bad that within a month of dating, I bleached my entire head blonde. In addition, he would often use names such as "slut" or "whore" in order to get me to act the way that he wanted. Jason was no stranger to mind

games, and he played them well when it came to the way I dressed. Any tight piece of clothing such as skinny jeans, leggings, or a v-neck shirt was off limits. These articles, along with shoes or jewelry that he did not like, would be hidden. When I was getting ready for school in the morning, I would call him to ask him if he had seen a certain piece of my clothing and he convinced me that I lost it or that my cleaning lady was stealing from me. Often, my mom would find "lost" clothing items stuffed in a drawer in the basement or at the bottom of the big garbage can, with only him to blame for such actions. He also liked me to wear a shirt that matched his to "look like a cute couple," even though we did not go to the same school and no one would see that we were matching. If not that, he told me that I had to wear his oversized, baggy sweatshirts to school so no one would "look at me and think I was pretty, so I could not cheat on him." To ensure these rules were followed, he would call me every morning and ask what I had "chosen" to wear that day. He had broken my spirit to the point that I was afraid to lie to him, so I just submitted to his requirements.

The third part of the wheel that I want to discuss is isolation. Isolation entails controlling what one does and who one sees and talks to—all while using jealousy to justify the abuser's actions. Jason

liked being my only confidant and would do whatever it took to make sure I was not letting anyone else into my life. My few friends that I had were gone within a couple months of dating. He would send them horribly mean messages behind my back and threatened them so they would not tell me anything. I did not find this out until after the breakup. He also attempted to harm my relationship with my family, stating that they were not really looking out for me and the only person who could do so properly was himself. Taking it a step further,

He had broken my spirit to the point that I was afraid to lie to him, so I just submitted to his requirements.

he decided to infiltrate my hobbies and the activities I was in at that time. Dance class and show choir were my passions, and he slowly began taking them away from me. He would ensure that I wore baggy clothes with his school name on them to practice to make sure "every guy there knew I was taken." Every performance he would sit in the audience and criticize me afterwards if I "looked like I was having too much fun" with other people on stage. As our relationship progressed, Jason did not even have to be with me in order to control my actions. Every night he would call me, as he lived in the town over. and demand that he be the last

person I talked to before I went to sleep. If I had talked to him for the night, there was no more talking with my family or being on my phone at all. Once that call from him had ended, my phone was to be shut off. I was so fearful of him by this point that I didn't even put up a fight, I just did as he said to avoid the consequences.

The last portion of the wheel I will discuss is quite serious, involving coercion and threats. Falling into this category is making or carrying out threats and threatening to commit suicide if one tries to leave, among other things. As Jason went to another school and could not physically have his eyes on me 24 hours a day, seven days a week, he would tell me that I was being watched. He said that he had spies at my school watching me during the day to see if I ever slipped up and disobeyed the rules that he set for me. Being terrified of the repercussions, I submitted. The part-time job I had at a local grocery store was monitored as well. Oftentimes he would sit outside in my car and watch me through the big windows. If that was not enough, he would periodically come inside and walk around the store, all while keeping his eyes on me. I was not to smile at anyone, especially boys, because, to him, that was cheating. The one thing that scared me most was his suicide threats. I never wanted to be the reason someone was

harmed, and he convinced me that if he killed himself, I would be blamed for it legally. Looking back now, this seems absolutely ridiculous. However, it was very real at the time. Every time he called I was to answer my phone, regardless of whether I was in class or not. One day, towards the end of our

relationship, I let it go to voicemail. The threatening texts came to follow, along with 100 more phone calls from him. Jason, thinking that he was losing his grip on me, decided to send me a series of pictures with a haunting message. Pictures of him sitting in my bedroom with a very large gun were sent to my phone. He said if I did not call him in two minutes that he was going to kill himself and it would be all my fault. That is enough to get anyone to listen. To this day, this incident still horrifies me.

Jason drank often, in addition to using a number of drugs which could impair thinking and judgement. I suspect social learning also played an integral role in his actions. Coming from a very dysfunctional home with non-married parents, who were substance users themselves, was his model. His to his unhealthy dating beliefs. In addition, he was originally from a large city in which gangs are prominent. Coming from one of these gangs himself had exposed him to many ugly parts of the world and could have affected his perception of women and how to get—and remain—in control. Perhaps

POWER AND CONTROL WHEEL

Physical and sexual assaults, or threats to commit them, are the most apparent forms of domestic violence and are usually the actions that allow others to become aware of the problem. However, regular use of other abusive behaviors by the batterer, when reinforced by one or more acts of physical violence, make up a larger system of abuse. Although physical assaults may occur only once or occasionally, they instill threat of future violent attacks and allow the abuser to take control of the woman's life and circumstances.

The Power & Control diagram is a particularly helpful tool in understanding the overall pattern of abusive and violent behaviors, which are used by a batterer to establish and maintain control over his partner. Very often, one or more violent incidents are accompanied by an array of these other types of abuse. They are less easily identified, yet firmly establish a pattern of infimidation and control in the relationship.



Figure 1

There are many factors that contribute to domestic abuse. Analyzing the situation now, many of these things were at play. Even though he was 16, own dad fathered 15 children with 13 different women and was very abusive to each party. Learning that example as a child most certainly contributed behaviors and negative attitudes were the only ways that he was taught to treat people in order to get his way. Arguably, the power and control aspect is a key part in maintaining this cyclical hell. Jason desperately wanted to have power over someone to make him feel superior, stronger, and more masculine. All these factors, combined with a wide-eyed, naive teenage girl, created the

these unhealthy

perfect storm for him.

The cycle of abuse was largely a part of what kept the relationship afloat for almost a year and a half. Phase one of the cycle is when tensions build in the

relationship, in the form of the maladaptive behaviors discussed above. Phase two is when some type of violence occurred. In my situation it was often screaming and serious suicide threats. Phase three is what really perpetuated the abuse in my opinion. This is the time in which the abuser tries to make up for their actions by apologizing, promising it will never happen again, and begging for forgiveness. It was during these periods that I thought that he would change, and we could really be together forever. He would buy me flowers after every fight we had to try to make up. On the outside. Jason looked like a dutiful boyfriend who spoils his girlfriend. If only others knew that for every bouquet I received, I had been rung out like a towel the day before.

This cycle of abuse, along with the attributes of the power and control wheel, contributed to the absolute torture that was my first relationship. Intimidation, emotional abuse, isolation, coercion, and threats should never rear its ugly head in any sort of relationship. When my innocent heart went looking for puppy love, I thought I had found it—only for it to take off its mask to reveal something much more grim. Looking back on this time in my life I knew that he had treated me despicably. but never considered it to be "bad enough" to be domestic

abuse. Analyzing the power and control wheel revealed the relationship to be just that-abusive. Long after we have parted ways, these experiences still influence my attitudes towards dating. A broken mind and spirit takes time to heal from abuse, and, contrary to what he thought, cannot be patched up with a dozen roses, like a bandaid over a cut



Lizzy Budiselich, ceramic

A Rooted Education

Alora Nowlin

LAS 110: Problem Solving for Sustainability

We once produced three thousand pounds of produce for our own cafeteria, but once we lost grant funding for a garden coordinator and changed leadership in Central Market, suddenly the garden-to-table connection was lost. How might we begin using our own food again in our own cafeteria, I have asked? And until now, no one has taken up the challenge. Alora's essay tackles this problem with a creative mixture of original interviews and case studies from other colleges or schools with subsistence gardens. I love how she uses research to answer a truly burning question for herself and for our campus community. More than that, I am impressed by how she weaves her own awakening to sustainability issues (her own capacity for change) into her call to action for the college. If she can come to care about the garden, she argues, so can the administration. It is a bold and inspiring argument.

-Joshua Dolezal

One of the most valuable skills we can learn today is how to live sustainably. This is easier said than done. There is not a class that can teach you how to live sustainably in the course of a single semester, since the resources that are available to us are ever-changing. The things we once seemed oblivious to are now common knowledge, and the needs of each individual are unique according to their environment. Even though we cannot teach a single class on sustainability and expect the student to be prepared for anything that comes after, we can teach them how they can live sustainably in the moment to better adapt in the future. Before coming to Central College, I had no real interest in sustainability. My criteria was strictly monetary and based on the majors offered. So when I first took a tour of the Roe Building, a building honored with a platinum certification by Leadership in Energy and

Environmental Design (Global), I wasn't interested in the lights that dimmed when the sun was shining or the PSA that came over the intercom of a room when the windows were opened when it was too hot or cold outside. To me, sustainability was simply a word that was used in politics in order to guilt people into recycling. What I didn't know was Central College made a vow to change this naïve idea, and in just five short months, for me, they did.

In recent years, campus gardens and farms have become increasingly popular as sustainability has become a more frequently discussed topic. Many institutions, including everything from elementary schools to universities, have been implementing sustainability education through the form of gardening and farming (Cobb 145). One of the things Central College prides itself on is sustainability education. In

addition to sustainable buildings such as Roe, Central College also has a strong focus on sustainability in academics. As a part of the core requirements for graduation, each student must take at least one class that pertains to global sustainability, but there are also many other classes that offer a sustainability focus such as Environmental Ethics, Food Justice, and Principles of Ecology (Global). Even with such a dedicated focus on sustainability, there are still aspects of campus in which Central College has room for improvement. The college garden is one of these areas. Since the garden was founded 15 years ago, it has served many purposes (Global). Currently, the produce that is grown in the garden is donated to a local food pantry, and although this is a great cause, the food pantry has begun their own garden and they are no longer in desperate need of the campus garden's produce

(Campbell). Since there is not a high demand for produce from the garden, the amount of food that is being grown has decreased over the past few years. At its peak, the garden produced around 1,500 pounds of produce; this past year, it was only able to produce about 300 pounds (Campbell). There are many factors that have caused this decrease in production, but the one thing that we can learn from it is that we have a chance to make Central College more sustainable. As an institution that strives to promote and exhibit sustainability, we need to cultivate a garden that can be used to not only teach students about sustainability, but to also make the institution more sustainable by providing produce for Central Market. If my views on sustainability can change in just five months at Central College, imagine what could happen for the garden in the next fifteen years.

Sustainability is not easy, at least when you are first starting. It takes time, dedication, and even money in order to correct old habits. For me, it was reminding myself to use my reusable water bottle instead of taking a plastic bottle from the fridge. For Central College to use garden produce in the cafeteria, a few different steps would need to be taken. The first thing that must be considered is financing the garden; there are many different things that have to be accounted for

such as tools, workers, crops, and maintaining equipment. Luckily, the garden is already in use, so there are some start-up costs that can be avoided. When it comes to the Market, Iwan Williams, the director of dining services, says it is run like a business because money is limited (Williams). Typically, the cheapest option is what the Market will choose; however, it is important to note that

A few years ago, \$80,000 of the Central College dining services budget went to locally sourced produce. This past year, it was a quarter of that number at only \$20,000 going to locally sourced produce

sometimes the cheapest option comes from what is available at the moment. When analyzing cost, it is cheaper to use a fresh, local tomato than it is to buy a canned sauce (Williams). If we were able to grow large enough batches of tomatoes to process, money could be saved without having to worry about the negative consequences of sourcing processed produce from elsewhere. One way that Warren Wilson College has addressed the issue of the cost difference between self-grown produce and outsourcing is by paying the market-value of the produce to the garden or farm directly (Cobb 170). This exchange allows the two to act as separate entities, and it gives the garden or farm the chance to

sustain itself. Similar to Warren Wilson College, Bowdoin College in Maine also assigns a dollar value to the produce they grow, based on the local market for organic produce (Caiazzo). Bowdoin College differs from Warren Wilson in that the funding of the garden comes from the dining services budget, as well as support from the garden club. This means that the garden is an extension of the dining services, but it is managed by separate staff (Caiazzo). Both of these schools provide different models for their garden and dining hall relationship. If the Central College garden and Central Market could establish a more business-like partnership in a similar way to Warren Wilson College or Bowdoin College, it would allow the Central garden to support itself, and therefore be sustainable. In unison with the decreased production of the garden, dining service spending on locally grown produce has also decreased. A few years ago, \$80,000 of the Central College dining services budget went to locally sourced produce. This past year, it was a quarter of that number at only \$20,000 going to locally sourced produce (Campbell). If we could grow produce in our own garden, we could offer it at a comparable price. Instead of only spending \$20,000 on local produce and the rest on out-sourced goods, we would be fostering an inhouse relationship between the financial aspect of the

dining hall and the sourcing of produce.

Another important thing to keep in mind when discussing finances in an institution is the value of education. As the associate professor in the Department of Horticulture and the director of the Hahn Horticulture Garden at Virginia Polytechnic Institute and State University, Holly Scoggins has a lot of experience when it comes to campus gardens. She states that gardens are necessary for teaching students about plants, and "the value of this function cannot be understated" (Scoggins 528). Iwan Williams recognizes this as well; even though dining services has to be run like a business, there also has to be a focus on education. We want to provide students with the best education possible, and that is the main focus of Central College (Williams). If we can use our garden to teach our students to have a more sustainable relationship with food, we can justify minor price increases because, as an institution, we have to prioritize education.

In addition to not having a set source of income for the garden, there is also a clear disconnect in communication between the dining services and the garden. Laura Paskus, a writer who focuses on environmental issues, knows about the strength and power that comes from cooperation between groups such as the

blue-collar and green-collar workers (Paskus 38). Even though they both have jobs that may seem contradictory, they can find a common interest in the well-being of their community (Paskus 38). Although Iwan, the Director of Dining Services, and Brian Campbell, the Director of Sustainability Education, would be expected to have different priorities, their focus is the same: the wellbeing of students. They both acknowledge that there is a disconnect and that it would need to be addressed in order



Sally Evoy, acrylic, 11" x 14"

for garden produce to be used efficiently in Central Market. This is not a unique issue, as schools like Unity College have faced similar problems (Ross 102). In order to overcome the communication gap at Unity College, a student gardener was given an updated job title that allowed them to focus on

supplying their dining services with produce and acting as a liaison between the garden and the cafeteria (Ross 103). With a single person in charge of relaying information, the connection between garden and dining services will allow for a smoother exchange of produce, allowing dining services to be better prepared.

The final consideration when it comes to implementing self-grown produce into the Central Market is maintaining the garden. There are three concerns when it comes to labor for garden produce: shortage of workers in Central Market, shortage of workers in the summer months, and increasingly hectic schedules as the school year starts. The Central Market always seems to be looking for student workers, and this high demand is reflected in the pay scale. Students who work in the Central Market have higherpaying jobs than most other student workers on campus (Newendorp). Another benefit of working at Central Market is students are given a free meal for every shift they work, meaning they do not have to use one of the fourteen or nineteen weekly meal swipes (Zinc). Although this sounds appealing to students, their meal swipes often go to waste at the end of the week because they used a free meal or two during the week. For example, student worker Madison Zinc works in Central Market three

days a week. She has the meal plan which allows students to use nineteen meal swipes a week, but with the three extra swipes and her hectic schedule, she typically has at least six left over (Zinc). This seems counterproductive because it is portrayed as a benefit to the students, but there is little to no reward. Instead of charging the full price for a student's meal plan, a student who works in a position for the dining services

or should be given a reduced cost for their meal plan and their wage should be lowered in order to reflect a more transparent and beneficial income. The promise of a reduced meal plan will attract students

savings upfront. Central Market workers are vital because staff is needed to process the fresh produce in order to prevent waste.

The next consideration for staff is in the garden. Rebecca Laycock Pederson, a postgraduate research student, and Dr. Zoe Robinson, a professor from Keele University, recognize that one of the most important things to consider and understand when it comes to campus gardens is "participant transience," more simply known as staff turnover (Pederson 12). In their review of university gardens, they acknowledge that students

usually miss the most labor intensive and productive part of the growing season (12). By involving people in the garden, we can help to foster a stronger relationship with food and a stronger community. Each year, there are positions open for students to work in the garden, especially during the summer (Campbell). Although they are paid the same wage as the students who work in the dining hall, the wage they



make is not enough to offset the cost of remaining in Pella for those who do not live there already during the peak harvest season. Central College already offers research opportunities for students during the summer, where they offer on-campus housing as a benefit, and the garden would provide an excellent opportunity for undergraduate research focused on campus gardens. It is also important to consider worker availability during the school year, which is an issue that many institutions with campus farms and gardens struggle with. One such school that found a solution to this struggle

is Scattergood Friends School. Scattergood Friends School is a private boarding school located in West Branch, Iowa. One of the most unique features of this school is their campus farm where students are given the opportunity to learn about farming through hands-on work. Mark Quee is the manager of the farm, and he is charged with the task of ensuring that there is enough labor to maintain the grounds. One of the ways Quee overcomes the lack of student availability during peak harvest time is by planting crops that have a higher cold resistance later than normal in order to delay the harvest as long as possible (Quee). Then, the school year starts with what many schools would call a J-term, or a short period where students explore a specific academic interest (Quee). At Scattergood, students are given one day a week where they spend four hours harvesting and maintaining the farmland (Quee). Classes switch off days, and this helps to give students a chance to learn about sustainability and farming while also giving much needed support to the regular gardening staff. After the majority of the crops are harvested or the J-term ends, the farm is maintained by designated crews of students and staff (Quee). Although a J-term would not be very feasible at the college level, there are over thirty sustainability classes at Central College in which

students would benefit from having hands-on experience in sustainability. If each class took one hour, every other week, there would be enough time and student participation to maintain the garden.

Central College is dedicated to creating a community of students who feel that the college is a second home, not a box on the checklist to complete in order to move to the next stage in life. Gardening can help foster this deep sense of community and family. In his work "Moving Mountains," author and environmentalist Eric Reece warns of something similar to participant transience. When people don't have a specific attachment to the place they are working or staying, especially if they view it as only temporary, they tend to disregard the wellbeing of others there. This was especially prevalent in the Appalachia Mountains where miners were stripping the once

majestic mountains for coal and leaving behind a wasteland (Reece 93). Unlike the miners in Appalachia, there are many places that are working to encourage students to become more connected to the land. For example, at Aaniiih Nakoda College in Montana, five to seven students are hired to work at the garden and greenhouse in the summer (Morales). The students often have to work through the summer heat and swarms of mosquitoes to complete tedious labor. Although this sounds like a job that very few people would want, many students return to this job year after year because of the bonds they make with the land and each other (Morales). By promoting student workers in the garden, we can help bring our community here at Central College even closer while teaching the importance of sustainability.

Sometimes, doing the right thing is difficult, especially

when it comes to changing your lifestyle. However, in this case, it is not as difficult as it seems. Central College has made a promise to every student that it will provide the best education possible and that students will become responsible and engaged citizens. In just five months, Central College has taught me the importance of sustainability, and now the college, the faculty, and the students, as a team, must work to identify ways in which we can become more sustainable. The garden is one place where we lack sustainability; although there are obstacles such as financing the switch, promoting better communication, and maintaining the grounds, these obstacles can be overcome. We must work together to use the garden produce in the Central Market in order to live up to the sustainability standards we have set for ourselves, and to ensure the integrity of our community.

Works Cited

Caiazzo, Matthew and Jeremy Tardif. Personal Interview. 18 Nov. 2019.

Campbell, Brian. Personal Interview. 7 Nov. 2019.

Cobb, Tanya Denckla. Reclaiming Our Food: How the Grassroots Food Movement Is Changing the Way We Eat. Storey Publishing, 2011, pp.145-70. Global Sustainability Education, Central College, https://www.central.edu/academics/programs/global-sustainability-education/.

Pedersen, Rebecca Laycock and Zoe Robinson. "Reviewing University Community Gardens for Sustainability: Taking Stock,

Comparisons with Urban Community Gardens and Mapping Research Opportunities." Local Environment, 17 Apr. 2018, p. 12. Quee, Mark. Personal Interview. 15 Nov. 2019.

Morales, Manuel and Scott Friskics. "Growing a Healthy, Sustainable Community: The Aaniiih Nakoda College Demonstration Garden and Greenhouse Project." Tribal College Journal of American Indian Higher Education, vol. 30, no. 3, Spring 2019, https:// tribalcollegejournal.org/growing-a-healthy-sustainable-community-the-aaniiih-nakoda-collegedemonstration-garden-and-greenhouse-project/.

Newendorp, Donna. Personal Interview. 21 Nov. 2019.

Paskus, Laura. "The Union Makes Them Stronger." The Future of Nature: Writing on a Human Ecology from Orion Magazine, edited by Barry Lopez, Milkweed Editions, 2007, p. 38.

Reece, Erik. "Moving Mountains." The Future of Nature: Writing on a Human Ecology from Orion Magazine, edited by Barry Lopez, Milkweed Editions, 2007, p. 93.

Ross, Nancy J. "Bringing You Fresh Food from Local Farms and Our Garden: A College Class Designs a Program to Meet Peer and Institutional Needs." Journal of Nutrition Education and Behavior, vol. 37, no. 2, Mar 2005, pp. 102-3.

Scoggins, Holly L. "University Garden Stakeholders: Student, Industry, and Community Connections." HortTechnology, vol. 20, no. 3, June 2010, p. 528.

Williams, Iwan. Personal Interview. 4 Nov. 2019.

Zinc. Madison. Personal Interview. 20 Nov. 2019.

Aristotle and Alison Discover the Secrets of Their Dads

Emma Carlson

ENGL 216: LGBTQ+ Literature and Culture

Emma wrote this paper for the final project assignment in LGBTQ+ Literature and Culture. She chose the option to respond to at least two of our course texts through a creative medium, then provide an explanation of her response.

-Valerie Billing

for smoke and mirrors (Alison)

maybe i didn't inherit your eye for aesthetics

for smoke

(mirrors and) (and mirrors)

but you made of me a magician still.

maybe not the exact same kind as you, but a magician still.

we know a good trick
when we see one,
don't we, dad?
we also know

when we can't oil the cuffs,

when we are no harry houdini,

when we confine, when we cannot

break out

and breathe

so i make you and you make me and we live vicariously.

25

it's your last act that's landed

no one knows how why you vanished

they have their theories. but they don't know.

> not like i do. do i know?

> > you have made yourself inimitable in your curiosity

you have secured your seat amongst roanoke and ufo's and life's great mysteries

. . .

you strolled before a sunbeam and bursted into **light**

light that crawls across mom's stage, through the theatre of our family to the few and far between failures of your facade

and i want to call you a *fucking* fraud how *dare* you force me beneath the blinding bulbs of grief of a

premature memoir

of making your show mean something?

'cause you were shit, dad.

shit at guessing cards,
at getting the bunny
out of the goddamn hat,
at knowing whether or not
you had us fooled.

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but we're both shit magicians
             in the end:
                    we reveal our secrets
                    for just a second of being seen;
                    pulling
                                 back the
                                               curtain,
                          revealing the fakes
                          and, worse still,
                           the reals.
      dad.
             you didn't stroll before a sunbeam
             because mom got the guts
             to leave this decrepit performance.
right?
                           no.
                          that was a long time coming.
                          you knew that.
                                 you had to know that.
      no.
                    you strolled before a sunbeam
because you ceased to amaze.
my own war (Aristotle)
i've never been
to vietnam.
      mom says
      it was real bad.
              mom also says,
"your father was beautiful"
like that's supposed to make sense.
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beautiful how? an impermanency, certainly. but beautiful like adonis? like dante?

more likely, i think

and all i do is think

is you were beautiful as a baby is; just a big-eyed *bambino* who saw something too

violent.

maybe 'copters c R as h i n g, Cutting.

ensue the carnage and chaos and

(how does it feel to house a whole other country in your head?)

i can't find you

and i'm always looking for you, dad

under the monsoons you never mentioned.

and the water reeks of chlorine, of dante,

of my own war.

don't ask me about him.

please.

i don't know how i'll answer. i don't know if i'll be silent like you.

i've got *bambino* eyes, too.

how long

'till *i'm* ugly?

how long

'till *i* only see the rain?

i'm afraid we are different.

is no one else ashamed? is no one else alone?

i'm afraid we are the same.

am i doomed as the soldier? will i ever come home?

will dante, too, tell my kids, "he was beautiful"?
will dante, too, pretend
i'm coming home?

As popular stand-up comedian John Mulaney once dryly remarked in a special: "None of us really know our fathers" (Mulaney). And while it was said in the spirit of morbid comedy, it also rings a little true. For better or for worse, there exists an ambiance of mystery in many father-child relationships. This ambiance can be further complicated by the father and/or the child being queer. In Alison Bechdel's graphic novel Fun Home: A Family Tragicomic and in Benjamin Alire Sáenz's novel Aristotle and Dante Discover the Secrets of the Universe, parenting particularly parenting by the father figure—plays an essential role for the main characters' development of their queer identities. Aristotle and Alison's queer identities enable them to ultimately better understand their dads and have their dads better understand them, arguably more fully than they could if they weren't queer. To illustrate this theory, I have written two pieces of accompanying poetry. The intent of these pieces is to speak to how queerness can be a vehicle for both father and child to better empathize with and accept one another for who they are.

The first poem, titled "For Smoke and Mirrors," depicts Alison, a college-aged butch lesbian, as she struggles to understand the complex similarities between

herself and her queer father.
Primarily, the piece depends
on the metaphor of magic. This
choice was loosely inspired
by Alison's stinging comment
on the manner in which her
father exercises his artistic
abilities: "He used his skillful
artifice not to make things,
but to make things appear
what they were not" (Bechdel
16). Much like a magician,

Through their interactions, it's evident that Alison and her father use each other as a medium for expressing aspects of identity forbidden to them.

Alison's father specializes in deceit and concealment. Alison, attempting to survive in the world as a fellow queer person, models his behavior. I observe this in my piece, writing from the perspective of Alison, "maybe i didn't inherit / your eye for aesthetics / for smoke and mirrors / but you made of me / a magician / still" (1-6).

Through their interactions, it's evident that Alison and her father use each other as a medium for expressing aspects of identity forbidden to them. For instance, Alison recalls getting into frequent disputes with her father over what the other should wear. She remarks, "While I was trying to compensate for something unmanly in him, he was trying to express something feminine through me... I wanted the

muscles and tweed like my father wanted the velvet and pearls—subjectively, for myself" (98-99). It's not an ideal situation for either party. As many queer people are, they're accustomed to compromising their identity for the sake of social acceptance, so they understand the necessity of living their truths through one another.

At first, Alison doesn't directly admit she wants the masculine clothing for herself. Like a magician ducks behind a curtain, she hides behind what she feels is the obvious shame of her overly feminine father something anyone, queer or not, might be embarrassed of. Back to the main point, Alison and her father, for the most part, understand why they want one another to appear a certain way. I reference this in my lines, "we know.../ when we are no / harry houdini / when we confine, / when we cannot / break out / and breathe / so i make you / and you make me / and we live / vicariously" (11-26). Just as magicians, contortionists, and escape artists must be aware of their physical limits. Alison and her father must be wary of the social limit to their self-expression or, in this metaphor, their act. Though they are personally constrained, they can still perform through, and subsequently better empathize with, each other. Had either of them been heterosexual and cisgender, this give-and-take never would've

worked. Since they both have a fairly good grasp of what it feels like to have one's identity caged in, this vicarious behavior is permissible between them.

The second poem, titled "My Own War," is written from the perspective of Aristotle—a fifteen-year-old boy who is frustrated by his inability to see what his mom sees in his dad, a Vietnam veteran suffering from PTSD. Aristotle also fears that as he endures his own internal war, he will follow in his father's footsteps by becoming removed from those who love him. Since he was very young, Aristotle can remember attempting to understand his father's distance and subsequently becoming angry when the answers were dissatisfying. He recalls a charged conversation with his mother in a fit of fury after his father wouldn't play with him: "'How could you have married that guy?'... 'Your father was beautiful.' She didn't even hesitate. I wanted to ask her what had happened to all that beauty" (Sáenz 12). Obviously, a haze of indignation and childish hurt is clouding Aristotle's judgment, but even though he phrases it cruelly, he's genuinely trying to comprehend his parents' thoughts. This is something I reference in "My Own War," as I write: "mom also says / 'your father was beautiful' / like that's supposed to make sense. / beautiful how? / ...

/ beautiful like adonis? / like dante?" (7-13). By attempting to see his mother's perspective by applying it to his own queer experience of loving another boy, Dante, Aristotle can then better cut through the confusion of how his mom and dad came to be together.

But there's a much bigger topic at play in this poem. Arguably, war is one of the biggest themes of Aristotle and Dante Discover the Secrets of the Universe. The obvious example of war is the one that Aristotle's dad fought in. Aristotle did not fight in a war

like his father, but he is a veteran in his own right. Though he doesn't always realize it, Aristotle is constantly battling with himself particularly when it comes to Dante. This is something I attempted to capture in Aristotle's brief but cutting remark in my poem: "how does it feel / to house a whole other country / in your head?" (24-26). This is meant as a cruel iab, but there's a genuine question

beneath the malicious surface.

Does it feel like how Aristotle feels? Is Aristotle an alien compared to how everyone else functions?

Throughout the novel, Aristotle experiences a

disconnect with other boys his age. Unable to identify with them, likely because of his queer identity, he searches for grounding in his father. I allude to this search in "My Own War" as I write, "i'm afraid we are different / is no one else ashamed? / is no one else alone? / i'm afraid we are the same. / am i doomed as the soldier? / will i ever come home?" (44-49). Aristotle fears he is entirely unique (and thus incomprehensible) while simultaneously fearing he's too much like his father. The apprehension of following in



his father's footsteps creates a tense, inner conflict about what he truly wants.

In seeking to understand the battle scars and emotional baggage of his father, Aristotle unearths his deepest, most

uncomfortable truth: he's been carrying his own war, his own unspeakable country, all along. He remarks as much after discussing it with his mother and father, thinking, "All of the answers had always been so close and yet I had always fought them without even knowing it... My father was right. And it was true what my mother said. We all fight our own private wars" (Sáenz 359). Out of shame, both Aristotle and his father bury their conflicts. Shame, an emotion frequently present in the young queer experience, is easy to underestimate in terms of emotional impact if not endured firsthand. So, had Aristotle not employed his queer experience to empathize with his dad's embarrassment and trauma, it's unlikely that Aristotle would have come to this realization. Following their confession session, Aristotle freely admits to himself, "For once in my life, I understood my father perfectly. And he understood me" (350). It's from Aristotle's romantic love for Dante that this mutual empathy is discovered. Such an intimate moment of vulnerability would have been much less organic and significant in a heterosexual setting, as Aristotle would feel no shame and thus be unable to understand why his father kept himself so distant.

Before making my concluding statements, I would like to address the purpose behind the unconventional formatting of my poetry. I took heavy inspiration from Trish Salah, an Arab-Canadian poet who writes with a style that can only be described as queer. Such as Salah does in her poem "Wanting in Arabic," I wanted to toy with abrupt line breaks, sentence fragments, and abrupt stops. These elements, when obscurely broken, cultivate a more accurate representation of human thought and experience than when they're held in respect to such an established format as a Shakesperian sonnet. Following Salah's blazed trail. I held more freedom to candidly explore the father-child relationships of Aristotle and Alison.

So why does any of this matter? What significance is it that queerness holds the potential to be a vehicle for which parents and children may arrive at better understandings of one another? In short, it matters because of the

immense prevalence of the misconception that indicates otherwise. Often, non-straight, non-cisgender individuals are blamed for being inconsiderate to others' negative reactions to their mere existence. We then attempt to make ourselves more palatable, denving any flamboyance, out of fear we'll be called callous or indifferent. But, we are suffering for a trait we don't possess. As is evident through the stories of Aristotle and Alison, for many reasons, the queer path is a difficult one to take. Precisely because it is so difficult, we foster a lasting empathy for all things different and all things that make people feel ashamed or afraid. Why wouldn't we, when we know firsthand just how awful it feels? Of course, it's fair to say that I'm overgeneralizing here. Not all queer people have this outlook, nor should they feel obligated to develop it. But more than enough of us are better equipped than our heterosexual, cisgender counterparts to take on the complex task that is understanding our parents for the people they honestly are. And, on the likely chance that they're worthy, accept them, too.

WORKS CITED:

Bechdel, Alison. Fun Home: A Family Tragicomic. Houghton Mifflin, 2006.

Mulaney, John. The Comeback Kid. Chicago, Illinois. 2017.

Sáenz, Benjamin Alire. Aristotle and Dante Discover the Secrets of the Universe. Simon and Schuster, 2012.

Salah, Trish. "Wanting in Arabic." Wanting in Arabic and Poems, TSAR Publications, 2013.

Recycling Crisis

Lauren Goeke

LAS 410: Ecotones: Exploring Literature, Science, and History

This sense of wonder assignment for LAS 410 invites students to pursue a topic of their choice connected to our class goals. I appreciated Lauren's narrative of travels and contrasts as well as her passion for researching solutions to help solve the "recycling crisis." Lauren would like to thank Director of Sustainability Education Brian Campbell for his guidance in research for this project.

-Mary Stark

I vividly remember my trip to Alberta, Canada in the summer of 2018. The wheels touched down on the landing strip. I found myself in a foreign land where the landscape, people, and priorities were completely different from my home in St. Louis, Missouri—and different from the college I attend in Pella, Iowa. My parents, my friend Caitlyn, and I stayed in Canmore—population 14,000 ("Banff Facts"). When we stumbled upon the weekly Canmore market, we were happily surprised. Fresh fruits, vegetables, meats, jam, coffee, and baked goods filled the booths. We ate fresh foods in biodegradable bowls with wooden spoons while listening to live music. People shopped for local soap and shampoo bars, artwork, clothes, jewelry, and alcohol. My parents purchased glass bottles of mead made from local honey, and Caitlyn bought a necklace made from an old "B" typewriter key.

Caitlyn and I strolled into a store that, even from twenty feet away, smelled insanely good. The Rocky Mountain Soap Company, a natural beauty store, originated in Canmore before expanding across the country. According to Forbes, this small soap company is able to make eleven million dollars in sales per year, while also caring about the environment. Their offices feature LED lights. recycled carpets, reclaimed wood, and solar power. The most impressive aspect of the company, however, is their recyclable product packaging. Instead of using plastic that sits in a landfill for hundreds of vears, like most of the beauty industry, they use durable, paper-based pots. They also started using cornstarch peanuts in their packaging instead of Styrofoam packing peanuts. The owners hope this environmentally-friendly business concept inspires other corporations in the future (Chhabra 2017).

Approximately fifteen miles away from Canmore is the town of Banff. This glorious town is home to the Banff National Park, a 2500-mile sanctuary that, in 1885, was Canada's first national park. The park is a tourist destination for around four million people every year. It features thousands of 120 million year old glaciers and mountains ("Banff Facts"). As we drove towards the

national park, I noticed the bridges across parts of the highway. They were green crossing paths for wildlife, so animals weren't separated by the highways or forced to cross in front of cars. A genius idea.

When we arrived at the third overflow parking lot, we waited in line for forty minutes for a bus, which drove us twenty minutes to the national park. When we finally arrived at the park, I could not believe my eyes. The glacier water was blue and clear, and the mountains were more beautiful than any I had seen before. We hiked up a mountain path, stopping along the way to take in the landscape. In her collection Li Bai: A Homage To, the poet Jean Elizabeth Ward writes, "You ask me why I dwell in the green mountain; I smile and make no reply for my heart is free of care. As the peach-blossom flows downstream and is gone into the unknown, I have a world apart that is not among men."

The following day, we rented mountain bikes from a local shop and rode around Canmore for a few hours. The sun beat down on us harshly, and we needed a short break. As we stopped at a picturesque

spot along a river, two local women took a break from their run to jump into the icy cold water, pulling themselves out before the current could pull them too far out. They told us it was a popular spot to do so, and recommended that we set up our hammocks right above the rushing water. We set up our hammocks, one on top

of the other. As my hammock stretched from a tree coated in brown sap to the long branch that dangled over the crystal-clear Bow River, I wondered how this would end. I jumped, landing in the hammock, fully aware that it would

not be possible to remain dry when getting back on land afterwards, due to the position of the hammock. An hour passed as I listened to the water, fish, and birds, including a nearby woodpecker. I could see the fish and the bottom of the river, something that seemed completely foreign to me; any rivers near my hometown of St. Louis are mucky, brown, and disgusting.

Here, in Canmore, the Three Sisters mountain peaks command the sky in the background. Trees stretch as far as the eye could see. I felt incredibly relaxed and connected to nature. We waved to people rafting down the river as we fell into the water. The water felt icy cold and knocked the breath out of me. I barely remembered to reach up and grab the tree to stop the current from sweeping me away. I could not stop smiling and decided to run and jump in one more time before biking back into town.

My vacation in this gorgeous and environmentally aware paradise had flown



Mary Busker, glass

by, and I found myself back in central Iowa writing a sustainability blog post for my work study job. Did you know that central Iowa sent twenty tons of paper to the landfill each day for four months last summer? Twenty tons per day. And this was not a mistake. So what happened? Mid America Recycling said that they could not find a single company to buy the paper. They tried stockpiling the paper for a while, but eventually they ran out of room and had no choice but to add it to the landfill waste. In 2017, Des Moines made a profit of \$320,000 from recycling. This fiscal year, it is expected to have a \$50,000 deficit. The city's solid waste fee is increasing two percent

in order to make up for these losses (Cannon 2018). Scott County, Iowa used to get 75 dollars per ton of mixed paper in 2017; a year later, they received two dollars per ton. Rock Island County brought in 50 dollars per bale of paper in 2017; in 2018, they paid five dollars to get rid of each bale (Gaul 2018).

What went wrong? The United States began recycling vears ago. According to the **Environmental Protection** Agency, the number of items recycled has increased year after year ("Municipal Solid Waste" 2016). Early on, however, the U.S. made a mistake by not building enough recycling facilities to handle everything being recycled. In order to solve this issue, the United States, along with several other countries, started sending its recyclable materials to China. China has been "the world's recycling bin" for over 20 years, processing "at least half of the world's exports of waste plastic, paper and metals," and the U.S. sent 16 million tons of waste to China in 2016 alone (Mosbergen 2018). China was happy to accept the waste in the recent past because they used the recyclables to feed the large manufacturing sector. As of the beginning of 2018, however, China no longer accepted twenty-four kinds of waste. They have also said that cardboard and scrap metal can only have 0.5 percent food

contamination, which would be impossible for Americans to meet currently. The effects of this sudden change by China have been felt worldwide because countries do not have a place for this much waste. Around 38 American states, including Iowa, have seen noticeable effects (Rosengren 2019). The states most affected are on the coast, since they have always sent everything overseas and do not have domestic markets to sell their recyclables to.

This disaster is not entirely China's fault, though. The United States has sent a high percentage of recyclables that were contaminated with food as well as non-recyclable items. In other words, the United States filled China's landfills with trash. Americans need to be educated regarding what can and cannot be recycled. Americans try to recycle dirty food containers, batteries, coffee cups, and Christmas lights, as well as plastic bags. We need to understand that anything with food on it is considered contaminated. A peanut butter jar is not recyclable unless you wash the peanut butter out. A beer bottle must be rinsed first (Mosbergen 2018). If Americans were more educated on proper recycling, costs could be cut down for recycling companies. Fewer employee hours would be spent sorting trash from recyclables. One possible option to reduce

contamination is to eliminate single stream recycling. Canmore does three-stream recycling with mixed paper, glass, plastic and metal, which results in less contamination and easier sorting. For other recyclables, there is a depot in town that accepts items such as car batteries, bike tires, electronics, light bulbs, paints, and batteries ("Beyond Curbside Recycling" 2019).

More recycling infrastructure must be built across the United States. Doing this would create new jobs, save landfill space, and, most importantly, help save our planet. This is our chance for the American recycling industry to flourish. The key to solving our recycling problem ultimately lies in our ability to make recycling profitable.

Why cut down more trees when we have thousands of tons of paper going to landfills? Paper is not a worthless item that we should have to fight to sell to someone. Paper needs to be worth more in a recycling plant than it is in a landfill. There is proof that recycling

can be profitable. As I showed above, cities across the country made hundreds of thousands of dollars on recyclables in 2017, and now they are losing thousands of dollars sending those recyclables to landfills.

Plastic is not a profitable recyclable. According to Slate Magazine, plastic bottles are worth very little when oil prices are low (Grabar 2019). Instead, we should consider eliminating single-use plastics, especially plastic water bottles. Many Americans buy plastic water bottles instead of using reusable water bottles, and much of this plastic makes its way into the oceans. In fact, over eight million pieces of plastic go into the ocean every day. It is estimated that there are over five trillion pieces of micro and macro plastic floating in the ocean ("Plastic Pollution" 2019). The problem isn't just plastic bottles, either. Millions of people use plastic bags when they shop. In fact, two million plastic bags are used worldwide every minute and a trillion

More recycling infrastructure must be built across the United States. Doing this would create new jobs, save landfill space, and, most importantly, help save our planet. This is our chance for the American recycling industry to flourish.

every year
("Plastic
Bags"
2014). Why
not use a
reusable
bag instead?
Doing so
could help
us eliminate
plastic bags.
In an effort
to encourage

people to use reusable bags, the United Kingdom charges around six cents for each plastic bag at stores with at least 250 employees (Howell 2016). Another unnecessary plastic item is plastic straws. Every year, 100,000 sea turtles and marine mammals, in addition to 1 million seabirds, die because of plastic waste. ("Plastic Pollution" 2019). Alternatives to plastic straws include metal, silicone, paper, plant-based, and bamboo. Another plastic is the microbeads in face washes and beauty products. These small beads drain into the oceans. Why not buy environmentally-friendly products instead?

I am not suggesting that the United States should accept the rest of the world's recycling, but we should be able to manage our own recycling. I hope that the United States can one day be as sustainable as Canmore, Canada. The Rocky Mountain Soap Company's



Alisabeth Gremminger, glass environmentally-friendly business concept can be applied here in the United States to save both money and the planet. I know that living without single-

use plastics is difficult, but I am willing to take on the challenge. In fact, I have started the plastic-free month challenge. Can you reduce your waste? As Edward O. Wilson said, "the great dilemma of environmental reasoning stems from this conflict between short-term and long-term values. To select values for the near future of one's own tribe or country is relatively easy" (40). Instead, we must think long-term about our descendants and the future of the Earth.

Works Cited

Antisdel, Brent. "Wasted." CITYVIEW, 28 Dec. 2018, www.dmcityview.com/feature-1/2019/01/02/wasted-2/.

"Banff Facts." Banff.com, www.banff.com/banff-helpers/banff-facts/.

"Beyond Curbside Recycling." *Town of Canmore*, canmore.ca/municipal-services/waste-management-recycling/beyond-curbside-recycling

Cannon, Austin. "Paper Recycled by Des Moines Residents Was Diverted to Landfill Due to Lack of Buyers."

Des Moines Register, 17 Dec. 2018, www.desmoinesregister.com/story/news/2018/12/02/

des-moines-what-can-cant-recycled-paper-metro-waste-authority-mid-america-china-paper-trash/2148661002/.

Chhabra, Esha. "This Canadian Company Has \$11 Million In Annual Sales While Putting The Environment First." *Forbes Magazine*, 23 Jan. 2017, www.forbes.com/sites/eshachhabra/2017/01/23/ how-this-canadian-company-has-11-million-in-annual-sales-while-putting-the-environment-first/#75628a4a5085.

Gaul, Alma. "Bottom Drops out of Q-C Recycling Market." *Dispatch-Argus-QCOnline*, 22 June 2018, qconline.com/news/local/bottom-drops-out-of-q-c-recycling-market/article 8d5164bb-7275-5567-81fc-8f7b2496ecb9.html.

Grabar, Henry. "Recycling Isn't About the Planet. It's About Profit." *Slate Magazine*, 5 Apr. 2019, slate.com/business/2019/04/recycling-dead-planet-profit-americans-commodities-china.html.

Howell, Dominic. "The 5p Plastic Bag Charge: All You Need to Know." *BBC News*, 30 July 2016, www.bbc.com/news/uk-34346309.

Mosbergen, Dominique. "China No Longer Wants Your Trash. Here's Why That's Potentially Disastrous." *The Huffington Post*, 25 Jan. 2018, www.huffingtonpost.com/entry/china-recycling-waste-ban_ us 5a684285e4b0dc592a0dd7b

"Municipal Solid Waste." EPA, Environmental Protection Agency, 2016, archive.epa.gov/epawaste/nonhaz/municipal/web/html/.

Petrov, Svilen. "The Island of Garbage in the Pacific Is Already Bigger Than 3 Countries." Maritime Herald, 9 Jan. 2019, www.maritimeherald.com/2019/the-island-of-garbage-in-the-pacific-is-already-bigger-than-3-countries/.

"Plastic Pollution - Facts and Figures." *Surfers Against Sewage*, 2019, www.sas.org.uk/our-work/plastic-pollution/plastic-pollution-facts-figures/.

Rosengren. "How Recycling Is Changing in All 50 States." *Waste Dive,* 1 Feb. 2019, www.wastedive.com/news/what-chinese-import-policies-mean-for-all-50-states/510751/.

"Town of Canmore Census." Town of Canmore, canmore.ca/town-hall/community-statistics/census.

Ward, Jean Elizabeth. Li Bai: an Homage To. Lulu Books, 2007.

Wilson, Edward O. The Future of Life. Vintage Books, 2002.

The Function of Stabilimenta in Spider Webs

Winner of the John Allen Award

Emma Clodfelter

BIOL 320: Evolution

I choose Emma's paper because I was captivated by how she presented the problem on designs in spider webs. She was very successful at providing the necessary background information to understand the biological problem, including the currently proposed hypotheses and critiques for each one, leading to her proposed work.

-Paulina Mena

Introduction

Perhaps the most unique trait of spiders is their silk. Despite other insects producing silk at some stage in their development, spiders remain distinctive due to both sexes using silk throughout their entire lifespan (Brunetta and Craig, 2010). The many species grouped together under the label "orb weaver" all spin a web as a means of trapping their prey (Rao, Cheng, and Herberstein 2006). Spiders all have spinnerets in their abdomens that are connected to many silk-producing glands (Brunetta and Craig, 2010). This allows the spider to utilize different kinds of silk for different purposes, such as being sticky to snare prey (Brunetta and Craig, 2010). It is thought that the many functions of their silk has allowed spiders to survive in so many different environments without radically altering their body shape or lifestyle (Brunetta and Craig, 2010). Spiders' webs have become less visible over the course of their evolution,

which makes the stabilimenta seem counterintuitive (Rao. et al. 2006).

The stabilimenta, or web decorations, are zig-zags of aciniform silk that form a conspicuous design, the function of which is unknown (Brunetta and Craig, 2010). Many hypotheses have been proposed, such as making the web visible to animals that may crash through it, attracting prey, and making the spider look larger to potential predators (Brunetta and Craig, 2010). Not all spiders use stabilimenta, and members of the same species may decorate their webs in different ways (Beccaloni, 2009). Because of how visible the web becomes when stabilimenta are present, there must be an advantage that would balance out this tradeoff. The function may vary in different species, as well, which complicates the experiments and results.

The silk-producing glands use ducts to transfer the silk into the spinnerets (Brunetta and Craig, 2010).

The spinnerets are covered with spigots, which are small tubes that expel the formed silk (Brunetta and Craig, 2010). The exact placement and number of spinnerets varies from species to species, and spiders are the only silk-spinning organisms with abdominal spinnerets (Brunetta and Craig, 2010). Spiders, with the exception of primitive species, produce six or more varieties of silk in their different glands, and each kind has its own function (Brunetta and Craig, 2010). The silk itself is formed by proteins, which can make the silk glue-like, woolly, strong, elastic, etc. in order to make a web that can withstand speeding insects, support the weight of the spider, trap the insects, and so on (Brunetta and Craig, 2010). The silk is so strong because it has a core-shell structure; the core is the strengthdetermining factor, and it is composed of the two spider silk proteins, hydrophobic spidroin I and hydrophilic spidroin II (Doblhofer, et al. 2015). Most of the spider silk genes come from the same gene family

(Brunetta and Craig, 2010). The speed at which spiders spin their webs is affected by temperature—heat makes spiders work faster, and cold makes them slower (Vollrath, 2003). There is also evidence to suggest that the conditions of silk-spinning determine the strength of the silk, not just the genes, as silkworms can spin silk of nearly equal strength if they spin it in the same fashion as a spider (Vollrath, 2003).

Vertical orb weavers in the superfamily Araneoidea use the spiral in their web to catch their prey (Brunetta and Craig, 2010). The capture spiral is a combination of two silk proteins, the stretchy flagelliform silk and the sticky aggregate silk protein glue (Brunetta and Craig, 2010). Flagelliform silk is translucent, which makes it hard for insects to detect, and it can withstand the speed of flying insects when they hit the web (Brunetta and Craig, 2010). The aggregate silk is a glue that is applied to the web fibers as a fluid (Brunetta and Craig, 2010). The aggregate silk beads up and scatters light, which may help attract insects (Brunetta and Craig, 2010). Unlike other spider silks, the aggregate remains wet and absorbs water from the humidity in the air (Brunetta and Craig, 2010). Spiders that do not use aggregate silk glue use woolly cribellate silk, but this is less sticky than the aggregate silk and does not reflect any light (Brunetta and

Craig, 2010). Aciniform silk, which the stabilimenta are composed of, are thought to be most similar to the original silk gland that appeared in the common ancestor of spiders (Brunetta and Craig, 2010). Females use it for the formation of egg sacs and wrapping up prey; males use it for depositing sperm before bringing it to the palpal organs (Brunetta and Craig, 2010). Aciniform silk is the strongest spider silk that has been tested, and it is also waterproof (Brunetta and Craig, 2010).

Some observations of orb weavers have led to the conclusion that species in the Cyclosa genus use the stabilimenta to camouflage their location in the web. These spiders litter their webs with debris and spin the stabilimenta in a spiral-like pattern, but this is only notable in these species, not in other spiders that use web decorations (Beccaloni, 2009). The problem with the hypothesis that the stabilimenta prevent birds from flying through the web is that spiders can rebuild their webs in a short amount of time. Although this does not disprove the hypothesis, it makes it seem less likely than the idea that the stabilimenta are used to attract prey. This hypothesis states that the stabilimenta attract prey by reflecting UV light, but this is not supported by the findings of Samuel Zschokke, whose research indicated that the stabilimenta

are not any more reflective than the other types of silk (Zschokke, 2002). However, these results conflict with other research that suggests that the stabilimenta are the most reflective part of the web (Brunetta and Craig, 2010). Therefore, my hypothesis is that the stabilimenta do attract prey.

It is thought that the stabilimenta vaguely mimic flowering grasses, but the spiders do not use the same pattern repeatedly, which prevents their prey from learning to avoid their webs (Brunetta and Craig, 2010). Some researchers observed that when Argiope argentata spiders decorated their webs daily with different patterns, there were more insect hits than when the spider did not use decorations or used the same ones consistently (Brunetta and Craig, 2010). However, the stabilimenta have also been noted to attract wasps, so spiders that decorate frequently eat well, but do not live as long as their nondecorating counterparts, due to wasp predation and parasitizing (Brunetta and Craig, 2010).

These observations were made on only one species, so repeating their methods with many other species of orb weaver and comparing the results would provide more evidence to support the hypothesis of prey attraction. If the function of the stabilimenta is prey attraction for the majority of species that use it, then the expected results

would coincide with what the researchers found when observing Argiope argentata. For their experiment, they photographed the spiders in their webs under UV light against a background of flowering grasses (Brunetta and Craig, 2010). They took note of all the stabilimenta patterns used by spiders and recorded damage to the web that indicated insect hits (Brunetta and Craig, 2010). After these initial observations, they

randomly selected webs to transplant stabilimenta onto and changed the designs at random the next day (Brunetta and Craig, 2010). Then they marked and trained stingless bees—the prey of Argiope argentata—to forage in the particular sites with the webs and recorded the number of bee hits in the webs (Brunetta and

Craig, 2010). They found that bees hit decorated webs more frequently, but after getting caught and escaping once, the bees learned the pattern and avoided the web, but would get caught again if the decoration pattern was changed (Brunetta and Craig, 2010).

An experiment that tested for the prey-attraction ability of web decorations found both that Thelacantha brevispina spiders were more likely to catch prey when the decorations were present, and that the combination of decorations and web barriers caused a decrease in predation rates by birds (Tseng, et al. 2011). These tuft decorations consist of silk, insect carcasses, eggs, and debris, and they may serve a similar function to, or may include, the stabilimenta (Tseng, et al. 2011). The experimenters designed three treatments for the spiderwebs: removal of the web decorations,



Hallie Taets, cut paper, 12" x 12" x 4"

removal of the web decorations and the barrier webs, and no treatment as a control group (Tseng, et al. 2011). They used video monitoring to keep track of the spiders' prey-capture rates and predation rates (Tseng, et al. 2011). To find how the UV-reflectiveness of the decorations compared to the decorations concealed with paint, the researchers developed a photoreceptor sensitivity model with honeybees and blue

tits to compare how insects and insect-eating birds viewed the treated and untreated webs (Tseng, et al. 2011). They found both that the paint did conceal the decorations, and that the untreated decorations were visible to insects and birds (Tseng, et al. 2011).

Their results showed that there was no significant difference in prey-capture rates between treated and untreated webs, but in the 2010 study, the treated webs with concealed

decorations had significantly lower prey-capture rates than the webs with visible decorations (Tseng, et al. 2011). Predation from wasps did not vary between the groups (Tseng, et al. 2011). However, this may be because the T. brevispina spiders have a thick, spiny cuticle as a means of protection from wasps, so their

decorated barrier webs likely did not evolve as a defense against wasps (Tseng, et al. 2011). There were only six bird interactions, two of which did not involve an attack, and this only happened in the untreated control group, whose decorations and barrier were present (Tseng, et al. 2011). There were four bird attacks in total, three in the group without barrier webs or decorations, and one in the group without

decorations only (Tseng, et al. 2011). There is still uncertainty whether the decorations were solely responsible for attracting prey, as they could not be separated from the barrier webs (Tseng, et al. 2011). However, when the barrier webs were present without decorations, they caught less prey (Tseng, et al. 2011).

Birds seemed to attack less when barrier webs with decorations were present, and although there was a small sample size of birds, this may suggest that the decorations make the barrier more visible to deter predators (Tseng, et al. 2011). The researchers did find that the decorations reflected blue light in addition to UV light, which is visible to birds and insects (Tseng, et al. 2011). The stabilimenta in other orb weaver webs conform to insect-form vision, but the tuft decorations do not, which suggests that they are imperfect mimics that nonetheless still function advantageously (Tseng, et al. 2011).

Another set of researchers studied the Argiope versicolor spider, an orb weaver, to see if predator-avoidance behaviors varied between adults and juveniles, and if these behaviors were stabilimentum-specific (Li, et al. 2003). Tactile stimulation and air movement were used as artificial stimuli to elicit any of four responses: shuttling, pumping, dropping, or shifting (Li, et al. 2003). Shifting involves moving

away from the middle of the web, shuttling is when the spider shuffles between sides of the web, pumping is when the spiders pump their bodies while on the web, and



Hallie Taets, marker, 9" x 12"

dropping includes dropping out of the web to hide in the leaf litter below (Li, et al. 2003). These researchers believe that stabilimenta may aid in deterring predators because they are only found in diurnal orbweavers that build their webs in open, visible areas (Li, et al. 2003). This does not mean that the stabilimenta cannot also attract prey, as it is possible that stabilimenta may have more than one function (Li, et al. 2003). The researchers also noted that all species in the genus Argiope that have been studied have been observed using stabilimenta (Li, et al. 2003). However, juveniles use

a discoid stabilimenta pattern, whereas adults utilize cruciform stabilimenta (Li, et al. 2003).

The study found that

juveniles in decorated webs had different responses than iuveniles in undecorated webs (Li, et al. 2003). They shuttled more frequently. shifting was about the same, and fewer than 10% dropped (Li, et al. 2003). Adults with stabilimenta in their webs also responded to stimuli differently than adults with plain webs (Li, et al. 2003). They did not drop or shift as frequently, and they pumped more often (Li, et al. 2003). The researchers suspect that shuttling in juveniles is associated with the stabilimenta as a means of making the spider harder for predators to spot in the

web (Li, et al. 2003). They also suspect that the discoid stabilimenta may block the juvenile from view or provide a barrier between it and the predator if the spider shuttles to the opposite side of the web (Li, et al. 2003). The researchers believe that since the adult A. versicolor build their webs in exposed areas, the wind loosens webs that lack cruciform stabilimenta, which may explain why pumping is more common on webs that have it (Li, et al. 2003). This study seems to find a connection between the stabilimenta and predatoravoidance rather than prev attraction, but this function may only be in some species.

An important factor in discovering the purpose of stabilimenta is whether it evolved once or multiple times independently, and whether the vertical orb weavers that use it are closely related or not. It is currently believed that the use of stabilimenta evolved independently at least nine times and has appeared in three families and twenty-two genera (Bruce, 2006). These families include Araneidae. Uloboridae and Tetragnathidae (Bruce, 2006). These families are not closely related to each other (Fernández, et al. 2018). Web decorations vary from being only stabilimenta to including debris such as egg sacs, plant matter, and dead insects, which may impact their function (Bruce, 2006). The pattern of stabilimenta can be described as belonging to one of six different categories: cruciate, linear, discoid, spiral, tufts and a silk mat (Bruce, 2006). As previously discussed, members of the same species may use more than one pattern throughout their lifetime, which is best observed in the webs of juveniles compared to the webs of adults (Bruce, 2006).

The Argiope species have been studied most heavily so far, which would make it beneficial to study other species of orb weavers (Bruce, 2006). The genus Allocyclosa has been studied as well, and it seemed to demonstrate predatoravoidance with its stabilimenta (Bruce, 2006). As for the prey-

attraction hypothesis, the idea that the stabilimenta imitate UV-reflective floral guides or gaps in vegetation has not been directly tested (Bruce, 2006). Therefore, this would be a prime topic of study in testing my hypothesis. Other pieces of supporting evidence have already been found, such as juvenile Argiope versicolor with decorated webs catching more Drosophila flies, but only when UV light was present, indicating that the stabilimenta are reflective (Bruce, 2006). Another study that involved the removal of web decorations showed that the spiders caught less prey without the stabilimenta, further supporting the idea that web decorations attract prey (Bruce, 2006). The main criticism of these studies is that they often compare the webs against artificial, colored backgrounds rather than natural backgrounds, which may alter the way the reflectiveness of the stabilimenta is perceived (Bruce, 2006). Decorated webs also tend to be smaller than undecorated ones, so it is best to compare decorated webs as a control with webs whose stabilimenta have been removed for the experiment (Bruce, 2006).

Materials and Methods:

Therefore, I would like to test the proposed mechanisms of prey-attraction with a natural background. My species of interest would be Argiope aurantia, as it is well-known and part of the Araneidae

family. Although it would be of value to choose a species from a different genus, more research needs to be done in many species to determine habitat, predators, diet, and more to aid in determining the function of their use of stabilimenta, as it likely varies between species due to environmental context. By choosing a well-known and previously-studied genus, I can easily compare my results to other studies. This may also provide insight into whether species within the same genus use stabilimenta for the same purpose or not, which will allow researchers to see how different selective pressures affected the function of stabilimenta.

For my study, I would like to find the difference between the amount of prey captured in decorated webs and undecorated webs, as well as measure the reflectiveness of both types of webs, in order to test my hypothesis that the stabilimenta attract prey with UV light reflection. For ease of comparing my results to other studies, I will do a similar experiment to what Craig described, but instead of transplanting web decorations onto webs, I will remove the decorations from a sample of webs and compare them to untreated, decorated webs (Brunetta and Craig, 2010). I would make sure to measure the amount of UV reflectiveness against the natural backgrounds the webs are already up against. The A. aurantia spiders build

their webs in a variety of places, but are most commonly found in dense vegetation (Enders, 1973). They also tend to choose areas that are not heavily shaded, but are protected from the wind (Enders, 1973). The spiders show no preference for which plant species they built their web between (Enders, 1973). A. aurantia mostly feed on insects belonging to orders Odonata and Hymenoptera, but they will still catch orders Coleoptera, Hemiptera, Lepidoptera, Orthoptera, and Diptera (Howell and Ellender, 1984). Adult A. aurantia will commonly feed on bees from the family Apidae, specifically honevbees and bumblebees (Howell and Ellender, 1984). The odonates they usually catch are dragonflies and damselflies (Howell and Ellender, 1984).

Because Odonata and Hymenoptera are these spiders' most important prey. I will focus on how they both see the stabilimenta. Using a photoreceptor sensitivity model derived for honeybees, just as another study did (Tseng, et al. 2011), I will transport the portion of the web with the stabilimenta to a lab and use a spectrometer to measure the reflectiveness. I will also use a combination of video footage and careful inspection of the insect remnants in the web to identify the species caught. This experiment will carry on from the start of June to the end of August in order to take advantage of the summer activity of insects and spiders. It will also cover a variety of habitats that A. aurantia is found in, as the surrounding vegetation may impact how the stabilimenta are perceived by the prey. The spiders in the experiment will be left in their natural habitat.

If I reject the null

hypothesis, then I should find that the spiders with their stabilimenta removed will consistently catch less prey than spiders with their stabilimenta intact. The significance of this would be determined using a two-sample t-test. If I fail to reject my null hypothesis, then I would expect for there to be no significant difference between rates of prey capture between the stabilimenta-absent webs and stabilimenta-present webs. I must also keep in mind that if I reject the null hypothesis, this does not mean that every species that utilizes stabilimenta is using it for the same purpose. More research will need to be done with other species in other genera before the scientific community is ready to reach a consensus. However, more studies should shed light on this biological mystery and increase our understanding of orb weaver spiders.

Works Cited

Beccaloni, J. (2009). Arachnids. Berkeley: University of California Press.

 $Bruce, M.J.\ (2006): Silk\ decorations\ controversy\ and\ consensus.\ \textit{Journal\ of\ Zoology\ 269}: 89-97.\ doi: 10.1111/j.1469-7998.2006.00047.x$

Brunetta, L., & Craig, C. L. (2010). Spider silk: evolution and 400 million years of spinning, waiting, snagging, and mating. New Haven, CT: Yale University Press.

Doblhofer, E., Heidebrecht, A., & Scheibel, T. (2015). To spin or not to spin: Spider silk fibers and more. *Applied Microbiology and Biotechnology*, 99(22), 9361-9380. doi:http://dx.doi.org/10.1007/s00253-015-6948-8

Enders, F. (1973). Selection of Habitat by the Spider Argiope aurantia Lucas (Araneidae). *The American Midland Naturalist*, 90(1), 47-55 doi:10.2307/2424265

Fernández, R., Kallal, R. J., Dimitrov, D., Ballesteros, J. A., Arnedo, M. A., Giribet, G., & Hormiga, G. (2018).

Phylogenomics, Diversification Dynamics, and Comparative Transcriptomics across the Spider Tree of Life. *Current Biology*, 28(13), 2190–2193. doi: 10.1016/j.cub.2018.06.018

Howell, F., & Ellender, R. (1984). Observations on Growth and Diet of Argiope Aurantia Lucas (Araneidae) in a Successional Habitat. The Journal of Arachnology, 12(1), 29-36. Retrieved from www.jstor.org/stable/3705100

Li, D., Lai Mun Kok, Seah, W., & Matthew L. M. Lim. (2003). Age-Dependent Stabilimentum-Associated Predator Avoidance Behaviours in Orb-Weaving Spiders. *Behaviour*, 140(8/9), 1135-1152. Retrieved from http://www.jstor.org/stable/4536081

Rao, Dinesh & Cheng, Ken & Herberstein, Marie. (2006). A natural history of web decorations in the St Andrew's Cross spider (Argiope keyserlingi). Australian Journal Of Zoology. 55. 9-14. 10.1071/ZO06010.

Tseng, H., Cheng, R., Wu, S., Blamires, S., & Tso, I. (2011). Trap Barricading And Decorating By A Well-Armored Sit-and-Wait Predator: Extra Protection Or Prey Attraction? *Behavioral Ecology and Sociobiology*, 65(12), 2351-2359. Retrieved from http://www.jstor.org/stable/41414702

Vollrath, F. (2003). Web masters. Nature, 426(6963), 121-122. doi:http://dx.doi.org/10.1038/426121a

Zschokke, S. (2002). Ultraviolet Reflectance of Spiders and Their Webs. *The Journal of Arachnology*, 30(2), 246-254. Retrieved from http://www.jstor.org/stable/3706267

El efecto de la casa en la salud en comunidades mayas

Kayleigh Rohr

SPAN 487: Senior Seminar in Hispanic Literature and Culture

This paper deals with the impact of home and housing on health in Mayan communities, particularly in Yucatán. Kayleigh's expansive investigation draws from areas such as human rights, environmental studies and the biological sciences in order to illustrate the interdependency of housing and access to culturally-appropriate health care. In choosing her piece for submission to the Writing Anthology, I considered Kayleigh's coherent and sensitive integration of the diverse factors at play in improving health care in Mayan communities. I was also impressed by the fact that she conducted--completely on her own accord--personal interviews for this project with our Mérida program director, Lisa Munro, and a Central alum, Liberty Wickman, who works for a health-related non-profit in Mexico.

-Kathy Korcheck

I. Introducción

La Comisión Nacional para el Desarrollo de los Pueblos Indígenas de México (CDI) define como indígenas a las personas que forman parte de un hogar donde el jefe(a), su esposo(a) o alguno de los ascendientes declara ser hablante de idioma indígena. Su estimación publicada para 2015 correspondió a 25.6 millones de personas (Bello). Sin embargo, hay un problema grande en las comunidades indígenas: mucha gente vive en la pobreza grave, lo cual impide la habilidad de tener una vivienda saludable. Los criterios para definir una vivienda saludable, según la Organización Panamericana de la Salud (OPS) y la Organización Mundial de la Salud (OMS) incluyen: la ubicación y la tenencia seguras; el diseño y la estructura adecuados; el espacio para una convivencia saludable: las instalaciones básicas; el

ambiente apropiado; los hábitos saludables y la protección contra efectos adversos para la salud (Bello, et al). La casa influye la salud en varias maneras: la ubicación, las tradiciones, la intervención (o la falta de intervención) del gobierno, y la pobreza. Por eso, hay diferencias entre las maneras en que se debe tratar a un paciente de varias culturas. Entonces, se tiene que adoptar una comprensión crítica de la relación entre vivienda y las tradiciones con la salud para mejorar el tratamiento de los pacientes.

México tiene niveles promedio de salud inferiores a los esperados para su desarrollo. A pesar de haber mejorado con el tiempo, el país lo ha hecho a un ritmo menor que lo adecuado. También, contrastes diferentes existen entre regiones geográficas, grupos étnicos, y niveles socioeconómicos. La desigualdad en los indicadores

es reflejada en la desigualdad en la acción pública, ya que el gasto público en salud ha dejado cerca de la mitad de la población fuera de los sistemas de seguridad pública, según Loewenberg (1680-1682).

Un grupo étnico que ha experimentado considerable marginalización en México es la gente maya. Las comunidades mayas están situadas en el sur de México, específicamente en los estados de Chiapas, Oaxaca, Campeche, Tabasco, Quintana Roo y Yucatán, y también en Guatemala ("Maya Civilization"). Hoy en día, hay casi seis millones de personas mayas, y son el grupo indígena más grande al norte de Perú. Los grupos más grandes incluyen los yucatecos, los tzotziles, y los tzeltales ("Maya Civilization"). Los yucatecos viven en la península de Yucatán en un clima tropical, y los tzotziles y tzeltales viven en los altiplanos de Chiapas.

Otros grupos grandes incluyen los cakchiqueles de Guatemala v los kekchis de Belice. Cada grupo habla un idioma maya diferente, pero todos son de la familia lingüística maya. Es un testimonio a las diferencias de cada subgrupo de los mayas. Las regiones mayas han sido sometidas a una intensa agitación política en las últimas décadas, con importantes pérdidas de vidas y devastación económica. Si bien muchos mayas han sido asesinados durante guerras civiles, en otros países como Guatemala se han visto obligados a abandonar sus hogares y buscar refugio en países como México, Estados Unidos y Canadá. Este fenómeno les hace pensar en la presencia (o la falta) de los derechos para las personas afectadas que incluyen los derechos a una casa digna y un sistema de salud adecuado.

II. La vivienda Según la Organización de las Naciones Unidas (ONU):

Toda persona tiene derecho a un nivel de vida adecuado que le asegure, así como a su familia, la salud y el bienestar, y en especial la alimentación, el vestido, la vivienda, la asistencia médica y los servicios sociales necesarios; tiene asimismo derecho a los seguros en caso de desempleo, enfermedad, invalidez, viudez, vejez u otros casos de pérdida de sus medios de subsistencia por circunstancias

independientes de su voluntad.

Esta cita es parte de la Declaración Universal de Derechos Humanos que fue firmada por los países de la ONU, incluyendo México y Guatemala. Los estados también deben asumir responsabilidad para garantizar que toda la población disfrute de un nivel de vida adecuado. El artículo reconoce que los alimentos, la ropa, la vivienda, la atención médica, y los servicios sociales son componentes esenciales de un nivel de vida adecuado para la salud y el bienestar. Definir los estándares que deben evaluar estos componentes es difícil, ya que los estados con diferentes historias y capacidades económicas y sociales tienen diferentes ideas de un nivel de vida adecuado.

Por estas razones, el acceso insuficiente al derecho a la vivienda es una amenaza al derecho a la integridad física y mental de las personas afectadas, y pone en riesgo el derecho a la salud, a la educación y al libre desarrollo de las personas. Según Krieger y Higgins, condiciones malas están directamente relacionadas con una amplia variedad de enfermedades, incluyendo infecciones respiratorias, asma, heridas, y salud mental. Por ello, la vivienda inadecuada es un tema de salud pública. Por ejemplo, una característica especialmente alarmante es la falta de agua aceptable y salubre, especialmente

en regiones rurales, lo cual está relacionado con varias enfermedades Muestra la relación entre la ubicación de la casa y disponibilidad de varios recursos necesarios. Por lo tanto la vivienda deficiente afecta múltiples dimensiones de la salud. Existe evidencia de que, en parte, las malas condiciones de la vivienda contribuyen a aumentar la exposición a peligros biológicos, químicos, y físicos, que afectan directamente los procesos fisiológicos y bioquímicos. Además, las preocupaciones sobre la vivienda deficiente son un factor estresante psicosocial que puede conducir a problemas de salud mental (Krieger & Higgins). Muchas personas ven la falta de una casa como un fracaso personal, y puede causar sentimientos de depresión o ansiedad. Finalmente, un refugio es parte de la base de la jerarquía de necesidades de Maslow. La base está compuesta de las necesidades fisiológicas (necesidades fundamentales para la sobrevivencia), como comida y agua suficientes. Entonces, se necesita refugio antes de se pueda apreciar seguridad, sentimientos de pertenencia, y más.

Además, la ONU explica que las personas indígenas son más susceptibles a vivir en condiciones impropias y experimentan discriminación sistémica con frecuencia en el mercado

inmobiliario, especialmente en términos de servicios básicos, la vulnerabilidad de estar desplazados, tenencias inseguras de las tierras tradicionales, y las alternativas culturalmente inapropiadas de vivienda ofrecidas del gobierno. La ONU también dice que las personas indígenas luchan contra la discriminación en las políticas y leyes que causan desacertadas asignaciones de

recursos para obtener una vivienda, como créditos y préstamos (Smart, et al). En respuesta, la ONU cita articulo 11 (1) del Pacto Internacional de Derechos Económicos, Sociales, y Culturales que establece el derecho a la vivienda a cada persona. Junto a eso, artículo 2 (2) instituye todos los derechos del pacto que tienen que ser ejercitados sin discriminación (Smart, et al). Cuando los artículos son juntados, el derecho a una vivienda digna debe ser ofrecido sin obstáculos por razones discriminatorias. Para añadir, la Constitución mexicana declara que es la responsabilidad del gobierno de ayudar a las comunidades a mantener un estándar de vida apropiado:

Para abatir las carencias y rezagos que afectan a los pueblos y comunidades indígenas, dichas autoridades, tienen la obligación de: (...) IV. Mejorar las condiciones de las comunidades indígenas y de sus

espacios para la convivencia y recreación, mediante acciones que faciliten el acceso al financiamiento público y privado para la construcción y mejoramiento de vivienda, así como ampliar la cobertura de los servicios sociales básicos. (Smart, et al)

Entonces, es claro que el derecho fundamental a una vivienda digna protege a todas



Mel Maskevich, ceramic

las personas y, por tanto, no debe ser limitada a sólo algunas poblaciones. Y si eso no es el caso, es la responsabilidad del gobierno de intervenir para resolver el problema y asegurarle los derechos a cada persona. Además, la Declaración de las Naciones Unidas sobre los derechos de los pueblos indígenas de 2007 reconoce que las comunidades indígenas deben tener el derecho para determinar sus políticas y programas de la vivienda (Smart, et al). Gracias

a los documentos, la base para establecer los derechos de las comunidades indígenas es evidente, y estas comunidades deben recibir el apoyo necesario para competir con comunidades no indígenas, incluyendo el derecho a un sistema de salud bien equipado para proporcionar cuidado necesario y apropiado.

También, la vivienda debe garantizar la expresión de la identidad cultural y la diversidad. Es importante que cada persona se sienta segura en su identidad en su casa y pueda practicar sus creencias, y eso es clave para mantener la diversidad en el mundo. Pero. para lograrlo, es fundamental que cada persona tenga refugio en un lugar seguro, limpio, y digno, especialmente para preservar la salud mental y física. Más allá de este punto, es clave que cada persona reciba asistencia médica dentro de un radio de su comunidad aceptable, o sea, que no tenga que viajar muchísimo para recibir la asistencia necesaria para sobrevivir. Sin embargo, el sistema de salud no está tan disponible a las poblaciones indígenas en comparación con las poblaciones no indígenas. Por eso, parece haber una incidencia más alta de algunas enfermedades, mortalidad materna, y más. Entonces, la conexión entre la vivienda y la salud es clara y es importante reconocerla.

III. El sistema de la salud

El sistema de la salud no está equipado para ayudar el número de habitantes en las comunidades mayas. La falta de médicos licenciados y clínicas ha creado un desafío muy grande para la gente indígena, v por eso, muchas personas no tienen acceso a un sistema de salud. Sin ayuda médica necesaria, los problemas se amplifican, y es como un efecto de dominó. Hay una "falta de medicamentos, insumos médicos, de laboratorio, vacunas, material de curación, instrumental, equipo médico y su mantenimiento" (CDH). También, la falta de personas con la educación necesaria es una causa de la falta de médicos debido a razones financieras, la ubicación, y las creencias tradicionales. Según Freyermuth-Enciso, "en los países latinoamericanos las personas que acceden a la educación médica son parte de una élite social" (30) porque aceptan a los estudiantes con las calificaciones más altas en los exámenes. Sin embargo, sin la presencia de una educación básica, es muchísimo más dificil lograr las calificaciones necesarias: "en los [lugares] donde la educación básica es deficiente, pierdan la oportunidad de acceder a esta profesión" (30). También, Freyermuth-Enciso dice que "la clase social es un elemento que distingue las prácticas culturales sobre los distintos consumos incluido el de los bienes de la curación" (30). Eso

es importante porque la gente entiende la importancia de las prácticas tradicionales v tiene la sabiduría para consolar a los pacientes: "un servicio de salud logra proporcionar seguridad cultural, entendida como la capacidad de sus agentes de comunicarse completamente con sus pacientes desde un punto de vista político, económico, social, espiritual, y lingüístico" (30). La capacidad de interactuar efectivamente y considerar a la gente como personas con derechos implica además obtener el consentimiento informado sobre los procedimientos médicos a los que se las someten y construir una nueva cultura en salud con la participación más activa de los usuarios de los servicios.

En estas regiones, hay una influencia de la medicina tradicional. Las prácticas medicinales muestran el papel de la casa porque las tradiciones forman la idea de cuáles tipos de prácticas son necesarias. Las tradiciones originan en las creencias de la familia y son ampliamente enseñadas en la casa. Muchas comunidades mayas tienen un curandero (sanadores tradicionales) debido a la presencia de enfermedades específicas. como el susto o mal de ojo (enfermedades psicológicas que causan síntomas físicos). Los curanderos son necesarios porque estas enfermedades "are not recognized by Western science; they require

a curandero and they have very clear physical symptoms and are not caused by a physiological illness," según Lisa Munro, PhD, quien trabajaba en Guatemala con grupos indígenas durante su tiempo con el Cuerpo de Paz. El susto es una enfermedad que puede afectar a cualquier persona, y es conocido como la pérdida del alma y "puede definirse como un 'impacto psicológico' de intensidad variada que se padece a consecuencia de factores diversos entre los que se encuentran los de índole sobrenatural, fenómenos naturales y circunscritos en experiencias personales que emergen como eventualidades fortuitas del todo inesperadas" (Guzmán, Chávez y Mónica). También, se clasifica como la pérdida de una entidad anímica. Algunos de los síntomas incluyen una falta de apetito, decaimiento, y palidez. Los tratamientos del susto son variados. El susto debería ser tratado "como una totalidad en la que pueden reconocerse elementos específicos, más o menos al determinar un complejo mórbido e incluso complicaciones" (Guzmán, Chávez, y Mónica). Entonces, es importante que un médico pueda reconocer estas enfermedades y referir al paciente a otro sitio para proveer el cuidado apropiado.

Ahora, según Lisa Munro, hay una exigencia de curanderos en Los Ángeles debido a la presencia de inmigrantes latinoamericanos allá. Muchos de los inmigrantes buscan curanderos después de sus viajes a los Estados Unidos porque muchos de ellos han tenido experiencias traumáticas. Entonces, demuestra la importancia de su cultura a pesar de su localización física en el mundo: sus tradiciones son una fuente de confort, como la casa. Eso es un testimonio a la importancia del papel de los curanderos tradicionales, especialmente porque es casi imposible recibir el cuidado semejante afuera de las prácticas de los curanderos. Demuestra el efecto de las tradiciones (que empiezan en la casa) en la manera que alguien busca la atención médica. Entonces, los médicos deben entender esta situación porque si hay un paciente que está buscando un tratamiento tradicional, el médico puede prescribir los próximos pasos.

IV. Los derechos

La falta de una garantía para los derechos en regiones indígenas y rurales es un problema grande que se atribuye a la falta de un sistema de salud sostenible. Los derechos incluyen el acceso a instalaciones sanitarias adecuadas y servicios, así como las medidas apropiadas de los Estados en relación con determinantes socioeconómicos de la salud, tales como la comida, el agua y el saneamiento, las condiciones de

trabajo seguras y saludables, la vivienda y la pobreza (Smart, et al). Para el Centro de Derechos Humanos en Chiapas la crisis crónica del sistema de salud chiapaneco es un reflejo más de la crisis general y de la incapacidad de gobernar en el estado, lo cual es obvio entre la violencia y las tasas de muertes, la corrupción en la estructura del estado y la falta de intervención del gobierno para resolver los problemas como la pobreza, educación, justicia, salud, y muchos más (CDH). Por ejemplo, según Frevermuth-Enciso, la tasa de la mortalidad materna es tres veces más grande en Chiapas que el resto de México (30). Un 70% de las mujeres que vivían en comunidades de menos de veinte mil personas y generalmente, de poblaciones indígenas, era analfabeta o cumplía sólo la educación primaria. La percepción de los médicos de ser desacreditados v la desconfianza de la población hacia ellos dificultan en las comunidades la atención primaria de las urgencias, obstaculizando la canalización de pacientes al ámbito hospitalario enclavado. También, se impide la permanencia prolongada del personal de salud en la comunidad.

Una región donde este problema es muy evidente es la región Altos Tsotsil-Tseltal, que está compuesta de dieciocho municipios, en los que 54% de la gente solo habla el idioma indígena (Loewenberg). También, en esta región ha ocurrido en los últimos once años el mayor número de muertes maternas en Chiapas, por lo que ha sido foco de preocupación de las autoridades de salud tanto a nivel federal como estatal (Frevermuth-Enisco 30). Los problemas en el encuentro médico explican las tasas altas de muerte (especialmente materna) así como los porcentajes de la población que fallecen sin solicitar atención médica. Se complica en la medida en que las mujeres viven en condiciones de profunda inequidad que se demuestra en las dificultades para asistir a la escuela. Muchas veces, son analfabetas y monolingües (debido a la falta de educación por mujeres en su comunidad de origen) y viven sin el derecho de decidir sobre su propia salud y cuerpo debido a esta falta (Jiménez Acevedo & Núñez Medina). El sector de salud ha profundizado el problema por la oferta de atención médica mediante una persona que no sabe el idioma local, lo que impide el cumplimiento del bienestar de las pacientes porque no reciben información suficiente, clara y cierta.

Para mejorar las relaciones entre los pacientes y los médicos, es necesario considerar las prácticas y los principios de la interculturalidad. Se tiene que construir lazos de confianza y el proveedor de los servicios

de salud debe reconocer la necesidad de una autorreflexión sobre sus prácticas. Las prácticas deben reflejar un conocimiento general sobre la población a la que atiende; los médicos deben ser abiertos de aprender sobre la cultura v la gente. Una organización que trata de aprender sobre la población a la que sirve es Compañeros en Salud (CES). CES fue fundado por Paul Farmer en Haití. La meta de Farmer es construir un sistema beneficioso para la gente indígena y crear confianza entre la gente y los médicos. Por ello, la relación médicopaciente replica las relaciones aprobadas por la comunidad y las familias. Un aspecto que funciona para esta meta es que los empleados y voluntarios se reúnen con la gente y les preguntan sobre lo que quieren para servicios médicos. También, ofrecen programas para formar a las mujeres para proveer examinaciones básicas (presión arterial, mediciones de glucosa, exámenes de salud mental, y más). Ahora, hay casi 100 mujeres en Chiapas que proveen cuidado culturalmente apropiado para la gente indígena. También, las mujeres pueden eliminar los obstáculos de distancia: por ejemplo, "some people live two hours from the clinic so a lot of these women may live closer and go to their houses and see them in their native tongue" (Wickman). Según Liberty Wickman, quien trabaja por Compañeros de

Salud en la Sierra Madre, la gente en las comunidades está aprensiva a CES en el principio, y hay mucha duda. Entonces, CES trabaja mucho para ganar la confianza de la gente e indicar que va a quedar en la comunidad y proveer servicios médicos por mucho tiempo. El propósito de CES es integrar



Catalina Valdez, ceramic

el conocimiento de medicina occidental con las creencias de la gente indígena. Según Wickman, CES "encourages them to support traditional treatment. Although [their treatments] might be a placebo effect, traditional treatment does help provide great care on a comfort level and bridge the gap between clinical care and modern medicine." Liberty Wickman ha hablado sobre clases que tienen los empleados de CES con las parteras tradicionales donde les enseñan a los otros sobre sus prácticas.

Un fenómeno que ha contribuido a la falta de intervención apropiada del gobierno es "ONGismo."

Las organizaciones no gubernamentales (ONG) son organizaciones que operan independientemente de cualquier gobierno y cuyo propósito es abordar un problema social o político. Estas organizaciones completan el papel de los servicios públicos donde el gobierno falta. Por ejemplo, hay muchas ONG que proporcionan el cuidado médico necesario para algunas de las comunidades indígenas. El problema con esta situación, según Lisa Munro, es que las ONG "are not beholden to the people they serve but. . to the board of directors and do not make decisions that help the people, but. . .the organizations that they serve. Because of this, so many non-profits keep the state from doing anything; the government looks at the people like they don't need help to do anything because they have a [non-profit] and don't see a need to change." Por otro lado, cuando la presencia de las ONGs creció, el sector de asistencia médica privada lo hizo también y más personas empezaron a asistir estas clínicas (Chary y Rohloff). Las clínicas privadas proporcionan cuidado personalizado y los servicios son mejores en comparación con los servicios de las clínicas públicas, que muchas veces no tienen un horario concreto, no son ubicadas efectivamente, y no tienen las medicinas necesarias. El problema con las clínicas privadas es que el gasto para

una consulta con un médico cuesta más de dos días de trabajo, según Chary y Rohloff. A pesar de que muchos de los voluntarios de los ONGs tienen intenciones buenas, hav problemas con la manera en que funcionan las clínicas. Primero, hay una falta de comunicación efectiva. Muchas clínicas tienen traductores de inglés y español, y también para español y el idioma indígena, pero no hay traductores suficientes para ayudar a todos los pacientes presentes (Munro). Por eso, hay mucha comunicación mala entre los médicos y los pacientes. Otro problema es que muchas clínicas, especialmente de los Estados Unidos, proporcionan medicinas que no están disponibles en las regiones que sirven. Por ejemplo, los pacientes reciben medicina por un mes, pero después de un mes, es casi imposible recibir más de la medicina y se regresa a la salud mala otra vez. Representa una desventaja para las personas que viven en comunidades rurales sin acceso a un hospital o farmacia modernos porque no tienen una manera de continuar el tratamiento sin la presencia de asistencia extranjera.

V. La conexión entre la casa y la salud

En gran parte del mundo, hay complicaciones con los derechos y las tendencias en las regiones indígenas, y México y América Central no son excepciones. Según la Organización Mundial de la Salud (OMS/WHO),

Housing is a complex construct that cannot be represented merely by the physical structure of the home. The WHO understanding of 'housing' is based on a four-layer model of housing, taking into consideration the physical structure of the dwelling as well as the meaning of home, and the external dimension of the immediate housing environment, and the community with neighbors.

Las condiciones inadecuadas de la casa pueden causar efectos sanitarios directos. Algunos ejemplos incluyen la presencia de moho o una falta de servicios higiénicos. Las estructuras adecuadas son determinadas por la calidad de la casa y son responsables por la funcionalidad de la casa y la protección contra amenazas de la seguridad. En una comunidad, los factores parecen independientes de las condiciones de la casa; un ejemplo es la etología social que depende de la educación, las características socioeconómicas, y más (Loewenberg). Estos elementos afectan cómo vive la gente en la comunidad. Finalmente, el ambiente de la casa inmediata está relacionada con la distribución de las casas en la comunidad, que afecta las relaciones con los otros miembros de la misma v la presencia de servicios públicos.

Primero, la situación física de la casa presenta algunos problemas. La ubicación es perfecta para el café y el chocolate, y para ganar pago de estos productos, pero es difícil plantar y crecer frutas y vegetales debido al clima, especialmente si no van a venderlos. Entonces, la consumición de nutrientes es muy limitada. Según Liberty Wickman, "Due to a limited fruit and veggie intake, people have a reduced vitamin intake. Also, meat is expensive, and most do not have access to a market, leading to a lot of chronic malnutrition and stunting. A lot of these people live in a food desert." Segundo, la ausencia de agua corriente crea charcos de agua y muchos problemas: "due to a lack of running water there are pools of water which become breeding ground for larvae." Otros problemas que son desafíos grandes para superar incluyen la pobreza y la presencia de tradiciones y papeles familiares. Muchísima gente indígena vive en la pobreza: "In Mexico, 71.9% of the indigenous population, which includes 8.3 million people, was in a situation of poverty in 2016" (The Yucatan Times). La pobreza es un ciclo que perpetúa otros problemas: "more than 30% of the indigenous people in Mexico did not have access to a balanced meal, 8 out of 10 did not have social security and 56.3% did not have basic

services (concrete floor, running water, electricity) at their homes" (The Yucatan Times). Estos servicios básicos tienen una gran influencia en la salud en varias maneras: la falta de agua corriente, la falta de comida suficiente y saludable, y más.

Otro elemento muy peligroso para la salud es la presencia de humo en la casa debido al uso de las estufas tradicionales. Las estufas usan leña para la fuente de combustible que crea problemas respiratorios para mujeres y niños cuando cocinan. El humo de la leña contiene un grado extenso de sustancias tóxicas. incluvendo el monóxido de carbono (CO) que la Organización Mundial de la Salud (OMS) define como "el asesino de la cocina." Según Nijhuis,

The typical cooking fire produces about 400 cigarettes' worth of smoke an hour, and prolonged exposure is associated with respiratory infections, eye damage, heart and lung disease, and lung cancer. In the developing world, health problems from smoke inhalation are a significant cause of death in both children under five and women.

En las comunidades de la Huasteca, ubicadas en la costa del Golfo de México y cerca de Veracruz, existe una elevada incidencia de enfermedades respiratorias, principalmente neumonía y bronquitis. La zona maya de Yucatán es donde las autoridades de salud reportan el mayor número de enfermedades respiratorias causadas por el humo que genera quemar leña o carbón dentro del hogar. En México, alrededor de 19 millones de hogares en las poblaciones indígenas, rurales y urbanas marginadas, utilizan la leña para cocinar, otros ocho millones alternan la leña con el uso de gas (Herrera Portugal, Franco Sánchez, Pelayes Cruz, Schlottfeldt Trujillo, Pérez Solís). También, la necesidad de recoger madera suficiente para las estufas quita tiempo que se puede pasar en la escuela, el trabajo, o en la casa con la familia. Nijhuis dice que familias pasan más de veinte horas o más cada semana recogiendo leña, y "Only 11.4 % of indigenous households in Chiapas own a stove, and this rate declines to 8.6 % for Tzeltal communities in Chiapas. Illnesses as a result of this exposure take millions of lives every year." Sin embargo, la comunidad no acepta tan fácilmente un tipo de estufas nuevas y muchas personas dudan de este estilo por razones económicas. Las estufas tienen que ser asequibles y fáciles de obtener v utilizar. especialmente porque los gastos en gasolina para cocinar son una parte significativa de los ingresos de las familias rurales. También, el estatus de las mujeres es influido por sus habilidades de cocinar,

entonces muchas prefieren la estufa original porque creen que producen mejor comida (Herrera Portugal, Franco Sánchez, Pelayes Cruz, Schlottfeldt Trujillo, Pérez Solís). Por otro lado. Kirk Smith de la Universidad de California Berkeley v su equipo investigador han determinado que la calidad del aire ha mejorado con la implementación de las estufas nuevas, pero los resultados demuestran que el proceso de mejorar la calidad será largo. Aun así, la frecuencia de las enfermedades infantiles es más alta que las recomendaciones de la Organización de la Salud Global (Nijhuis). En conclusión, la presencia del humo en la casa por las estufas tradicionales afecta la salud de cada miembro de la familia, y a pesar del hecho de que hay alternativas, son difíciles de adoptar. Entonces, muestra que las tradiciones son tan integradas en la casa que es imposible separar una de la otra. Sin embargo, con el cambio del conocimiento de la salud, es importante que los estándares cambien para proteger cada vida. Pero también, se tiene que respetar las tradiciones de cada cultura. Entonces, es la responsabilidad de los catalizadores del cambio de considerar la importancia de la tradición cuando tratan de cambiar elementos de la casa v la cultura. En general, es un buen ejemplo del efecto de la casa en la salud y cómo puede

afectar a cada miembro de la familia

VI. Conclusión

La casa influye la salud en varias maneras: la ubicación, los recursos disponibles, las tradiciones, y el estatus de sistema de salud en los estados mexicanos. Para las comunidades mayas, las implicaciones influyen los derechos de las personas, y todos los elementos están interconectados. Por eso, se debe analizar el sistema de la salud a través de varias perspectivas. El derecho a una casa digna (y si se cumple

o no) afecta el derecho a un sistema de salud adecuado. Los derechos a una vivienda incluyen la ubicación y tenencia seguras, el diseño y la estructura adecuados, el espacio para una convivencia saludable, las instalaciones básicas, el ambiente apropiado, los hábitos saludables, y la protección contra efectos adversos para la salud (Bello, et al). Estos derechos incluyen la calidad de vida en varias maneras como el mantenimiento de la salud. El acceso a un sistema de salud adecuado es un derecho también e incluve acceso a un médico que habla el idioma apropiado

y que tiene la sabiduría sobre la cultura del paciente para proveer el cuidado apropiado y los servicios necesarios para proteger la calidad de la vida. Algunos factores clave son la tasa de la mortalidad materna y la falta de clínicas en regiones indígenas, v para mejorarlas, tiene que haber un cambio en la estructura del sector de salud en el gobierno. Aunque cada grupo étnico es muy diferente y tiene opiniones diferentes sobre el estilo de vida (incluyendo la vivienda), cada persona debe tener acceso a servicios de la salud adecuados y apropiados.

Obras Citadas

Bello, Pamela, et al. "Healthy-Sustainable Housing Index: A Pilot Study to Link Architecture and Public Health in a Semi-Urban Community in Mexico." *International Journal of Environmental Research and Public Health*, vol. 16, no. 3, p. 295. 2019.

CDH Fray Bartolomé de las Casas. "Crisis Del Sistema De Salud En Chiapas." 14 Apr. 2017, frayba.org.mx.

Chary, Anita, and Peter Rohloff. "Privatization and the New Medical Pluralism Shifting Healthcare Landscapes in Maya Guatemala." *Lexington Books*. 2015.

Guzmán, Chávez, and Mónica. "El Sol Como Fundamento Curativo De Las Terapias Mayas Yucatecas En El Período Colonial." *Estudios De Cultura Maya*. UNAM, Instituto De Investigaciones Filológicas, 2006.

Freyermuth-Enciso, María Graciela. "La Mortalidad Materna y Los Nudos En La Prestación De Los Servicios De Salud En Chiapas. Un Análisis Desde La Interculturalidad." *Liminar*: *Estudios Sociales y Humanísticos*, vol. 12, no. 2, 2014, p. 30.

Herrera Portugal C., Franco Sánchez G., Pelayes Cruz M., Schlottfeldt Trujillo Y., Pérez Solís B.L. "Daño al ADN en mujeres expuestas al humo de la leña en Chiapas, México / DNA damage in women exposed to firewood fuel smoke in Chiapas, Mexico." *Argent*; pp. 56-61. Dec 2009.

Jiménez Acevedo, Hilda y Gerardo Núñez Medina. "El sistema de salud de Chiapas ante la transición demográfica y epidemiológica." *Cuadernos del CENDES*, vol. 33, no. 92, pp. 79-103. 2016.

Krieger, James, and Donna L Higgins. "Housing and health: time again for public health action." *American Journal of Public Health* vol. 92, no. 5, pp. 758-68, 2002.

Loewenberg, Samuel. "The Plight of Mexico's Indigenous Women." *The Lancet*, vol. 375, no. 9727, pp. 1680–1682, 2010.

"Maya Civilization." *Mystery of the Maya - Maya Civilization*, Canadian Museum of History. Munro, Lisa. Personal interview. 19 Mar. 2019.

Naciones Unidas. "El Derecho a Una Vivienda Adecuada." Naciones Unidas.

Nijhuis, Michelle. "Three Billion People Cook Over Open Fires —

With Deadly Consequences." National Geographic. 16 Aug. 2017,

https://www.nationalgeographic.com/photography/proof/2017/07/guatemala-cook-stoves/

Smart, Sebastián, et al. "Derecho a Una Vivienda Digna En Latinoamérica." Trust.org, Thomson Reuters y TECHO, 31 Oct. 2017.

The Yucatán Times. "In Mexico 8.3 Million Indigenous People Live in Poverty." The Yucatán Time., 10 Aug. 2018.

Wickman, Liberty. Personal interview. 12 Feb. 2019.

World Health Organization. "Health of Indigenous Peoples." World Health Organization, 3 Feb. 2016.

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