WRITING@SVSU

SAGINAW VALLEY STATE UNIVERSITY

Writing@SVSU

2019–2020

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CREDITS

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Editors' Note

Welcome to the 2019-2020 volume of *Writing@SVSU.* This edition captures what was one of the strangest years in recent times. This past March—when COVID-19 required the university to begin remote instruction within the span of just a few days—life radically changed for SVSU's students, staff, and faculty. This move necessitated that deadlines for papers and final projects were shuffled, deadlines for the University Writing awards were delayed, the annual University Writing Awards banquet was cancelled, and *everyone* on campus quickly learned new technologies and ways of operating.

These events, however, remind us of the importance of writing and celebrating the achievements of our campus writers—whether those authors are just beginning their academic careers, recently graduated, or celebrating years of teaching at the university, their accomplishments are all important. Recognizing them here may, in fact, be all the more important until we can gather together in large groups.

These events and the disruptions of these past months also remind us, as editors, of the nature of writing, and the writing process itself. Consider this: in the past months, we have truly learned of the importance of critical thinking and scientific knowledge, of reacting swiftly and smartly to a dangerous situation, and of the need for patience and flexibility. These ideas also apply to writing. When we have writer's block, we must find new ways to surmount that obstacle. Similarly, we may approach a writing task thinking we have a clearly identified argument in mind, but the very act of writing can take us in a different direction. We write to show what we know, to learn, to document our world, and to achieve change. The pandemic (and the civil rights protests of the spring and summer months) have likewise reminded us of the nature of our work as members of the academic community: that we all become engaged, active, and participating citizens of our home communities and the larger world even when our world seems confined to the walls of our homes.

The pandemic, our stay-at-home orders, and the need to quarantine also remind us that writing is both a solitary act and one that actively involves connecting with others. Sometimes that relationship manifests itself in the peer review process; sometimes, it's just a matter of connecting through our final draft with the intended recipient of our words and work. The pandemic and writing also remind us that we are not alone. Even when we are physically separated, we can connect through words, and this connection can occur synchronously or asynchronously in the present moment *and* over time. (How many of us reread favorite works on our bookshelves while our local libraries were closed? How many of us are connecting online? How many of us are still watching recordings of meetings we can't attend? How many are documenting this experience in journals, poems, or blogs for future generations?)

Even the need to wear masks feels apropos of our work as writers. As we rummage in our rhetorical toolboxes and craft our messages, we are deciding which persona to adopt given our audience, message, and medium. Those writerly masks, too, can be personalized and cobbled together from materials we have at hand, just as arguments can be similarly constructed from personal experience and the peer-reviewed work of others.

In this unprecedented time, we hope that you enjoy the writing on the following pages, that you keep writing, and that, of course, you and yours remain safe.

Chris Giroux and Kim Lacey
Co-editors, *Writing@SVSU*

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Spotlight on…
The University Writing Awards

The Ruth and Ted Braun Awards are presented in the categories of General Education, Graduate Programs, and in each of the five colleges to promote excellent writing across the curriculum. This year two prizes were available in the College of Health and Human Services: one for students in Health Sciences, Kinesiology, or Occupational Therapy courses, and one for students in Nursing or Social Work courses. Two prizes were similarly available in the College of Arts and Behavioral Sciences: one for students in Art, History, Modern Foreign Languages, Music, Philosophy, Rhetoric and Professional Writing, or Theatre courses, and one for students in Communication, Criminal Justice, Geography, Political Science, Psychology, or Sociology classes. Members of the 2019–2020 University Writing Committee judged this year's entries. The committee was chaired by Scott Kowalewski, associate professor of Rhetoric & Professional Writing.

The Braun Awards were established by Ruth and Ted Braun. Longtime supporters of SVSU, they created these awards with the belief that no student can be successful in his or her academic career without writing competence and that no SVSU graduate should enter the workplace without such proficiency.

The Brauns' support of SVSU extends far beyond these writing awards. Both have served on the SVSU Board of Control and the SVSU Foundation Board of Directors. The Board of Control's chairperson from 1995–1997, Ruth Braun has been active in community service: she has served on the State Board of Education and the Saginaw School District Board of Education, as the president of the Junior League of Saginaw, and as the chairperson of the Board of Trustees of Saginaw General Hospital. Hugo ("Ted") Braun was a partner in the Saginaw law firm Braun Kendrick Finkbeiner PLC. A recipient of an honorary Doctor of Laws from SVSU, he was a longtime supporter of the school; among his other volunteer work for the university, he served on the Foundation Board's Finance & Investment Committee. Like his wife, he was much involved in other community organizations; he was president of the Harvey Randall Wickes Foundation, and United Way of Saginaw County honored him with its Outstanding Volunteer Award.

The writings of past Braun Award winners are available online at www.svsu.edu/writingprogram/writingawards/braunawards/

The Tyner Prizes are awarded to students in English courses to recognize writers of fiction, nonfiction, and poetry. Faculty in the English Department nominate student work for these prizes. Tamara Migan, lecturer of English, chaired the selection committee in 2020, and prizes were awarded in the categories of fiction and nonfiction. Matt Chappel won for his short story "George," which appears on the following pages. Kellie Rankey won for nonfiction for her paper called "Repurposing the Master's Tool's to Distort the Master's House: The Rani of Jhansi and Colonial Subjectivity under Attack in George MacDonald Fraser's *Flashman in the Great Game*," and Brad Yurgens won for his creative nonfiction piece "Probability Stacks." The Tyner Prizes are named after Raymond Tyner, a former member of the English Department. Professor Tyner came to SVSU in 1968 and was long affiliated with *The Green River Review*.

The First-Year Writing Awards recognize outstanding writing in the beginning composition courses taught at SVSU. The First-Year Writing Program at SVSU strives to ensure incoming freshmen have a solid introduction to writing at a collegiate level. This program includes two

comprehensive writing courses: Writing Skills (English 080) and Composition I (English 111). The First-Year Writing Committee was chaired in 2019–2020 by Emily Beard-Bohn, associate professor of English.

The winners of the 2020 First-Year Writing Awards for English 111 were as follows:

- First Place: Danielle Wolanin, "Code Meshing: A Study of How Code Meshing Is Linked to a Double Consciousness"
- Second Place: Peyton Hart, "Writing Away My Dreams"
- Third Place: Alexis Moulton, "The Art of a Shitty First Draft"
- Fourth Place: Graham Jones, "Handcuffs"
- Fifth Place: Elijah Whitney, "What My Writing Means"

The First-Year Writing Committee also awarded the following prizes to students enrolled in sheltered sections of First-Year Composition classes:

- First Place: Farhim Apu, Rakibul Hassan, and Zakaria Abden, "Reflection of a Discourse Community: Dining Services at SVSU"
- Second Place: Sara Neves, "The Sense of Good Writing"
- Third Place: Binh Duc Dang, "The Art of Writing"

The following prizes were given to students enrolled in English 080:

- First Place: Ja'Lynn Jones, "Marshall Fredericks' Persephone"
- Second Place: Logan Zakoor, "How to Process a Whitetail"

The Diane Boehm Writing Awards for e-Portfolios were first awarded in 2015. Established by Diane Boehm, founder and former director of the SVSU Writing Center and the SVSU University Writing Program, the awards recognize the creative and effective integration of writing and multimedia by SVSU students via the medium of e-Portfolios. Entries are judged according to a portfolio's ability to do the following: present a student's capabilities in an engaging, professional, and comprehensive manner; include artifacts and documents that demonstrate deep learning appropriate to the student's class or chosen major; include perceptive self-reflection; demonstrate creative use of multimedia; and be easy to navigate and aesthetically effective based on the capabilities of the software or program. Coordinated by the University Writing Committee, the Boehm Awards are given for portfolios made for the classroom or for a workplace application.

The Ming Chuan Multilingual Writing Awards were awarded for the first time in 2018 and were established by Dr. Robert S. P. Yien. A longtime supporter of SVSU, Dr. Yien joined SVSU in 1970 and was a recipient of the Franc A. Landee Teaching Excellence Award, he served as the vice president for Academic Affairs, and he has been instrumental in the success of Ming Chuan University at SVSU. These awards recognize writing excellence by international students at SVSU. One award is for students in the English Language Program; the other award is for students who have moved into courses that are required as part of their degree. These awards are coordinated by the University Writing Committee.

How to Write a True Trauma Story

Whitney L. Rakieten
Braun Award for Excellence in Writing in General Education
Nominated by Christopher Giroux, Associate Professor of English

Whitney L. Rakieten, formerly of Leslie, Michigan, is in college, she says, for the long haul. She started her quest for higher education at MSU while still in high school in 2005. Most recently, she transferred to SVSU to continue pursuing her mechanical engineering degree after completing an associate's in applied sciences for computer-aided design at Baker College. She currently works in the utility industry and hopes to use her degree to improve the industry when she graduates.

This paper, "How to Write a True Trauma Story," is the result of a final writing assignment given to her in Thematic Approaches to Literature (ENGL 204) in Fall 2019. The focus for the class was trauma and trauma literature.

Dr. Giroux, in nominating Whitney's piece, noted a few aspects of her essay that makes it an example of good writing: "[Ms. Rakieten] used as her starting point the sophisticated short piece 'How to Tell a True War Story' by Tim O'Brien. His is a tale that is full of paradox and that consistently breaks the rules of storytelling. Ms. Rakieten tries to model those moves herself. Thus, her paper stands both as a piece of creative writing and as an academic paper using a thesis, topic sentences, and the like. She works hard to weave these elements together and smoothly transition between points. Additionally, and perhaps most importantly, Ms. Rakieten's paper reminds us of the importance of narrative. Academic convention urges students to avoid the first person. Ms. Rakieten's work, however, recalls the value of first-person writing—the impact that it can have on readers. Her deeply personal and disturbing story reminds us that narrative isn't just a genre in and of itself, but a means of giving evidence, and when done well, it is an extremely effective rhetorical device."

Any decent literature course will introduce students to new material and prompt them to expand their writing both stylistically and academically. An exceptional example of writing from this course that helped to expand my writing capabilities was Tim O'Brien's "How to Tell a True War Story," which inspired me to ask myself the following: how does one write a true trauma story? O'Brien's text provided an excellent structure to develop my formula for writing such stories. The process involved deep contemplation and led me to a major revelation: the formula for writing a true trauma story is going to depend on how the author defines trauma. It's in the dictionary, but the truth behind it is different for every person. I cannot possibly write a guidebook for all authors, so instead, I will explain how to write a true trauma story based on my definition of trauma. For me, trauma is the irreparable scarring of my soul due to an event that changed me at my very core. It is the dreams that I can't escape from. They find me in my waking hours, not just in sleep. It is the overwhelming feeling that takes over every time my car points towards my childhood hometown. It is my inability to move on from the events of my past and move into the future. It is the death of a former version of myself, as total recovery is not possible. With that in mind, I can now walk you through writing my true story with what I consider to be the four major parts of a

true trauma story: the set up or introduction, the traumatic event, the immediate aftermath, and the long-term effects.

The introduction should explain how the person or persons involved in a traumatic experience ended up in that position. For me, describing one of my more recent traumatic experiences is as simple as describing the start of any other of my normal days. I had no inkling of what was to follow. It was a cool April morning, and I woke up to my 75-pound pitbull, Salene, squirming all over the bed and repeatedly rolling over on top of me, a sure sign she wanted outside. I reached for my phone to check the time. The sun had just started coming up so I knew, if it was early enough, I could probably close my eyes just a little longer. She started barking at my bedroom door, and I figured she really had to go outside. I heard the school bus pull up in front of the house, so I knew she wasn't letting me get those precious few more minutes. I climbed out of bed, rubbing my eyes and cursing myself for having dogs right at that moment. I crossed over to my bedroom door; "Ok, Weeny! Gosh, let's go!" I told her as I stuffed my phone in the back pocket of the previous night's jeans. She burst forth from my room full throttle, bolting down the stairs, and began jumping against the front door, just like she did every morning. I followed her and pushed her back, just like I always have; I also always check to make sure the buses are gone before I let her out. She tends to think barking at the kids who are climbing in the bus is the way to make new friends. As I started to unlock the door, I had no idea that there was a nasty, life-altering surprise on the other side.

This is where my introduction would stop. It tells you where I was and what mindset I had leading up to the event. It even tells you a little about my wardrobe. The point is to paint a picture for the readers but leave enough room for them to fill in the blanks. This sense of calm prior to the coming of a storm is also a tactic used by David Rabe in his play *Sticks and Bones*. In the opening of the play, immediately after the slideshow, he shows the family sitting in their home with Father Donald. They are entertaining each other, talking about their sports glory days, and then they get a phone call that their son, David, is coming home from the war. They are understandably happy for the news (96–99; act 1).

Another author, Russell Banks, also provides this type of introduction in his *The Sweet Hereafter*. During his character Dolores' first chapter, she talks about the morning of a traumatic event. She tells readers about the morning weather report she gives her disabled husband, about how she was a diligent and dependable bus driver, about how normal her day seemed, and how great the condition of the bus was (2–6). She even goes over the details of her bus route and talks about each of the kids on it (6–33). It was no different than any other beginning to any other winter day Dolores had.

Just to really drive the point home: this same sense of introduction to a trauma is also prevalent in Rajiv Joseph's *Bengal Tiger at the Baghdad Zoo*. We see the set-up happen immediately with two American soldiers patrolling the Iraqi zoo and goofing off in a carefree manner. They talk about their war spoils, lack of sex, and the sorry shape of the zoo, not suspecting danger (7–11; act 1, scene 1). It is the same with almost any true trauma story: there is a calm, a sense of normalcy, if you will, prior to the actual traumatic event.

Now we move to the second key factor of writing a trauma story, which is the traumatic event. This is essential for readers. It provides the context for the suffering that will follow. To show what I mean, I will continue with my own story.

I unlocked the deadbolt, still pushing my hyperactive pooch back with the side of my body, and I walked out the door sideways to ensure the coast was clear before releasing my furball. It wasn't. I looked up as I closed the door and turned towards the screen. The shuffling noises I heard weren't registering, nor was the fact that there was a man rifling through my toolboxes in front of me. Without thinking, I grabbed my phone and walked straight through the porch past him, forcing the screen door open as I jumped over the steps barefoot. Standing in my front lawn, I reached for my phone to dial 9-1-1. It wasn't working. The emergency callback screen was flashing at me. I looked up again as I noticed someone else walk toward me from the driveway. Parked there, idling,

was a tan, rusted out, banged-up GMC truck I had never seen. It's fucked up what you remember: I could hear the exhaust leak, and a misfire in the fourth cylinder, but besides dark hair and short stature, I couldn't tell you what the men looked like at all. Just the truck. Hanging out of the back was my large lime-green toolbox. I tried calling the police again; the phone still wasn't working. The second man was closer now. I remember saying, "I'm calling the cops—put my shit back, and leave," but it didn't sound like my voice. The second man, now standing in front of me, shouted, "Alex sent us. You hear me? Alex sent us! This is all his now, bitch." Instant dread. Alex was my ex-boyfriend. He was violent, was a drug addict, and had been stalking me for weeks since the break-up. I tried desperately to dial 9-1-1 one last time. As I held the phone up to my face, I felt a blast from behind me. My phone flew forward. The man from my porch tackled me. Blows rained down on my face for a moment and a few others on my back and ribs. I felt my phone in my side as they pushed me further into the ground. I landed a blow to someone's chin, and my elbow sunk into the other's rib cage before they pinned my arms. Finally, a third man yelled from the truck, "Fuck, we gotta go, fuck her!" They jumped up and ran to the truck. I pulled my phone out from under me and managed to snap a picture before they drove away. I was numb. I should have been aching all over, but I felt nothing right then. I tried to call the police again. It wouldn't work.

Here is where I stop telling my personal event. I need readers to see what I saw and feel what I felt at that moment. Most would imagine terror, but, honestly, I just remember how surreal it felt, like it wasn't happening to me. Although Dori Laub and Nanette Auerhahn are actually focusing on what happens much later after a traumatizing event, we can find connections to their ideas and my situation. Numbness and disassociation paired with my gaps in memory could indicate I was in a fugue state, which Laub and Auerhahn describe in their article "Knowing and Not Knowing Massive Psychic Trauma: Forms of Traumatic Memory." They explain that these states are "marked by the intrusive *appearance* of split off, fragmented behaviors, cognitions and affect, which are pieces of the traumatic memory or experience [….] With the emergence of this fragment in the individual's behavior or psychic life, varying degrees of knowing are possible. Individuals exhibit different degrees of awareness" (291). These feelings are expressed for the traumas the other authors discuss as well. With Rabe, we see the immediate denial his characters go through upon seeing their son, returned home from war, blinded and mentally damaged. He is pulled from a convoy of other mangled and deceased soldiers being shipped, like mail, back to their families with nothing. The son, upon entering the house, also denies it is his family at all (101–05; act 1). Rabe goes into detail about the appearance of the character David and the appearance of the convoy to reinforce how traumatic this scene is for the outwardly happy family on which David is dumped.

Rajiv Joseph introduces one of the many traumatic events of his play, the tiger's attack of the character Tom, which results in the tiger's death, using very descriptive language and stage directions to amplify the feelings surrounding the event. In this scene, Joseph focuses on the characters' body language and even uses the commentary of the tiger's ghost to describe what was happening in the moment. To intensify the feelings of chaos and confusion in audiences, he also used layers of simultaneous dialogue on stage. While Kev and Tom were having a "softer" conversation on stage and made to look relatively relaxed during their patrol, the tiger's lines are marked with italicized words to indicate emphasis and with a gradual increase in the use of exclamation points to mirror the tiger's growing agitation during the scene (Joseph 11–12; act 1, scene 1).

Russell Banks has the most descriptive imagery of a traumatic event. He uses his character Dolores to recreate a vivid scene of the bus crash from her perspective in the first chapter:

> I will remember that red-brown blur, like a stain of dried blood, standing against the road with a thin screen of blown snow suspended between it and me, the full weight of the vehicle and the thirty-four children in it bearing down on me like a wall of water. And I will remember the formal clarity of my mind, beyond thinking of choosing now, for I had made my choice, as I wrenched the steering wheel to the

> right and slapped my foot against the brake pedal, and I wasn't the driver anymore, so I hunched my shoulders and ducked my head, as if the bus were a huge wave about to break over me. There was Bear Otto, and the Lamston kids, and the Walkers, the Hamiltons, and the Prescotts and the teenaged boys and girls from Bartlett Hill, and Risa and Wendell Walker's sad little boy, Sean, and sweet Nichole Burnell, and all the kids from the valley, and the children from Wilmot Flats, and Billy Ansel's twins, Jessica and Mason—the children of my town—their wide-eyed faces and fragile bodies swirling and tumbling in a tangled mass as the bus went over and the sky tipped and veered away and the ground lurched brutally forward. (34-35)

All these scenarios depict the actual damaging events. My story was of an assault, Rabe's was about an injured soldier being dumped on his family against both parties' wishes, Joseph's was about a soldier's hand being bitten off by a tiger, and Banks' was a deadly bus crash. All are different traumas, but they are all directly discussed when telling a true trauma story and trying to capture its surrealness.

The direct aftermath of trauma is the next big piece of the true trauma puzzle. Here there are always a lot of questions. Who did what? Where and why did this terrible thing happen? Could it have been prevented? Denial and a consequent state of stasis follow immediately after the traumatic event occurs. After my assault, I sat on my steps with my phone in my hand, which still wasn't connecting. I was trembling, a detail I know only from my neighbors telling me so; I was unaware of it myself. These two women had come running over after the truck left, phone pressed to the older woman's ear. Apparently, the older woman and her daughter had witnessed everything from across the street. Within ten minutes, an ambulance arrived with two paramedics; they proceeded to examine me as gently as possible. I couldn't tell you their names or what they looked like, but I do remember the two cop cars that showed up. The officers interviewed me and helped me into the ambulance. One of them became frustrated with me; I guess I had started to cry, and he couldn't understand me. Just as I hadn't been aware of the trembling, I wasn't aware of the crying either. The one thing I remember clearly from their questioning was that one of them loudly yelled at me in the back of the ambulance, "You know who did this to you! I can't do anything unless you name him." While he was right about knowing who caused it, I had never seen the men that carried out the deed before that day. I told him as much. I remember him storming out of the back of the ambulance before we left. The ride to the hospital is a black hole in my memory, but by the time I arrived, I was aware of every punch I had taken; I could also feel a large chunk of meat missing from my right heel. I was taken to a secure room in the Emergency Department. My parents arrived and grilled me, hoping for answers just like the officer. I didn't have any answers for them either, which made them furious, so, naturally, my mother started screaming at the officer on scene. By then I recognized him. I had called the cops about my ex-boyfriend several times; this cop, now standing in my hospital room, had always sided with Alex. When I had been thrown across a room, this officer had told me there was no witness and that my bruising could be from anything. He had failed me, so my mother was firing off questions mixed with insults just long enough for him to threaten her with disorderly conduct.

After that came the nurses with so many more questions, but my head was out of it again. I didn't have much to say; maybe I just couldn't. Between the cops, my family, and the friends who had to be called to get my dogs for me, I was swimming in an ocean of questions, most of which I had no answers for. I hadn't even processed the events myself; how could I possibly answer them for someone else? Here we have my best attempt at expressing the immediate aftermath of my trauma. It was a surreal whirlwind.

This chaos is mirrored by David Rabe. When the initial denial passes for the family of the character David in *Sticks and Bones,* we see the same flurry of behavior. David's mother hurtles questions at him and becomes flustered by his answers if she doesn't ignore them altogether (Rabe

106–08; act 1). Sometimes, the flurry of questions doesn't come from the outside world. In the case of Nichole Burnell, the only surviving child of the bus crash in *The Sweet Hereafter*, the flurry of questions was her own. She couldn't remember the crash and she didn't know the fate of her bus-mates: "But what about the other kids? I really need to know.... How come I'm lying here in the hospital with tubes stuck in me and my body all numb. How come I'm not dead too?" (Banks 169–70). Either way, the flurry of questioning comes, as does the temporary numbness and confusion, so it is important to include them.

One must not forget to include the everlasting damage of a traumatic event. My personal damage is still developing, but I can tell you that I know how to clear my house tactically, and I carry a gun, legally, everywhere I am permitted. If my dogs start barking frantically, and I know I am supposed to be alone, I spring for that .45 caliber pistol with such speed and fluidity that, sometimes, I frighten myself. I was never able to live at my home again. I sold it. It was somehow violated for me. I never felt safe there anymore, and I couldn't open my front door without seeing a shadow in the corner, even though it was never there again. There is permanent damage to my jaw socket from the impact of a fist, and I am terrified of the idea of dating anyone again because I will never know for certain what that person could do. I came out strong enough, but there is an anger in me now that wasn't there before, and a fear that every person who steps too close is going to be one of those men that attacked me.

Judith Herman, author of *Trauma and Recovery*, speaks of hyperarousal in Chapter 2 of her book (35–36). The concept of hyperarousal is essentially a state of over-the-top awareness of one's surroundings. There is a very good argument to be made that my now-automatic reflex to reach for my gun and begin sweeping the house fits her description of hyperarousal, as does my almost inability to sleep, my overall constant vigilance regarding any surroundings I find myself in, and my lack of trust in anything or anyone.

In the other books, lasting damage is more easily identifiable. Tom, who lost his hand to the tiger in *Bengal Tiger at the Baghdad Zoo,* ends up needing a prostitute because he can't masturbate with the hand he still has. During this encounter, Tom hallucinates a conversation with his dead friend who was there when he lost his hand. (Joseph 42–52; act 2, scene 8).

In *The Sweet Hereafter*, long-term damage is evident in the personality changes of his characters. The charismatic hometown hero, Billy Ansel, becomes an alcoholic. Nichole Burnell, a popular cheerleader before the accident, is permanently wheelchair-bound, and Dolores, the dutiful bus-driver, never drives bus again. The town, Banks shows, becomes a desolate and somber place.

Lasting effects are seen again in Rabe's *Sticks and Bones*, as the discomfort and shock of having their golden son returned incomplete never settles with the family. It escalates and becomes even more traumatic. The ending is open to a bit of interpretation, but the way I read it, they killed David because they couldn't handle living with him. He was moody and guilt-wracked for leaving the girl he loved behind. Her ghost haunted him, and he never learned to live with the regret.

If writing a true trauma story, one must ensure that all four parts are present. They work together to tell a true trauma story. Anyone can be subject to a traumatic event at any time. It can happen on a sunny day in a happy town to amazing people, and it will change everything. In my case, although it is far from the worst trauma, that assault cost me. It took a certain sweetness out of me. I am more cynical. I view people with a skepticism and weariness that didn't used to exist in me. I am more than willing to end another life, when before I always thought there was another route. I may be alive, but the daughter my parents raised, the mother my son loved, the friend, the lover, the employee, the everything about the woman I used to be changed. Fundamentally. Irrevocably. I feel things differently now on the rare occasions I do feel. That is the point of trauma. This is what all authors, myself included, try to give to others; it is a gift of understanding the permanent life-altering changes produced by true trauma stories.

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Confucian Values in East Asian Economic Development

Bijesh Gyawali

Braun Award for Excellence in Writing
in the College of Arts and Behavioral Sciences, Category 1
& Ming Chuan Multilingual Writing Award
Nominated by David Nichols, Associate Professor of Philosophy

Bijesh Gyawali, who is from Kathmandu, Nepal, received his bachelor of business administration in economics from Saginaw Valley State University in May 2020, graduating *summa cum laude*. A member of the James Buchannan Fellowship at George Mason University, Bijesh looks forward to pursuing a graduate degree in economics in Fall 2020 and a career in public policy upon completing his graduate studies.

Bijesh wrote this piece for his East Asian Philosophy class (PHIL 215), which is an introduction to the culture, arts, and history of the East Asian Region. As a part of the class, students explored the philosophical and religious ideas of Confucianism, Buddhism, Daoism, and Shintoism, and their relevancy for contemporary lifestyles in spite of modern and global challenges. Bijesh decided to write about Confucianism in particular because he was interested in studying East Asian society through the prism of the past and learning about Confucian values and the roles in East Asian economic development.

Bijesh notes the biggest challenge of writing this piece was reading through the voluminous writings of Confucian scholars and synthesizing the ideas for an academic audience. Through this challenge, he learned that one must read good writing to be a good writer. Reading good writing, he says, prepares one to clearly articulate ideas, which is ultimately very helpful in the writing process.

The rise of East Asian economies over the past thirty years has mesmerized the world and has garnered attention and inquiries to help explain the phenomenon. Since the 1960s, Asia, the largest and most populous continent, has witnessed faster growth than any other region of the world. The impressive rise of East Asian economies, like those of Japan, China, and the four Asian Tigers (Hong Kong, Singapore, Taiwan, and South Korea) since the closing years of the Cold War compared to countries like Canada, Scandinavia, and Israel over the same period merits attention (Kaplan, 2015). China's fast-paced economic growth has lifted millions of people out of extreme poverty, which has led to a renewed interest in its decision-making models and the Confucian values that are believed to underlie it. The usage of the term "Confucian values" needs a bit of explanation since many scholars point to German sociologist and political economist Max Weber's *The Protestant Ethic and the Spirit of Capitalism* (1905) to show the incompatibility of the Confucian ethos and rational entrepreneurial capitalism. However, many critics challenge this notion by pointing out the "economic miracles" of East Asian countries. Although traditional Confucian values may have been an obstacle to the development of modern capitalism in these countries, select Confucian ideas like the emphasis on thrift and hard work, respect for education, and respect for authority have proven useful in the economic development of East Asian economies.

Moreover, Japan's case of economic stagnation in recent decades has raised many questions about the values inherent in the Confucian legacy.

Before we delve into the role of Confucian values and their impact on the rise of East Asian economies, let us look at what Confucianism is exactly. Confucianism is the system of philosophical and ethical teaching propounded by Confucius. Confucius is the Latinization of "Kong Fuzi," or Master Kong, who lived around 2,500 years ago in the northern Chinese state of Lu during the waning days of the Zhou dynasty (Kaplan, 2015). The oldest record of his life and ideas are found in the *Analects*, a book containing the fragments of his conversations with his disciples. The late professor Irene Bloom from Columbia University makes an interesting symbolic reference that sums up Confucian values: "The Confucian value system may be likened in some ways to a tripod, which is one of the great vessels of the Shang and Zhou Period and a motif that reoccurs in later Chinese art" (Three Confucian Values, n.d.). Each one of the three legs of the vessels represent a key value of Confucian teaching and is active in Chinese culture and the ethos of broader East Asian civilization. Three crucial concepts in Confucian value systems are *xiao* (filial piety, or respect for one's parents, elders, and superiors), *ren* (humaneness, or the care and concern for fellow human beings), and *li* (ritual consciousness, or the rules of proper behavior in the society), which together are supposed to shape a person's psyche and moral consciousness, and to assist one in dealings with the vagaries of the world.

With a sustained average annual growth rate at 10%, the rise of the "Asian tiger" impels us to look beyond the economic and political in the cultural context. Generally, economists and political scientists have tended to support the role of economic and political institutions to help explain why East Asian countries were able to achieve successful economic development. However, a balanced view is needed in combining all three approaches (economic, political, and cultural) to offer meaningful insight because none of them alone provide a complete explanation. Put differently, it is less a question of what set of factors is most conclusive and more a question of how these factors worked together. The founders of many modern Asian states—South Korea's Park Chunghee, Taiwan's Chiang Kai-shek, Singapore's Lee Kuan Yew—were consciously Confucian and often relied on the Confucian rulebook as they navigated their societies through the rigors of modernization (Kaplan, 2015). These countries have seen the manifestations of enlightened authoritarianism and corruption as a by-product of embracing Confucian ethics, which has slowly evolved into parliamentary systems, and have accountable democratic institutions.

Confucian educational thought and practice have had a far-reaching impact in China and other East Asian countries such as South Korea, Japan, and Singapore that has led to their educated workforce. Dr. Charlene Tan (2017) brilliantly captured this idea in her assertion that Confucian pedagogical culture adopted by East Asian countries places a premium on education, high social status, respect for teachers, student attention and discipline in class, a firm grasp of foundational knowledge, and repeated practice. These countries not only share relatively similar wealth, but their views on education have allowed them to be among the top countries in the global educational rankings of the Organization for Economic Co-operation and Development (OCED). Succeeding in school is culturally stressed, which has had an enormous impact not just in terms of gaining and developing cognitive skills, but also inculcating Confucian ideals of *ren* through *li* so that students can realize and broaden their *dao* (way). This approach provides an industrious, technologically competent, productive, and internationally competitive workforce conducive for attracting foreign investments.

Another feature of the Confucian ethos is frugality, which has long been seen as a virtue in China and elsewhere in East Asia. According to Chinese Global Television Network ([CGTN], 2018) thrift and diligence are described as essential elements in Confucianism and traditional Chinese habit. The data from the World Development Report (1993) on Economic Growth in East Asia showed that domestic savings and investment in high-performing East Asian economies like those of Indonesia, Singapore, Japan, South Korea, and Malaysia, were significantly higher than in other countries worldwide (Bhanoji, 2001). Little has changed over the past three decades as this

trend still seems to continue. East Asian countries are among those with the highest savings rates, adding up to 35% of GDP ("Excess Asian Savings Are Weighing on Global Interest rates," 2019). Asia's high saving rate has substantially contributed to capital formulation and allowed countries to invest in modern technology. The role of technology is vital in the economic development of East Asia because a highly skilled workforce learned to use technology faster and more efficiently, which then enabled them to play technological catch-up with the Western countries. Therefore, the thrifty attitude and fiscal prudence translated into enormous sacrifices in consumption and leisure, which was conducive to accumulating a massive amount of labor and capital needed to boost export-oriented industries.

The Japanese abandonment of Confucian values of thrift and diligence in the late 1980s led to a burst in the economic bubble created by asset prices. In the decades following the end of the Second World War, the Japanese devised an amazing economic formula for rising from the ashes of the war to achieve astonishingly rapid economic growth (Suleski, 1999). With the help of foreign aid from the U.S, the Japanese developed infrastructure and set up highly productive industries, such as those in automobiles and electronics, and became the world's second largest economy from 1968 until 2010 (Kollewe & McCurry, 2014). The period between roughly 1985 and 1990 was a prosperous time in Japan. Propelled by the cheaper dollar, prowess in manufacturing, and a sense of confidence that came along with economic strength, Japanese individuals and corporations were buying overseas assets like Rockefeller Center in New York and golf courses in Hawaii and California (Johnston, 2009). The Bank of Japan lowered interest rates, while the bank's lax lending practices enabled firms and individuals to obtain real estate, speculate on the stock market, or easily purchase assets, which created an asset price bubble in the economy that burst as the decade of the '90s began ("Lessons from a 'lost decade,'" 2008). The frugality and austerity that marked the country after the post-war era became marked by opulence, extravagance, and conspicuous consumption. Nostalgically, those who remember the days of the bubble era see it as a moment in Japan's history when the country deviated from its Confucian morals and cultural values and became greedy and lavish in a Western sense of the term (Johnston, 2009).

Meanwhile, after the bubble burst in Japan, misguided government policies wedded to the Confucian notion of deference for authority played a role in the longest-running economic stagnation in Japan's history, dubbed as the Lost Decade. The problems seem to be that Japanese society had assembled a set of economic policies that worked so well to build a prosperous nation but failed to hold politicians and bureaucrats accountable for the country's economic quagmire. As a result of the bubble burst, Japan's economy suffered years of economic stagnation and price deflation, leaving Japanese banks and companies full of bad debts. Even though the government was cutting interest rates and introducing fiscal stimulus measures like public works projects, these moves were not enough to revive the economy. One American economist recounted that Japan failed to clean up the banking system partially because, for a long time, regulators were in cahoots with the banks hiding their bank loans in opaque corporate structures ("Lessons from a 'lost decade,'" 2008). More than two decades after the economic crisis, Japan is still reeling from the effects of the Lost Decade as the country's new prime minister, Shinzo Abe, navigates his way to address chronically low inflation rates, decreasing worker productivity, and a rapidly aging population (Breene, 2016).

East Asian countries like Japan, China, and Singapore have had some striking economic success linked to their Confucian heritage. The conventional wisdom derived from the theory of Max Weber's work asserts that the traditional Confucianism was a drag on the economic development, while selected Confucian values like hard work, frugality, and education helped create an environment conducive to the thriving ways of modern capitalism. In the decades following the Second World War, Japan was a beneficiary of Confucian values, which helped in its economic development by encouraging hard work, frugality, diligence, education, and loyalty on the part of the individual to companies and on the part of all groups and individuals in society to national goals. At the same time, the utilization of Confucian-derived values like loyalty and

deference to authority was detrimental as political and economic institutions enjoyed unquestioned obedience, which led to the financial debacle of the past two decades. Rather than critically examining the idea of earlier generations and coming up with creative responses to current problems, Japan, a country largely influenced by centuries of Buddhist teachings, failed to realize its enshrined wisdom, that change is the only permanence in life in solving its lingering economic malaise.

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Life at the Margins: An Anthropological Study of Bedouin Liminality

Melanie Ross

Braun Award for Excellence in Writing
in the College of Arts and Behavioral Sciences, Category 2
Nominated by David Nichols, Associate Professor of Philosophy

Melanie Ross is from Royal Oak, Michigan. She graduated from SVSU in May 2020 with a double major in sociology and criminal justice, and a minor in religious studies. In 2018 she traveled to Israel on *Birthright Israel*, where she developed an interest in religious studies. On the trip, she learned about different aspects of Israeli culture and history, including traditional practices, pilgrimages, and the conflict between Israel and Palestine. One of the experiences she had there was staying at a Bedouin camp for one night, which is what inspired her to do an independent study with Dr. David Nichols.

She also traveled to India, on a trip that was led by Dr. Warren Fincher in Summer 2019. Traveling has opened her up to a larger world and will be a crucial part of her graduate studies and career. Melanie is now a graduate student at the University of Michigan–Flint and hopes to pursue a doctorate in the sociology of religion specializing in South Asia.

This research paper was written under the mentorship of Dr. David Nichols, who, Melanie stresses, was very supportive and helpful throughout the process. This research started with an independent study shortly after Melanie returned from Israel. The research consisted mainly of reviewing literature on different facets of Bedouin life each week. A common theme she found concerned Bedouin women and the struggle with keeping their identity in the face of modernity. This paper, which borrows the concept of "liminality" from anthropologist Victor Turner, will be presented in September 2020 at the Michigan Academy of Science, Arts, and Letters. Melanie hopes to publish the essay in an academic journal.

The Bedouin are a Near Eastern subculture of ancient origin, one that has always existed at the boundaries of wider civilization. As a result, the Bedouin have fostered a whole tradition of liminal existence. The liminal character and traditions of the Bedouin have been a magnet for some and a repelling force for others, and the marginality of the Bedouin is the very thing keeping others from understanding this complex culture. This paper clarifies what makes Bedouin life in the Fertile Crescent liminal, how that liminality is challenged by modern global forces, and what the Bedouin are doing in response to those challenges.

Victor Turner (1969) is an anthropologist who addresses liminality by identifying and applying three stages of rites of passage to rituals, pilgrimages, and other facets of human society. The first stage, separation, is the symbolic moment where an individual or group goes through a

detachment from a social structure or a set of practices. The second phase, marginality, is the liminal state. A highlight of this second stage is a feeling of being "betwixt and between." During rites of passages, the awkward feeling of this intermediary state is essential. It is a feeling of being nowhere in particular, "neither here nor there." The ritual participant is given an opportunity to react to the betwixt and between. Religious traditions propagate rituals for the sake of passing the ritual participant through this betwixt and between; when the subject is in the awkward intermediary state, ritual helps the subject navigate the awkwardness. In the third state, aggregation, the individual completes the rite and returns to the community, at which time the participant is expected to follow the practices and obligations that come with being in this new state (p. 94).

Certain people groups live within liminal zones their whole lives. Whereas Turner talks about specific stages, I would like to talk about a whole group that dwells perpetually with liminality for the entirety of its existence: the Bedouin. The Bedouin are such a people because of their peripheral existence; they live at the edge of conventional society. As I will explain, the liminality of this peripheral existence is exacerbated by modern global forces that encroach upon it. There are many Bedouin villages scattered across the Fertile Crescent, and although there may be minor differences between each Bedouin village, the cultures and practices are relatively the same. Whereas Turner tends to focus on the impact of rites of passage for a single tribal group, I expand the concept of liminality to extend to a wider marginal sphere, a liminal zone of existence that one or more tribes inhabit for a sustained period. This liminal culture literally sets itself apart from other cultures. I penetrate the sacred liminal core of the Bedouin in ways that expose their vulnerability to modern, global forces and at the same time show their ability to form meaningful polemical responses. My analysis passes from examples more holistically geared to their liminality to those more specifically aimed at existential issues of identity.

What is unique about the Bedouin is that they have a liminal identity, but even *within* the already liminal society of each Bedouin tribe there is yet another liminality. This inner liminality typically conflicts with an otherwise homogeneous way of life. The outer liminality of the Bedouin tribes is perpetual, the long result of a tradition cultivated for how to live at the margins. In fact, the Bedouin have lived at the margins of civilization, cherishing their own oppositional traditions, for as long as they can remember. They are heterogeneous with respect to the modern world that always besets them, and yet they use this marginality to re-establish themselves with their own homogeneity—the homogeneity of those who are betwixt and between. In other words, they are heterogeneous in their relationship to the modern world, comfortable only at its margins, but there at the margins, they find their own homogeneity—the homogeneity of those who are betwixt and between. In Bedouin societies, rites of passage are very important to both individual and group identity; they allow for the individual to reestablish himself or herself as truly Bedouin.

When the members of a marginalized group feel that their special liminal existence is being threatened, they sometimes respond antagonistically. Societies may become polemicized as a result of tensions having built up to a point where direct action seems unavoidable for the sustained existence of the marginal group. The perpetual liminality of a group like the Bedouin, which has prided itself on being a peaceful refuge and a model for coexistence, now turns polemical. Just as Turner found a rich source of creative power in the "limen" or marginal moments of human life, so too the Bedouin keep drawing, even now, upon their perpetually liminal way of life for creative answers in the face of modern adversity. Their liminality is their power to *be*—and their being must remain, insofar as possible, heterogeneous with respect to the modern world that besets them. In the following pages, I use several examples of this power to keep Bedouin identity intact, some of which have been more successful for the Bedouin than others. Each example of identity struggle is complicated in its own right, and in all of these instances, the Bedouin inhabit a charged atmosphere where they feel compelled to make a decision, either for assimilation, which results in the death of their Bedouin identity, or for resistance, which results in a polemicization of what it means to be Bedouin.

When Israel gained independence from the British, this created a need for making policy changes. Multiple wars took place on Bedouin land, forcing a migration to the Negev. With the idea of the Bedouin moving into the city, the government has been trying to persuade the Bedouin to assimilate by making living conditions harsh. For the Israeli government, an ideal situation would include the Bedouin moving out of their traditional refuges and migrating to an Israeli city. However, the city would be in conflict with the Bedouin tradition, culture, and belief; the city would be loud, the Bedouins would have difficulty maintaining their nomadic lifestyle, and the group's much cherished solitude would be in danger as Bedouin tribes would be forced to live together. In response to this coercion, the Bedouin group identity has often become highly polemicized. By being part of the modern experience, Bedouin have become their own marginal class. They face the option of assimilating and becoming part of the modern world, but at the cost of living much differently than in their traditional societies. The last resort is to stay in their traditional civilization and continue to fight the government for their land.

The Bedouin are losing their opportunities to sustain an authentic liminal experience, as they are increasingly forced to succumb to modern pressures. The result is a perpetually liminal existence whereby a tradition of liminality is threatened with respect to its defining characteristics. If Bedouin are continually pushed out of traditional societies to live in the city, will the Bedouin tradition eventually vanish? If they decide to move into the city, they will be out of sorts, and not be able to live their nomadic lives. They might then feel marginalization within the city, but not the traditional marginality that supported their freedom. Additionally, while the younger generations might succumb to the modern pressures, the older generation might continue to be devoted to the traditional lifestyle as much as possible. As a result, tension might take place between older and younger generations. Fitting Bedouin into urban landscapes would be a significant change.

Preservation of Bedouin Life

As the Bedouin find themselves challenged by modern global forces, what is seemingly essential or most "Bedouin" about them will need negotiation and quite likely, courageous ingenuity. Will the Bedouin still have tradition and their practiced cultures? Some practices that are traditional in Bedouin civilizations may not be allowed in the city. Women might be more willing to move out of civilization so that they can have more respect, which, in turn, might bother the men. The old generation is likely to worry about the Bedouin civilization dissolving. The threat of extinction stemming from the insatiable hegemonic forces of globalization cast a shadow over the Bedouin. Their marginality is even more acutely felt now as a precious artifact of the ancient world, too expensive to maintain. In fact the Bedouin find themselves, more than ever, at the crossroads of modernity and tradition—in a pressurized betwixt and between: some people will attempt to enter into Bedouin life for the sake of escaping modernity, only to find out how difficult it is to assimilate; other people may exit Bedouin life, into the modern world, only to find how difficult it is to retain the timeless traditions.

A common experience Bedouin families have experienced is economic hardships due to the pressure to keeping the Bedouin tradition. Zeidan al-Sheba, a Bedouin in the Fertile Crescent, had lost multiple jobs due to wars, forcing him to move. Although moving is typical for the Bedouin, it was worrisome for Zeidan al-Sheba, because as the patriarch of the family, he was expected to be the provider. His jobs, which consisted of working for an oil company and working on ships, were geographically significant. Although he had his orchard on Israeli land, which fed him and his family, he was still on a low income. Wrinkles, scars, and a toothpick kept between his eyebrows and cheekbone to keep his eye open, however, gave him an exotic look and attracted tourists. The Israeli government sent him to a big hospital, to give him surgery on his eye. It was a way to modernize him, even if it seemed sympathetic to him. Although he had the chance to move himself and his family to the city, he decided to go back to the Bedouin civilization, where he now maintains his liminal existence (Lavie, 1990, p. 45). While at first he was dependent on his

perpetual liminality, or at least the look of it, to attract the modern world, al-Sheba felt he was struggling to maintain his liminality in a deeper authentic sense. His only other option would have been assimilation. In this case, he could have assimilated by stereotype or else by welfare. Both of these lifestyles would conflict with the Bedouin who have little interest in the modern lifestyle. Perhaps al-Sheba needed a third way to stay authentically Bedouin while maintaining his financial stability. With tourists paying him to take pictures, he was reduced to selling his liminality to get by. Although he made money this way, he was still in contact with the modern world. What he really needed, one could argue, was a way to go polemical with his marginality.

Many traditions exist in Bedouin life, and another is poetry. This practice, ancient in origin, belongs to both male and female contributors. They help explain the social role of Bedouin life, and the law and order that takes place in Bedouin societies. Poetry can even be an important avenue for Bedouin women to express important truths about their liminality. One Bedouin example (Rainey, 2016) from the United Arab Emirates—so admittedly, a bit further afield—is that of a woman named Shamsa, an 80-year-old widow. She was married from 13 years of age and gave birth to a son and four daughters, one of whom died. Two of her daughters still live with her, as they are unmarried. Shamsa's father was a religious leader, fluent in Arabic, who knew the Qur'an. Shamsa became a famous poet in her city, but her poetry remains unpublished. Her writing speaks to the beauty and solitude that is experienced in the Bedouin tradition. Her poems speak to the tradition she believes in, centered on providing food for her herd and her guests. The keywords in her poems describe her views on Bedouin life (p. 12).

Shamsa's formal poetry ties her to rural Bedouin life and speaks about what is worth preserving—namely, its rugged independence. Elizabeth Rainey (2016), reporting on Shamsa's unpublished work, says that she "celebrates the rural idyllic pastoral lifestyle. Shamsa evokes the ties to the earth that the Bedu enjoy along with their independent spirit" (p. 12). The poetry revels in the raw freedom of Bedouin marginal terrain and makes use of symbols like the bird that desires to go home. In a poem recorded in 2012, Shamsa is "Happy in the trees' shadow, amid full bird song / Would hear thunder's ring and full lightning sparkle, / Watering country, town and Bedouin" (as cited in Rainey, 2016, p. 12). Shamsa's description speaks to the way she feels about Bedouin life, the betwixt and between her involving the pastoral lifestyle. Even the form of the poetry is malleable and meant to be highly flexible, reminiscent of Victor Turner's dictum of betwixt and between. The style is very open and favors the independent creativity of the poet. Shamsa has found her voice as a Bedouin woman; she has capitalized on an opportunity to polemicize that marginal existence against modern, global encroachments.

One can find other such Bedouin poems now in collections, like that of Clive Holes and Said Salmon Abu Athera, which is entitled *Poetry and Politics in Contemporary Society*. One of the poems, "Prison in Israel," speaks about the tension between borders. It typifies a growing sense of desperation among the Bedouin and relates that on the Israel-Sinai border, there was a man whose camel had crossed over from the Sinai. He went to the Israeli side to retrieve his camel, and for doing so, he was arrested. The poem speaks to the poor treatment he received from the police officers and in prison. It includes the poverty he experienced while in jail and the torture he received, which was exacerbated because he was from the other border. While in prison, the author of "Prison in Israel" recorded in his poem "Deprived of food and tortured—that's how low my life has sunk. And tell them that I'm tied in chains, my feet, my hands as well, and tell them they poured ice on me as I lay in my cell" (as cited in Holes & Athera, 2009, p. 71). Holes and Athera included "Prison in Israel" because it emphasizes the circumstances between the Israel-Sinai border. According to them "Prison is in any case no shame (*ma hu im'irrah),* but rather the price a man pays for doing what real men have to do" (p. 71). The author of "Prison in Israel" makes a difficult decision polemical; this is because in Bedouin societies it is looked down upon to speak about the unfortunate aspects of the lifestyle. Poetry that is written by the Bedouin can be a way of protest and also reflective. Where Shamsa speaks to the beauty and solitude of Bedouin life, other poems speak to world affairs, politics, and poverty.

Assimilation into Bedouin Life

People outside Bedouin societies who want to become Bedouin might have a hard time being accepted into Bedouin territory. Marguerite van Geldermalsen (2006) was traveling through Greece, Egypt, and Jordan with her friend Elizabeth, and while in Jordan, they passed through Bedouin territory, when she met Mohammad. At first Mohammad's family was hesitant about an outsider with a Western, non-nomadic lifestyle coming into a Bedouin camp. It took a while for his family to warm up to her—and even for her to warm up to his family. She had to get accustomed to the Bedouin lifestyle. It seems that his family was understanding that the practice was new to her, but eventually she felt that she should start learning the duties and play her part in the Bedouin society. Although she became a Bedouin, she still struggled to maintain her individuality. In fact, Marguerite found that she had to work to keep her individuality. She learned the difference between the jobs of men and women. Because she came from a place where there was less pressure to live so traditionally, she had expected that she would have more freedom. The couple was not easily accepted, and they had to prove that they were truly Bedouin. One can join a perpetually marginal group like the Bedouin, only to find oneself pushed to the very margins of their traditional project.

On the outside looking in, people might be more attracted to the Bedouin life insofar as the lifestyle holds out the poster image of a perpetual pilgrimage. To some it holds out the promise, nostalgically, of an "essential" primitive Jewish existence. The Bedouin tradition, after all, has been around since Biblical times. The Biblical characters have passed on but remain sacred in the Bible. Moreover, the Bedouin tradition might be a way to fill the gap and connect with symbolic ancestors. People who are Jewish but live in Western societies might feel a sense of not-belonging, and being able to live like their ancestors did might give us a better understanding of history. Certain practices, after all, often make people feel a sense of belonging. While ritual traditions might help with the feeling of being lost, some people might want to go on a pilgrimage or perform a different tradition that brings a better sense of value. Given that the Bedouin tradition is Biblical, Jewish people might try to assimilate to Bedouin life and make a pilgrimage out of the experience for a better connection with the ancestors.

Yet assimilation can prove harder than expected, according to Yael Zerubavel, author of "Memory, the Rebirth of the Native, and the 'Hebrew Bedouin' Identity." Zerubavel (2008) describes the experience of Russian Jews who wanted to connect with Biblical forefathers and therefore went to live in Bedouin society as "Hebrew Bedouin." They were unfamiliar with the environment, yet they knew this was the way life was practiced in Biblical times. Besides, the Russian Jews were no strangers to being marginal, as they were already marginalized as Jews in Russia. With the image of the Hebrew Shepherd being the ultimate goal, they wore the Kafiya, which is the traditional Hebrew dress. These dresses made them look and feel more traditional, which was very important to them. Wearing the Kafiya made them feel homogenous on the land. Being able to live this anachronistic lifestyle enabled these individuals to belong more fully to their religion. However, the Bedouin, who already lived in this society, were not very welcoming to the Russian Jews. The Bedouin had been settled there for many generations, and when individuals moved from a new, Western society, the Bedouin were skeptical of them, but being able to live in a Bedouin society gave these Russian Jews a feeling that they were fulfilling their purpose in Judaism. Traditionally, there was no electricity, so being able to go to the desert and live without electricity gave them a feeling of liminality, thereby confirming their religion. These Russian Jews had found their truth; they were connecting with something original, something Biblical, what seemed to them like an essential historical connection. They had found a way to step out of their challenged minority existence, armed with the new romantically charged Jewish-Bedouin identity. When they came into the Bedouin society however, it was awkward for the traditional Bedouin surrounding them because they felt that their sovereignty was being challenged. The modern outsider, typically viewed as a threat, had come in. The Russian Jews wanted to be recognized, so they made their own Hebrew dress. This way the people would know who they were and where

they came from. The problem with the Russian Jews giving up everything was that they already had an identity, a modern identity. In reality it was difficult for the Russians to become members of the Bedouin society.

The Feminine Margin of Bedouin Life

The female Bedouin are interesting for liminality's sake because of the irony of that liminality. Bedouin women are commonly pushed to the periphery of Bedouin society, as a marginalized group within a larger marginalized group. The normative expectations for them require strict traditional order—precisely the opposite of Victor Turner's limen. With the world changing so quickly, the Bedouin might feel more pressure to change their ways and become more modern. What keeps the women there, women who live such a limited life? In a traditional Bedouin home, the man has the say in the house, while the wife is often thought to be at a disadvantage. Women typically do not have a choice in who they want to marry. The father has the say, and so does the husband-to-be. If a woman does not like the man she is going to marry, she sometimes goes into hiding, or refuses to marry, which can come with consequences. If the husband is no longer satisfied with the woman to whom he is paired, the husband and wife often get divorced.

The gender roles found in Bedouin societies are in place to keep social order. Men and women are separated in public. They should not be amorous outside of their home, only behind closed doors. When they are in public, men and women keep themselves distanced, and they are more than likely with other families. Women are in charge of cooking, caring for the children, and taking care of the home, while the men are herding the livestock and conducting other pastoral nomadic labor. When men come home from long days, they expect to be cared for by the women, and the women are expected to fulfill this obligation. Men and women live rather separate lives, but both working to be able to live and support their family.

Women in Bedouin societies have three stages that they go through (Westheimer & Sedan, 2009). They start at a low status when they are young. At the age of 10, a girl's job is to help her mother around the house and with the herds. Her friends can only be girls from the same tribe. She cannot be in any contact with other men who are outside her family until she is married. The second stage happens when the woman gives birth. A woman's chance for a higher status happens only if she gives birth to many boys. If a woman has a son or multiple sons, the amount of respect people have for her is increased, because she literally grows the patriarchal society. If she gives birth to children who are girls, her status remains low. The people with whom she can socialize, however, expand now that she can socialize with her husband's family. The third stage is when the woman has reached menopause. She is taken care of if she has given birth to only boys. Her social status has expanded tremendously, and men can even come into her home when husband and children are away. At this point, if a woman has sons who are grown, she has the most respect and is obeyed as an elderly woman. If she did not have sons, her status remains, as noted previously, low; her social life does not expand, and she continues to be looked down upon (p. 30).

Al-Majnuna is an anthropologist who interviewed a woman who was an ex-wife of three husbands (Lavie, 1990). The woman was very vocal about her experiences. She made it clear to the people around her that she had been scarred emotionally (p. 126). When a woman is divorced, she is at the lowest of the low socially. Women are expected to maintain their role as a wife, and there is an expectation to follow the orders of husbands and sons including to cook, to clean, and to perform any other duty that the husband or son may want.

Many other pressures come with being a woman. At a young age, girls are expected to be circumcised. It is commonly believed that if a woman is not circumcised, she will grow male genitalia. At one point, when Al-Majnuna was observing the ritual, she had to take a break from being a researcher. The ritual was very difficult to hear about because of the two worlds of which she was part and the culture shock was paralyzing. If women are not circumcised, they are at risk for being held at a low status and never having the chance to move up. The rumor about the male

genitalia is taken very seriously in Bedouin societies. Men will not marry an uncircumcised woman. This myth reinforces the assumption that the male is the essential human. This also psychologically affects the women because they believe that the rumors are true (Lavie, 1990, p. 125). Women also experience liminality because men experience more power than women.

With the Western experience becoming more familiar, women might be more tempted to leave Bedouin society, especially if life outside of the Bedouin is less patriarchal. The men are expected to do what counts as the real labor, while the women are expected to do all of the housework and keep the men satisfied sexually. The feeling of liminality might be there because there is a world outside where they will not have these expectations. Women also might surrender to the Bedouin norms, deciding that this is how their life is supposed to be, just as it has been for centuries. As modernization becomes more familiar though, more and more Bedouin women might leave their tents to go try out a new lifestyle.

Sometimes, when a woman in the family has grown tired of living a sheltered life, and she feels she has been abused emotionally and physically, she protests against the patriarchal order and becomes labeled a "madwoman." Even by expressing her emotions about marriage, she is susceptible to the madwoman label. She becomes liminal because she is exhausted from living in patriarchal conditions, and she wants to show the public that she does not have any status in their society. The madwoman is looked down upon in her community, but she is willing to bear the punishment or embarrassment. Oftentimes, the marriage is painful and abusive, both physically and mentally, but it is even against the norm to talk about marriages because they are meant to be kept private. To keep shame from the family, the wife is expected to keep quiet about the conditions she is going through, so that the family is kept from embarrassment. The madwoman seems to correct liminality for Bedouin women in the sense of confirming Turner's expectations. Instead of giving in to the patriarchal society, she insists on her own order.

The madwoman is, at the very least, the marginalized woman standing at the edge of the already marginalized class of women, and this occurs within the perpetual liminality of Bedouin life itself. Women in Bedouin societies do not have much room to talk about what they go through. The madwoman is polemical. The very label of madwoman suggests rationality is the unfortunate exception to social order. What is madness to her critics is a badge of pride for her and a marker for the only perspective that ultimately makes sense of a condemnable patriarchy. Her madness simply is a rejection or refusal of the social fabric that coerces her to comply.

Conclusion

No matter what the gender, race, or origin is, Bedouins have had a liminal identity. They are betwixt and between in that they are pushed to the margins. With modern forces, the liminality is challenged when pressured to move into the cities. The Russian Jews and the madwoman are similar in that they have taken a course of action to cope with their liminal existence. When the Russian Jews and the traditional Bedouin feel that their liminal existence is being threatened, they become polemicized. The Russian Jews went polemical even by making their own Kafiya. The traditional Bedouin felt that their territory and identity was being threatened by the Russian Jews because the latter were exposed to modernity in Russia. The madwoman and Russian Jews are also similar in that they are both perpetually liminal. The madwoman is marginal within the marginalized group. It is outside of the law and order for a woman to speak about her feelings. When a woman has been divorced, she no longer enjoys prestige. The Russian Jews are liminal because they have a different identity than the traditional Bedouin; the madwoman is liminal and polemical because once she has expressed her feelings, she is no longer a conventional Bedouin.

As these aspects of Bedouin life show, examples of perpetual liminality are not difficult to find for the Bedouin. They go polemical because something causes them to make a rough decision: they are either going to rise to the occasion to maintain their identity, or they can crumble before modern society's coercive forces for assimilation—and this rising and crumbling may occur in the

"real world" or on the page; no matter the circumstance, the Bedouin people are forced to look for a way to fight from and for their liminality.

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African American English: Origins, Structure, and Attitudes

Caroline Helmstadt
Braun Award for Excellence in Writing in the College of Education
Nominated by Natalia Knoblock, Associate Professor of English

Caroline Helmstadt is from Bridgeport, Michigan. She started at SVSU in Fall 2018 and is majoring in English education, minoring in history education, and seeking an endorsement in social studies. In addition to her academic pursuits, Caroline works as a tutor at SVSU's Writing Center. Caroline partakes in writing as a hobby and is often inspired by the outdoors; she has had poetry published in the community arts journal *Still Life*.

"African American English: Origins, Structure, and Attitudes" was written for Language in Education (ENGL 370) taught by Dr. Natalia Knoblock in Fall 2019. As the final project for this course, Caroline had to research a topic, write a paper, create a related teaching assignment, and present her findings to her class. Through the course of the semester, she feels she developed more strongly as a writer and gives particular thanks to her English professors Dr. Knoblock and Dr. Elizabeth Rich, as well as the Writing Center staff. As a future educator, Caroline finds the topic of African American English to be important and particularly relevant, as she believes education should be all-inclusive.

Abstract

All people speak a dialect whether they recognize it or not. However, some dialects, such as African American English, are stigmatized due to social connotations. African American English was developed when slaves being brought to America from Africa needed a way to communicate across language groups. Despite common knowledge of this historical fact, competing theories—the Anglicist and Creole hypotheses—have emerged to address the specific development of African American English. Another point of discussion is that although African American English has a well-defined structure, although it is spoken by many African Americans, and although its use of auxiliary verbs offers further insight into those competing theories of origin, speakers of this dialect often face discrimination; they are at a disadvantage, particularly in the field of education, as most schools and educators do not recognize and support African American English as a valid dialect. To combat this, some teachers and researchers are searching for ways to support this dialect and eliminate the stigma linked to it.

Many dialects are spoken around the world. In fact, every person speaks one. However, some dialects are viewed more negatively than others because of the social constructs that have been created surrounding them (Reaser, Adger, Wolfram, & Christian, 2017). In America, one such dialect that faces discrimination is African American English. African American English is spoken by many Americans, and the stigmatized weight that it carries is one that appears incredibly difficult to shake. People cannot always help the way they speak as it is an integral part of their lifestyle and how they grew up, and to be penalized for such a thing is problematic. If language and dialects are simply part of how an individual speaks and grows up, why then are the speakers of the dialect known as African American English often deemed incompetent and lower on the social ladder?

The answer is built into a long and wearisome past for African Americans as they faced much discrimination and many hardships throughout American history. Today, that past still influences the racist viewpoints and beliefs that are held by much of the Caucasian majority in America. When African Americans speak African American English, they will often be singled out and looked down upon. African American English then, unfortunately, serves as fuel for the discrimination and, ultimately, misunderstood beliefs held by the majority in America for decades. Those beliefs are not isolated only to America, however, and they are also not limited to a specific time period. The beginnings of the social constructs and views towards African Americans go far back. The history of African American English is a tale borne of pain and slavery, and although African American English eventually developed into a well-structured dialect of its own that is currently spoken across America, African American English unfortunately still carries a stigma today.

History of African American English

The origins of African American English are rooted in the horrific institution of slavery. Despite the general acknowledgement that this practice caused the development of African American English, controversial theories surround the mechanisms of that development.

The Slave Trade

The history of African American English reaches far back to the days of the Atlantic slave trade. Slaves were taken from Africa primarily to the Americas to work, especially to the American South where there was a huge boom of agricultural industry. A considerable number of Africans were forcibly taken from their homes and shackled into the slave system. In addition to this, because the incredible size of the African Continent, the slaves were from different regions of Africa and thus did not share a common language. For slavers, this mixing of Africans who did not share a common tongue was done with strategic importance. In "A Sketch of the History of Black English," Dillard (2008) includes a statement from slave ship captain William Smith in 1744 that describes the vast number of African languages spoken by the slaves and how the purposeful mingling of those languages occurred to prevent slaves from succeeding in any plot to take over the ship. Additionally, in an article titled "Do You Speak American?," the authors relate a slaver's lack of interest in the linguistic structures of African languages and the difficulties of documenting early development of African American English; they note that slave traders were hardly thinking of documenting their exploitation of human cargo for the historical record (Torbert & Wolfram, 2004). Slave traders were merely interested in economic gains and increasing their own personal wealth rather than the moral significance of the humans they were treating as property and the languages they spoke. Because of the vast variety of African languages spoken among slaves and the lack of historical records documenting their speech, a few theories have emerged to address the development of the dialect known as African American English.

Theories about the Development of African American English

Many researchers who study linguistics acknowledge the roots of African American English being derived from slavery; however, they disagree about how the dialect has been shaped into what is spoken today (Baugh, 2006). Two main theories have speculated on the development of African American English: the Anglicist theory and the Creolist theory. According to one source, the Anglicist theory states that African American English developed much like other European American dialects of English. The source assumes that slaves learned the dialectal varieties of the English spoken by their white masters in whatever region they resided. In contrast to this, the Creolist theory considers African American English to have developed out of the native languages originally spoken by slaves (Torbert & Wolfram, 2004). Creole languages develop when people

who do not speak the same language need to communicate with one another, which is what would have happened with the slaves since they spoke varying languages based on tribe and region of origin. However, according to an article in *Southern Quarterly,* slaves would have developed a pidgin language first; a pidgin language is one that is created by individuals to communicate with people who speak other languages, and that new pidgin language or dialect contains elements of the different original languages spoken. A pidgin language can only persist, however, if it is passed on to future generations. The Creolist theory considers that to have happened with slaves and African American English. As slaves were on plantations in the Americas, communicating with each other and eventually having children, the pidgin language that they spoke was passed on through their families, thus becoming a creole language (Dillard, 2008). In terms of the Creolist theory then, that creole language is now known as the dialect of African American English. Although it seems there is more evidence supporting the Creolist theory, especially considering the logical flow from pidgin language to creole language, Torbert and Wolfram (2004) acknowledge that it is difficult to know for certain which theory is true because not many documents from the slave trade era focus on the speech and language development of slaves. Despite the uncertainty of the exact developmental patterns of African American English, it was clearly a significant part of slaves' lives as the dialect survived centuries and is still spoken around the United States of America today.

Structure and African American English

As African American English has been able to persist throughout American history, the dialect has, unsurprisingly, many specific features and structures that mark it as its own. To understand the core of African American English structure, one must examine syntax, or the way sentences are formed. As part of syntax, auxiliary verbs help make up the sentence construction of African American English. Auxiliary verbs are essential to understanding the dialect of African American English, especially when one is considering the theories surrounding the development of the dialect.

The Development of Auxiliaries

Many studies have been done on language development in children. However, very few studies have been conducted regarding African American English development. Auxiliary verb development studies are especially lacking (Newkirk-Turner, Oetting, & Stockman, 2016). To gain a better understanding of auxiliary development, Newkirk-Turner et al. (2016) researched the issue while also looking for dialect-universal and dialect-specific effects in terms of auxiliaries. In their study, they found that the initial production of auxiliaries, especially "be," "do," and modal forms, occurred between the ages of 19 and 24 months. The children's forms were initially restricted to simple syntactical constructions, but as they got older, their usages were expanded. Furthermore, in their study, Newkirk-Turner et al. discovered that in terms of developing auxiliaries, children demonstrated both dialect-universal and dialect-specific effects. For dialect-universal effects, children demonstrated similar developmental patterns at the same age, such as the use of "be" initially being restricted to simple, contractable forms (such as "I'ma gonna go there") before being expanded to include some uncontracted forms (such as "And he was feeding my pet"). In contrast, a dialect-specific effect that was found was the overt marking of "be" by older African American English-speaking children that varied by type of surface form and by type of succeeding verbal element. The results of this study are important for raising awareness over the lack of research done about African American English while also offering valuable insight into the developmental patterns of auxiliaries within the dialect. Furthermore, the study establishes African American English as a specifically structured dialect that can function as a valid form of communication. However, understanding the overall development of auxiliaries in African American English is

only a portion of structure, as various auxiliary verbs have specific meanings and patterns in sentence construction.

The Auxiliary "Be"

In terms of syntax, the usage of the word "be" as an auxiliary is frequently noticed as a pattern in African American English. As with any dialect, varying differences exist regarding structure and syntax of African American English depending on what region of the United States the speaker is from (Bender, 2000). However, according to one article summarizing Wolfram and Thomas's "The Development of African American English," the past tense form of "be" has been mostly regularized across the variations of African American English (Baugh, 2006). "Be" is utilized in African American English sentences to refer to something that generally happens or is a recurring, habitual action (Reaser et al., 2017). For example, sentences such as "They usually be happy when they go to the movies" and "She always be running late to school" demonstrate the common usage of "be" in African American English as habitual. The inclusion of the words "usually" and "always" indicates that the actions being performed by the subjects in the sentences are done frequently. African American English then adds "be" to emphasize the recurrent action (Reaser et al., 2017). Furthermore, this form of syntax represented in "be" is important when looking at the theories surrounding the development of African American English. The way "be" is used in the habitual sense is specific to African American English and thus fuels the debate surrounding the conflicting theories of the development of the dialect. Because "be" is not used in the same way in Standard English and African American English, this syntactical element seems supportive of the Creolist hypothesis. However, because "be" in African American English functions as a replacement for "am," "is," or "are" in Standard English, this could show evidence for the Anglicist hypothesis. In addition to syntactical elements, African American English's use of "be" has a special grammatical meaning. These speculations concerning "be" in African American English can further link the dialect to the debate about its origin. As Washabaugh (1980) states, in *Generative Studies on Creole Languages*, the use of "be" is either internal language change or borrowing: internal language change is markedly more drastic and typically involves motivation of some kind on the part of the speaker to convey a specific meaning, whereas borrowing is less natural to the speakers while simultaneously moving the construction of the sentences closer to the original form from which it was borrowing. It seems then that a case could be made for both the Creolist theory and the Anglicist theory by looking at internal language change and borrowing as evidence. These considerations of the specific origins of "be" further demonstrate the complex controversies surrounding the developmental theories of African American English.

Attitudes towards African American English

Although African American English has developed into a dialect with a defined syntactical structure, it still carries a stigma. This is especially an issue in the field of education. However, despite negative views towards African American English, movements for acceptance of the dialect exist.

Stigmas Associated with African American English

Negative social connotations surrounding African American English can be harmful to speakers of the dialect in many ways. African American English speakers may face discrimination when applying for a job, be perceived as less intelligent, and develop a negative self-concept. At the root of this issue is education and the way speakers of African American English are treated in the classroom. To get to the core of this issue, researcher C.D. Weinraub (2015) conducted a study concerning the perceptions that educators had of their African American English-speaking students.

Weinraub noted that despite 80% of African Americans speaking African American English, the dialect does not receive the respect it should. Additionally, most schools do not even recognize the dialect. In his study, Weinraub observed classrooms (typically middle school ones), examined lesson plans, and interviewed teachers. At the end of his study, Weinraub found that most teachers rarely pursued any interest in or knowledge of African American English, even when the teachers were educating a class of mostly African American English speakers. This creates an issue for students speaking the dialect: they are at a disadvantage because many teachers lack interest in learning more about the dialect and how to accommodate dialectal structures into their lesson plans. Students' self-concepts may suffer as a result as well: they are likely told that the way they speak is wrong because most educators fail to acknowledge the legitimacy behind their dialect. Unfortunately, this stigma surrounding African American English is deeply engrained in societal connotations and a long history of discrimination towards African Americans. That stigma is difficult to combat.

Efforts towards Acceptance

Although a longstanding stigma surrounds African American English, some researchers are making efforts to ensure that the dialect is being accepted—especially in the field of education as classrooms are becoming more diverse. To address the need to look at dialects in a neutral light, in the article "Speaking Up for African American English: Equity and Inclusion in Early Childhood Settings," researchers Margaret Beneke and Gregory Cheatham (2015) proposed the strategy of practicing equity and inclusion to help teachers accept African American English in their classrooms. Beneke and Cheatham argued that moving towards an equitable and inclusive classroom setting is beneficial to students because it creates a learning environment where children feel nurtured and welcome. When this occurs for children from diverse racial and linguistic backgrounds, they experience more positive social and academic successes. To that end, these researchers noted that teachers should set high expectations for African American children and provide them with positive attention to encourage academic success, to honor African American children's cultural background while including the family as a resource to maintain their cultural identity, and to encourage children to investigate challenges within their own communities to develop a critical consciousness. These practices would help develop classrooms that are more accepting of African American English speakers and eliminate many of the consequences that occur when educators have negative perceptions of speakers of the dialect.

Unfortunately, barriers to implementing these acceptance techniques still exist due to deeply engrained social beliefs (Beneke & Cheatham, 2015). Because of this, the work of proponents of African American English is far from over. In fact, to counter the stigma, some educators have considered labeling African American English speakers as being bidialectal due to the need for speakers to be able to code-switch between their dialect and Standard English. These researchers studied whether most educators recognize and honor bidialectalism in students and found that they often do not, thus putting students who speak African American English at a disadvantage because their dialect is not properly acknowledged. To support bidialectal students, these scholars contemplated the importance of building on African American English speakers' communication styles. This is done with the intention of teaching those students to better switch between written and oral communication forms that they will encounter—code-switching, they maintained, is a skill that such students will need if they wish to be successful in navigating American society (Boutte & Johnson, 2013). These techniques in the classroom would overall be helpful in supporting African American English-speaking students; they could face less discrimination in their lives as well as build a more positive self-image of themselves rather than be told that the fundamental way they speak is wrong. Again, this is especially important because African American English is a structured dialect spoken by many African Americans around the United States.

Conclusion

African American English is a complex dialect due specifically to its origins. The history of African American English has roots in slavery, and although it eventually developed into a well-structured dialect of its own that is currently spoken across America, African American English unfortunately still carries a stigma today. Although most critics agree African American English developed as a result of the slave trade, the conflicting Creole and Anglicist theories have emerged to address the precise formation of the dialect. What is not debated is that as the dialect developed into one that was well structured, patterns—especially in terms of syntax—came into being and can be studied. Auxiliary verbs as a part of syntax, for example, offer insight into the developmental theories of African American English. However, auxiliaries further complicate supporting either theory over the other. Furthermore, although African American English is a structured dialect, it carries a stigma that can negatively affect speakers, especially in the field of education as many teachers and schools do not recognize the dialect and as students do not receive the help that they need to succeed in and out of the classroom. However, some individuals are working so that African American English becomes more accepted in schools. It is unfortunate that speakers of this dialect face such disadvantages simply because of their language use; after all, everyone speaks a dialect. Still, it is good to know that in the spirit of acceptance and equality that is associated with America, the wheels of change are spinning, and the future is offering a brighter outlook for African American English speakers. If these efforts at change are not pursued however, an entire population will continue to be ridiculed and be at a disadvantage, especially in the field of education, and education is a right that everyone should receive fairly and fully.

Related Teaching Activity

The objective of this teaching activity is to raise awareness in students of the dialect of African American English. Because stigmatized dialects are not often recognized or accepted, students must become familiar with the different ways that people speak and remember that all should be respected. In this activity, students will examine the history, structure, and stigma of African American English to gain a better overall understanding of the dialect. This activity is designed for students in grades 9 through 12.

The material with which the students will be working should be familiar to them. This activity will largely be a culmination of prior knowledge. Previously, students will have read literature of and about the Slave Trade era, such as portions of *Roots* by Alex Haley, and worked with grammatical structures. Applying this knowledge to African American English will tie these elements together.

Students will be broken into three groups and follow their group-specific instructions:

- Group 1: History
  Look up a primary source about the Slave Trade. Discuss and answer the following questions:
  - What new information about the slave trade did you find most interesting?
  - How was the language of the slaves addressed in your primary source?
- Group 2: Structure
  Listen to a clip of someone speaking in African American English. Discuss and answer these questions:
  - What features do you notice about African American English?
  - Are any of those features/structures shared by Standard English?

- Group 3: Attitudes
  Look up an article about attitudes towards African American English. Discuss and answer the following questions:
    - Are you surprised that there is a stigma surrounding African American English?
    - What can people do to combat that stigma?

Following this work, students should be prepared to discuss their findings with the class. This activity works because students are engaging in a little research of their own about the issue *and* discussing their findings with their peers. This activity helps to raise awareness about African American English while also combining elements from previous class sessions (the literature from/about the Slave Trade era and information about grammatical structures). This creates an overall cohesive unit for the class.

To accommodate English Language Learners, one modification for this activity would be to implement a content-to-strategy reading approach (Cary, 2007). With this approach for English Language Learners, students will be told why understanding African American English is currently important in that it applies to the way social constructs can affect individuals. Additionally, this understanding can be applied to other dialects. Furthermore, a modification for home-dialect speakers would be to support their dialect by encouraging bidialectalism and bilingualism in class by implementing usage of it as a normality (Cary, 2007).

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The Motherhood Penalty

Savannah Bruske and Crystal Schultz

Braun Award for Excellence in Writing in the College of Health and Human Services, Category Two

Nominated by Michael Heron, Assistant Professor of Social Work

Crystal Schultz is a third-year SVSU Honors Student from Sterling Heights, Michigan. She is pursuing a major in mechanical engineering with a minor in mathematics. Crystal is involved in Forever Red, Society of Women Engineers, and Hip-Hop Club. Additionally, she is a work-study student in the Dean's Office for the College of Science, Engineering and Technology.

Savannah Bruske is a third-year SVSU Honors Student from Saginaw, Michigan. She is working on a biology degree with the goal of attending pharmacy school. Savannah is a Wolohan Fellow at SVSU and plays in the Saginaw Area Concert Band; she also works at Growing Years Christian School and Child Care Center.

This co-written piece was done in Fall 2019 for Honors II (HON 292), a course with a focus on issues related to gender. The goal of this assignment was to analyze how gender and sexuality can impact students' future career choices. With an interest in engineering, a male-dominated field, Crystal recommended analyzing how mothers are treated in the workforce. Crystal and Savannah offer a special thanks to their professor, Michael Heron, for supporting their work.

Today, it is much more common to live in a household with two parents working full-time jobs than it was fifty years ago. Because people have become more accepting of women in the workplace, and because it has also become more difficult to support a family on the income of only one person, this has led to the common occurrence of mothers in the workforce. Although it is technically illegal to discriminate against women in the workplace because of sex, many employers get away with discrimination against mothers. In fact, research has shown that mothers in the workforce are often discriminated against simply because they are women with children. This discrimination is oftentimes based on unreasonable stereotypes that hold no real weight. Women with children are seen to have less human capital and education than their working counterparts, and they are consequently penalized for this through a variety of ways, including reduced wages, fewer promotions, and unfair hiring practices. Moreover, this motherhood penalty varies based on social status, the mother's age, the choice of motherhood, and the number of children.

Mothers in the workforce often experience a wage penalty and are prone to receiving fewer raises in pay than their working counterparts, whether male or female. One explanation for this is that mothers are considered a reduced investment in human capital. Human capital can be described as the qualities workers or employees possess that are valued due to their perceived economic worth, such as the training or education they have received in their area of expertise. Mothers have been perceived as possessing less human capital due to the idea that they cannot spend as much time working because of the time they are expected to spend with their children. According to this view of human capital, mothers' hourly wages diminish by about 5% due to the decrease in human capital (Staff & Mortimer, 2012). Mothers who receive pay through a salary rather than by the hour are affected as well, being offered, on average, a starting salary that is 7.4% (or $11,000) less than those of women who are without children and have the same credentials (Correll, Benard, & Paik,

2007). Many mothers are doing the same work as childless women, fathers, and childless men, yet it is assumed by many employers, as illustrated through salaries offered, that they are not deserving of the same pay.

Similarly, women with children are much less likely to be recommended for management positions and promotions than their coworkers. According to one source, women without children are 8.2 times more likely than mothers to be recommended for management positions. This source also noted that mothers have been deemed less promotable than women without children. Additionally, even though fathers have children and are working to provide for their families, they do not face the same discrimination or wage gap as mothers; the stigma of a lack of commitment to mothers' work due to time spent with children does not follow men in the same way as it does women (Correll, Benard, & Paik, 2007). The question of whether someone is male or female is a tipping point regarding parenting and the workplace.

The pay gap and the obstacles related to promotion and management roles are problematic because many women who are penalized for having children are not in positions that require any less effort than women without children. Additionally, employers often perceive that mothers exhibit a lower work ethic after having children when in reality they may work just as hard if not harder. The perception that they put forth less effort comes from cut hours that may result from taking care of children, which requires a lot of time and energy (Staff & Mortimer, 2012). Unfortunately, mothers who exhibit a strong commitment to their work are also discriminated against in other normative ways. They are reported as less likeable and more "interpersonally deficient" (Benard & Correll, 2010, p. 630). As Benard and Correll have explained, "normative discrimination occurs when employers discriminate against mothers because employers believe, perhaps unconsciously, that success in the paid labor market, particularly in jobs traditionally considered masculine, signals stereotypical masculine qualities such as assertiveness or dominance" (p. 617). These qualities directly contrast with such stereotypical qualities associated with motherhood as being nurturing and caring. Exhibiting "masculine" traits as mothers makes them seem unlikeable. If mothers are discriminated against for presumably being uncommitted to their jobs, yet discriminated against in a new way once they find a means to prove themselves in the workforce, how do they climb the ladder? The answer seems to point to not having children; however, that is not a choice that women should have made for them, and motherhood cannot always be prevented.

Multiple factors affect the severity of the economic consequences that mothers face, one of these being social status. High-wage, middle-wage, and low-wage mothers are affected by the motherhood penalty differently, and Glauber (2018) has suggested that this concept is not new; in fact, it has been around since the 1980s. The author concluded that during that time period, high-, middle-, and low-earning mothers received similar wage penalties. The source also stated that, since then, the motherhood penalty decreased for all earners but at different times and with different magnitudes. Glauber, for instance, noted the following trends. High-wage mothers in the 1980s made 4.3 times more than low-wage mothers. This number increased to six times more by the 2010s, and the wage gap between high earners and low earners is still expanding. The statistics from Glauber also show that in the 1980s, high-wage women experienced a 7% wage penalty. By the 1990s, this decreased to 5%. It again decreased in the 2000s to 2%, and in the 2010s it was considered negligible. High-wage mothers are most likely the ones able to afford the penalty, yet they experience the smallest penalty. In the present decade, the 2010s, Glauber found that high-earning women do not pay a penalty for having three or more children. This may explain why women in this financial situation have the most children (Budig & Hodges, 2010). High-earning women get the choice to have many children because they have enough money for it and do not have to worry about losing wages when returning to work. Budig and Hodges, however, suggested the main cause for the penalty amongst high-wage mothers is "lost human capital due to childbearing" (p. 705). The authors have also suggested that this accounts for over 50% of the penalty. It is understandable that mothers can be paid less when they are not at work because they

are not physically putting in work for a company. When returning from childbearing however, they deserve at least the same salary they had when they left because they have the same qualifications, if not more (as will be explained below).

Although there is not as much evidence regarding middle-wage mothers, it was found that in the 2010s, they experienced a 5% wage penalty for three or more children (Glauber, 2018). Other studies found a 10.3% wage penalty per child (Budig & Hodges, 2018). These numbers can make women hesitant about having children because it can cause financial issues for the family.

In contrast to middle- and high-wage earners, low-wage mothers experience the largest penalty. Their penalty did not start to decline until the 2000s, and today, low-earning mothers experience an 8% penalty for three or more children (Glauber, 2018) although that number is debated, as another study from this decade found a 14% wage penalty per child. The latter study suggested the reason for such a large penalty is tied to a lack of family resources and again that perceived issue of work effort. Mothers in the low-wage range often do not have family to turn to for childcare. Thus, jobs that provide flexible hours when childcare is an issue also contribute to the penalty amongst low-wage mothers (Budig & Hodges, 2010) because flexible jobs often do not pay much and do not offer benefits such as health insurance. Low-wage mothers are thus in a tough financial situation: they typically do not have enough income for childcare, so they must turn to flexible jobs that often do not pay as much, and on top of that, they experience the largest wage penalty. It is unacceptable that mothers who make the least are forced to pay the largest penalty.

In addition to the amount that mothers earn, the number of children may also directly impact the severity of the motherhood penalty. A recent study done by Kahn, García-Manglano, and Bianchi (2014) found that one child rarely hurts a mother's wages significantly. Moving up to two children reduces wages by 12 to 17%. Having three or more children results in a wage penalty, based on their financial situation, that will exist for a mother's lifetime. Additionally, Kahn et al. remind us that discrimination may occur in yet another way for mothers with three or more children: only 28% of these mothers are in the workforce.

Age, however, complicates all this. The study by Kahn et al. (2014) also noted that mothers face the penalty most often between the ages of 20 and 50. Thus, for about a third of a mother's life, they are experiencing unfair discrimination in the workforce with mothers at the lower end of the age scale facing the largest penalty. The study also found mothers in their 30s with two or more children face a large penalty. By age 40, no significant difference between the penalty experienced by mothers and women without children was found by the study, although women in their 40s and 50s with three or more children did experience a penalty. Kahn et al. explain, however, that the decline in the penalty typically occurs as mothers reach older ages with the following example: at age 52, mothers were more likely to be employed than childless women. (Normally by the time mothers reach their 50s, their children are old enough to take care of themselves. Often times, Kahn et al. noted, they are off to college or moved out completely.) The motherhood wage penalty is thus highly influenced by the mother's age, which often reflects the age of the children as well.

Age is also a factor linked to education. The highest education level held by childless women occurs around the age of 50; on the other hand, childless women at age 25 are found to be better educated with an average of 13.8 years of schooling compared to an average of 10.6 years held by mothers at this age (Kahn, García-Manglano, & Bianchi, 2014). Discrimination thus often occurs because employers find it more beneficial for their companies to hire those who are more educated. These details remind us that the idea of human capital is the largest factor in the motherhood penalty. Women without children are characterized by a higher human capital than women with children, because children are seen to take away work hours for mothers.

Another factor that can dramatically affect the motherhood penalty is the idea of choice; when motherhood is seen as more of a choice, mothers receive a much harsher penalty. One source found that viewing motherhood as a choice alters the perception of employers and increases the effects of the motherhood penalty (Kricheli-Katz, 2012). Kricheli-Katz also found that in states that receive more funding for legal abortions for low-income women, that have a higher abortion rate,

and that have fewer mothers overall, the effects of the motherhood penalty are much greater because motherhood is seen to be more of a personal choice that a woman can make. The author concluded that when being a mother is seen as "inevitable" and there are fewer options for women who choose not to enter motherhood, women with children are seen the same as women without children.

Discrimination against mothers surfaces in other ways. Women who had a job before becoming a mother normally return to that job; however, mothers looking for a new job face new obstacles. Employers are less likely to hire women with children because they are seen by many as less competent and committed than other women who are otherwise identical to them in their credentials and experience (Benard & Correll, 2010). In a study done by Correll, Benard, and Paik (2007), two different résumés were created for two women who differed only in their parental status, one being a mother. Mothers were reported as less competent by 10% and less committed by 15%. Participants in a similar experiment rated the mother as less "competent, committed, and worthy of salary and other rewards" (Benard & Correll, 2010, p. 618). Similar applications were sent to actual employers for job openings in this experiment, and mothers—identified as such through their volunteer work listed on their résumés—were called back about their applications half as often as women without children. These biased performance assessments have nothing to do with actual performance and everything to do with unfair assumptions about work ethic and ability.

Unfortunately, biases against mothers contribute to statistics like childless women being six times more likely to be hired than mothers (Correll, Benard, & Paik, 2007). To make up for this unreasonable stereotype that mothers are not committed, they must work harder to prove themselves. Correll, Benard, and Paik have even suggested they must exhibit greater evidence than others of their ability to be seen as competent. However, they cannot show too much competence if they want to be seen as a likable person, as previously discussed. Mothers walk a thin line, and it is unclear exactly how they can achieve all of their goals without facing some type of discrimination arising from arbitrary assumptions about their character.

All of these stereotypes point to the fact that mothers are expected to prioritize their children over their work, and because of this they are viewed as less productive in the workplace, making them less likely to be hired (Kricheli-Katz, 2012). They are just as productive as other women, yet employers seem to believe that putting their children first will interfere with their jobs. Although that may be true in some cases, it certainly has not been proven to be the standard. Women with children could have many assets that may be beneficial to a workplace—traits that they have acquired through motherhood, such as time-management, problem-solving, and communication skills. However, the odds are still stacked against them, and mothers must work hard to disprove the stigma. As a result, in contrast to employers' assumptions, women with children have been shown to have a greater work ethic (Budig & Hodges, 2010). Perhaps the work that it takes to care for many children at once helps mothers put more effort into their jobs because that is what they are used to doing; unfortunately, many employers have not come around to thinking this way as exhibited through hiring practices.

It has been shown here that when women bear children, they face many penalties. Fathers, however, do not face these same issues. In fact, although mothers are penalized, fathers are rewarded. The phenomenon that occurs when men become fathers and are offered a higher salary and more benefits is termed the fatherhood premium. In addition to this issue of salary and benefits, mothers are often held to higher standards than fathers as well. In fact, Correl, Benard, and Paik (2007) found that fathers were allowed to arrive late to work more often. When mothers were late to work because of the children, they were penalized; however, when fathers were late to work, it was considered nice for them to spend time with the children. Fathers are also seen by society as providers rather than caregivers, and employers see fathers as more committed and suitable for management positions. In fact, in a name study referenced in the same source, fathers were rated more committed than non-fathers by 5%. A reasonable explanation for this is that once a man becomes a father, he feels he needs to work harder to provide for his child. The authors found that

in the past, employers used to pay fathers a "family wage" to accommodate their breadwinner role. Legally, this wage does not exist anymore, and although the motherhood penalty has been decreasing over the years, the fatherhood premium has been increasing. The increase began in the 1990s, and by the 2010s, high-wage fathers earned a 10% fatherhood premium, and low-wage fathers earned a 5% premium (Glauber, 2018). Moreover, it is not just the issue of pay. Fathers are 1.83 times more likely to be recommended for management positions than non-fathers (Correll, Benard, & Paik, 2007). Some could argue that the fatherhood premium makes up for the motherhood penalty in traditional families with two working parents who are in a heterosexual relationship. These concepts, however, should be eliminated from society to make the workforce equal for both men and women: the motherhood penalty and fatherhood premium are both discrimination in the workplace.

Mothers are paid, promoted, and hired less, simply because they have children. Multiple factors affect the motherhood penalty including, but not limited to, wages, number of children, and age. A main cause of this problem is that employers view mothers as less productive after bearing children. Studies have shown, however, that mothers are just as productive, if not more, after having children. The fatherhood premium is almost the exact opposite in which men who have children are rewarded with a higher salary, lower performance standards, and management positions. They are also seen as more committed than mothers. Think about this the next time you see your own mother or any mother with whom you work. All women, with children or without, deserve the same wage and benefits as men. The motherhood penalty and all discrimination in the workforce needs to be eliminated to create equality for all.

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Effect of Ambiguous Gravity on *Drosophila melanogaster*

Natalie Delemeester

Braun Award for Excellence in Writing in the College of Science, Engineering & Technology

Nominated by Marie Cassar, Associate Professor of Psychology

Natalie Delemeester is a Saint Charles, Michigan, native with a biology major and chemistry minor. She will enter her senior year in Fall 2020, and once she graduates, she plans to pursue a career in family medicine. She is active on campus through her work at the Writing Center and in her role as a member of Women's Club Rugby.

This piece, which was written for Honors III (HON 392), is the proposal for Natalie's Honors thesis work with Dr. Gary Lange, professor of biology. Having so much agency in her research project, she notes that she had to do a lot of research to fully understand the topic, and with this assignment, she consequently learned of the value of a literature review. She says this essay was, in many ways, the most fun she has had writing in college because it was about something so intensely personal. Natalie notes, "Science is the process of conducting research and then defending why you did what you did and how you interpreted the results. In writing this, I felt like I was truly being a scientist."

Abstract

The scientific field has long recognized the relevance and applicability of using *Drosophila melanogaster* as a model test organism. These creatures have significant homology to humans, and their easily measured characteristics and short lifecycle make them ideal sources of study. Prior research and literature will be reviewed to give background for the proposed work to be done in Fall 2020: the effects of ambiguous gravity on the morphology and behavior of *Drosophila melanogaster* along with its relevance for the future of humankind in space. (Ambiguous gravity is here defined as a set of conditions where there is no constant direction of gravitational pull on an organism.) The construction of this environment and the methods of analyzing its effects will be explained in detail. The key tests used to measure and assess the morphology and behavior of the flies will be the rover/sitter test, adult climbing test, and pupation height.

Earth is on a path to rapidly become uninhabitable to its nearly eight billion humans. Human activities such as rampant pollution (including greenhouse gas emissions), deforestation, and exploitation of natural resources have worked in tandem to create an unsustainable future on planet Earth. Given the dismal future scientists are predicting for Earth, a renewed interest in exploring the possibility of life in space makes sense, for life in space would have a host of complications associated with it. One concern is the long-term effect of an ambiguous and low (or absent) gravity environment on the human body. A wealth of research exists on the effects of reduced and zero gravity conditions on organisms, but there is a conspicuous lack of research focusing specifically on ambiguous gravity. (The term ambiguous gravity refers to conditions in which an organism has no consistent point of reference for gravity because the environment is

constantly undergoing three-dimensional motion.) In this research project, the effects of ambiguous gravity on the behavior and morphology of *Drosophila melanogaster* will be examined.

Test Subject and Test Environment: Background Information and Rationale

Drosophila melanogaster, commonly called the fruit fly, has been used as an animal model for humans since Thomas Hunt first used the species in 1910 to examine sex-linked gene expression. The wild type of fruit fly has a head composed of six ancestral segments with red compound eyes, segmented antennae, and suctorial mouth parts. Its brown thorax is composed of three ancestral segments with six legs and one pair of full wings, as well as a balance organ called a haltere, a biological gyroscope evolved from a modified wing on the third segment. Its abdomen is formed from 11 fused ancestral segments and is primarily used for reproductive purposes. At the end of the abdomen is the ovipositor from which eggs are laid.

Drosophila melanogaster is a favored model test organism for a variety of reasons. These diploid flies have a relatively short lifecycle, produce many offspring (upwards of 100 eggs a day), and display fairly straightforward traits for identification and measurement. Their lifecycle consists of an egg stage, three progressively larger larval instars, a pupa stage, and the adult stage. *Drosophila melanogaster* also shows a significant level of genetic homology to humans. For instance, roughly 77% of known human disease genes have a comparable match in the fruit flies' genetic code (Molina, 2014), and 50% of fly protein sequences have mammalian homologs (Koren, 2012). This makes them a cheap and efficient test species to use with a clear applicability for human test subjects.

Although the intent of this research is to study the effects of life in space, benefits to conducting this work on Earth exist. For one, it eliminates concerns about the effects of the high g-force the flies would experience upon being launched into space. It is also considerably cheaper to do this work on Earth, as well as easier to set up control groups. In fact, much of the research that has been done in regard to absent or altered gravity has been done on Earth.

Literature Review

In 2011, the National Research Council issued a call for research focusing on identifying common alterations in gene expressions in model organisms in space. Meant to help predict the potential effects of life in space on humans, this call triggered an abundance of projects examining the effects of both reduced and absent gravity on fruit flies. Fruit flies, like humans and many other mammals, display a negative geotaxic response. (A negative geotaxic response means an organism will move against the pull of gravity. Roots of plants exhibit a positive geotaxic response.) Although some of the genes responsible for this geotaxis have been studied with the use of cDNA in work done by Toma, White, Hirsch, and Greenspan (2002), multiple factors affect this complex polygenic trait. As a result, more research has been—and still needs to be—done.

The National Aeronautics and Space Administration (NASA) has conducted and funded a significant amount of such research. In research done on the *Columbia* Space Shuttle in 2003, six groups of 50 male fruit flies, which had been incubated and raised on Earth until maturity, were sent into space. Two of the six groups were sent up in a 1-g centrifuge aboard the shuttle. All six groups remained in orbit for 15 days. This study found a significant increase in the walking speed and locomotor activity of the flies as compared to control groups studied on the ground (Hill et al., 2012). This research provided evidence that the conditions of space had likely affected the flies' behavior, but did not fully answer what really was causing the change. In an article by Koren (2012), she speculated that the g-force experienced during takeoff may have altered the flies in some fashion, so further research was needed to clarify the relationship between the locomotion observed and the gravity conditions.

Research done by Hill et al. (2012) in the United Kingdom clarified the aforementioned relationship by utilizing superconducting solenoid magnets to create a type of magnetic force that simulated weightlessness on Earth. This special type of magnetism, referred to as diamagnetism, works on biological materials such as water (as opposed to traditional metal-based magnetism) and can be used to balance out the force of gravity down to the molecular level. Creating these conditions on Earth enabled the study to be extended for up to a few weeks and to show cross-generational trends. The flies under these no gravity conditions were observed to have increased wing and leg movement rates as compared to a control group, just as the flies sent into space in the 2003 research did. This enabled Hill's team to confirm it was the lack of gravity causing the differences seen in the previous work. It is hypothesized that the more rapid movement may be a response to reduced strain on joints or perhaps an attempt to gain an orientation in space despite the lack of gravity, but further research is needed to determine the mechanism behind the change.

Additional research done by Ogena, Belyakin, and Sarantseva (2016) showed that prolonged exposure to microgravity conditions for five generations of flies led to increased transcription of metabolic genes but a lowered level of transcription of genes related to cytoskeletal organization, the plasma membrane, and morphogenesis. Corresponding research by Chen et al. (2019) looking into how microgravity conditions affect the formation and physiologic function of human cancer cells also yielded interesting results on the cellular level. The cells exposed to microgravity displayed increased cell aggregation, rearrangement of cytoskeletal elements, and early apoptosis (i.e., cell death). These studies show the relevance of examining the effect of gravity on a test organism because these changes can threaten the integrity of an organism and its ability to reproduce. Cytoskeletal elements such as the cleavage spindle and the contractile ring are essential for cell division and thus the organism's continued existence.

The previously mentioned studies indicate gravity does have some measure of influence on fly behavior and morphology, but metrics for these changes are a topic of discussion and depend on the scale of the analysis. One common test for evaluating fruit fly development and behavior is the rover/sitter test. This test is focused on the distance a third instar larva travels on the surface of a yeast-coated agar plate during a set time period. A larva that travels under a certain distance, commonly 8 cm, is considered to be a "rover," whereas a larva that travels under that is considered a "sitter." In landmark work done by Belle and Sokolowski (1987), it was shown that the rover and sitter traits have an autosomal basis (meaning the trait is not linked to the sex of the fly). Their work also offered proof that the rover trait had complete dominance over the sitter trait and that these traits were controlled by one gene. The rover/sitter test is one way to evaluate neuromuscular development through progressive generations of flies. Rather than merely classifying a larva as having the rover or sitter traits as previous work has done, researchers can assess and interpret the degree of difference in the amount of locomotion for further insight. My proposed research will do just that.

Work by Narasimha, Kolly, Sokolowski, Kawecki, and Vijendravarma (2015) also offered insight for another measure with which to evaluate fruit flies: larval pupation height. They found that flies often choose to pupate in soil or other media if given the time and resources to dig the necessary tunnels, but they will pupate above ground if needed. In their work examining the burrowing behavior of *Drosophila melanogaster* larvae, Narasimha et al. likewise commented on laboratory pupating behavior. They demonstrated 1) that *Drosophila* typically pupate on the walls of their container because the bottom is covered in food and 2) that the distance of larval pupation from the bottom is influenced by both genetic factors and such environmental conditions as light, humidity, pH levels, and fly density. It is helpful to note that in the work of Narasimha et al., constant darkness reduced the instances of larval embedment in the substrate. This observation is noteworthy because the rover/sitter test is best done with third instar larvae that can be obtained more readily from the side of the container; minimizing the burrowing activity of larvae then stands to offer benefits for both the rover/sitter test and the pupation height analysis.

When one is considering adult fly behavior, the work of Madabattula et al. (2015) is relevant. Their study quantitatively examined the role of neurodegenerative disorders on the climbing behavior of fruit flies, capitalizing on the negative geotaxis that the flies display. They measured the number of flies that climbed past a certain marker in their container during an allotted time period after being shaken to the bottom of the container. Limitations of this study included not being able to account for the flies' motivation and social interaction, as well as a lack of data about the larval flies' behavior. Madabattula et al. also noted that humidity caused the flies to perform less than optimally. Nichols, Becnel, and Pandey (2012) have acknowledged that adult climbing tests can be tedious, labor intensive, and take up quite a bit of time; however, given the nature of the study at hand, concerns about high throughput, or the ability to conduct many tests, are less significant.

The role of the halteres as a balance organ in fruit fly movement cannot be understated, and these biological gyroscopes have also been the source of much research. According to Simmons (2010), during flight these tiny clubbed vestigial wings beat just out of synchronicity with the forewings. They beat in only one direction, but if the fly undergoes a change in direction, voluntary or otherwise, the stem of the halteres will twist and trigger a dense nerve cluster attached to the stem. The fly is then able to respond to these signals to adjust its direction and altitude.

As a whole, past work on *Drosophila melanogaster* reminds us that, given the potential for humanity's future in space, researchers need to investigate the possible effects of space on the human body with a safe model species. Existing literature has shown that microgravity has definite effects on *Drosophila melanogaster*, a well-known test subject for pre-human trials. These effects include alterations in cellular-level functioning, such as reduced transcription of cytoskeletal elements, as well as alterations on the macro level in the form of higher rates of appendage movement. The need for research is clear; what remains is to decide what to explore first and how. The proposed research will focus on providing proof of behavioral and morphological changes in *Drosophila melanogaster* under ambiguous gravity conditions.

Proposed Materials and Methodology

The effects of ambiguous gravity on the *Drosophila melanogaster* will be examined over multiple generations and quantified using three tests: the rover/sitter test, the adult climbing test, and pupation height. For each generation of flies experiencing the ambiguous gravity conditions, a corresponding group of flies will serve as a control and be kept in the same room but *not* be put onto the ambiguous gravity-creating apparatus. Sample sizes will be, at a minimum, 30 flies from each generation for the sake of ensuring the statistical significance of the results.

Incubation

Previous SVSU students created a special fly medium capable of withstanding the continuous movement that the vials will experience. To create this mixture, deionized water must be heated until it boils on a heating plate before agar powder is added. For every 100 ml of deionized water, 1 g of dehydrated agar powder must be added. A stirring rod, roughly 3 cm long, can be used to mix the agar into the water. Once the water is boiling, the powder can be added and the heat should be reduced so that the mixture merely simmers. After approximately five minutes, as the agar fully dissolves in the water, 2.5 g of 424 media from Carolina Biological should be put in a glass vial. These vials are roughly 15 cm high and 3 cm in diameter. Once the agar/water mixture is fully dissolved, it can be poured into the vial at a ratio of 10 ml for each 2.5 g of 424 media. When they are first combined, a stirring rod can be used to mix the two mediums fully. This mixture should be given roughly five minutes to solidify fully. Once solidification occurs, five grains of Fleischman's active dry yeast can be placed on the surface of the media. When the proposed research is being conducted, each vial will be labeled with tape and identified by the date of creation

as well as the specific fly type used. A cylindrical sponge allowing for gas exchange will be used to plug the vial.

The flies will be transferred from pre-existing university cultures to the vials without anesthesia to avoid any potential for the chemicals used in fly anesthetizer to impact fly behavior or fertility. Each freshly prepared vial will be given between 10–15 flies upon creation. A maximum of seven vials can be loaded onto the tube rotator at a time. The rotations per minute will then be set at 3, and the Orbitron V on which the rotator rests can then be set to 2. After 72 hours, the parental, P_0, generation of flies will be released from both the control and experimental samples.

Rover/Sitter Test

Seven days after the cultures are created, the rover/sitter test will be administered. To help measure the distance traveled by the larvae on the agar plate, a hazy film will be created on the surface of the agar. To make this haze, a mixture of .5 g of Fleischman's yeast, 1 g of sugar, 1 ml of white poster paint solution, and 50 ml of double distilled water will be added to an Erlenmeyer flask and swirled. After being allowed to sit for 5 minutes, 2 ml of the solution should be placed on the surface of each agar plate with a disposable pipette, and the plate should be rotated to ensure the entire surface is covered (any excess can be poured off); the plate should then be left to sit uncovered to allow for a dry uniform haze to form. This will take around 5 minutes.

A third instar larva should be selected from the slide of the vial for use in the rover/sitter test. The larva can be retrieved with the use of a paintbrush or a microloop, and should be placed in the middle of the agar plate. The larva should be allowed to move freely for 5 minutes. At the end of those 5 minutes, the trail the larva made through the hazy surface can be measured (using a pre-marked string) to the closest centimeter. This process will be repeated with 30 flies from each group.

Pupation Height

Pupation height of all larvae will be recorded to the nearest tenth of a centimeter after Day 8, by which time all eggs and larvae should have pupated. Any larvae that have pupated in the media will be counted as having a value of 0 cm; however, these pupas are often hard to identify and count due to the opaque medium. Thus, consideration is being given to anecdotally noting the amount of side wall pupation compared to in-media pupation as a more subjective record on the part of the researcher. If interesting trends in the flies' preference for pupating on the vial wall or media begin to arise as the research is carried out, consideration will be given to observing this measure in an objective fashion to investigate the data to the fullest.

Adult Climbing Test

The adult climbing test will be administered to the flies on Day 14 as, by this point, the flies will have reached adulthood. To administer the adult climbing test, a climbing apparatus constructed by a prior student will be used. The apparatus consists of a set of thin tubes, approximately 1 cm in diameter and .76 m in length, supported at a 45-degree angle with wood. The adult fly will be corralled into the tube with the use of a large syringe. Once the fly is in the tube, a timer should be started for a minute. The distance traveled by the fly in that minute should then be recorded in centimeters. Five flies from each of the seven experimental vials and five flies from the seven control vials will be tested in this fashion.

General Notes

Throughout the duration of the experiment, any notes by the researchers are to be made in a notebook designated for this project. These notes will include when actions like clearing of the parental generation of flies will be done, as well as the data obtained. Notes may include observations about characteristics of the flies not originally intended to be examined, but that prove interesting. For example, if the flies' halteres change in any substantive fashion in response to the ambiguous gravity conditions, this may warrant further investigation.

Potential Data Representation

In this section, the raw data will often be presented in the form of a scatterplot with a line of best fit and standard deviation bars to further clarify the data being shown. An example of such a scatter plot focused on the mean pupation height is seen in Figure 1. The standard deviation markers will be used to indicate the range of data within each generation. In preliminary test runs, the pupation height of the control groups was fairly uniform, but the experimental groups had a much wider variation. The standard deviation markers will help convey this to the reader, as seen in Figure 1.

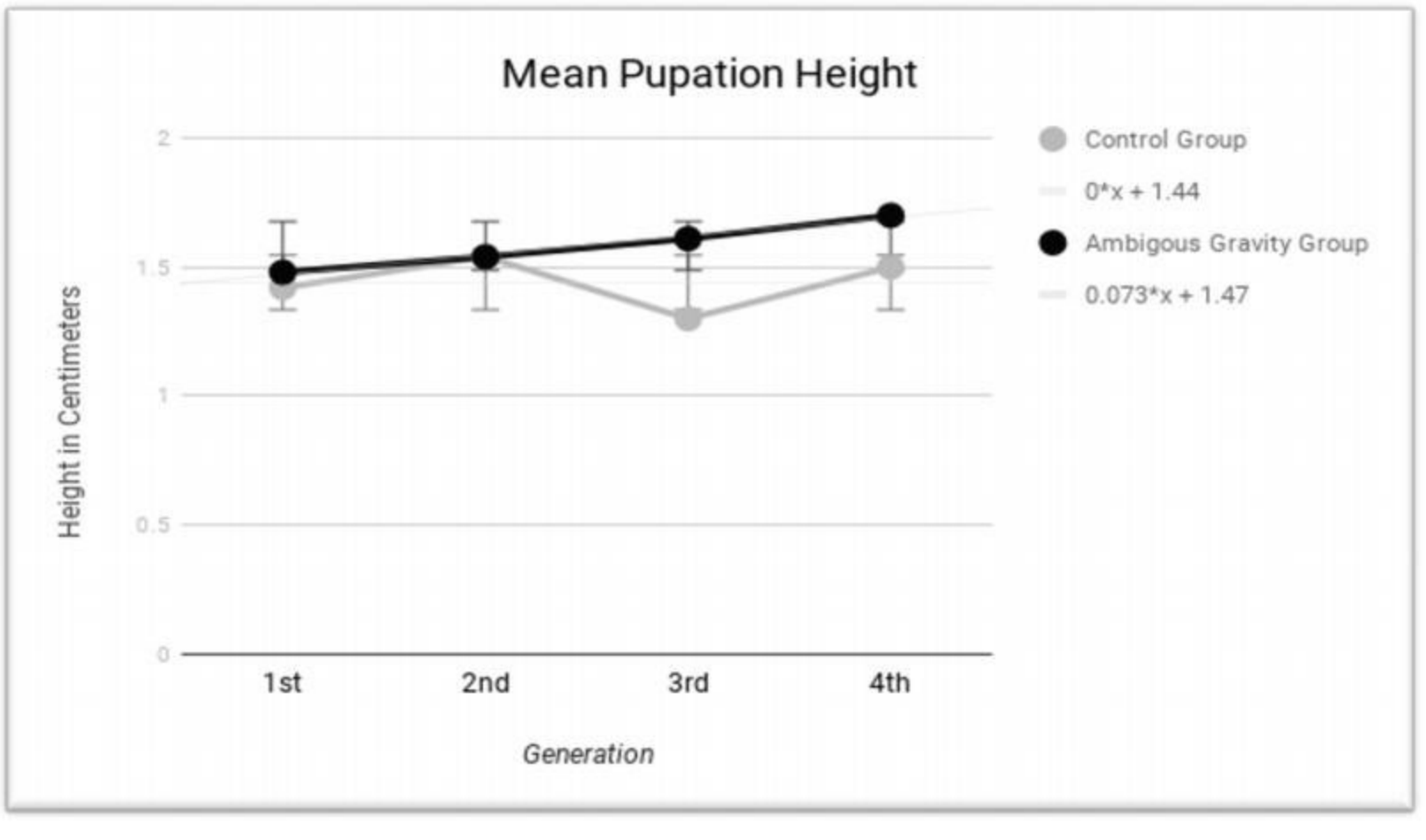

Figure 1. Potential comparison of the mean pupation height, in centimeters, of the control and experimental groups

Rover/sitter test data will be represented by a scatterplot showing how far the average larva from each group went, as well as a bar graph indicating the ratio of rovers to sitters from each group, as shown in Figures 2 and 3.

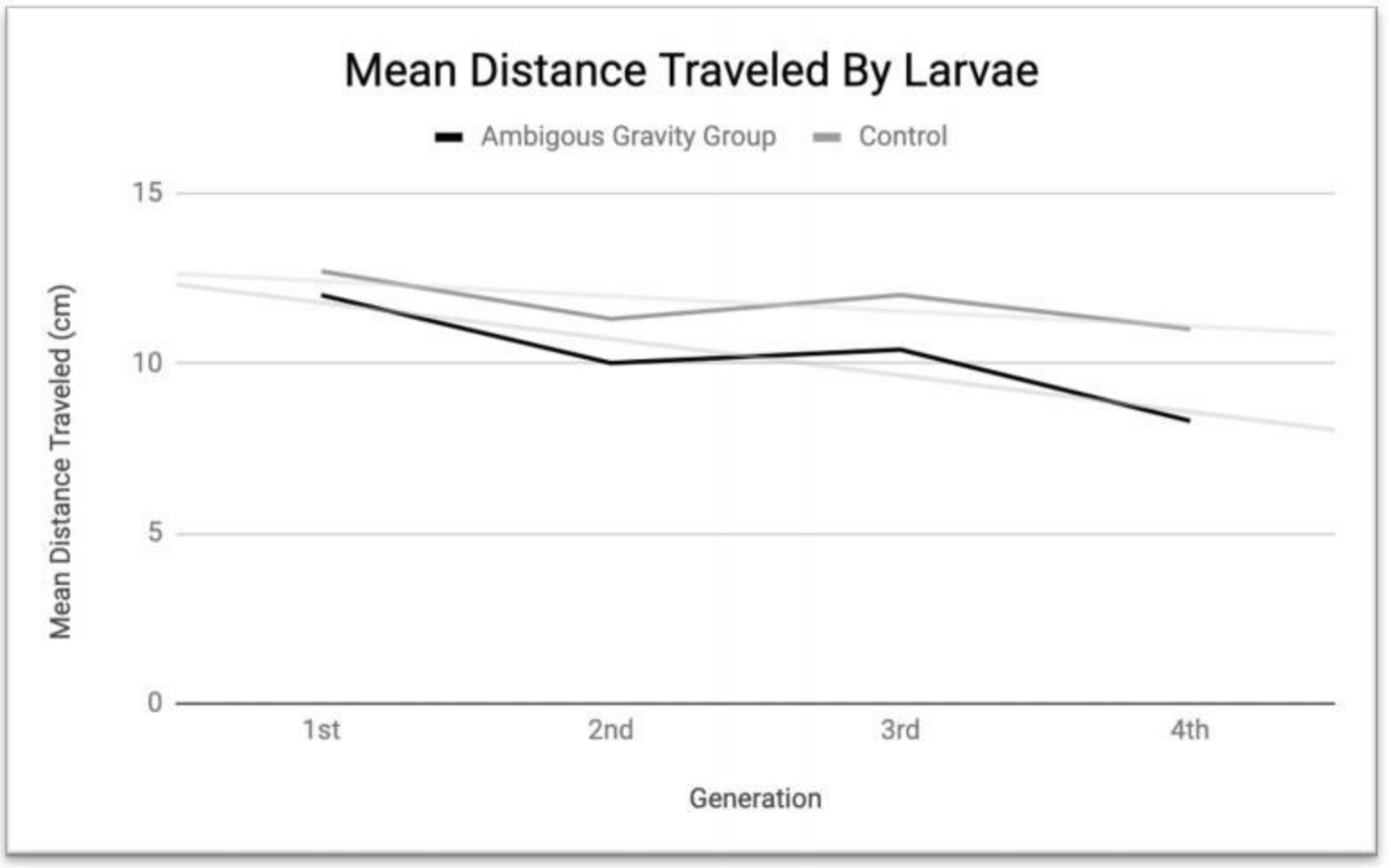

Figure 2. Potential way to show the mean distance traveled during the rover/sitter test for each generation

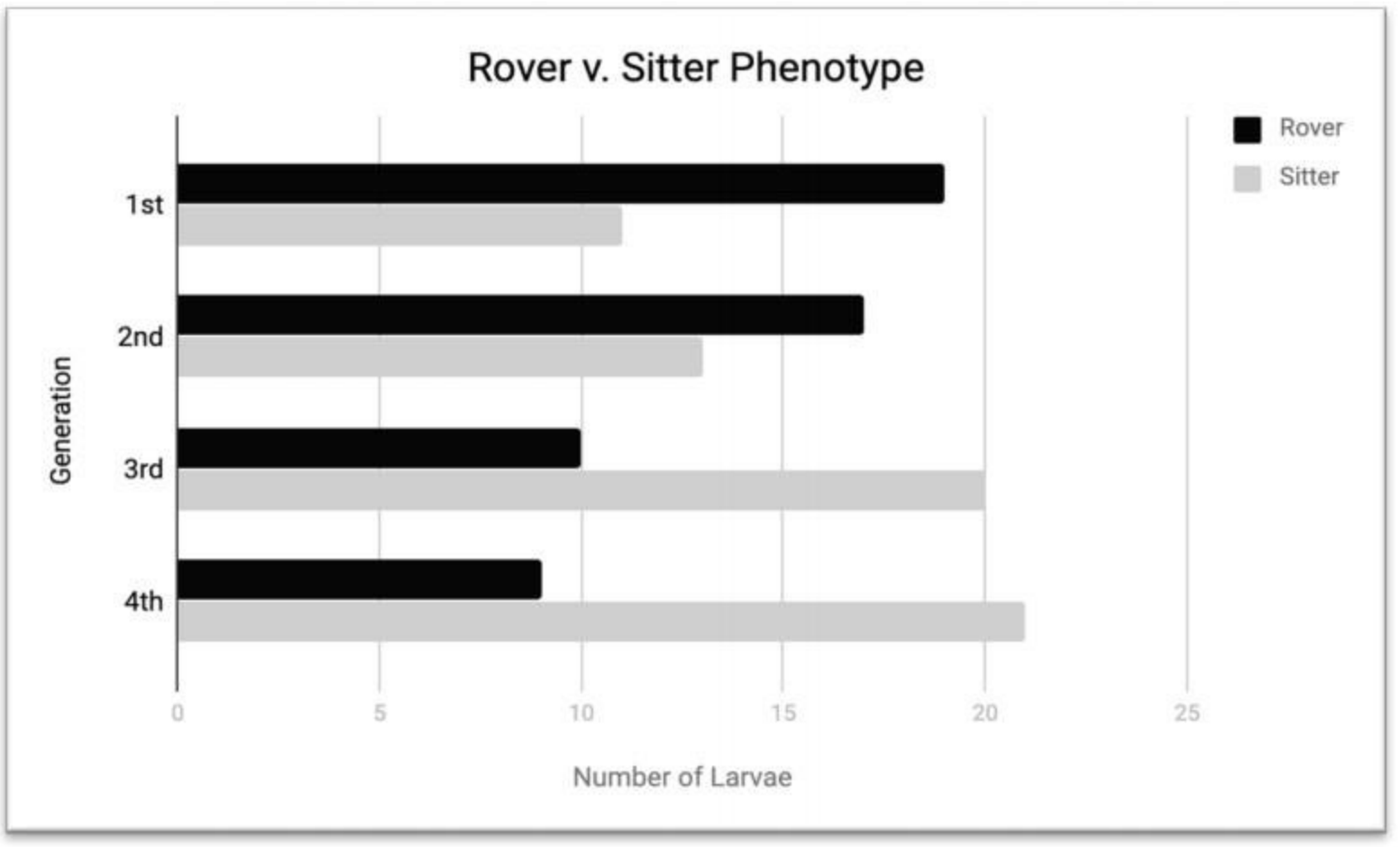

Figure 3. Potential comparison of the number of larvae displaying the rover and sitter traits in each generation

Data from the rover/sitter test will also be presented side by side with the adult climbing test to enable correlations in the data to be noticed more readily, as is shown in Figure 4. Average distance

traveled in the rover/sitter test for each generation will be displayed next to the adult climbing test data. This sort of graph will be made for both the control and the experimental groups.

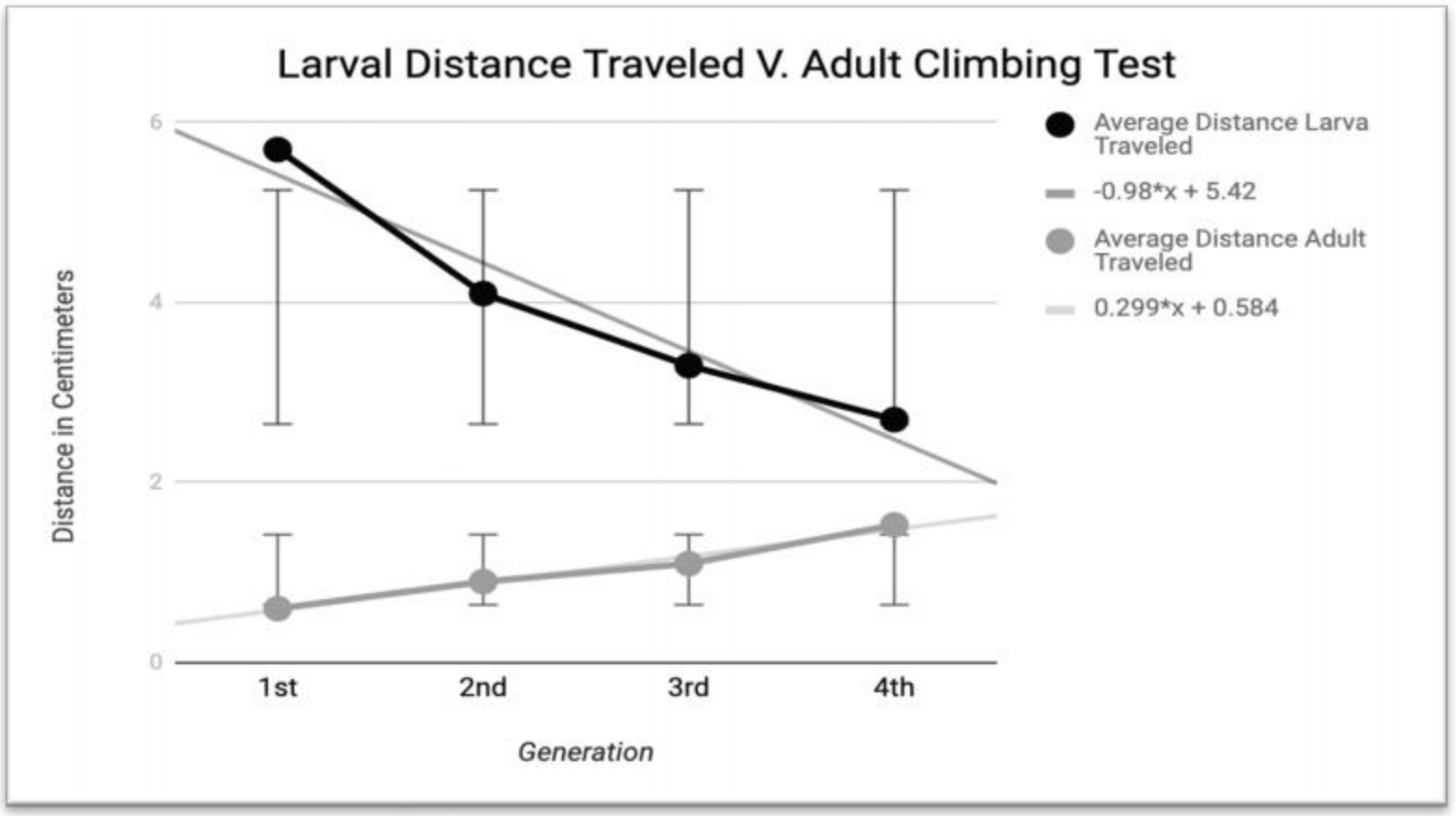

Figure 4. Sample of a potential comparison of the distance traveled as an adult and the distance the larvae traveled in the rover/sitter test

Anticipated Results

One expected trend for the data is that as the generations develop, an increasingly higher number and higher proportion of larvae will demonstrate the sitter phenotype as compared to the rover phenotype. Preliminary data obtained by other SVSU researchers over Summer 2019 hinted at this trend. A connection between the rover/sitter characteristic and the distance traveled in the adult locomotion test is expected as these tests are both indicative of neuromuscular development of the fly, and how the fly responds to stimuli should be consistently and increasingly different as the organism grows. Statistical significance of the differences between the data from the control groups and the experimental groups will be determined using an analysis of variance (ANOVA). This test looks at the difference between two variables, and based on the sample size and the extent of variance within the population, a p-value is determined. If the p-value calculated is smaller than the accepted (i.e., alpha) level, the null hypothesis can be rejected. Although this does not unequivocally prove the hypothesis, as the nature of science does not allow for this to happen, it provides strong support.

Discussion of Proposed Project

This section of the study will feature a discussion of the trends seen in the data and comment on their relevance for space travel and its associated complications. Additionally, areas to improve and clarify the research will be noted along with potential causes of distortion or error in the study. These may include a larger sample size, different growing conditions, the effect of the lighting, or the variety of *Drosophila melanogaster*. (Repeating this research with a particular mutant such as the ultrabithorax fly may yield interesting results due to the fly's lack of halteres.)

As this work is the first foray into examining the effects of ambiguous gravity, it does have its limitations. For instance, work by Wu and Guo (2011) used computer modeling to examine parts of *Drosophila*'s brain to determine 1) the role of the mushroom body in decision-making and 2) whether fruit flies are capable of associative memory (using a past experience to determine their response to new stimuli). This type of intricate science requires the use of machinery and tools not currently housed at SVSU. Although looking at the actual brain morphology of the fly would be interesting, the first line of an investigation often relies on indirect measures such as those proposed. Future studies can take the results from the proposed study to direct their own research with the use of more advanced technology.

Conclusion

Life in space is a daunting, unknown, and very real possibility for the future of mankind, and, as such, this proposed experiment is of grave importance. Based on the changes in *Drosophila melanogaster*'s behavior and morphology, insight can be gained into how the gravitational conditions experienced in space might affect human beings. For instance, if the adult flies experience great difficulty with movement, then the genes controlling that movement can be further examined. The study also enables trends throughout generations to be viewed, to see if the effects grow more pronounced. Due to the remarkable homology of humans and flies, the genes being impacted in the fly are likely to have a human correlate that would be impacted under the same gravitational situations. As more is learned about this phenomenon, research could potentially be expanded to other species in a more targeted fashion.

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A Policy Brief: The Effect of Non-Medical Vaccination Exemption in Michigan

Ann Yaroch

Braun Award for Excellence in Writing in Graduate Programs
Nominated by Christine Noller, Assistant Professor of Health Sciences

Ann Yaroch graduated with a master's of public health in May 2020. She received a bachelor's of science in in biology from SVSU and a master's of science in biology from Western Kentucky University. Her future plan is to obtain a Ph.D. in epidemiology or immunology. She is interested in parasitology and infectious diseases.

"A Policy Brief: The Effect of Non-Medical Vaccination Exemption in Michigan" was written as a final project requirement for Public Health Services (HS 650). The purpose for writing this piece was to raise awareness and highlight the impact of non-medical vaccination exemptions throughout the United States, particularly in Michigan. Ann is interested in the field of infectious diseases, as can be seen in this paper, because of the recent reemergence of several diseases attributed to a lack of vaccination.

Executive Summary

All 50 states have legislation requiring specific vaccines before students can enter the school system. Although vaccination exemptions vary from state to state, all school immunization laws allow exemptions for medical reasons. In addition, several states grant non-medical exemptions (NMEs). According to the National Conference of State Legislatures, 47 states have provisions that allow parents to exempt their children from receiving a vaccine if it opposes their religious beliefs, and 18 of those states allow philosophical exemptions based on personal, moral, or other beliefs (Devitt, 2018). Recent research has shown that many of these states, as well as large metropolitan centers within the states, have seen an increase in the number of NMEs granted to children. In fact, during the past decade, the number of philosophical exemptions has increased within two-thirds of the states that permit such exemptions (Olive, Hotez, Damania, & Nolan, 2018). As a result, lack of vaccination is creating pockets of vulnerability and leading to outbreaks of vaccine-preventable diseases. This policy brief examines the impact of vaccination waivers on outbreaks of preventable diseases within the state of Michigan.

Michigan has one of the highest immunization waiver rates in the country, with some counties reporting waiver rates over 10%, with 1 out of 10 school-aged children who have not received all the vaccinations required for school (Michigan Department of Health and Human Services, Division of Immunization, 2019). In addition, individual school buildings have reported even higher waiver rates. High non-medical waiver rates can leave communities susceptible to diseases such as measles, chickenpox, and pertussis (whooping cough) by undermining community or "herd" immunity. An examination of recent reports from the Michigan Department of Health and Human Services (2018) revealed that between 2017 and 2018, Michigan has experienced a 42% and 89% increase in cases of mumps and measles respectively. Given that each of these diseases is preventable with proper vaccination, public health measures should be taken to reduce or eliminate the non-medical-related vaccination waiver options.

Such policies could include banning conscientious exemptions or employing a stricter process for obtaining an exemption. In addition, the state could apply pressure on or offer incentives to private school boards to encourage full participation in vaccination programs. Other policies should be implemented to help understand the scope of the problem, including requiring schools and the state health department to publish the number of students on each campus who are vaccinated, under-vaccinated, and unvaccinated in a uniform and transparent system.

Context/Scope of the Problem

Vaccinations are among the most cost-effective and successful public health interventions. Due to the high contagion, morbidity, and mortality associated with most vaccine-preventable diseases (VPDs) and the safety, effectiveness, and potential financial savings offered by vaccines, all jurisdictions in the United States have introduced, and actively enforce, laws that require proof of immunization for school entrance (Salmon et al., 1999). However, according to the 2015 National Immunization Survey, only 72.2% of children ages 19 to 35 months in the United States were fully vaccinated, as per guidelines from the Advisory Committee on Immunization Practices (Olive et al., 2018). Due to parental concerns about vaccine safety and efficacy, many families are choosing to opt out of vaccinations required for school entry by obtaining NMEs based on religious or philosophical beliefs. Figure 1 shows the rate of NMEs in states and counties between 2016 and 2017.

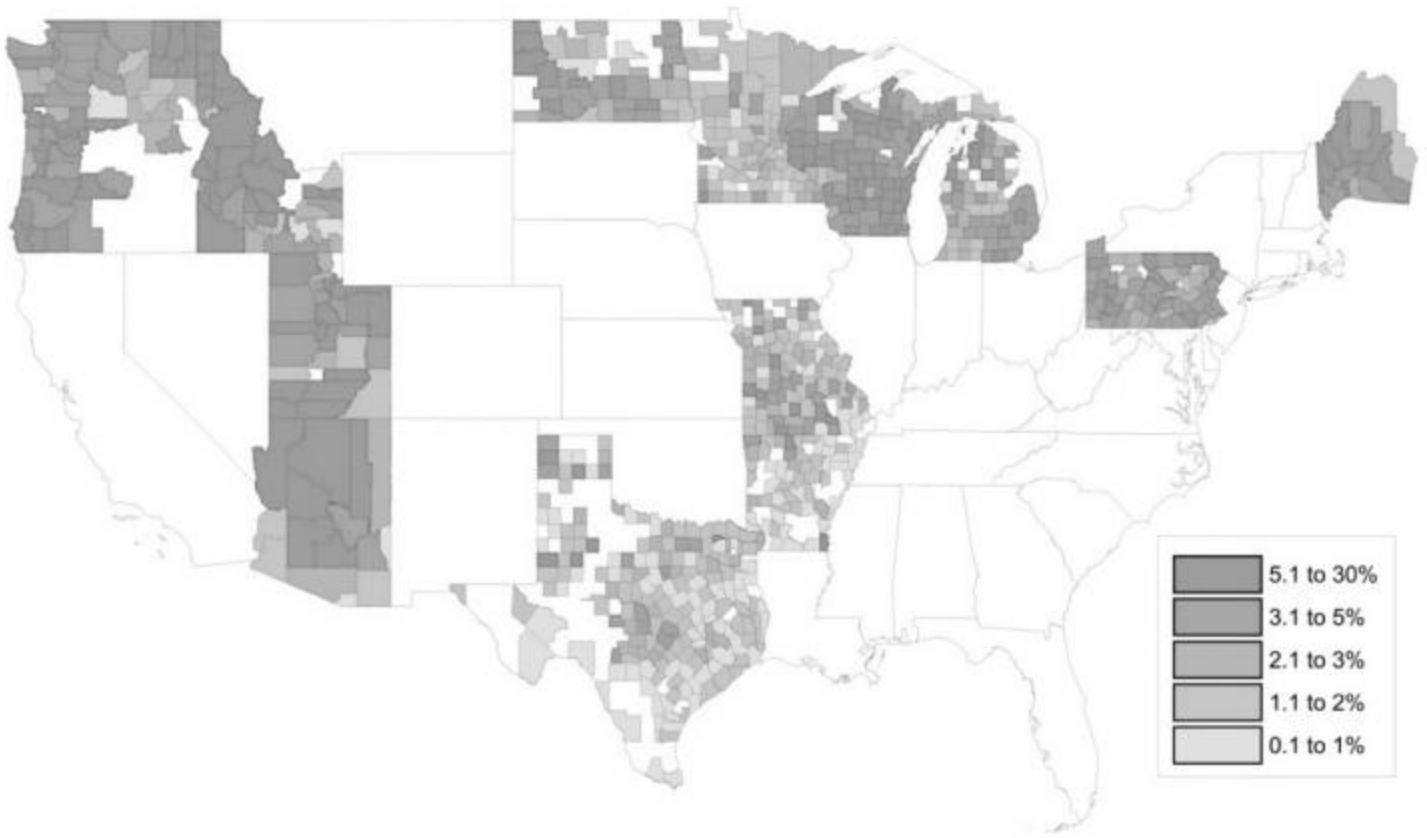

Figure 1. Rates of NMEs in the U.S. between 2016 and 2017. Adapted from "The State of the Antivaccine Movement in the United States: A Focused Examination of Nonmedical Exemptions in States and Counties," by J.K. Olive, P.J. Hotez, A. Damania, and M.S. Nolan, 2018, *PLOS Medicine 15*(6), p. 4.

In addition to the states with higher NME rates, data indicates several metropolitan areas with large numbers of kindergarteners with NMEs (see Figure 2). Metropolitan areas with populations of more than 1 million people that had high NME numbers included the following:

- Detroit, MI
- Houston, TX
- Kansas City, MO

- Phoenix, AZ
- Portland, OR
- Salt Lake City, UT
- Seattle, WA (Devitt, 2018)

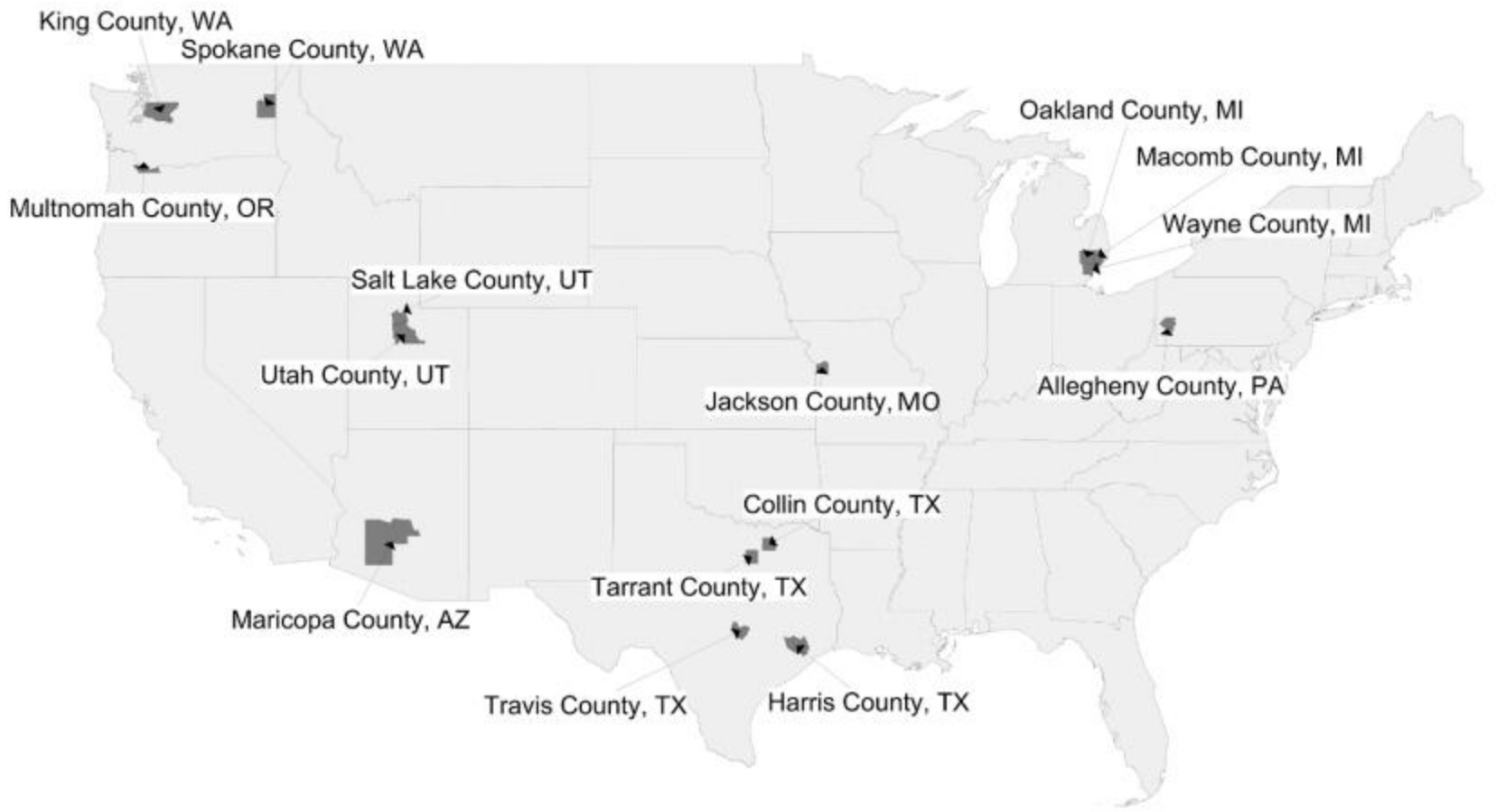

Figure 2. Metropolitan hot-spots of NMEs. Adapted from "The State of the Antivaccine Movement in the United States: A Focused Examination of Nonmedical Exemptions in States and Counties," by J.K. Olive, P.J. Hotez, A. Damania, and M.S. Nolan, 2018, *PLOS Medicine 15*(6), p. 5.

Individuals with exemptions from vaccinations for any reason may be at increased risk of contracting a VPD, when compared with vaccinated persons. Research has shown that school-aged children and adolescents claiming vaccination exemptions in the U.S. were 35 times more likely to contract measles when compared with vaccinated youth (Salmon et al., 1999). In addition, persons who claim NMEs can create risks to the community because unvaccinated or under-vaccinated individuals can be a source of transmission. Vaccinations not only benefit an individual's health, but also that of the greater population, which includes people who cannot get vaccinated for medical reasons, chemotherapy patients, and immune-compromised individuals, as well as patients more susceptible to disease, including infants and the elderly. The strength of a population's resistance to disease, or herd immunity, is related to the number of individuals who are immune. When the majority of the population is immunized, disease can be contained to minimize outbreaks (Olive & Matthews, 2016). The U.S. Department of Health and Human Services (2016) states 90–95% as the target population coverage for most vaccine-preventable diseases. These values serve as the threshold needed to achieve the desired herd immunity effect. Vaccination rates that fall below this range can selectively introduce increased disease incidence and more severe illness in all affected individuals, a mechanism known as the herd severity effect (The U.S. Department of Health and Human Services, 2016).

Over the past few decades, there have been several reports of VPD outbreaks that started primarily in exempt individuals and spread throughout the community. One example, the 1996 measles outbreak in Utah, demonstrates the effect that clusters of unvaccinated individuals can have on the community (Olive & Matthews, 2016). Statewide, 118 cases occurred, with 107 in Washington County, where 45% of the measles cases had obtained vaccination exemption (Olive

& Matthews, 2016). The substantial percentage of exemptors in this outbreak, as well as the concentration of cases among exemptors in the beginning of the outbreak, suggests that they played a major role in transmission.

According to the Centers for Disease Control and Prevention (2019), from January 1 to November 7, 1,261 individual cases of measles have been confirmed in 31 states. This is the greatest number of cases reported in the U.S. since 1992, with the majority of cases occurring among individuals who were not vaccinated. The states that have reported cases to the CDC are Alaska, Arizona, California, Colorado, Connecticut, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Missouri, Nevada, New Hampshire, New Jersey, New Mexico, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Tennessee, Texas, Virginia, and Washington. The states that have reported outbreaks include California, Georgia, Illinois, Michigan, New Jersey, New York, Oregon, Pennsylvania, Texas, and Washington. Figure 3 shows the number of measles cases in the U.S. over the past 10 years.

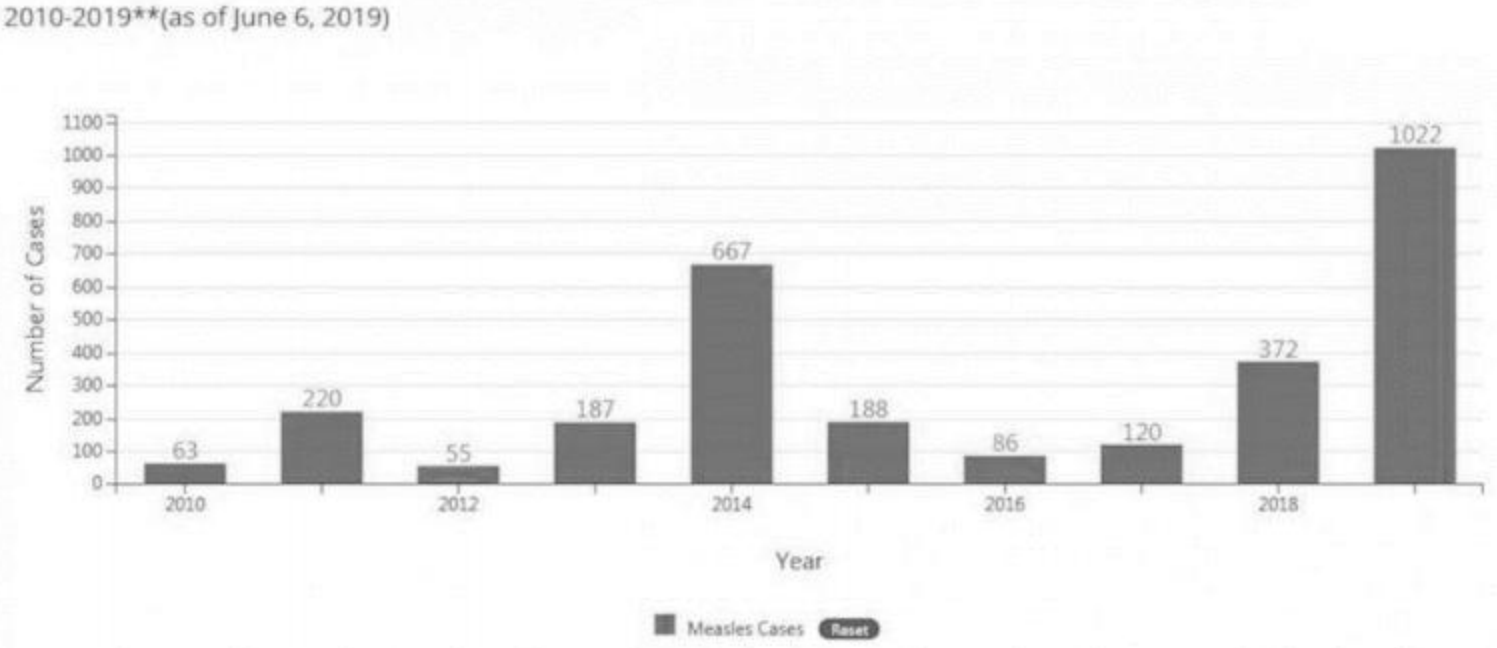

Figure 3. Number of Measles Cases by Year. From "Measles Cases and Outbreaks. Measles (Rubeola)," by Centers for Disease Control and Prevention, 2019, https://www.cdc.gov/measles/cases-outbreaks.html.

Overview of Michigan

Vaccination requirements for school entry are implemented to maintain high vaccination coverage and protect schoolchildren from vaccine-preventable diseases. Before a child can attend kindergarten or seventh grade, participate in childcare services, or enroll in a new school district in Michigan, parents or guardians are required to produce documentation that confirms their child has either received the school-required immunizations or has received at least one dose of each of the required immunizations and is awaiting receipt of subsequent doses to be administered at appropriate intervals. Parents can also provide documentation that an immunization requirement has been waived for religious, medical, or other (sometimes referred to as philosophical) reasons.

As stated previously, Michigan has one of the highest immunization waiver rates in the country, with many counties reporting waiver rates over 10%; this means 1 out of 10 school-aged children have not received all vaccinations required for school. Additionally, a few clusters have reported exemption rates at approximately 14% (Michigan Department of Health and Human Services, Division of Immunization, 2019). Figure 4 shows a county-level overview of the percentage of immunization waivers of kindergarteners and 7th graders, respectively.

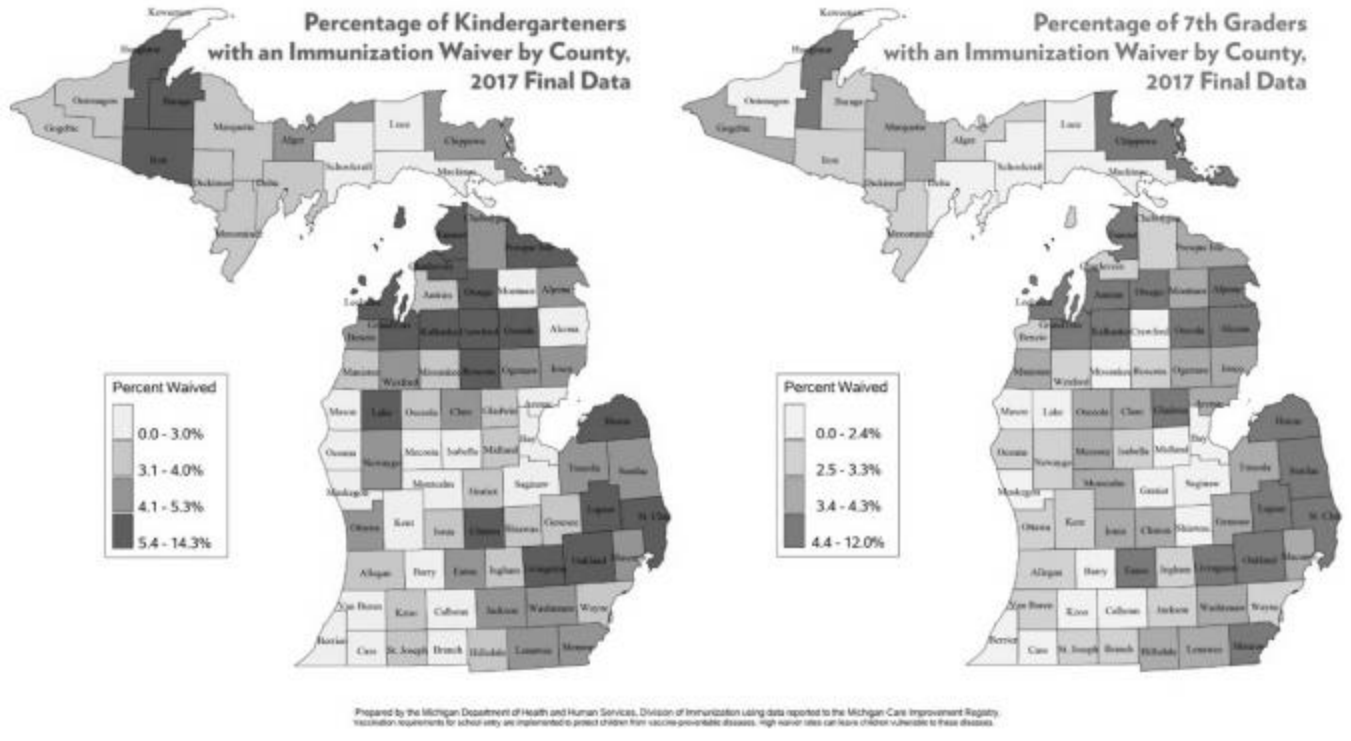

Figure 4. Percentages of Vaccination Waivers for Kindergarten/7th grade. Adapted from "Immunization Waiver Information," by Michigan Department of Health and Human Services, Division of Immunization, (n.d.). https://www.michigan.gov/mdhhs/0,5885,7-339-73971_4911_4914_68361-335711--,00.html

The final data show an increase in overall waiver rates (3.8%) compared to last year (3.6%). Overall immunization waivers for kindergarteners increased from 4.2% with a waiver in 2017 to 4.5% in 2018. Immunization waivers remained at 3.4% from 2017 to 2018. From 2017 to 2018, the percentage of new entrants with a waiver increased from 3.3% to 3.5%. As indicated by Figure 5, the majority of waivers were based on philosophical reasons.

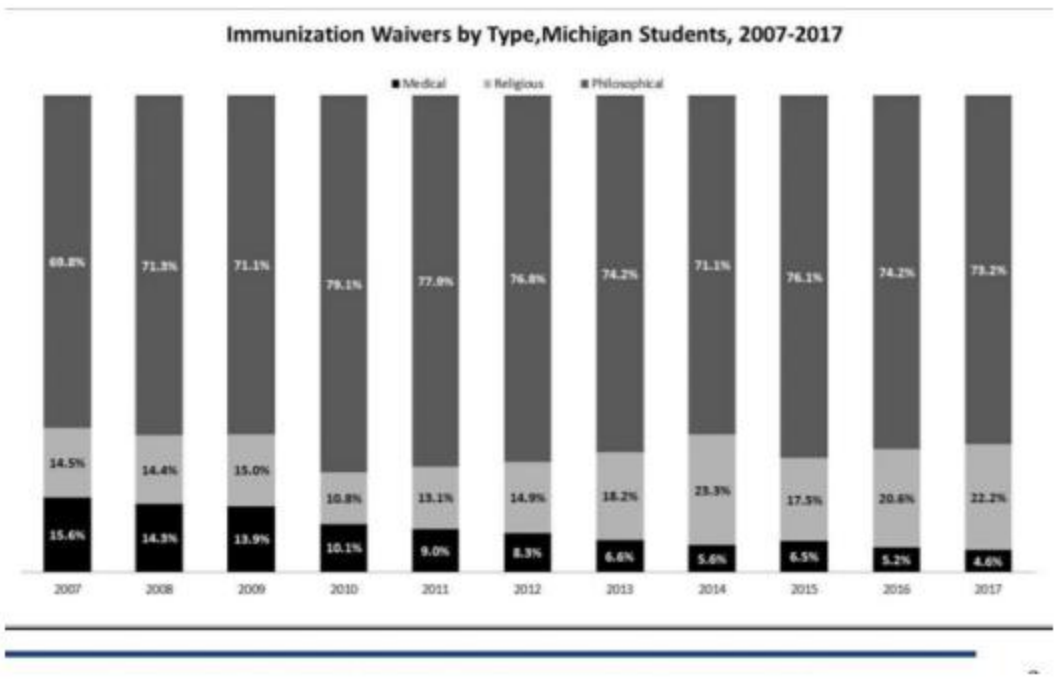

Figure 5. Immunization waivers by type. Adapted from "Immunization Status of School Children in Michigan, 2019," by Michigan Department of Health and Human Services, Division of Immunization, 2019, https://www.michigan.gov/documents/mdch/School_Summary_2014_483316_7.pdf.

Data has shown an overall increase in U.S. cases of VPDs, and the same is true for Michigan. High waiver rates and low vaccination coverage have left populations vulnerable to

vaccine-preventable diseases. Below is a summary of VPDs reported to the Michigan Department of Health and Human Services (2018) with 2017 data presented in Table 1 as a comparison:

- Congenital Rubella—No cases of congenital rubella were reported in 2018.
- Diphtheria—No cases of diphtheria were reported in Michigan in 2018.
- *Haemophilus influenzae* invasive disease—There were 23 cases of invasive *Haemophilus influenzae* disease under the age of 15 years reported in Michigan. These cases ranged in age from newborn to 6 years.
- Measles—There were 19 cases of measles in Michigan in 2018. This was the highest annual number of cases in the state since 1994. All cases were the result of exposure during international travel or the result of exposure to an importation case. All 19 cases were confirmed by laboratory testing and ranged in age from 2 years to 49 years.
- Meningococcal disease—There were 4 cases of meningococcal disease reported in 2018. Cases ranged in age from 30 to 88 years of age. None were in age groups or risk groups specifically targeted for meningococcal immunization.
- Mumps—There were 82 cases of mumps reported in the state in 2018. Cases range in age from 2 years to 83 years.
- Pertussis—There were 651 cases of pertussis reported in 2018. Cases ranged in age from 5 days to 87 years, with a median age of 9 years. Hospitalization was reported for 40 cases, but there were no reported deaths due to pertussis. Cases were reported in 58 of Michigan's 83 counties. There were nine reported pertussis outbreaks involving 3 or more cases.
- Rubella—There were no rubella cases in Michigan in 2018.
- Tetanus—There were two reported tetanus cases in Michigan in 2018. Cases were 20 years and 56 years of age.
- Varicella—There were 433 varicella cases reported in 2018, a 20% decline from the 540 cases reported in 2017. Cases ranged in age from 29 days to 85 years, with a median of 7 years and a mean age of 11.9 years. There were 14 varicella outbreaks reported, ranging in size from 2 cases to 6 cases. Nine outbreaks occurred in elementary school settings, two in daycare/preschool settings, one in a home setting, one in a high school, and one in a correctional facility.

Table 1

Cases of VPDs in Michigan from 2017–2018

Disease	Total Cases 2017	Total Cases 2018
Congenital Rubella	0	0
Diphtheria	0	0
H. influenzae invasive	26	23
Measles	2	19
Meningococcal disease	5	4
Mumps	46	82
Pertussis	773	651
Poliomyelitis	0	0
Rubella	0	0
Tetanus	2	2
Varicella	540	433

Adapted from "Summary of Vaccine Preventable Diseases Reported to the Michigan Department of Health and Human Services, 2018," by Michigan Department of Health and Human Services, 2018, https://www.michigan.gov/documents/mdhhs/VPD_Summary_2018_664854_7.pdf

Policy Alternatives

Michigan's current vaccination policy, Act 368, was enacted on September 30, 1978 (Legislative Council, State of Michigan, [n.d.]). It was determined that children would require vaccines to protect them from 14 serious, even life-threatening diseases, and to prevent outbreaks in schools and other places where children congregate, the state required a current immunization record to be on file prior to school entry. However, Michigan has always allowed for the following waivers, as seen in Exemptions 333.9215, Sec. 9215:

> (1) "A child is exempt from the requirements of this part as to a specific immunization for any period of time as to which a physician certifies that a specific immunization is or may be detrimental to the child's health or is not appropriate."
> (2) "A child is exempt from this part if a parent, guardian, or person in loco parentis of the child presents a written statement to the administrator of the child's school or operator of the group program to the effect that the requirements of this part cannot be met because of religious convictions or other objection to immunization." (Legislative Council, State of Michigan, [n.d.]).

Over time, Michigan has implemented laws and rules to ensure that children are adequately immunized against vaccine-preventable diseases, and below is a timeline of important changes to these policies:

> 1978: Each student, upon entry into kindergarten or into a new school district involving grades 1–12, must possess a certificate of immunization at the time of registration or not later than the first day of school.
> 2000: Public Act 89 mandated an immunization assessment be completed for each sixth-grade student.
> 2010: Additional vaccine requirements were added.
> 2012: Senate Bills 237, 238, and 239 were passed by the Michigan legislature to move the sixth-grade assessment to seventh grade.
> 2014: A new educational requirement was created for Michigan parents opting their children out of getting vaccinated before entering school.

Prior to a child entering or attending school, parents or guardians are required to produce documentation confirming their child has received the school-required immunizations or, in the alternative, their child has received at least one dose of each of the required immunizations and is awaiting receipt of subsequent doses to be administered at appropriate intervals. Once provided, these children are considered "complete." A required vaccine may be waived or delayed if the following occurs:

> 1) A valid medical contraindication exists precluding the child from receiving the vaccine. A medical waiver must be completed and signed by the child's physician and shall state the contraindication(s), the vaccine(s) involved, and the time period during which the child is precluded from receiving the vaccine(s).
> 2) The parent or guardian holds religious or philosophical beliefs which preclude receipt of a vaccination(s). Any parent/guardian who wants to claim a non-medical waiver will need to receive education regarding the benefits of vaccination and the risks of disease from a county health department before obtaining the certified non-medical waiver form through the Local Health Department. An updated waiver must be presented each time the child's immunization status is reported. Each year, schools are required to report the immunization status of children enrolled in kindergarten, 7th grade (6th grade prior to

2012) and new entrants to the school district. (Michigan Department of Health and Human Services, [n.d.])

As stated above, in December 2014, the Joint Committee on Administrative Rules approved a new educational requirement for Michigan parents opting their children out of getting vaccinated in December 2014 (Michigan Department of Health and Human Services, [n.d.]). The new rule allows parents/guardians to have the opportunity to speak with a health educator from their local health department about their concerns and questions regarding immunizations prior to the non-medical waiver being signed. Any parent/guardian who wants to claim a non-medical waiver is required to receive education regarding the benefits of vaccination and the risks of disease from a county health department before obtaining the certified non-medical waiver form through the local health department. Additionally, parents/guardians seeking to claim a non-medical waiver are required to participate in an immunization-focused discussion with county health department staff. During the discussion, parents/guardians can bring up any immunization-related questions and concerns they may have. Staff must present evidence-based information regarding the risks of vaccine-preventable diseases and the benefits/potential risks, such as possible side-effects, of vaccination. This rule preserves the ability of parents/guardians to obtain a non-medical waiver following the completion of this required educational session (Michigan Department of Health and Human Services, [n.d.]). However, given the recent increase of NMEs in Michigan counties, as well as the number of vaccine-preventable diseases that occur within the state, measures should be taken to reduce or eliminate the non-medical-related vaccination waiver options.

Such policies could include banning conscientious exemptions or employing a stricter process of obtaining an exemption. In addition, the state could apply pressure on or offer incentives to private school boards to encourage full participation in vaccination programs. Other policies should be implemented to help understand the scope of the problem, including requiring schools and the State Health Department to publish the number of students on each campus who are vaccinated, under-vaccinated, and unvaccinated in a uniform and transparent system.

Policy Recommendations/Conclusion

To reverse the trend of increasing vaccine exemptions in Michigan, public health considerations should override personal autonomy. In a recent study, Michigan was ranked as one of the states with the highest rate of vaccination waiver, and, as shown in Figure 5, over 70% of all waivers were due to philosophical reasons. The Michigan Legislature should employ a multi-faceted approach to address school-entry vaccine exemptions, including an outright ban of the allowance on non-medical waivers.

Prior to 2015, Mississippi and West Virginia were the only two states that banned religious and philosophical belief (or non-medical) exemptions (Ventola, 2016). More recently, California enacted a ban on all non-medical exemptions due to the measles outbreak at Disneyland, in which 67% patients who contracted measles during the 2014–15 Disneyland outbreak intentionally opted out of vaccination due to personal beliefs (Zipprich et al., 2015). According to one source, in direct response to the measles epidemic, the California State Legislature passed Senate Bill 277 (SB 277), which placed a statewide ban on NMEs starting January 1, 2016. SB 277's effect has been both immediate and significant, with the number of kindergarteners with NMEs dropping to 3.133%, the lowest rate California has seen in over a decade. Additionally, each county in California reported significantly fewer children with NMEs and decreases in VPDs. Since enacting an NME ban, Mississippi has led the nation in pediatric vaccination rates since 1999, with more than 99% coverage of kindergarteners for the MMR, DTaP and chickenpox vaccines (Olive & Matthews, 2016). Notably, the Mississippi State Department of Health has not reported a single measles case in the state since 1992 (Mississippi State Department of Health, 2008). These examples demonstrate the effectiveness of reducing VPDs through the banning of NMEs. Based on these

data, Michigan, which has one of the highest NMEs rates in the United States, would greatly benefit from discontinuing the NME option on vaccination waivers, leading to increased protection of schoolchildren from vaccine-preventable diseases.

Another policy option should include the creation of a more rigorous process of obtaining an exemption. Stricter legislative action to close NMEs should become a higher priority because of the positive correlation between leniency of state vaccination policies and exemption rates. On average, states with policies that permit both types of NMEs have 2.5 times higher exemption rates (Olive et al., 2018). Currently, Michigan requires parents to undergo an educational component prior to obtaining health department signatures for waiver approval. However, policy amendments could also include the requirement of a pediatrician's signature or mandating that exemption claims be submitted annually. This option has been implemented in a few states and has resulted in a decreased rate of NMEs. For example, in 2014, Oregon passed a law requiring parents to submit a physician's signature or certificate of completion of an online educational module about the benefits and risks of vaccination. In the 2014–15 school year, there was a 17% decline in kindergarteners with non-medical exemptions in the state (Olive & Matthews, 2016).

Other policies should be implemented to help understand the scope of the problem, including requiring schools and the state health department to publish the number of students on each campus who are vaccinated, under-vaccinated, and unvaccinated in a uniform and transparent system. Increased transparency will help eliminate gaps in current vaccination data and inform parents of local vaccination rates, which could potentially impact their decisions on which schools their children will attend.

Of course, in order for policy change to occur, as well as be successful, it is critical to achieve community buy-in. Continuation of targeted education campaigns through schools, health-care facilities, churches, and community centers, as well as community involvement in the decision-making process, will be central to making progress toward discontinuing NMEs.

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George

Matt Chappel

Tyner Award for Fiction

Nominated by C. Vince Samarco, Professor of English

Matt Chappel is an English literature major with a sociology minor originally from Marlette, Michigan. A member of the 20th class of Roberts Fellows, he will graduate in Spring 2021. Matt spends his free time running, woodworking, fly-fishing, and hanging out with his wife. The writing that inspires him most is poetry, and he has a particular affinity for Robert Frost. When Matt graduates, he plans to travel and write about his experiences.

"George" was written for Creative Writing: Fiction (ENGL 306); Matt says "George" is a stand-alone work, but this story and its threads may "spin off" into other pieces.

"Well then, there's Sheila."

"How old were you?"

"About seventeen."

"How many years ago was this?"

"About nine."

"Go on."

I fidgeted in the chair. The chair was black, maybe navy. It was plush and comfortable. I stared at it awhile. Light through the window cast a square of sun on my knee. I rubbed where the light was.

"George?"

"Yes."

"You were talking about Sheila."

"Mhm…"

And before the chair was a long table with a steaming cup of tea on a coaster and the tea bag was still in the cup. The tea darkened as the leaves steeped. There were lots of books on the table. They were stacked in piles of three, each with a yellow sticky note with a name on it. My name wasn't on any of the piles. I wondered where my stack of books was. I remember when I was fifteen reading a long mystery book, no it was a drama, or a drama-mystery. A woman, Sara, had had an affair with a neighbor. She was a stay-at-home and her husband, Craig, worked long hours at the office and Bill next door seemed to always be there on the edge of the yard, working in the garden, mowing the lawn, trimming a tree. I guess he wore tight shirts and Sara really liked that and somehow or other they ended up getting together. Then one evening, Sara had made dinner for Craig, but he hadn't come home. The food went cold. Craig stumbled into the house after midnight, dirty and drunk and went straight to the bathroom to wash his hands. After that Bill wasn't seen around his hou—

"George."

"Yeah."

"Are you feeling alright? Should we call your mother?"

"No, no, I'm okay. She's at work anyway."

"Alright, I'm ready when you are."

"Okay. Uh, Sheila. We started meeting outside Charlie's on Friday nights…."

"Did anyone else know about this?"

"Uh no, no. It was just me and Sheila."

"None of your friends knew?"

I looked down at my feet. "No."

"What did you and Sheila do?"

"Sometimes we'd go in for a drink. I sat in a back booth where it was dark. She ordered the drinks and brought them back. The bartenders either never knew or never asked about me, I guess."

"Is that all you did?"

"No."

"What else?"

"Other times she took me to an apartment."

"Was it hers?"

"Yes, well, no. I don't know. She always carried around a tiny red purse with a large key ring inside. There were a lot of keys on it."

"Was there ever anybody else at the apartment?"

"No. It was empty."

"Did you feel comfortable there?"

"I guess. I mean, I really didn't need to be comfortable."

I noticed a potted plant in the window. Some of its stalks were broken; other stalks were withered brown and drooped onto the window sill.

"That plant is dying." I nodded to it.

He looked over his glasses at it.

"Yes, I'll have to remember to water it."

Back in the fifth grade I remember once going over to a friend's party. Chad. After the candles and cake, I guess he thought it'd be funny to shove me in a closet. The other kids went along with him and locked the door. They told me they were just playing a joke, I guess, but I pounded on the door and screamed until my throat was hoarse and tears came down in buckets. I could hear them laughing. In the dark, I curled up in a corner next to a vacuum cleaner and went silent. Chad's mom wanted to know what was going on. "Oh, honey," she said when she opened the door. The kids who were gathered outside the door parted as we passed by. She put me in the kitchen and got me a glass of water and sat with me until my parents came. At home they asked what happened. I told them I didn't know. They didn't ask any more questions.

The ray of light warmed my knee and I rubbed it again.

"What did you do there?"

"Hmm?"

"At the apartment—you were saying Sheila took you to an apartment."

"Oh, well, we just fooled around I guess."

"Do you want to talk specifically about what happened?"

"We just fooled around."

"Okay, that's fine, George. How many times did you meet with Sheila?"

"I don't know."

"What did you feel your relationship with her was like?"

"I don't know."

My throat was starting to get dry. I wanted a glass of water, but I didn't want to ask for it. But my throat was so parched. I tried to clear my throat. My parents took me to some sand dunes one time. The sand was rough and gritty and there was a strong wind that day and sand blew in my face and hair and mouth. I coughed, hacking, and said I didn't want to go up to the top. Don't be a sissy, my father said, and Mom slapped him on the arm. At the top I remember looking out and thinking we were in the desert. I didn't know we had deserts in our state. There were mountains of sand, valleys and hollows. The dunes seemed to stretch on forever. I wondered what it would be like to be buried in the sand.

"George?"

"Mhm, yes, Sheila. Uh… can you repeat the question?"

"I was just wondering how you felt about Sheila. Did you have any romantic feelings for her?"

"I guess. There's a lot I don't remember."

"If you feel comfortable, try to recall as much as you can."

"I think mostly I just liked her."

Freshman year of high school there was a girl, Alexis. Lexi for short. She was thin and had short black hair and freckles. On nacho day I bumped into her in the cafeteria and made her spill her tray. I gave her my tray and got a mop and a pan to clean the floor. The next day she asked me to sit with her at lunch and we laughed about my clumsiness. I laughed so loud the other kids stopped eating lunch and stared at me. When Lexi and I started dating I felt really good. I mean, somebody looked at me and asked me questions and smiled. I guess I wanted… maybe I never knew what I wanted. I wanted her. Lexi's parents were in business and were always taking long trips—sometimes in the same week. The first time I ever snuck out of the house was to go see her. In the morning when I got home, and I couldn't tell my parents where I had been, my father beat me with a belt while my mother cried quietly in the kitchen. I didn't even feel the pain. I guess I was somewhere else. When I didn't react, my father beat me until I begged him to stop. I couldn't go out for track that year. I spent that season going to physical therapy for my sciatic nerve. Shortly after that Lexi broke up with me and started hanging around Chad.

"What's that?"

"What, oh, the cleaning lady's in the next room. Will it be a distraction for you?"

"No, I'll be okay, I'll be okay."

"Now where wer—"

"I'll be okay."

"George?"

"Yeah. Nothing! I'll be okay."

"Hey, George, maybe we better call it a day, okay?"

"Okay. I'll be okay."

"George, will you look at me? Good. I need you to breathe, George. Breathe, yes, just like we practiced, big breath in and let it out. Good."

Professional Portfolio

Allison Stein

Diane Boehm e-Portfolio Award

Allison Stein is a professional and technical writing major and general business minor. A native of Harbor Beach, Michigan, she enrolled at SVSU in Fall 2018. At SVSU, she is the secretary for the Association of Professional and Technical Writers and a member of the Usability Research Team. Allison also writes a monthly column for *The Lakeshore Guardian* (a newspaper covering the thumb area of Michigan) and has published three poetry books through Stein Expressions, LLC. She intends to pursue a career as a writer and editor.

Allison developed her portfolio in Internship I in Professional and Technical Writing (RPW 328), taught by Dr. Bill Williamson, professor of rhetoric and professional writing. The work application portfolio is directed at future employers in the professional/technical writing field and potential clients who need a technical writer. Its purpose is to showcase Allison's breadth and depth of professional development and to prove her readiness for job opportunities in the technical communication field.

Allison's portfolio currently showcases three significant projects: 1) a software user guide in written and video formats based on persona mapping, a task analysis flowchart, and data from usability studies; 2) planning, publishing, and marketing materials from her 80-page book, *Trust the Wind*; and 3) a recruitment plan for a local youth group, including materials for a brand identity kit, themed flyers, an event press release, social media content, and a group newsletter.

Allison recommends that college students who wish to create a professional portfolio begin by considering exactly what they want to achieve. A list of personal assessment criteria for an effective portfolio might include objectives that students set for themselves as developing professionals or standards against which they expect future employers to evaluate their work. For this portfolio, Allison identified her two guiding design goals as multimodality (proving herself comfortable with various technologies and media, and being able to do contextually appropriate work) and self-reflection (showing attention to her meta-learning through project narratives and high levels of emotional-intellectual engagement with work and work processes).

Allison created her portfolio with the web design tool *Bootstrap Studio*. From this project, Allison, who plans to graduate from SVSU in December 2020, learned how to convey a sense of professional identity and how to market herself more effectively as a technical writer. The portfolio project helped her make connections across multiple academic and professional facets of technical writing, giving Allison the opportunity to examine her interests and abilities within and beyond the discipline. Her portfolio may be accessed at allisonstein.bss.design.

Code Meshing: A Study of How Code Switching Is Linked to a Double Consciousness

Danielle Wolanin
First Place, First-Year Writing Award for English 111
Nominated by Gillan Thompson, Lecturer of English

Danielle Wolanin, from Byron, MI, came to SVSU to study kinesiology. During her general education English classes, she found a talent and spark for writing essays, something she had never enjoyed during her high school career. She plans to work with and rehabilitate people who have suffered from spinal cord injuries, and although English does not currently hold a spot in her future plans, she hopes that a strong English background will help her with any future clinical reports. She is currently involved at SVSU as a member of the Student Exercise Science Association (SESA).

The purpose of this assignment was to conduct a study about a research question regarding literacy history. Danielle chose to study whether people used a different form of language, and more specifically if they used code meshing or code switching depending on their environment. She conducted her research by holding a series of personal interviews with people both in and out of school, hoping to get a variety of perspectives to include in her paper.

I always hated the screeching sound of my alarm clock. It was the signal that started a new school day. I remember rolling out of bed to check the time, the light of my phone hurting my eyes. It was time to get up. This entailed brushing my teeth, doing my hair, making and eating breakfast, packing a lunch, packing my school bag, and getting dressed. I normally wore jeans to school, an article of clothing that I would never just lounge around in or choose to wear if I was staying at home. But this was school. I was getting ready to go to school, and that meant having to wear uncomfortable pants. What I didn't understand then was that I was getting myself ready to start my day as my other self, the self that was present at school.

At school, I spoke a different language and inhabited a different identity. There was not much comfort in my jeans, nor was there any comfort in this other language. I was constantly watching the words that came out my mouth, rehearsing the lines over and over in my head from the book I had to read to the class; I feared messing up, feeling a sudden panic when there was a word in the paragraph I had to read that I did not know how to pronounce. I was masking my natural flow of communication because I had to sound smart at school; I had to be able to read my paragraph without making a mistake.

I now realize that I was code switching. Code switching is defined as "the use of more than one language or language variety concurrently in conversation" (Young 149). I left my natural, comfortable home language and shifted into a tense, hyperaware language as soon as my alarm clock went off in the morning. What I was going through was analogous to Barbara Mellix's experience. Mellix was an African American woman who grew up speaking Standard English at school and Black English at home. Her mother would yell at her when she used her natural, flowing Black English at school or in mainstream public places such as the grocery store. Mellix lost her

identity when she was at school; that is, her code switching forced her to have a double consciousness, and this applied to her writing as well. She grew up understanding that writing was an occasion for "proper English" meaning that at school her Black English was not allowed (175). This is similar to how I felt when it came to my code switching. My native, natural home English was not allowed in the school setting. Mellix wrote that code switching can cause "tremendous emotional and psychological conflict for those attempting to master academic discourse" (181). Code switching forces us to inhabit multiple identities, and for Mellix and me, these identities were a school self and a home self.

Although Mellix was successful in perfecting and eventually inhabiting Standard English, Vershawn Ashanti Young argued against code switching altogether, encouraging individuals to try to embrace code meshing instead. In his article "Nah, We Straight," Young defines code meshing as the "blending and concurrent use of American English dialects" (151). Young believes that our identity is greatly influenced by our language. This means when students are forced to speak a different language at school, they must create multiple different identities and form a double consciousness. This is a problem because the rules of Standard English are determined and governed by the speech habits of middle- and upper-class white Americans. Take Mellix for an example; Young would argue she was being forced to use the language of white America and push her Black, native, and cultural language to the back burner (153). This is unfair and cruel to Mellix, as she should not have to create a whole new identity for school due only to her race and class.

One of Young's best examples explaining why code meshing is so important involves the use of a piano. He says that when we play the piano, we do not use only the black keys or only the white ones; we use both types of keys simultaneously because it sounds better. The same thing goes for language; we should not only use Black or white English because a mix of the two not only sounds better but flows better. Implementing code meshing is using both the black and the white keys. With the use of code meshing, we can hopefully begin to eliminate the feeling of double consciousness that so many students face (156).

With my study, I set out to see whether students of different grade levels and with different future goals felt they were using a different type of language at school than they were at home. Although code switching and meshing are often discussed in terms of race and ethnicity, I kept my focus on issues of education. I wanted to see whether any students felt that they were using a type of code meshing to make themselves feel more at ease with communicating in different settings. I believe that code switching is forcing people to have multiple identities and that people are more comfortable when they can use code meshing in their language.

Methods

I conducted my research by performing a series of personal interviews with various individuals. I did not want to focus on one narrow story or perspective; I wanted to capture a variety of lifestyles by interviewing both students who had and had not continued their educational careers after high school. By doing so, I hoped that my research would have multiple perspectives and capture a wider variety of experiences. After conducting three interviews, I had the perspectives of two college students and a high school graduate who chose to go right into the workforce post-graduation. I began all of my interviews with a rundown of my topic. I told them that I was conducting research on the difference between code meshing and code switching, and I was trying to see whether there were differences between the languages that we speak at home and the languages that we speak at school. I started everyone off with the same question: "Do you feel like there is a difference between how you talk at school compared to how you talk at home?" After this question, I normally got a response such as "yes" or "for sure" without much more elaboration. This catapulted me into my next question, into me longing for more details. I wanted to pinpoint what specifically was different about the language that was spoken at home and at school. I asked my interviewees to try to explain exactly what was different in the language used, aiding them by

asking about such things as differences in grammar or the use of slang terms. The final question that everyone was asked was whether they mesh their school and home language and identities, or whether they keep them separate.

Results

The results from my studies all seemed to support my original hypothesis that code switching forces people to have double identities and code meshing makes people feel more comfortable with language. My first interviewee was a college student named Hayden Brucewski. Brucewski talks differently in school because he feels that when he is at school, he has an expectation to "sound smart." He feels overly conscious of his grammar, the structure of his sentences, and his choice of words. Brucewski said it is "not a big deal" to cuss in front of your friends, but it can definitely be a big deal if you cuss in the wrong type of school setting. He also feels like he almost speaks three different languages, something I never considered. Brucewski said that, first and foremost, he has a home language. This is his comfortable, carefree, cuss-filled language. At school, he feels like he has a peer language *and* a teacher or professor language. When I asked him to elaborate, he said that even though he isn't the most comfortable with his peers, it's not a big deal if a few words are out of context or just are not grammatically correct. He is not completely comfortable talking to his peers, but he is not sitting on the edge of his chair either. Talking to teachers and professors was a different story. This is the situation where he is on the edge of his chair. This is the "rehearsed" language, the one-that-you-say-in-your-head-before-you-say-it-out-loud type of language. When asked about code switching versus code meshing, he said that it's very situational for him. There are instances, such as a presentation, where home language is eliminated and his more public, studious identity shines through, and there are times, such as working in groups, where he can mesh his two languages. Brucewski implements both code switching and code meshing in his school language.

My next interviewee was Emilio Soto, a high school graduate who is now working. Soto did not choose the college path, but I did not feel that it mattered for this study. In fact, I wanted to know more about his perspective on code meshing and code switching. Soto says that when at home, he talks how he wants to talk. If he wants to say something, he says it. It's as simple as that. He feels that his language at home uses slang terms and leans heavily towards the "improper" side of things, using such clauses as "I seen it." At school, his language was somewhat proper but still had a hint of improper English to it. This was him holding onto his home identity. When I asked Soto about code meshing, he said that he feels he uses it based on the situation, similar to the results I got from Brucewski. He actually went into describing the exact situation that Brucewski did, saying that he used a mesh of language when talking to his friends and peers at school, but did his best to sound "professional" when talking to teachers. He even further elaborated and said that it also depended on the teacher: with some teachers, he felt comfortable using his mesh language to communicate, but with other teachers, this was not so much the case. Based on what I can infer from his story, he uses different language based on the relationship he has with the person and not solely the situation or setting. When I asked Soto whether he feels like he uses code switching or feels like he has two separate identities, he quickly responded with "yes." "When it comes to language," he says, he feels like he is two different people. I also asked him which language he preferred the most, his improper home style or semi-proper school style. Predictably, he answered that he prefers the home-style language. It is just more comfortable, plain and simple.

Finally, I interviewed Samantha Arthur, a college student in my English Composition class. Like Brucewski and Soto, Arthur said that at school she uses "bigger words" and more professional language to sound smart. Her home language is more comfortable and relaxed. I asked her whether she keeps the two languages completely separate from each other or whether she ever meshes them, and she said "yes and no." When I asked for elaboration, she said that there are situations where she uses her school language at home and vice versa. For example, if she were to tell her mom or

dad a story about what happened at school, she may tell the story using her school language. Arthur feels that, for the most part, her school and home languages are completely separate and that she does not really mesh the two. Even in her example of using school language at home, she was not meshing the languages; she was simply using one in a different setting. She was the only person I interviewed that did not really use a mesh of languages. Arthur also said that she does not find it difficult to "switch" between her home and school languages. I asked her why she does not mesh her languages and she said that she just has it so engrained in her head that they are two different things that it just does not seem right to put them together. She has two distinct, separate identities.

Conclusion

When comparing all of my interviews, I found that, for the most part, all my subjects experienced code switching, but a distinct difference exists between the way that we communicate at school versus in our home setting. What I did not expect to find was that many people also have two school languages, one for peers and one for teachers. Having all of these different languages either makes people feel divided, torn between where they really belong, or simply satisfied because code-meshing allows them to move between different spaces while holding on to their one true identity.

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Spotlight on... Students

No matter in which college they find themselves, SVSU students write regularly in their courses. As members of a university that, per its mission statement, "creates opportunities for individuals to achieve intellectual and personal development," SVSU students write in different genres, learn different documentation styles, and find themselves weighing the various options they carry in their rhetorical toolkits. No matter their major, they must consider issues of medium, message, and audience.

Because their majors do vary, students find different venues in and avenues through which to grow as writers. No publication can capture all their stories. In the following pages however, you'll find stories about five students, representing SVSU's five colleges, who have found success in their studies through writing.

In this section, you'll also find profiles of the editors of SVSU's two student-run publications, *Cardinal Sins* and *The Valley Vanguard.* Founded in 1967, *The Vanguard* is SVSU's official student-run news source and has been the recipient of numerous awards. Its online presence can be found at www.valleyvanguardonline.com/. *Cardinals Sins* is SVSU's fine arts and literary magazine. Produced by the school's faculty, staff, and students, *Cardinal Sins* has been honored by the American Scholastic Press Association; it features work by members of the SVSU campus and by artists from around the nation. More information about *Cardinal Sins,* including back issues and submission deadlines, can be found at www.cardinalsinsjournal.com/.

Spotlight on…
The College of Arts and Behavioral Sciences

Imari Tetu

Professional and Technical Writing Major

When she came to SVSU in Fall 2017, Imari Tetu had no idea her experiences here would change her vision for the future. A professional and technical writing (PTW) major and a communication minor from West Branch, Michigan, Tetu graduated in 2017 from Kirtland Community College with her associate of art degree. Initially, she was a communication major and a PTW minor, but after spending some time in her Intro to PTW (RPW 260) class with Dr. Bradley Herzog, Tetu realized that PTW was her passion. At first, she aspired to be an editor, but her time in the Department of Rhetoric and Professional Writing (RPW) and the Diane Boehm Writing Center would shape her interests and change her path.

Tetu has been a valuable presence to the campus writing community. After her first semester at SVSU, Tetu and a few other students spearheaded the relaunch of the school's Association of Professional and Technical Writers (APTW). Tetu is particularly proud of that work given that she was elected president after completing her second semester in the program and after having only taken two PTW classes. In her role in the APTW, Tetu was instrumental in organizing the APTW's annual mini-conferences, which saw about 15 presenters and 70–80 attendees each year.

Tetu's growth as a writer—and contributions to the campus's community of writers—is also tied to her work as a tutor at SVSU's Writing Center. As a writer herself, Tetu was intrigued by the Writing Center, though her expectations of what her job would be differed significantly from the reality of it. When she started there in January 2018, she believed she would mostly be editing papers, but quickly learned her job was to guide students through the writing process and provide them with feedback. Of her time in the Writing Center, Tetu observed that "I was learning to be a support for students, sometimes talking through ideas for their drafts, other times asking questions about organization and clarity. I learned to separate higher-order concerns from lower-order concerns and prioritize the former. I also developed my interpersonal skills, not anticipating how challenging it would be to sit down with a complete stranger and talk about their writing, much of which was very personal." In addition to tutoring, Tetu has performed other roles and tasks at the Writing Center. She served as its technical writer, helping to revise the Center's website, and led orientation sessions to familiarize incoming freshmen with the Writing Center.

Writing and working at the Writing Center also became a way to connect with the larger community. Tetu spent several semesters tutoring and leading workshops in the Saginaw and Bay community writing centers, and she also attended and presented her original research at several conferences, including the Michigan Writing Centers Association Conference in 2018 (with Writing Center Director Helen Raica-Klotz) and the 2019 International Writing Centers Association/National Conference on Peer Tutoring in Writing joint conference (with fellow tutors Hannah Mose and Elizabeth Kennedy). Tetu received the SVSU Undergraduate Student Travel Grant to help fund this work, which involved studying why students do not take advantage of the Writing Center; she was the 2020 recipient of a Mayme Hamilton Award for Tutoring Excellence; and she also received the Boehm Writing Center Tutor Service Award with Hannah Mose. The

latter award led to a postcard poetry contest, in which local residents wrote poems about Saginaw's history, places, and people.

In Fall 2020, Tetu will be attending Michigan State University to begin a master's in digital rhetoric and professional writing. She is grateful for everyone who has been a part of her experience at SVSU, with special thanks going to the RPW faculty. Although she came to SVSU with aspirations to be an editor, during her time here she learned of the power of writing, and its impact on human interactions. As a result, she now plans on becoming a professor of technical communication to share her passion for writing with others.

Spotlight on…
The Scott L. Carmona College of Business

Joshua High
Accounting Major

The drafting of any piece writing involves, on some level, a consideration of audience—of community—even if we are writing for a community of one. That focus on community is something that College of Business and Management alum Joshua High knows all about.

A December 2019 graduate of SVSU, High was born in Fresno, California, but frequently moved because his dad was in the U.S. Coast Guard. Eventually, High and his family settled in Belmond, Iowa, where he graduated from Belmond-Klemme High School. Upon his high school graduation in 2011, High joined another community: he enlisted in the U.S. Army where he learned how to be organized and prepared, developing an understanding of the importance of service and of a professional, respectful attitude.

As he was leaving the Army in 2015, where he volunteered as a tax preparer, High considered where he wanted to go to college. He consulted his dad—who was retiring from the Coast Guard and moving back to Michigan—and decided that SVSU would be a good fit. Because High values his family, another type of community, he wanted to be near them during his college experience.

Based on his volunteer work in the Army, High decided to major in accounting upon entering SVSU in 2016. When he reflects on the work he often did in his classes, High points to the importance of the writing process: "Being able to do critical and evaluative research before the writing process begins is an invaluable asset that translates to many careers in business, and then to be able to take that research that you have and organize it in a clear articulate way through writing shows both a level of commitment to the reader and to your profession as a whole that speaks volumes to people who read what you write." High notes that paying attention to detail and being aware of ethical responsibilities have also been crucial to his success in the College of Business and Management. And of those who have helped him develop these skills, High specifically thanks Amy Hendrickson, associate professor of law; Timothy Kenyon, lecturer of English; Mark McCartney, professor of accounting; and Elizabeth Pierce, associate professor of accounting.

While at SVSU, High also considered becoming an attorney, so he chose to minor in legal studies. This interest would lead him to SVSU's Moot Court program, another community that would really emphasize and hone his writing skills. Almost everything that went into the arguments he presented to judges involved writing, and in this venue High excelled. When he competed at the regional tournament in 2019, he and his partner Ashley French received second place. The pair consequently went on to compete at the 2020 National Moot Court Tournament in Baton Rouge, Louisiana, as one of just three teams representing SVSU.

In addition to the Moot Court program, High involved himself with writing in other extracurriculars. He is grateful for the connections he made with other student veterans and the skills he gained in preparing résumés with Career Services while working in the SVSU's Military Student Affairs Office. These activities provided an outlet for his desire to engage in community service, promoted a strong sense of ethics, and enabled him to develop and share his writing skills. One other extracurricular stands out for High: the St. John Paul the II Catholic Ministries. Within this ministry, High notes, "I was able to seek both guidance and consolation through the practice of my Catholic faith on campus that gave me both strength and encouragement to pursue my

academics with greater intensity." After much prayer and discernment, High has decided to apply to the Diocese of Saginaw and pursue becoming a seminarian. The genre of the homily may be a specialized one not typically covered in SVSU's writing or business classes, but High will undoubtedly draw on writing skills he gained here at SVSU as he begins this new vocation in this new community.

Spotlight on…
The College of Education

Emma Kirsch

Early Childhood and Elementary Education Major

When she came to SVSU in Fall 2015, Emma Kirsch knew she wanted to give back—and to become like those supportive individuals who helped her to thrive in middle and high school. That insight eventually led Kirsch, who is from Clinton Township, Michigan, to declare herself an early childhood and elementary education major.

Kirsch, however, was wise enough to seek out advantages beyond the classrooms of the College of Education. She became a member of the twentieth class of Roberts Fellows, a group focused on developing leadership abilities from a global perspective. She also took two faculty-led study abroad trips, one to India and another to Argentina, both focused on education in foreign countries. Among many other extra-curriculars, she co-founded Pie Club (a student favorite), served as vice president for Forever Red with a focus on fundraising and student scholarships, and led summer-orientation groups two years in a row.

Writing has also been a huge part of this May 2020 graduate's SVSU experience. Kirsch worked as a tutor in the Diane Boehm Writing Center for three years beginning in Winter 2017, and although she found herself growing as both a writer and as an individual through her work in the Writing Center, she really found her footing in the Community Writing Centers (CWCs). The CWCs operate two times a month at both the Butman-Fish Library in Saginaw and at the Wirt Library in Bay City. Funded respectively by the Saginaw Community Foundation and the Bay Area Community Foundation, these centers are the first of their kind in the state of Michigan and provide residents with workshops on a variety of writing topics as well as one-on-one consultations on writing. Kirsch not only tutored and held workshops at both locations, but she also served as a coordinator at these CWCs for a year and a half.

Some of her favorite sessions at the CWCs include workshopping a cookbook that a man wrote for his family and working with various storytellers of all ages, including a novelist in the third grade. For Kirsch, the common thread between her experiences was the value of hearing people's stories: "It's easy (and dangerous) to make quick assumptions, but being open-minded and sharing in conversation with all sorts of people has been a significant lesson I've learned at the CWCs. This lesson will translate well into my career as an educator because open-mindedness is where discovery can really begin, and that's something I want to practice with my students." This is a clear departure from someone who once thought of writing as just involving essays and papers.

Kirsch's time in the CWCs also reminded her that writing is always hard work. The most challenging sessions involved individuals who were passionate about their writing but unwilling to listen to her feedback. Working with someone on their writing, she knows, is a collaborative act by necessity and requires both parties to be engaged. This lesson about audience will also serve her well in her future career—even when her students aren't present—because "to write is to communicate. Teachers are responsible for not only family communication, but communication with the administration and students." As a teacher, she expects she will also need to write a grant or make notes of student progress, two very different forms of writing. She also notes that "an essential part of being a teacher is self-reflection to identify the efficacy of your lessons and to help you grow and adapt." She credits her education classes for emphasizing the importance of such self-reflective writing.

Undoubtedly, her ability to reflect on those experiences through writing in her classes, at the CWCs, in the campus Writing Center, and in her various on-campus engagements have paid

off. Kirsch twice won the Braun Award for Excellence in Writing in the College of Education, received the 2019 Tutor Leadership Award from the East Central Writing Centers Association, was the recipient of an SVSU Mayme Hamilton Award for Tutoring Excellence for her work in the campus Writing Center, and was honored with a YWCA Great Lakes Bay Emerging Leader Award. She has also presented at six state and regional conferences on a variety of concerns, including community writing centers, trauma-informed education strategies, non-native English speakers and fundraising initiatives.

Although Kirsch's future plans have hit a bit of a bump due to COVID-19 school closings, she remains characteristically pragmatic. She intends to stay in the area for a few years and work as a teacher before embarking on international travel—and writing will undoubtedly be part of the journey and the destination.

Spotlight on…
The College of Health and Human Services

Stacey Wallace

Occupational Therapy Major

Since high school, Stacey Wallace has wanted to work in the field of occupational therapy (OT). That desire never faded as she moved with her family from Germany to Washington State, and then finally to Saginaw, Michigan, with her husband. Wallace took two years of classes at SVSU starting in 1994 and came back to finish her degree in 2015. Little did she know how much writing that would involve.

Although crafting poems, which she sees as an emotional outlet, is something Wallace enjoys in her free time, she does not find it translates directly to OT. In fact, Wallace states that writing reports about patients is a skill to which she is getting accustomed. Wallace explains, "OT students are trained to be concise with their language because they need to be able to take an individual's entire background and history and somehow condense it down to the most important information that insurance companies or other medical workers need to know."

Although writing concisely may not be as enjoyable as writing creatively, she has found satisfaction in writing within her classes. While working with Ellen Herlache-Pretzer, associate professor of occupational therapy, and Stacey Webster, an instructor of occupational therapy, Wallace was given the opportunity to conduct research on Vision Coach for the past year and a half. Vision Coach is a machine used by therapists to help improve patients' reaction times, but because Vision Coach is less than a decade old, no normative data was in place that would help track patient progress. Wallace and two classmates consequently spent months conducting tests with the machine, collecting data that can be used by others.

Beyond the benefit of this data, Wallace appreciated that the resulting document she helped produce was a collaborative effort. Although many students find group work to be a source of frustration, Wallace loved co-writing the 30-page manuscript of research findings with fellow students Demytria Walker and Lee Wilford. According to Wallace, most work in the OT program is done collaboratively, and, as such, students need to be prepared for this aspect of the field: "You're going to be working with other people—other doctors, other occupational therapists, patients, family members, insurance companies. Requiring collaboration is an asset of [SVSU's] program. When you work with other people, you learn their strengths and weaknesses as well as your own, and you are able to talk to each other, take advantage of your strengths, and work on fixing your weaknesses together." Wallace and her co-authors are now turning their manuscript into a 15-page journal article in hopes of publishing it in *Occupational Therapy in Health Care*.

Wallace appreciates that her instructors do so much to prepare their students. For example, through the program, she was given the opportunity to work hands-on with a stroke patient eight hours a day for two weeks. Such opportunities, like writing itself, are challenging, but valuable: "The amount of work, writing, and collaboration that needs to be done in the program can be overwhelming, but that's just real life. In the field, you need to constantly work with people and for people, and it never stops, so you just have to keep rolling with it."

Wallace is slated to graduate with her master's degree in December 2020 after completing her last round of fieldwork. From then on, she will certainly use the writing and critical thinking skills that she has acquired to help, she says, as many people "from their brains to their toes, from birth to death, with abilities and disabilities, and everyone in between" as she can.

Spotlight on…
The College of Science, Engineering and Technology

Peter Piwowarski
Computer Science Major

Many believe that software developers and engineers have no use for writing in their professional careers, but computer science major Peter Piwowarski knows otherwise. This SVSU student and Hemlock, Michigan, native is firm in his belief that properly written documents are absolutely essential to the computing profession for users, programmers, and system administrators.

Piwowarski's interest in computers began at a young age, poking and prodding at old computers at home and experimenting with hardware. When he began thinking about college, SVSU caught Piwowarski's interest due to its proximity and, most importantly, its computer science program.

In choosing computer science as his program of choice, Piwowarski quickly learned that writing would be playing a significant role in his studies. Although many of Piwowarski's courses focused on computer code and database systems, classes such as Technical Report Writing (RPW 304) focused on the value of quality prose, an important feature of his future work. As Piwowarski notes, "[Programmers] need to document the software and processes we build. It's very important for anyone who wants to use what we've built."

Although many professors and courses have been valuable to Piwowarski during his time at SVSU, he is particularly appreciative of Avishek Mukherjee, assistant professor of computer science and information systems. Piwowarski describes Dr. Mukherjee as a gifted lecturer, one who is able to effectively communicate class material to his students. Through coursework with Dr. Mukherjee and other faculty, Piwowarski's writing skills have grown along with his technical knowledge of computers and programming. The task of creating documentation guiding users through the complex operating system OpenBSD proved to be a prime example of how important clear, structured writing is to the computing field.

Outside of academics, Piwowarski's significant college experiences have been his involvement with the Association for Computing Machinery on campus, as well as his work with Delta College's ITS Club (and its free PC clinics) and its STEM Explorer Program. Through these extracurriculars, Piwowarski has been able to fix community members' computers free of charge and pique K–12 students' interest in the STEM fields. Writing played a role in this community involvement, specifically through his position with the Explorer Program, where Piwowarski was responsible for creating customizable instructional software for K–12 students.

His formidable computer science knowledge and strong technical writing skills, Piwowarski knows, are applicable to any future work, whether in a job as a programmer or in a future graduate program. And although the May 2020 graduate's post-SVSU plans aren't firm, his intensive studies and impressive extracurricular activities as a programmer who writes (both code and in the traditional sense) have set him up for success.

Spotlight on…
Cardinal Sins
Rita Collins, Co-editor

Creative writing major and psychology minor Rita Collins always believed writing to be a powerful form of human expression, and as co-editor-in-chief of *Cardinal Sins*, Collins saw first-hand just how compelling that expression can be.

Collins began her journey with *Cardinal Sins,* which is advised by English faculty member Dr. Kimberly Lacey, in the Fall 2017 semester as part of the general reading committee. By the next semester, Collins was serving as fiction editor, and following former editor-in-chief Mackenzie Bethune's graduation in May 2019, Collins stepped up to take on the role of editor-in-chief, along with then-flash fiction and creative non-fiction editor Hannah Somalski.

Collins described her time with *Cardinal Sins* as her "first real first-hand experience" with publishing, noting the work was invaluable. Collins viewed *Cardinal Sins* as an opportunity to gain experience in creative writing, editing, and publishing, beyond what is offered in the classroom. In addition, *Cardinal Sins* was instrumental in Collins's personal growth. Collins described her early-college self as someone who rarely got involved with extracurricular activities. When she first joined the reading committee, Collins never imagined she would one day be the co-editor-in-chief, but after two semesters in the role, she couldn't imagine it any other way.

Although collaboration and a strong team spirit made working with *Cardinal Sins* a true pleasure, it wasn't all smooth sailing. Collins's leadership faced a steep challenge during the Coronavirus outbreak. The campus's move to online instruction and the suspension of large gatherings occurred shortly before the reading committee was set to meet for the final rounds of judging. Instead of the usual interaction and discussion, the Winter 2020 semester's concluding meetings had to occur remotely. Distribution was also marked by difficulty: the SVSU Graphic Center was unavailable to produce print copies, and the staff had no way of distributing copies of the journal across campus—even if they had, there were very few students on campus to receive them. Although the challenges were unprecedented, Collins had faith in the ability of her readers and editors to overcome. Indeed, Collins saw these events as an opportunity for additional growth into an online platform. In the past, *Cardinal Sins* had featured only a few pieces online as highlights of the journal, but with the restrictions of the virus, the staff was pushed to consider virtual distribution. Though Collins's own preference is for holding a book in her hands rather than seeing it on a screen, she maintained that the priority of *Cardinal Sins* was to reach readers despite the circumstances, and the online format could make this possible.

In the face of these challenges, Collins's passion for developing as a writer and an editor never wavered. Instead, Collins's interest grew to encompass issues of access and accessibility, such as how individuals process information; for example, as much as she enjoyed reading, Collins often found herself unable to engage with audiobooks in the same way. Realizing this led to a desire for expanding access to physical books—and for becoming a certified Braille translator. Collins noted that Braille resources are all too few, and she is passionate about helping to fill that void. Linked to her love of literature, Collins has become interested in translating longer works, such as novels and textbooks, but she also wants to focus on day-to-day texts, such as signs, menus, and official documents.

Although Collins completed her studies in Winter 2020, she still has a vision for *Cardinal Sins*. As a native of Saginaw, Michigan, Collins looks to a time when *Cardinal Sins* would go back to its roots as a presence in the local community. Although proud to be part of a publication representing writers from across the nations, Collins hopes to see more work representing lives and

interests not just of SVSU students, but of the broader communities throughout the Great Lakes Bay Region; a blend of both local and global submissions, she believes, would round the journal out to its best form yet.

The following piece by Ben Hall represents some of the global work published in the Winter 2020 issue of *Cardinal Sins*. Collins says this piece was one everyone on the reading committee knew they wanted to include from the moment they first read it.

Winter, 2010
by Ben Hall

So you wrote a book for all the rabbit-faced men that gave you slurry advice on love. Once, you'd asked for mine. I started climbing buildings the night Dad came home with cancer. And though by now it's just a peppering of memory, crudding up the web of some house spider, there's still the little matter of the note I left on top of my old high school the December after our conversations ended, lying on my back as flecks of Mississippi gravel froze into my hair. The geese that passed were throating encouragement (possibly criticism) as Ryan Adams saddened in my ear, and I, a little drunk on booze, on a febrile thirst for miracles, was thinking that, if I could tune myself to the right frequency, I might slip through, might ink into some other world where (probably) it still hurts but for better reasons.

I missed you this time
I love you
Maybe you thought I couldn't understand. But we were all looking for ways to discharge, to unburden this terrible love we're born with.
You— into your pages, your *huevos motuleños*, the men you led to your table.
Me— along the edges of a knife and across the rooftops of stars that were soundlessly beckoning, *You don't need to leave just yet. There's hours left till morning*.

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Spotlight on…
The Valley Vanguard

Kaitlyn Farley
Editor-in-Chief

Editing concerns bettering a piece of writing, but Kaitlyn Farley reminds us that improvement is truly a dynamic process and not limited to text. In fact, through her editor-in-chief position of *The Valley Vanguard* over the past two years, Farley has continuously sought to improve the standards of the paper as a whole as well as the culture of the staff. By drawing upon her classes and her personal experiences, Farley has demonstrated leadership and initiative that will prove advantageous as she strives, after her May 2020 graduation, to become a full-time news reporter.

This Warren, Michigan, native and professional and technical writing major started at SVSU in Fall 2016 and joined *The Valley Vanguard* that same semester. A year later, she became the paper's arts and entertainment (A&E) *and* opinion editor, and in Fall 2018, she was made editor-in-chief. Since becoming editor-in-chief, Farley has made it a priority to maintain a high quality of writing, reporting, and professional development within the staff. In Fall 2019, she implemented a more extensive training program on how to write for *The Vanguard*, which was utilized by new and returning staff members alike. Part of this training program involved offering weekly workshops on different topics of journalism, some of which included writing better leads, storytelling through journalism, and integrating quotes. Farley also began utilizing the use of the Freedom of Information Act (FOIA) to develop more accurate and in-depth stories that meet the needs of the paper's audience.

To aid in the development of *The Vanguard*'s new tools and training program, Farley utilized lessons learned in her professional and technical writing classes. In Winter 2019, Dr. Fenobia Dallas's Intro to Journalism (RPW 262) exposed Farley to different theories and techniques that she was able to work into her weekly training workshops. In Dr. Bill Williamson's Editing (RPW 435), Farley was able to create a style guide for *The Vanguard* that could be used by the staff even after she graduates. Finally, in Advanced Rhetorical Theory (RPW 465), taught by Dr. Scott Kowalewski, Farley was given the opportunity to conduct ethnographic research on the workplace of *The Vanguard*. This work helped her formulate a plan to improve the culture of the staff as a whole, which is something Farley claims she had been trying to do the entire year.

One of the biggest improvements of *The Vanguard* that Farley has seen over the 2019–2020 year has been related to the organization's culture. No doubt aided by her ethnographic research, Farley found that many of the staff members felt *The Vanguard* was too "in and out." Although she had started implementing in-person staff meetings in 2018, Farley claims that people would only show up to receive their reporting assignments—and then leave. To remedy this, Farley began to make staff meetings more interactive and inclusive. At one such meeting, the staff compared *The Vanguard* to other college papers and discussed what *The Vanguard* does well and what it could improve. Farley even put the staff meeting food choices up to a vote each week. Farley explains, "From the very start, I made sure every staff member knew I was there to support them and that they could contact me about anything anytime."

The Valley Vanguard has likewise presented Farley with numerous professional opportunities to assist her journey in becoming a full-time news reporter. During Governor Whitmer's visit to SVSU in January 2020, Farley was able to meet the executive editor of *Route Bay City,* where she is now doing freelance work. Her experiences as a reporter and editor-in-chief

of *The Vanguard* also made her application to WSGW and *Saginaw News–MLive* stand out. She is now a reporter for the radio station and will be interning at *Saginaw News–MLive* in Summer 2020.

Farley is thankful to *The Vanguard* for giving her such crucial insight on how a newsroom should be run. Within the innumerable lessons she has learned through her experiences with *The Vanguard*, she feels the most important to keep in mind involve issues of integrity and purpose. As Farley notes, "There isn't such thing as an unbiased person, but there can—and should—be such thing as unbiased writing. Journalism isn't about forming people's opinions. It's about informing people so they can form their own opinions."

Although her tenure as editor-in-chief of *The Vanguard* is at a close, Farley hopes the improvements she implemented will continue to have an impact on the paper and the campus. The following article, which appeared in *The Valley Vanguard* on February 20, 2020, and was written by Connor Rosseau, is a case in point. Farley says that the topic of exams and funerals came up because of an opinion piece written by a staff member. When readers started sharing their own stories about the same problem, the members of *The Vanguard* decided to look deeper into the official policy. In Farley's words, "This article shows that we are engaging a lot more with readers than what was previously true. We only questioned the policy because our readers expressed concern over it." This article exemplifies *The Vanguard*'s dedication to listening to its readers—as well as Farley's own dedication—and provide them with the unbiased reports needed to stay informed.

Students Raise Concerns for Exam Policy over Family Deaths

by Connor Rosseau

After receiving student concerns over SVSU's policy on missing class for a family death, *The Valley Vanguard* reached out to Dean of Students Sidney Childs.

The concerns came after a Feb. 10 *Vanguard* opinion [piece] about professors asking students to take exams amid a family death.

Childs said that in such cases, students should come to him with their concerns. He explained that his responsibilities as the dean of students include helping students who face family deaths or other situations that interfere with their performance at school.

"We help them navigate that process with the goal of helping students understand what their responsibilities are and what the university's responsibilities are," he said.

Many students struggle with deaths of family members, and in some cases these situations have clashed with exam days, which creates difficulties for both the student and the instructor.

Childs addressed some of students' concerns and offered advice for resolving these kinds of issues.

"(Faculty) serve as role models for students," Childs said. "(We want to make sure) we are moving in the direction where everyone understands one another and the student can continue to have a positive experience at the institution."

Childs said college is a place where students learn how to operate in the real world and successfully handle situations life throws at people, including a family death.

"At the end of the day, it is about creating that environment where the primary purpose for being here is to help students become their best selves," he said.

He said in the event that a professor says missing the exam means a zero, no matter why a student misses it, there are steps a student can take to advocate for themselves.

One option for students is to speak with the chairperson of that professor's department. If a student speaks with the department chair and is not satisfied with their response, Childs said, the student can always go to the dean of their college.

If things are still not resolved the way the student would hope, they can get in contact with the provost's office.

Childs explained that professors have certain rights when leading a college class. While they must follow university policies, faculty create their own attendance policies.

That means professors decide what is deemed an excused or unexcused absence, he said.

Childs said he encourages students to seek guidance or assistance when it comes to any sorts of issues between students and professors.

"We encourage students to make sure that they are having a conversation with the faculty member," he said. "Make sure that you are communicating… in a timely manner. In the event that there is a funeral that takes place during finals week, I would have that conversation immediately."

Students who prefer to address a concern online can go to the Cardinal Care notes on the Student Affairs page of the SVSU website.

"If there are some concerns involving wellness, safety, academic success… you can tell us what is going on," he said. "It comes to someone in my office and then we will follow up. There is always someone to talk to.… Students are not alone."

Reprinted by permission of *The Valley Vanguard*. "Students Raise Concerns for Exam Policy over Family Deaths" first appeared in the February 20, 2020, issue of *The Valley Vanguard*.

Spotlight on... Faculty

In the following pages, we profile the work of SVSU faculty members known for their work inside and outside the classroom. Innovative teachers and scholars, they are also successful writers who strive to help their students find their own success as writers.

Writing Equals Communicating

Jennifer Chaytor

Associate Professor of Chemistry

Winner of the 2020 Franc A. Landee Award for Excellence in Teaching

Jennifer Chaytor has been teaching at SVSU since 2012. Her main teaching responsibilities are organic chemistry lectures and laboratories and a biochemistry survey course. Chaytor received a bachelor of science with honours in biochemistry from Brock University in Ontario, Canada, in 2005. She then completed a Ph.D. in organic chemistry in 2010 from the University of Ottawa (Ontario, Canada) and a post-doctoral position in medicinal chemistry at the University of Alberta in Edmonton, Alberta, Canada, before joining the Chemistry Department at SVSU. Chaytor has developed an active undergraduate research program at SVSU, emphasizing both bioorganic chemistry and chemistry education. She has published articles in several peer-reviewed journals, including the *Journal of the American Chemical Society*, *Bioorganic and Medicinal Chemistry Letters*, *Carbohydrate Research*, and the *Journal of Chemical Education*.

Chaytor has received 1st State Bank's 2019 RUBY Award in the Great Lakes Bay Region. (This annual award honors the "area's brightest professionals under the age of 40 who have made their mark in their professions and are having an impact throughout the Great Lakes Bay Region.") Also the recipient of the SVSU Undergraduate Research Program Faculty Mentor Award (in 2017), she is currently the co-coordinator of the Dow Science and Sustainability Education Center Summer Internship Program at SVSU.

When students first register for my organic chemistry courses, they typically have a lot of concerns. Organic chemistry has a reputation for being "horrible," "incredibly difficult," and "full of memorization." Subsequently, I spend a good part of my courses convincing the students (I hope) that these concerns aren't (totally) accurate.

One task that students generally don't expect to encounter in organic chemistry is a lot of writing. After all, they are science majors. They chose a career path in science, and often they don't see a connection between science and writing. Part of my job as a science instructor is to teach them that to be a successful scientist (or a doctor, or a veterinarian, or a pharmacist, or a dentist, or …), you must be able to communicate. A large part of communicating science is being able to explain results clearly and concisely to both scientific and non-scientific audiences, and to do so through writing. For example, when an experimental procedure is not communicated clearly and completely, it can be impossible for another person to replicate the recorded results. This could result in mistrust of the scientist's data and conclusions, when in fact it is simply a result of poor communication.

I thus incorporate a writing component into all my lecture courses. Students in Organic Chemistry I and II (CHEM 230 and 330) write study plans and reflections, and students in Advanced Organic Chemistry (CHEM 415) and Survey of Biochemistry (CHEM 250) write research papers. Additionally, the vast majority of my exam questions are written response questions and not multiple choice, even in courses where I have close to 100 students. Students need to show evidence of critical thinking and problem solving, and this is not easily assessed with multiple choice questions. Medical schools probably don't care if students know the intricacies of

a particular organic chemistry reaction mechanism, but they do want students who can think critically and solve problems. Thus, I emphasize writing in my lecture courses because it is a critical skill that students must develop in both lecture and laboratory courses.

After teaching organic chemistry labs for a few years, I realized that students often struggled with being able to write and format a coherent lab report. Students take two semesters of general chemistry lectures and laboratories in their freshmen year before beginning organic chemistry in their sophomore year. Our general chemistry labs focus on techniques and skills, but not on writing lab reports, so students have not had a lot of practice in doing so once they reach organic chemistry. To give students some practice in writing and to tackle this problem, I developed a writing module that all students complete as their first "experiment" in organic chemistry lab.

The writing module is broken up into two parts. The first part of the module discusses the importance of writing and why it is relevant in the sciences; we discuss how writing equals communicating—and that no matter their future career plans, they will need to be able to communicate. We also spend a great deal of time learning how to properly cite our sources, so that we can learn from experts in the field and correctly attribute those experts' ideas. Many students think of writing only in terms of writing essays for English class, and I remind them that there are several different types and purposes of writing.

The purpose of the first part of the module is to convince students that being able to write well will be relevant to their lives both during college and after they graduate. I explain that if they are planning to go to graduate school, they will need to write research papers, journal articles, grant applications, and a thesis. Their writing skills will also be important when preparing conference presentations.

Because many of our chemistry students are planning to go into a health-related profession such as medicine, we also discuss how a large part of a doctor's job involves charting and communicating with colleagues about patient care. In this field, inaccurate note-taking or charting could result in the death of a patient. My aspiring veterinarians often mention that their patients can't speak for themselves, so it is critical for veterinarians to advocate for their patients and communicate their needs.

For those students who are interested in careers in the chemical industry or an industrial lab, producing accurate lab notebook records and well-written reports is essential. I explain to students that the outcome of lawsuits can come down to what was written in a laboratory notebook. If it's not recorded, it didn't happen. Scientists can be fired, and even face criminal charges, for falsifying results or not accurately recording what was done in the lab. To this end, students learn that lab notebooks must be a complete record of what occurred in the lab (no pencil or white-out!). This means, even if they make an error, it must be reported. After all, sometimes "errors" lead to serendipitous discoveries! Furthermore, I tell the students that regardless of their career plans, at some point, they will have to apply for a job and that they must be able to effectively communicate and sell themselves to prospective employers.

After completing the first part of the module about the importance of writing, we have a class discussion where students identify their career plans and discuss how writing will be important as they pursue their goals. Following this exercise, students tend to have a greater understanding and appreciation for why writing matters to their life.

The second part of the module focuses more on the mechanics of writing, where we break down each part of a lab report (introduction, procedure, results, discussion, conclusions, and references) and look at what information belongs where. I have found many students struggle with understanding the difference between a results section, where you report the data obtained, and a discussion section, where you analyze and interpret those results.

We also talk about formal and informal writing, avoiding conversational writing in a lab report, and correct use of citations. The writing module culminates in writing a lab report using supplied data, so the students get practice in all the different areas of a scientific lab report. Students

have reported that working through this module has helped them improve their writing, and it has also helped me to give them more specific feedback on their lab reports throughout the course.

At the end of my courses, in addition to learning organic chemistry content, laboratory techniques, and problem-solving skills, I hope that students come out with an appreciation for writing as a communication tool and practice in using this tool effectively.

The simple module described above, though, really isn't all that simple and reminds me that our students tend to compartmentalize their classes. They don't always see how skills from different classes in different disciplines are transferable. They also don't readily see how many conventions may need to be tweaked when one moves between genres or writes for a different audience. In this light, the simple can instead be revelatory, and, I hope, this serves as a reminder that no matter our discipline, as instructors, we all need to step back and have these conversations about writing and communication with our students. We can't simply think "I'll leave the writing to those communication-intensive courses; I have too much content to get through." Instead, we all have a responsibility to help our students hone these skills and give them opportunities to practice writing regardless of the discipline, because writing equals communication.

An Excerpt from *Daily Life of African American Slaves in the Antebellum South*

Paul Teed and Melissa Ladd Teed
Professors of History

Paul Teed received his Ph.D. in history from the University of Connecticut and joined the SVSU faculty in 1997. Melissa Ladd Teed received her Ph.D. in history from the University of Connecticut and joined the SVSU faculty in 2000.

The following is the introduction to their *Daily Life of African American Slaves in the Antebellum South* (Greenwood Press, 2020). They have also co-authored *Reconstruction* (ABC-CLIO, 2015), which is part of the Guides to Historic Events in America series.

Nearly all historians of the United States have identified slavery as a central factor in the making of the modern nation and argue that its brutal legacy of racism remains deeply embedded in American society down to the present day. Although there is no way to understand the nation's past without reckoning with the multifaceted impact of slavery, many Americans clearly find the subject disturbing and out of step with images of the nation emphasizing freedom and equality. Indeed, recent controversies over middle school and high school social studies curricula and over textbook adoptions around the country have centered on their presentation of slavery and its role in American life. Despite a scholarly consensus on the central role of slavery in causing the Civil War, for example, state education officials in Texas only recently adopted curricular standards acknowledging that fact. One widely used high school textbook produced by a mass-market publisher, moreover, was challenged by parents in 2015 for using the generic and sanitized word "workers" to describe Africans kidnapped from their homeland and forced to labor under terrible conditions in the Americas. Most recently, conflict over the presence of monuments to leaders of the overtly proslavery Confederate States of America has generated an intense debate in the country over the realities of life for African Americans on the plantations of the Old South. Many Americans seem unwilling or unable to confront this aspect of their nation's past, with nearly 41 percent of respondents to a 2015 Marist poll denying that slavery was the main cause of the Civil War (Ehlinger 2015).

Yet even as these issues roil the public debate, teachers face enormous difficulty in presenting their students with an accurate understanding of slavery and its role in American history. In a survey compiled by the Southern Poverty Law Center, for example, teachers reported that school districts and state boards of education provide only lukewarm support for teaching about slavery and that assigned textbooks inadequately address the subject. When asked if the textbook they use does "a good job of covering slavery," only 8 percent strongly agreed, while 18 percent either disagreed or strongly disagreed (SPLC 2018, 29). In addition, teachers acknowledge that slavery is a topic that sometimes creates an uncomfortable classroom environment as it raises questions about the character of the nation and about the source of racial inequality in contemporary America. The logical result of these limiting factors is a striking lack of knowledge among high

school seniors about the history, character, and meaning of American slavery. In a 2016 poll consisting of eighteen historical questions conducted by Survey USA, only 32 percent of seniors knew that slavery was abolished by the Thirteenth Amendment and less than half knew that the Middle Passage referred to the horrific process by which kidnapped Africans were brought to the Americas as slaves. Thus, while slavery has become a more important topic than ever, Americans lack essential knowledge about its history.

What is perhaps even more surprising is that the general public's declining knowledge about the history of slavery is occurring at a time when historians of the institution are making huge strides in understanding it. In recent decades, the study of American slavery has attracted some of the most talented and innovative historians of our time. Using a wide range of sources and techniques, scholars have explored nearly every aspect of the system of chattel slavery from its inception in colonial Virginia through emancipation. We know more than ever before about the economic impact of slavery on the nation's development, the role of the slave trade in the emergence of cotton production, the brutal methods by which slaveholders dramatically increased staple crops, the experience of enslaved women in the plantation houses of the antebellum South, the diet of slaves, their religious lives, and the material circumstances they confronted on a daily basis. Accurate information about all these topics is also more accessible than ever as the digitization of archival sources has made plantation records, interviews with ex-slaves, slave narratives, and other critical documents available to anyone with access to the Internet. In the past, serious inquiry about slavery required extensive travel to special collections departments and archives around the country, but digitization has placed the raw materials of historical work at the fingertips of students.

Like any scholarly field, the history of slavery has generated interpretive disagreement among its practitioners. For some time, debate has centered around the degree to which enslaved people were able to resist the dehumanization and violence inherent in slavery and to carve out a world that was culturally autonomous from that of their masters. Scholars who emphasize the "agency" of enslaved people have pointed to evidence that West African cultural patterns, including religious practices, naming traditions, family and community structures, agricultural techniques, and material customs, demonstrate that many enslaved people were able to protect themselves from the worst emotional and psychological effects of slavery. Other historians, represented most recently in works by Walter Johnson and Edward Baptist, have argued that slavery was, at its core, a system of forced labor governed by the ruthless logic of capitalist production that demanded higher and higher levels of material output for the world market in cotton. The extent to which enslaved people were able to exert "agency" or "autonomy" over their own lives, these scholars insist, was conditioned and sometimes totally compromised by the terrible labor demands made on their bodies. The differences between these two approaches should not be overstated, but they form the basic plane on which current historiographical debates are taking place.

The approach taken in this book seeks to blend the best elements of the most recent literature on the history of slavery. In its most basic form, antebellum slavery was a system that defined enslaved people as chattel property, a form of ownership that imposed almost no restrictions upon the ability of the slaveholders to buy, sell, and use their slaves at will. The daily lives of slaves, then, were shaped profoundly by the recognition that their most basic relationships to family, friends, and community could be severed by masters who chose to sell them to slave traders or other planters. Fear of physical punishment or abuse weighed heavily on the minds of enslaved people, but their dread of sale and separation from loved ones was perhaps their most overriding fear. In many of the chapters that follow, the existence of a market in slaves will cast a defining shadow over aspects of daily life. Their religious faith, for example, often provided consolation to those who had lost their nearest and dearest to sale, while the intellectual and political values of enslaved people often revolve around scathing critiques of their masters' crass decisions to place profits over human relationships. In their musical and recreational activities, enslaved

people worked to create social bonds and shared memories they hoped would survive the possibility of loss and separation.

But the "chattel principle," as one former slave called it, shaped many other aspects of slaves' lives as well, including the rhythms of their work, their material circumstances, and their relationships with slaveholders. As property with a dollar value nearly as great as the land itself, slaves were a central element of their owners' assets, and their productive labor was indispensable to the profitability of the plantations, farms, and shops where they worked. This meant that slaveholders interacted with their slaves primarily out of economic self-interest and sought to extract maximum value from their labor at as low a cost as possible. On plantations, where the vast majority of enslaved people lived and worked, an unrelenting routine of year-round labor and a carefully measured allotment of food, clothing, and shelter sharply circumscribed the time and ability of slaves to realize their individual, familial, and communal aspirations. Despite the rhetoric of racial paternalism that they constantly used to defend and justify the system of slavery, Southern planters were enmeshed in a capitalist system of cash-crop production that required them to use their human property to the fullest in their headlong pursuit of profit. Plantations were not, as slaveholders contended, extended families but rather labor camps in which enslaved workers' lives were forced to conform to the demands of cotton, sugar, tobacco, or other staple crop production. Physical abuse, poor diet, shoddy clothing, and medical neglect were, unfortunately, outgrowths of a system that defined slaves as chattel and that valued them insofar as they contributed to the economic interest and social aspirations of their owners.

Yet the dire consequences of defining slaves as property are only one half of the story of the slaves' daily lives that is told here. Enslaved men, women, and children refused to accept the terms of this brutal, dehumanizing system and used all their cultural, intellectual, and physical resources to resist it. Like other oppressed people in history, African American slaves were acutely conscious of the weaknesses in the system and exploited gaps in the slaveholders' power wherever it was possible. Although slaves lacked political rights, for example, they understood that plantations operated according to a hierarchy in which white masters, mistresses, and overseers had specific responsibilities and exerted distinctive forms of power. Playing whites off against each other, especially owners and overseers, was a means by which slaves protected themselves against overwork or various forms of abuse. Recognizing that slaveholding families liked to see themselves as benevolent, evangelical Christians, slaves appealed to such values and received permission to build churches of their own where they developed a covert critique of slavery and where a distinctive brand of liberation theology was born. While they rejected the paternalistic defense of the oppressive system, enslaved people used its terms to their advantage wherever possible, and the richness of their religious, recreational, political, and intellectual loves testified to the success of their endeavors.

Another main theme that emerges in this work on the daily lives of enslaved people is the persistence of African cultural practices into the world of antebellum slaves. Though there is a wide-ranging debate among historians over the extent of cultural transmission from West Africa to the United States, the evidence for significant continuity is overwhelming. Despite the power of slaveholders to impose their cultural norms on the people they owned as property, the West African elements of slave culture in the United States gave enslaved people an alternative set of values through which to construct a world of their own. Many slaves converted to Christianity during the great revivals of the early nineteenth century, for example, but the circumstances of their conversions allowed them to express and enact their new faith in ways that were consistent with their African spiritual heritage. Alongside their Christianity, moreover, slaves practiced conjure, fortune telling, divination, and other African practices that allowed them to navigate the treacherous water of American slavery. In their recreational lives, slaves preserved critical aspects of African dance and musical culture in ways that helped to create a strong sense of community in a world in which slave communities existed under the ever-present possibility of disruption through sale. All these elements suggest that while the daily life of slaves was powerfully shaped by both the power

of the master and the demanding realities of the plantation regime, slaves embraced their own human vitality and sought to create lives of their own.

The daily lives of slaves in antebellum South as presented here are, therefore, a dynamic story of oppression and resistance. The evidence of this, as we shall see, can be found most compellingly in the words of the slaves themselves as found in the various narratives they wrote before and after emancipation and in the hundreds of interviews they recorded during the 1930s. Indeed, those narratives and interviews focused directly on daily life rather than on abstract discussions of the institution of slavery. In the end, it seems that what former slaves remembered most about their experience under the cruel burden of human bondage was the ways in which they had somehow made it through each day despite the violence and brutality they experienced. It was in their daily struggles for human dignity that the slaves found hope for the future and the strength to continue the fight against a system designed to crush out their dreams for freedom.

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A Summary of *Smash the Bottleneck: Fixing Patient Flow for Better Care*

Danilo Sirias
Professor of Management

Danilo Sirias earned a master's degree in industrial and systems engineering and a Ph.D. in business administration, both from the University of Memphis. He is also a Certified Critical Chain Project Manager and a certified Theory of Constraints (TOC) International Certification Organization thinking process implementer. Dr. Sirias is currently a professor in the Department of Management and Marketing at Saginaw Valley State University.

He has received multiple grants to further his research in the applications of TOC in healthcare. His research interests include managing patient flow in healthcare systems and developing strategies to improve quantitative reasoning. Dr. Sirias is a co-author of the book *Bridging the Boomer–Xer Gap: Creating Authentic Teams for High Performance at Work* (Nicholas Brealey Publishing, 2002), selected by Soundview Executive Summaries as one of the most influential business books of 2002 and by *Foreword* magazine as Book of the Year. He is also co-author of the book *Success...an Adventure* (Sirias Consulting, 2009), written to teach students thinking tools. Dr. Sirias is also the inventor of the methodology known as Problem Solving Maps, used to help students develop quantitative reasoning skills. Problem Solving Maps strategies are now being used in several countries around the world. He has published peer-reviewed research in several journals, including the *Journal for Quality and Participation*, *International Journal of Applied Quality Management*, *International Journal of Production and Operation Management, International Journal of Production Research*, and *Journal of Education for Business.*

In the following essay, Dr. Sirias provides a summary of key ideas from his *Smash the Bottleneck: Fixing Patient Flow for Better Care (and a Better Bottom Line)*, which was published by Health Administration Press in 2020 and co-authored by Christopher Stears.

Effective health care facilities are an essential element of any society. In addition to providing care to the population in general, such facilities ensure access to care for vulnerable people, including the indigent, the uninsured, and the homeless. For this reason, the viability of a nation's health care system is a significant public issue. Of the myriad problems affecting health care, patient flow has become one of the most important; however, the road to improvement is not easy.

Hospital overcrowding, and therefore poor patient flow, has implications in quality of care delivered, hospital finances, patient satisfaction, and provider wellness. Overcrowding causes patient morbidity and mortality. It costs hospitals millions of dollars through ambulance diversions, prolonged inpatient lengths of stay, and malpractice.

No less important, there is a shortage of primary care providers, patients typically wait for months for an appointment as outpatient clinics, and medical offices are overcrowded. As a result, it is often difficult for patients to address acute problems with their primary care providers or obtain

timely follow-up after an emergency department visit or hospitalization. This situation pushes patients even more away from primary care and toward more costly emergency services.

Smash the Bottleneck: Fixing Patient Flow for Better Care introduces the Theory of Constraints (TOC), which posits that the productivity of any system is limited, at a point in time, by ONE constraining resource. Working as a team to identify, optimize, and break this constraining resource improves the performance of the entire system. TOC is a process of ongoing improvement similar in some ways to other operational methodologies, most notably Lean. However, at its most fundamental core, the emphasis of TOC is on "coordination," whereas, for Lean, it is on "waste." Lean looks to eliminate waste across a system to improve operations and TOC looks to focus improvement efforts through one specific resource (the constraint). In fact, one of TOC's criticisms of Lean is that in Lean, there is often too much emphasis on eliminating waste, and if too much is eliminated, it could make the system anemic. Additionally, TOC shows that reducing waste around a resource other than the constraint does not really have a positive impact on system-wide flow.

The book's focus is to show how TOC can be used to improve patient flow in a hospital, clinic, or medical office. It presents three main tools and their application to healthcare: 1) the Five Focusing Steps (5FS), 2) Drum Buffer Rope (DBR), and 3) Buffer Management (BM).

The 5FS of the TOC are a direct result of the assumption that the flow in a system is a function of its weakest link (see Figure 1). The 5FS are: 1) Identify the system's constraint, 2) Decide how to exploit the system's constraint, 3) Subordinate everything to the above decision, 4) Elevate the system constraint, and 5) If in a previous step, the constraint was broken, go back to step 1.

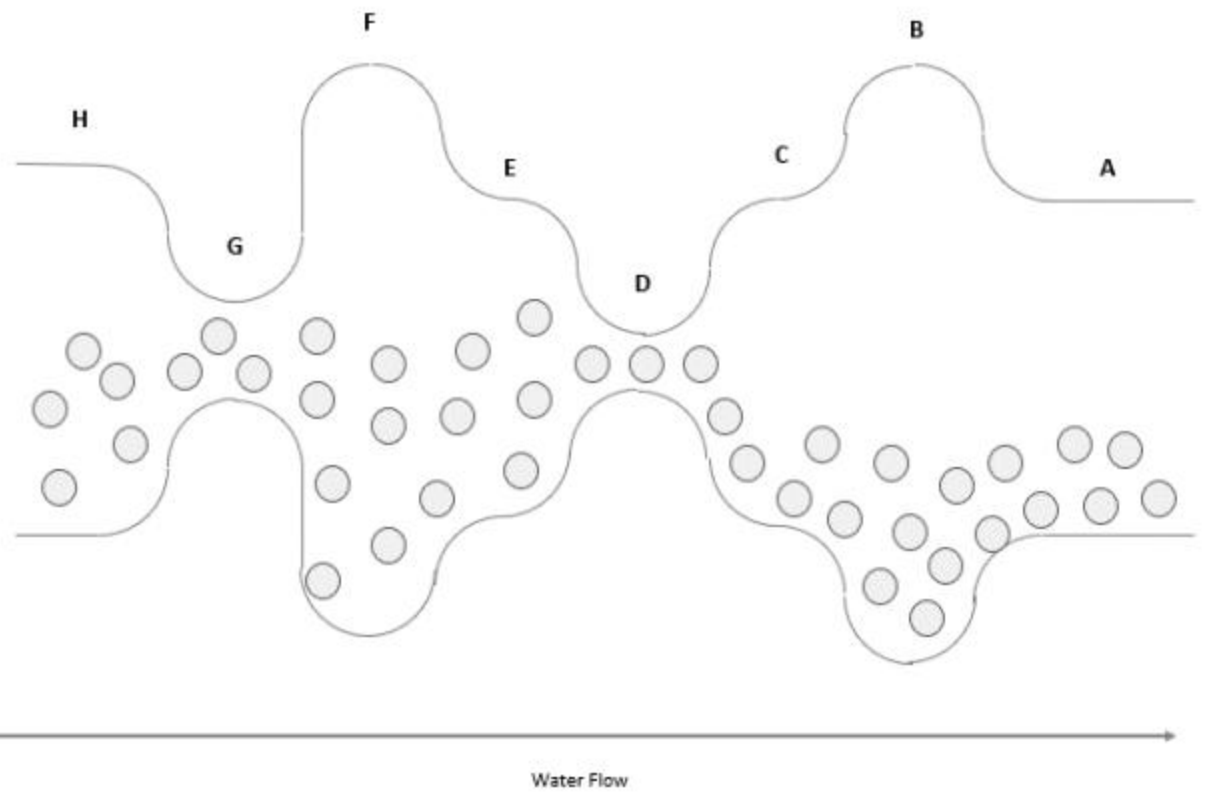

Fig. 1. The bottleneck determining the output of the system

DBR, the second tool, is a methodology whose objective is to create a schedule that is robust, is achievable, and can be executed with a significantly reduced amount of chaos. Scheduling resources to optimize the output of manufacturing and service systems is a complex problem. The challenge is how to create a plan that can withstand the realities of the expected variability that would inevitably occur during the execution of the plan.

The Drum is the schedule of the constraint, and it should be as realistic and optimized as possible to get the most out of this resource. That schedule sets the pace of the entire system. Due to its importance, the Drum schedule is protected from disruptions using Buffers. Like a shock absorber in a car, Buffers protect the schedule from "bouncing around" to the point that the initial plan becomes obsolete and undoable. The final part of the system is the Rope, which is a mechanism

whose purpose is to ensure that the pace of everyone's work is synchronized to the Drum. While Buffers ensure the Drum is protected from variation, the Rope is designed to ensure that buffers are not too long, too short, or excessive. It is designed to protect the system from being overloaded. See Figure 2 for a summary of DBR.

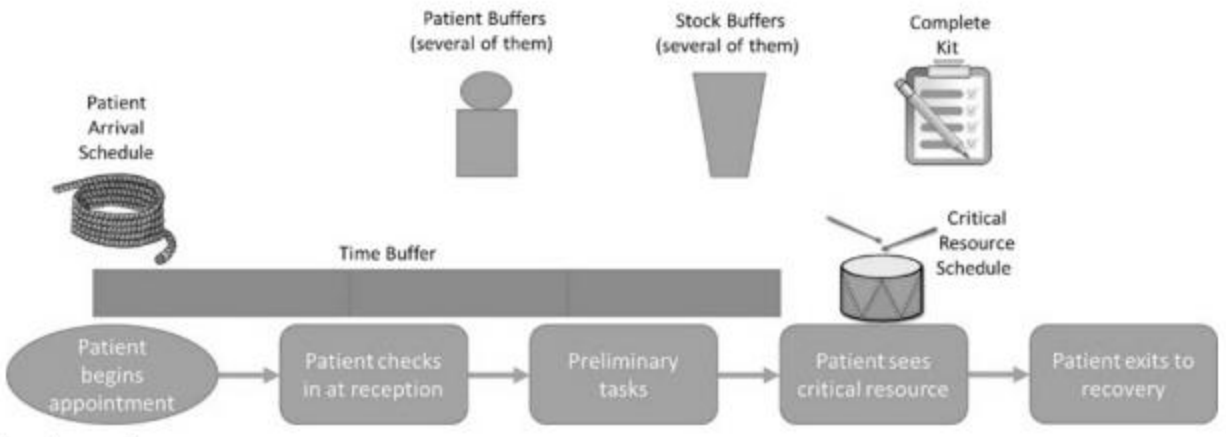

Fig. 2. The DBR at work

Finally, BM is a tool to manage the execution of the plan. The function of BM is to help resources prioritize tasks to improve synchronization, expedite urgent tasks to avoid delays, escalate situations requiring additional approval or resources, and improve critical processes preventing flow. BM becomes operational by using a color scheme based on how much each of the buffers determined in DBR are consumed. By continuously monitoring events during execution, we determine colors by "buffer consumption." Buffers start as green, and, as they are consumed, they turn from green to yellow, red, and finally black. A system needs to be developed to determine buffer status dynamically without burdening employees. Visual tools (such as a computer display or colored stickers) are used to communicate the conditions of all buffers to all resources so they can prioritize their activities.

These three tools can be adapted to improve flow in emergency departments, inpatient units, and clinics. 5FS is generic enough that can be used in any healthcare environment. DBR can be more quickly applied to clinics because the physician schedule is the Drum, and the system design requires it to determine the different Buffers and the Rope schedule. BM can also be applied to any healthcare environment, but it is more appropriate to be used in inpatient units where the Drum schedule is not possible. TOC offers an innovative and practical methodology to improve patient flow, an essential part of healthcare systems worldwide.

An Excerpt from "End of Life"

Bonnie Harmer
Associate Professor of Nursing
Jaime L. Huffman
Associate Professor of Nursing
with Abdul Waheed

Dr. Bonnie Harmer received her M.S.N. from SVSU and her Ph.D. from the University of Lincoln-Nebraska.

Dr. Jaime Huffman, R.N. (not pictured), began her fourteenth year of teaching at SVSU in 2020. Her doctoral work focused on end-of-life decision making among U.S. military veterans and was completed at Wayne State University. She received her M.S.N. from SVSU and her B.S. from Western Michigan University.

The following excerpt is from their article "End of Life," which was published on *PubMed* in 2020.

Ethics

The end of life can be rife with ethical dilemmas. It is important for the healthcare team members [to] fully comprehend the principles of bioethics, so they can face potential ethical dilemmas that might occur for their patients and family members at the end of life. The healthcare team member must recall that the goal of end-of-life care is to enhance the quality of life for the dying person and thus must always keep this goal in mind when helping the patient and family with ethical dilemmas.

The first principle of biomedical ethics is autonomy, which is the patient's ability to choose and have self-determination. When looking at potential ethical dilemmas that may occur at the end of life, the healthcare team member must assess if the patient can make decisions for themselves autonomously. The team member must assess the patient's cognitive and developmental ability to understand the disease as well as care options and be able to make informed decisions related to those options.[7]

The ethical principles of beneficence and non-maleficence merit concurrent consideration. Beneficence, or doing what is best for the patient, and non-maleficence, not causing the patient harm, are considered as balancing one another.[15] The healthcare team members need to do as much as they can to benefit the patient (beneficence) while taking the necessary precautions not to prolong the dying person's suffering (non-maleficence).

The final ethical principle for consideration in end-of-life care is justice. When considering the principle of justice, the healthcare team member needs to weigh what is fair or just for the dying patient and act according to those interests.[16] By keeping all four of these principles in mind, the healthcare team member is likely to help the patient and family make decisions that are ethically sound and enhance their quality of life.

One of the potential ethical dilemmas healthcare team members can face [is] when a formerly competent dying patient has lost their decision-making ability.[17] If the dying patient is unable to state their wishes, the healthcare team member must look to an advance directive. An advance directive is a legal document that outlines the patient's wishes and, in some cases, names

a durable power of attorney, a person who is designated to make healthcare decisions for the patient. Adhering to the wishes of the advance directives is the ideal way to maintain the ethical principle of autonomy. However, reports are that only twenty-six percent of Americans currently have an advance directive in place. The most frequently cited reason given for people not to have advance directives is a lack of awareness as to why this document is needed. Having advance directives in place for dying patients reinforces the need for early end-of-life conversations with the patient and family members. In these conversations, the dying person is encouraged to choose a person, who may or may not be [a] family member, who will respect their wishes, make decisions that align with those wishes, and advocate for those wishes should disagreements occur.

Another ethical dilemma healthcare team members can face when caring for dying patients is when the care options chosen by the patient or the durable power of attorney cause unnecessary prolongation of suffering or are medically futile. Recalling that all end-of-life care should be patient-centered, healthcare team members should consider futile medical care can take a variety of "forms and be defined as futile only in the context of each patient's situation."[18] Examples of such care options as documented in healthcare literature are cardiopulmonary resuscitation on frail and elderly dying patients, completing screening tests that will not influence the comfort care given, and invasive procedures such as placement of endotracheal tubes and surgeries that will not add quality to the life of the dying individual.[18][19] These inventions might succeed in "providing physiological effects yet provide no benefit to the patient."[20] Of course, all interventions merit consideration within the context of the patient's diagnosis and the trajectory of their illness. Health team members should also be aware that the patient's culture often influences end-of-life care decisions. Therefore, a thorough cultural assessment completed early in the end-of-life care might help healthcare team members, dying patients, and their family members have an understanding of expectations of care.

When ethical dilemmas occur, and there is disagreement on how to proceed with the end-of-life care for the dying patient, ethics committees can convene. The purpose of ethics committees is to advise the hospital staff, not to take over or direct patient care. Although the decisions of ethics committees are not legally binding, these interprofessional committees, members of which include physicians, nurses, chaplains, social workers, and case managers, serve to offer professional advice in situations where conflict has occurred.

Pain and Symptom Management

There are many symptoms patients face at the end of life, which can affect their quality of life. With proper symptomatic control, healthcare team members can enhance the quality of life for their dying patient. Symptoms that affect the physical domain include pain, respiratory, and GI symptoms as well as mobility issues. Symptoms such as depression and anxiety affect the domain of psychological health. It is the responsibility of all healthcare team members to assess these symptoms and work with the patient to control them as best as possible.

The research shows adequate pain management is one of the most discussed concerns for patients facing the end of life.[21][22] Healthcare team members are encouraged to complete comprehensive assessments of the patient's pain on a routine basis and structure care around these assessments, knowing that pain control frequently changes. Choosing the correct assessment tool for measuring a person's pain depends upon the developmental and cognitive ability of the patient. The Child and Infant's Postoperative Pain Scale (CHIPPS) can be used for neonates and infants while the PQRST scale is useful for all adults who are verbally capable of expressing their needs.[23] Healthcare team members should bear in mind some scales exist for those who are not capable of verbally expressing their needs. Scales such as the [Pain Assessment in Advanced Dementia (PAINAD)] can be used in instances when patients have a diagnosis, such as dementia or expressive aphasia[,] that limits their ability to self-report their pain. Regardless of the type of scale used, a thorough self-report is needed from the patient, which should inform the physical

exam completed by the healthcare team member. The healthcare team member should differentiate the different types of pain the patient is experiencing (i.e., neuropathic vs. visceral) and use this comprehensive data collection to help control pain symptoms. There are a variety of ways pain is treatable. Those that are pharmacological include the administration of opioids, non-opioids, and adjuvants such as antidepressants and corticosteroids. Non-pharmacological treatment for pain includes heat/cold therapy, meditation, massage therapy, and music therapy. The type of treatment chosen should be based on a comprehensive assessment of the patient and should include the patient's needs and desires. Also, depending on the state laws where the patient is receiving end-of-life care, medical marijuana is an effective treatment for pain management.

One of the most common respiratory symptoms patients can experience during end-of-life care is dyspnea, or difficulty breathing. Research shows that as many as 70% of all dying patients report dyspnea symptoms during end-of-life care. As with pain, the healthcare team members must complete a thorough assessment of dyspnea symptoms. This involves assessing the rate, depth, rhythm, pattern, and effort of breathing.[24] Assessment tools, such as the Respiratory Distress Observational Scale (RDOS)[,] are available to help guide healthcare team members assessments. The RDOS measures a patient's heart rate, respiratory rate, restlessness, paradoxical breathing pattern, accessory muscle use, grunting at end-expiration, nasal flaring, and look of fear. These categories give the healthcare team members comprehensive data to treat the symptoms of dyspnea.

Pharmacological treatments for dyspnea include bronchodilators and the use of opioids.[25] Non-pharmacological interventions include position changes, oxygen therapy, and energy conservation techniques. It is important that comprehensive and frequent assessments of dyspnea take place, so treatment options change as symptoms and patient status change.

GI symptoms that can occur at the end of life include anorexia and constipation. Both can be symptoms of the terminal disease the patient is living with, side effects of treatments, or both. Proper assessment as to the cause of these symptoms is key to treating them. Pharmacological treatments of anorexia include antipsychotics such as olanzapine and corticosteroids while non-pharmacological treatments include calorie-rich diets, foods patients enjoy, and odor control.[26][27][26] Constipation is another GI symptom patients can experience at the end of life. Again, a thorough assessment is needed to determine the cause of this symptom. Proper bowel assessment and examination of medication side effects merit consideration when assessing the patient with constipation. A common pharmacological treatment when constipation results from opioid use is a GI motility stimulator. Non-pharmacological interventions include hydration, fiber-rich diets, and mobility.

One of the most common mobility symptoms patients can experience at the end of life is fatigue. Fatigue is not general tiredness; patients instead express it as incapacitating exhaustion.[28] This exhaustion can severely affect the quality of life of the dying patient. Healthcare team members should know there are several validated tools to measure fatigue in patients. Among the most frequently used tools is the [Functional Assessment of Chronic Illness Therapy (FACIT)] Fatigue Scale (Version 4). This 13-question Likert-scaled tool can be used to assess how fatigued a person is and how this symptom limits their ability to engage in social interactions. Once the team completes a proper assessment of the patient's fatigue, the healthcare team members can work to control this symptom.

Pharmacological intervention for fatigue should first examine the cause. Some causes of fatigue with clear etiology include dehydration, anemia, infection, and depression. In these cases, the symptom of fatigue is often relieved with the treatment of the underlying cause. In cases where fatigue has no known etiology, stimulant drugs such as methylphenidate and steroids have shown to be effective.[29] Non-pharmacological interventions include exercise, physical training, energy conservation, and energy restoration.[29] To choose the most appropriate treatment for the patient, continuous assessment is necessary.

Psychiatric symptoms such as depression and anxiety affect the psychological health domain of the dying patient. These symptoms can range from moderate to severe and should be assessed using valid tools to direct treatment. A plethora of tools exists to measure the symptoms of depression and anxiety. The Self-Stigma Depression Scale and the Hamilton Depression Rating Scale can be used to measure depressive symptoms.[30] Whereas, the General Anxiety Disorder (GAD-7) and Hamilton Anxiety Rating Scale can be used to measure symptoms of anxiety.[31][32][31]

Pharmacological interventions include SSRIs and NDRIs, such as bupropion.[33][34] Non-pharmacological treatment for depression includes cognitive behavior therapy and exercise.[35][36] Among the most common pharmacological interventions to treat anxiety symptoms are benzodiazepines.[37] Cognitive behavioral therapy, as well as meditation, is effective in reducing anxiety symptoms.[38]

The symptoms of pain, dyspnea, anorexia, constipation, fatigue, depression, and anxiety are among the most common symptoms patient at the end of life can encounter. It is essential that healthcare team members screen for these as well as any other symptoms the patient may experience. Upon completion of an adequate assessment the patient and the healthcare team member can develop a plan of care that will help to enhance the patient's quality of life.

Termination of Care

When symptoms are no longer manageable, or patient suffering is too great, termination of care must be a consideration. Termination of care is not something decided on a whim; rather it is part of the initial end-of-life discussions. When the treatment the healthcare team members are providing is medically futile or prolonging patient suffering, terminating the care and allowing the patient to die is necessary.[39] If the patient can participate in these decisions, it should be the patient's decision when they want to terminate care. If the patient is developmentally or cognitively capable of making such decisions, this responsibility falls to a power of attorney.

Termination of care decisions can also be informed by recommendations from ethics committees when ethical dilemmas are present. When recommending termination of care for the dying patient, healthcare team members are encouraged to bear in mind the previously discussed issues of concerns, including communication techniques, cultural considerations, and quality of life. At the center of every conversation about the termination of care should be the patient and their quality of life.

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A New Nearctic Species of *Diadocidia* Ruthe Fungus Gnat (Diptera: Diadocidiidae)

Stephen W. Taber
Professor of Biology

Stephen Taber received his bachelor's degree in physics from Texas A&M University, his master's in biology from Texas Tech University, and his doctorate in biological sciences from The University of Texas at Austin. During his time at SVSU, he has been the recipient of the Warrick Award for Excellence in Research and the Braun Fellowship Award for Research.

Abstract. A new species of *Diadocidia* Ruthe fungus gnat was discovered in the eastern Lower Peninsula of Michigan in a mixed pine and hardwood forest. *Diadocidia longivena* Taber is the fourth species recorded from North America and the first new species of this genus described from the Nearctic in 63 years. The fly belongs to subgenus *Adidocidia* Laŝtovka and Matile as do both of its congeners that were described in North America.

Introduction

The fungus gnat genus *Diadocidia* Ruthe was formerly part of the enormous family Mycetophilidae but now it belongs to the family Diadocidiidae and includes 25 species (Falaschi 2016, Bechev and Chandler 2011). It is easily recognized by the colinear arrangement of wing veins r-m and bm-cu (Vockeroth 2009). Were it not for one fossil species the family would be monotypic with the nominate genus its only member.

Materials and Methods

The type locality of the new species was a mixed pine and hardwood upland in Huron National Forest, Ogemaw County, Michigan, USA. Flies were collected with large Malaise traps (BioQuip Products Inc., Rancho Dominguez, CA) erected in April 2019 when snow melt allowed access to the area. Material was retrieved every week and is expected to continue on this schedule until insect activity decreases in late autumn.

All specimens were frozen in Malaise trap canisters until removed and placed in Petri dishes for sorting and identification with a stereomicroscope. Those of interest were soaked overnight at room temperature in a tissue culture dish with water, one drop of the wetting agent polysorbate to help submerge dry appendages and wings without breakage, and with two KOH pellets per 20 ml H2O to clear dark pigmentation, spread genitalia, and soften the specimens. Rain frequently enters the trap canisters in which case no polysorbate is needed. After a water rinse, an 80% ETOH soak, and a 100% isopropanol maceration each specimen was placed on a microscope slide with several drops of Euparal (Agar Scientific, Stansted, England). Cover slips were not used because material must be re-examined from different angles by applying additional mounting medium and waiting a few minutes for the previous application to reliquefy. Isopropanol sometimes reliquefies faster. The photographs shown here were taken with stereoscopic and high-power compound microscopes, (Olympus SZ40 Zoom and Olympus BH-2, Tokyo, Japan), provided with a digital SPOT idea camera (Diagnostics Instruments, Sterling Heights, MI). Stacking software was employed to combine series of images differing only in the chosen plane of focus into a single merged image with improved clarity (Zerene Stacker Version 1.04), thus overcoming depth-of-focus problems with thick specimens.

Descriptions followed the examples of modern Palearctic work (Papp and Ševčík 2005, Polevoi 1996), while drawing upon the morphological terminology of the standard reference on Nearctic Diptera (Vockeroth 1981), excluding certain characters that are either not used in identification keys, are likely variable, or both.

Diadocidia longivena Taber new species

Diagnosis. The long R1 vein of the wing and the four strong setae near the apex of each gonostylus distinguish this species from all others known to the author.

Type Material. Holotype. Adult male, Huron National Forest, 44.474 N, 83.977 W, Maltby Hills, 2.7 km west of Beal Road, several hundred meters N of Alcan Highway, Ogemaw Co., MI, 8 June, 2019, S. W. Taber, Saginaw Valley State University Insect Collection, University Center, MI. Paratypes. Seven adult males and one adult female with the same data as the holotype except one male specimen collected 16 June.

Description. ***Holotype.*** Adult male (Fig. 1). Length in Euparal = 4.8 mm. Body brown except for wings; antenna with 14 flagellomeres, lateral ocelli almost touching compound eye. Thorax: laterotergite glabrous, setae of head, thorax and abdomen black, halteres brownish-yellow, tibial spurs dark brown, all tarsal claws small and simple with a basal tooth. Wing (Fig. 2): Length = 4.2 mm, smoky without pattern, clothed with dark macrotrichia and microtrichia, vein R1 unusually long and nearly straight, extending to almost the midpoint of the cell formed by the M fork, C continues past its confluence with R4+5 to half the distance between that confluence and M1, sc-r absent, Sc reaching costa proximad of r-m. Abdomen: tergite 9 broad and slightly flattened at the apex, cerci clothed with setae of various lengths but none as strong as a bristle; each gonostylus with 2 dark claws at the apex, gonostylus (Figs. 3, 4) with a ventral row of four long, dark, strong setae or bristles, (the three basalmost setae homologous to the three bristles of *Diadocidia trispinosa* Polevoi 1996, Figs. 7 and 9); aedeagus (Fig. 5) a simple rod of length 0.1 mm. Female: as for the male except for the terminalia (Fig. 6).

Etymology. The new species is named for the long R1 vein of the wing.

Biology. Juveniles of *D. longivena* are unknown.

Distribution. The new species is known only from its type locality.

Remarks. The female cercus (Fig. 6) resembles that of *Diadocidia spinosula* Tollet (Laŝtovka and Matile 1972, Fig. 20) and *Diadocidia. stanfordensis* Arnaud and Hoyt (Arnaud and Hoyt 1956, Fig. 1E) whereas sternite eight resembles that of *D. ferruginosa* (Meigen) (Laŝtovka and Matile 1972, Fig. 19). But the female of *D. ferruginosa* has swollen proleg tarsi of segments 2-4 (Hutson et al. 1980) as shown here for an unidentified female *Diadocidia* species collected at the type locality of *D. longiseta* (Fig. 7), whereas the female of the new species has simple proleg basal tarsi (Fig. 8) like those of the male.

Figure 1 *Diadocidia longivena*, male habitus. Length = 4.8 mm.

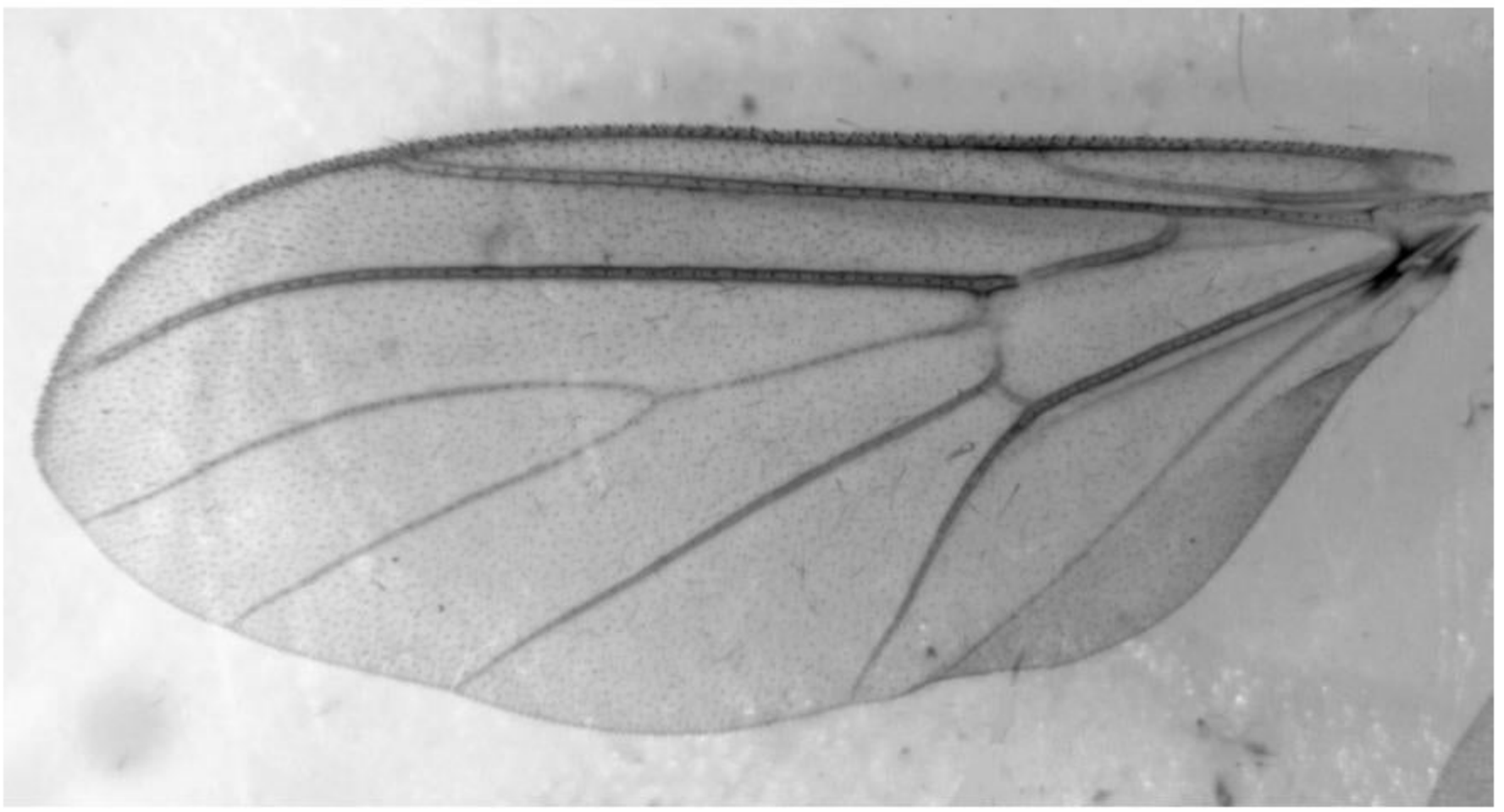

Figure 2 *Diadocidia longivena*, male wing, length = 4.2 mm.

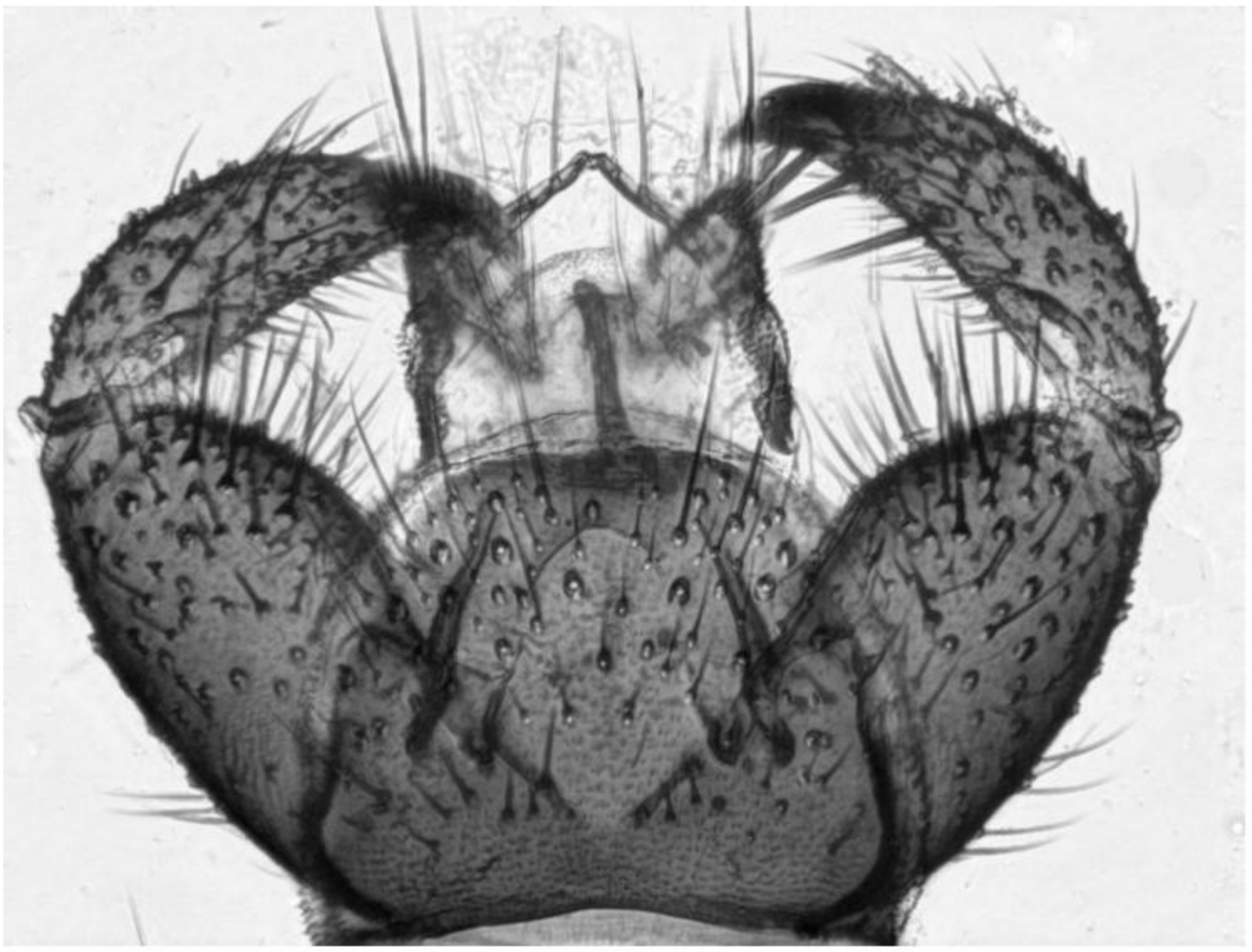

Figure 3 *Diadocidia longivena*, male terminalia; dorsal view.

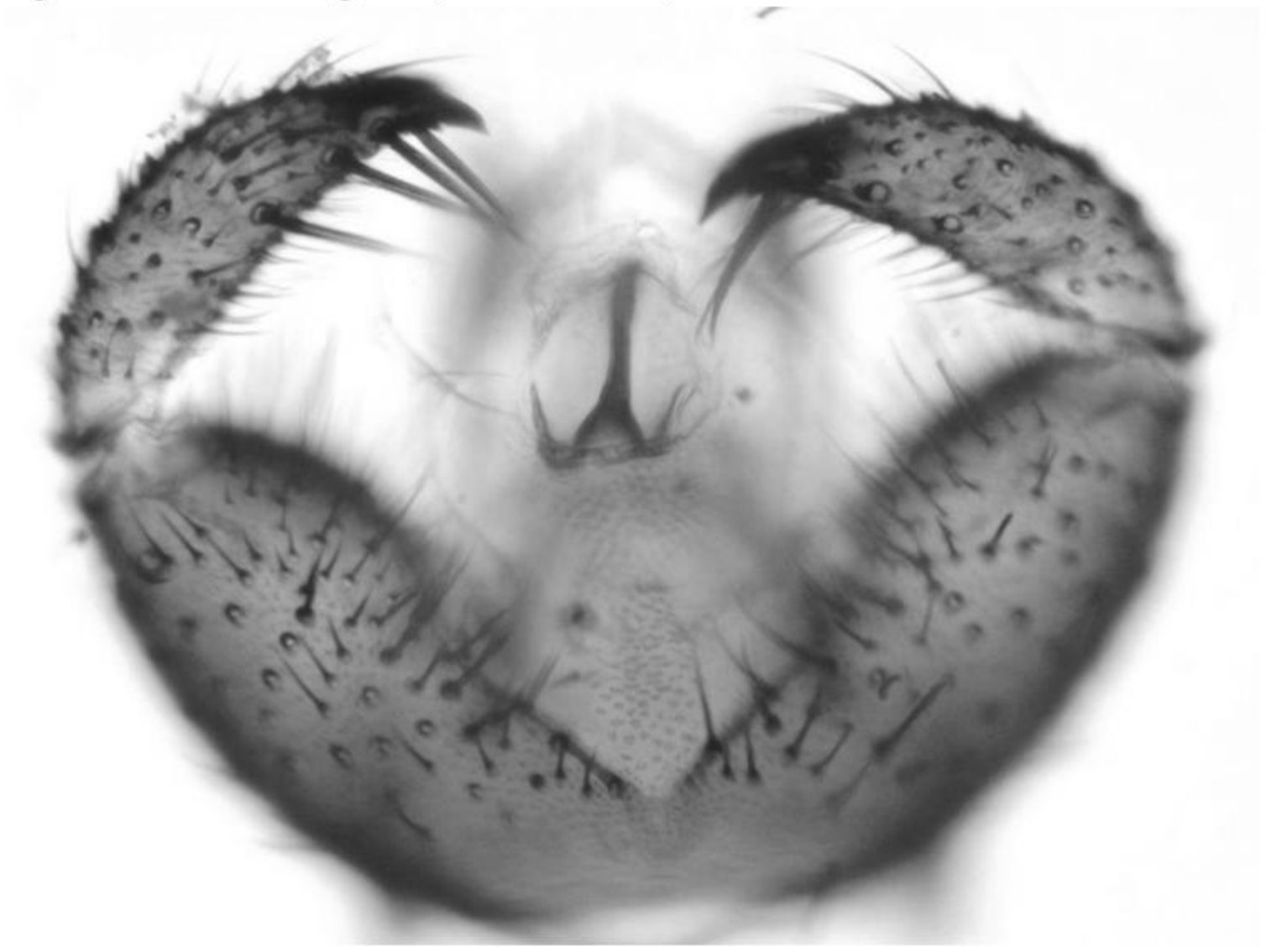

Figure 4 *Diadocidia longivena*, male terminalia; ventral view.

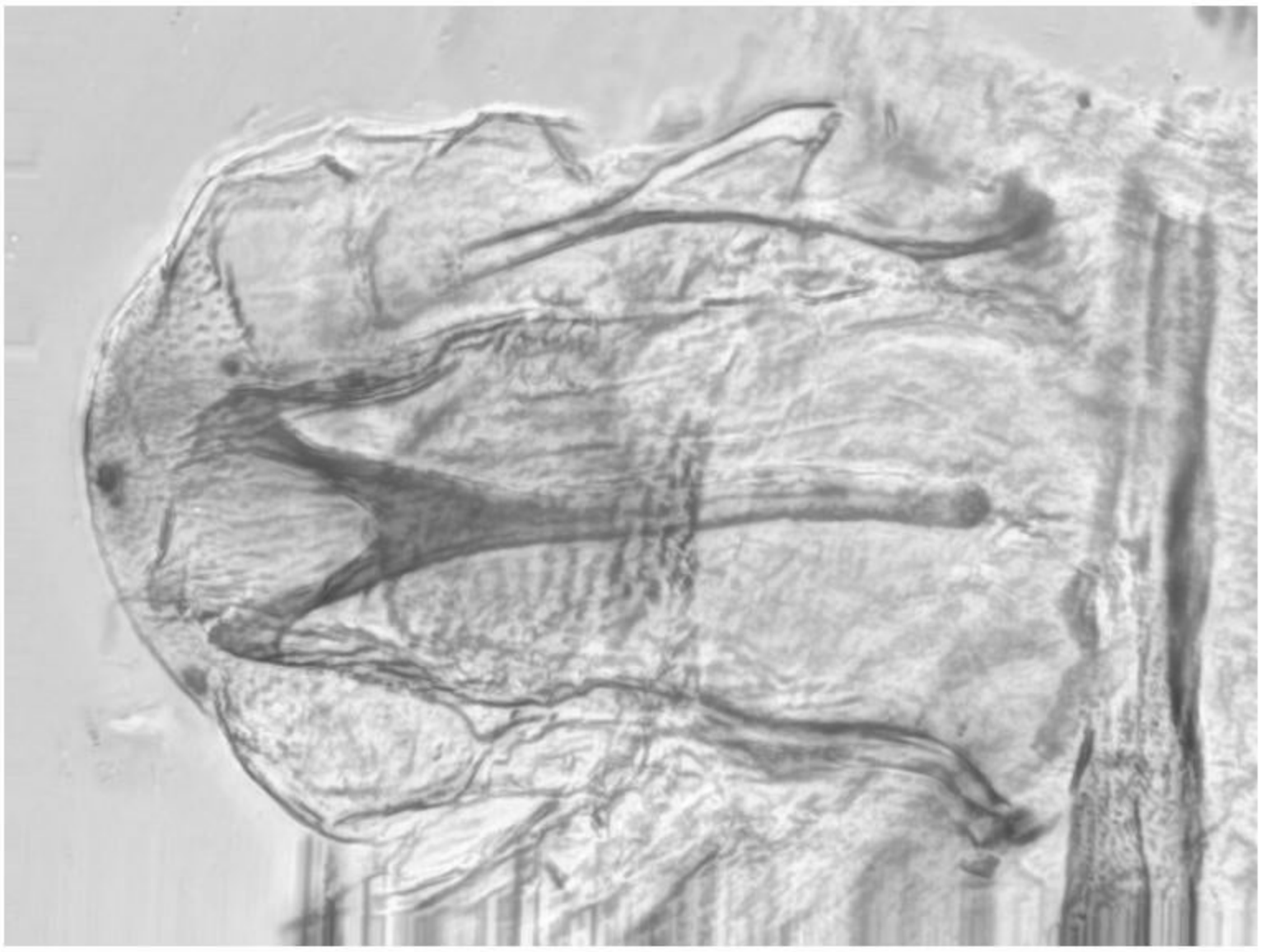

Figure 5 *Diadocidia longivena*, aedeagus.

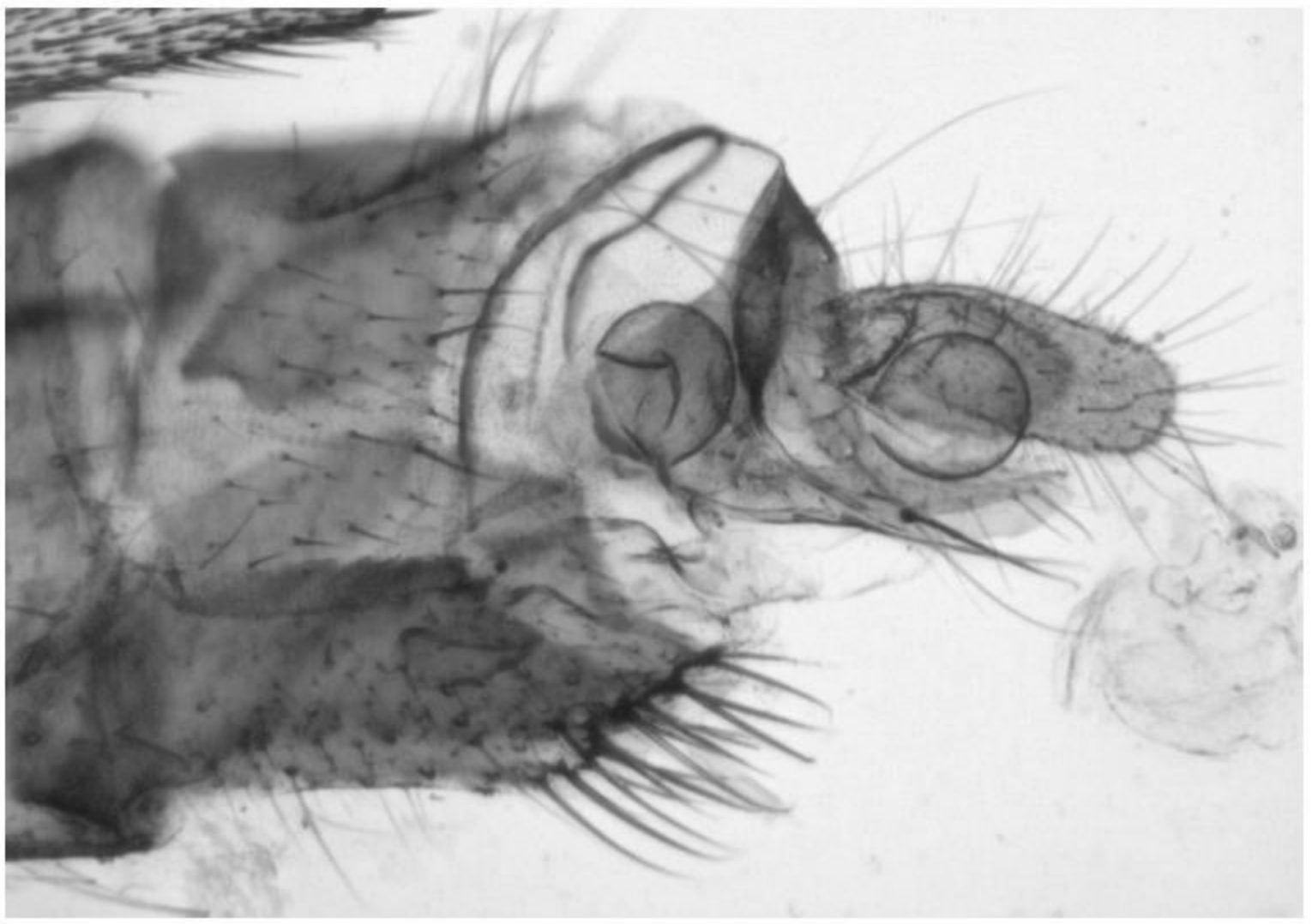

Figure 6 *Diadocidia longivena*; female terminalia.

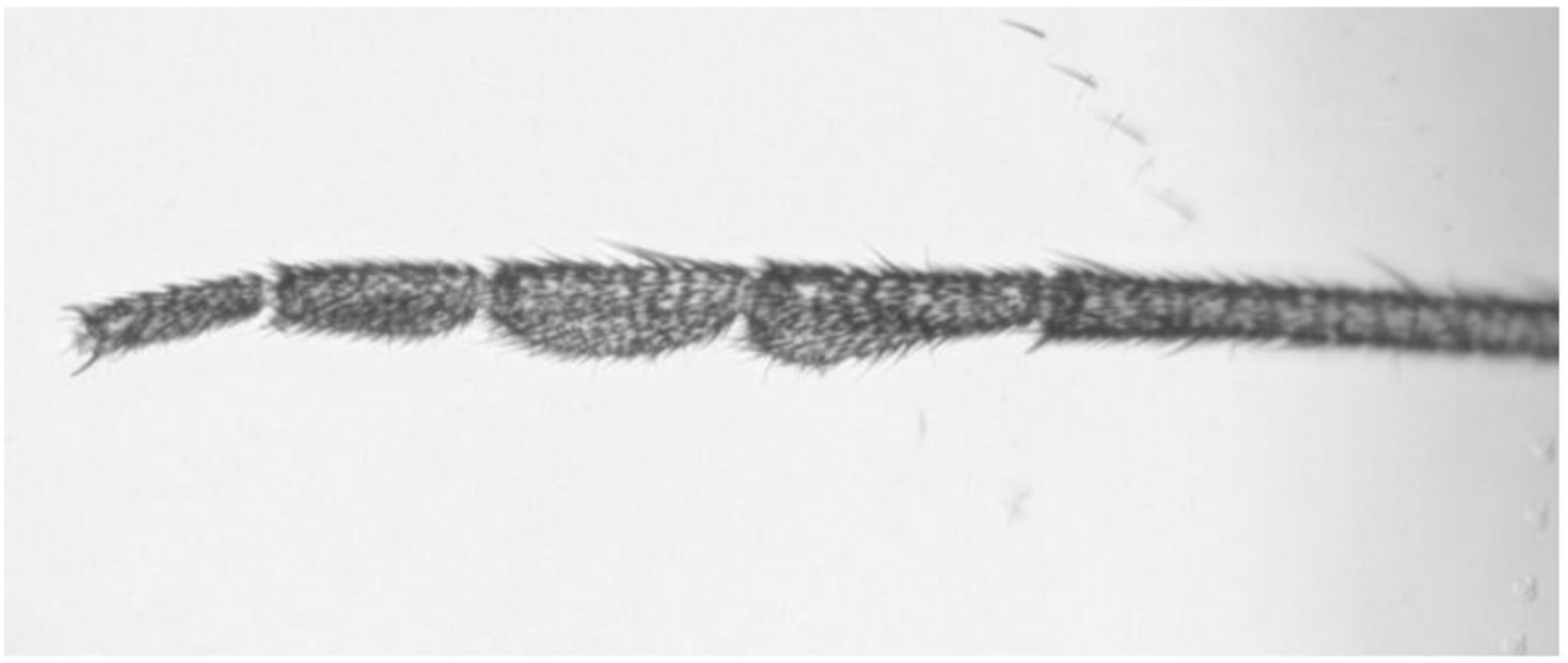

Figure 7 *Diadocidia* female unidentified species, foreleg tarsi.

Figure 8 *Diadocidia longivena* female, foreleg tarsi.

Discussion

The most recently described Nearctic species of this genus is *D. stanfordensis* from 1956 in California. The only other species described from the Nearctic was *Diadicidia borealis* Coquillett in 1900 from British Columbia. A fourth species, *D. ferruginosa* has been reported from Canada and The United States (Fisher 1941) but it was described from German material in 1830 and its status is questionable (Bechev and Chandler 2011). The long 1st flagellomere places *D. longivena* in subgenus *Adidocidia* Laŝtovka and Matile (Papp and Ševčík 2005) with *D. borealis* and *D. stanfordensis*.

The larval and pupal stages of the new species are unknown. The larva of its close relative *D. stanfordensis* dwells in a slime tube in and/or under logs and stumps (Arnaud and Hoyt 1956), leaving a molluscan-like slime trail in its wake. *Diadocidia* larvae have also been associated with fungi (Hutson et al. 1980).

Acknowledgment

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Spotlight on…
The Center for Community Writing

Established in 2018, the Center for Community Writing works to promote writing throughout the Great Lakes Bay Region. Coordinated by Helen Raica-Klotz and Christopher Giroux, the Center serves as an umbrella organization for various other initiatives, including the Saginaw Community Writing Center (SCWC), the Bay Community Writing Center (BCWC), and the Saginaw Bay Writing Project (SBWP).

The Center for Community Writing continued to operate its community writing centers in 2019–2020. Housed in Saginaw's Butman-Fish Library and established in October 2015, the SCWC is the first community writing center of its kind in the state of Michigan and is funded by the Saginaw Community Foundation. The BCWC opened its doors at the Wirt Public Library in Bay City in September 2017; it is funded by the Bay Community Foundation. Both centers offer specialized workshops on a given topic (like résumés, cover letters, or short fiction) as well as individual consultations on any piece of writing a community member chooses. Because of the pandemic, these services began to be offered online in Spring 2020.

Under their auspices, and through funding provided by community member Dr. Debasish Mridha, the community writing centers published another issue of *Still Life* in 2020. The only community arts journal sponsored by a university in the state of Michigan, *Still Life* offers creative writing opportunities for writers of all ages and can be found online and in print. In 2019, *Still Life* was once again honored with a first-place award from the American Scholastic Press Association.

In 2019–2020, with support from Dr. Marc Peretz, dean of the College of Arts and Behavioral Sciences, the community writing centers also continued to offer a series of semester-long creative writing seminars for inmates housed at the Saginaw Regional Correctional Facility in Freeland, Michigan. These workshops were led by SVSU Writing Center tutors Matthew Chappel and Lizzy Kennedy.

The SBWP is the local chapter of the National Writing Project (NWP). Based on the "teachers teaching teachers" model, this grant-funded initiative enables area teachers to come together and discuss literacy issues related to best practices in the classroom. Through year-round programming that includes workshops, graduate courses, summer institutes, and guest lectures, the SBWP creates opportunities for teachers' personal development and information that they can pass on to their colleagues and students. In Summer 2019, the SBWP also held a creative writing camp, Word Play, for middle and high school students. The SBWP was led in 2019–2020 by SVSU's Writing Center director, Helen Raica-Klotz, and by Merrill High School teacher Allison Jordan.

On the following pages, we share some of the writing generated by the Center for Community Writing through its contests, workshops, and various community initiatives. More information about the Center for Community Writing can be found at www.svsu.edu/ccw.

long & low

Denise Hill

Still Life Author and Saginaw Bay Writing Project Participant

Denise Hill is an educator and an editor of *NewPages.com.* She collects Petoskey stones, stray dogs, and plastic bags, and tries never to miss a week without buying a Michigan Lotto ticket. She was born and raised in Michigan and loves the mitten state with its great lakes and craft beer.

the lake freighter's horn sounds
as it courses downriver
cool damp predawn air
carries its bellowing call
across town while we sleep
hauling in cargo
sand & stone
gravel & coal
one long blast, one short
the bulker's horn sounds again
echoing through our dreams
vacant hulls
waiting to be filled
rock floating
on water

Frog

Ed Oberski
Community Writing Center Participant

Ed Oberski started writing poetry when he retired in mid-2018. New to the art, Ed has taken advantage of both the Bay and Saginaw Community Writing Centers. Both groups played a significant role in the creation and improvement of several of his poems including the one published here. In previous lives, Ed was the CEO of Great Lakes Bay Michigan Works!, did (or so he says) a poor job as a trial lawyer, served in the U.S. Coast Guard, and grew up on a small farm. He and his wife, Celina, live in Saginaw Township, Michigan. Together they enjoy visiting their daughter and son in-law in Toronto, Canada, and their son in New Orleans, Louisiana. In retirement, Ed also studies Buddhism, enjoys an occasional cigar, and attempts to play pickleball.

In cattail and coontail, bull rush and cutgrass
In duckweed and pondweed, fanwort and cordgrass

Through this murky water, with light so subdued
All is green or brown, but in every hue

There are layers and layers of life, it abounds
It is all that I see, that I sense. Life surrounds

In all three dimensions, I am free to roam
Above and below, all around is my home

But now I sit still, invisible almost
And the world passes by in a slow-motion coast

As my smooth, dappled skin drinks in the wetness
I am at peace. I am safe. I'm unstressed

Then comes a slow change in my internal software
My body it's cold, and my lungs they need air

With just a slight push, I glide upward with purpose
Only my eyes and my nose break the surface

No threat presents, shadow, movement or sound
I climb onto a pad, and take in all around

I'm confined to this plane, but so vast is this world
With all colors and sounds, and blue sky unfurled

Need both sets of eyelids, the sun's so severe
But it warms my blood, so for now I'll stay here

An Excerpt from "Tracks"

Spencer Williams
Community Writing Center Participant

Spencer Williams is a former Marine Corps officer, Vietnam War veteran, and teacher with international experience. A father of twins, he has worked as a carpenter and builder/designer of houses.

"Collette, Fred needs something Chad has recently worn for tracking. Can you find something?"

"I'll get his pajamas, "she said as she sprang into action like a car shifting into high gear. Flint's presence and this task had the desired effect of calming Collette. Also, she knew about Fred's reputation for locating lost kids. Although Collette was unable to say what direction Chad took, Flint was able to determine it by circling the house and finding the freshest tracks. Then he shared Chad's pajamas with Fred and gave the "seek" command. His dog eagerly headed in the same direction as the tracks. With much sniffing close to the ground, Fred captured the minute scent particles matching Chad's PJ's. Flint checked his compass so that he could find his way back if it got dark and then jogged to catch up to Fred.

An hour into the search Flint discovered a track that sent chills up his neck. He recognized them as those of a very large mountain lion, which crossed and then followed Chad's tracks. It walked unhurriedly, and with purpose, occasionally stopping as if observing the surroundings. This discovery put an understandable fear into Flint's steps as he became more wary—all senses alert as he knew how quick and deadly these cats were. Their agility, speed, and power were used to catch and sever their victims' spinal cords by crushing their necks. Although his job necessitated a sidearm when in the field due to bears, wolves, wolverines, and mountain lions, Flint was not overconfident about even a .44 caliber Magnum's ability to stop this lion before it seriously hurt him, and he wasn't like Clint Eastwood's Dirty Harry character.

Before moving on, Flint unsnapped his holster, took out his pistol, and checked the five shells with the hammer resting on the empty chamber. He knew the difference between shooting at a stationary paper target and a fast-moving, life-threatening one. He was tempted to turn around and return to safety. Then he remembered his sister's distress and what a great friend Chad was. He wouldn't be able to face Collette or face himself in the mirror, if he chickened out. So, gun in hand, he soldiered on down the game trail with Fred leading the way.

Another fifteen minutes went by in this relatively quiet forest with only the wind-rustled leaves whispering through the pine trees. Were they sending encouraging messages he wondered? The air was nippy, hinting at the winter that would soon follow. The light was fading with the sunset, and it wouldn't be long before he would have to stop his search as it would be too dangerous with that lion on the prowl. His chances against that predator were bad enough in daylight. Finding his way back with the help of his compass was also going to be a dangerous challenge in the dark.

Out of the corner of his eye he caught movement, and he swiftly turned to face it. The lion was in the air in an attempt to pounce as Flint shot and ducked under it. Bouncing up quickly, he faced the snarling, wounded cat, which was even more dangerous now that it was hurt and angry. With only a second's hesitation, two shots in quick succession found their heart-stopping target, and the lion died before hitting the ground.

Shaking from the adrenalin rush, which always followed a scary fight-or-flight event, Flint had to sit on a nearby fallen tree. It was then that he heard a weak voice calling, "Help."

An Excerpt from *An Arrow in the Chamber, A Sword in the Sheath*

Mia Hileman
Community Writing Center Participant

Mia Hileman is a ten-year-old writer living in Freeland, Michigan. She's always had an interest in writing—and all things animal—from a young age. She started attending the Bay Community Writing Center when she was nine and loves the help of her many tutors. When she's not completing NaNoWriMo's Young Writer challenges, you can find her playing outside, crafting, coding, and building virtual worlds in Minecraft.

The following excerpt comes from the first chapter of Mia's novel.

Tyson woke to the birds chirping right next to his small window. Bright sun glanced through the curtains as if to see if he was awake. He got up and put on his tunic. Tyson shook out any dirt from his tunic and went to cook a rabbit that he shot with his old bow and arrow. The small house was silent now that his mom and dad had passed away. He soon realized that in a couple of days, his test would choose his lifetime.

"It's time already?" he whispered into the small house.

He chewed down the rabbit like it was the drumstick of a chicken. He went to his bedroom to carve the new bow he was making. The carvings flew into his face, but Tyson knew that when it was done it would be perfect.

Tyson walked out of the small, neatly handmade door. Clouds rumbled over as if *they* were going hunting too. *Yes, that means the animals will be moving,* Tyson thought.

He passed by a fox sniffing for a mouse through the brambles. The fox stepped too far into the bramble and scratched its nose. It yelped and darted into a hole under a nearby tree. The spruce trees loomed over him, leaning and moaning as the wind started to pick up. A rabbit poked out of its hole and looked around. Tyson darted behind the nearest big bush he could find. He silently pulled an arrow from his stiff quiver. He pulled the arrow back and aimed. The arrow flew into the rabbit's head and it fell to the ground. "Yes!" Tyson whispered softly.

A fox darted from under the snow, its white coat blurred in front of Tyson's eyes. Tyson jumped out from the brush and tackled the fox. The fox responded by scratching Tyson and then running back to his den. "Oh, good," Tyson prayed to the gods.

Tyson ran back to his house and jumped inside right as the heavy snow started to blow in. When he looked back, a man stood in front of him. Tyson jumped back and stood up straight to recover from the shock. "Hello, Tyson," the man said.

Tyson nodded a greeting, then did a hand movement to tell him to move on. "It is time for your test; you will meet in the castle at sunrise," the man said and walked out of the small cabin before Tyson could move a finger to shut the door.

"Well, you better start cooking," Tyson said to himself.

Our Own Magic

Jolyn H. Ohlendorf
"Saginaw, This I Believe" Postcard Poem Project Winner

Jolyn H. Ohlendorf is a local art teacher and 2017 SVSU alumna. While studying at SVSU, she took advantage of the university's Study Abroad services twice, travelling first to Ireland and then to New Zealand, where she completed her student teaching. Though infected with the travel bug, she remains loyal to her hometown—and continues to advocate for the charm and merits—of Saginaw. She appreciates the opportunities provided by the Saginaw Community Writing Center and hopes for even more chances to bring attention to the beauty that surrounds her.

Saginaw, I believe, has a magic to it
  A slanted magic, yes,
  No one would deny that
But if you bend your head to just that tilt
  You'll see it:
The dusty fire-orange light hitting twisted trees in the dawn
The stubborn wild daisies battling valiantly against mown grass
The man with the cardboard sign daring you to look him in the eye
The cat with the chopped-off tail grooming itself with arrogance
The woman who reads to her child though she is weary working three jobs
Angle your head just right—you will see it
And soon you'll find yourself believing
In the magic of Saginaw

Spotlight on…
Visiting Writers

As part of its mission to enhance the life of the community in which it resides, SVSU is committed to bringing guest speakers to campus. Sponsored by individual departments and colleges, Student Life, the President's Office, student organizations and student support services, among other campus groups, these visitors create a richer learning environment at SVSU and speak to a host of interests and issues we face locally and globally.

Some of our visiting writers come as part of Voices in the Valley, a longstanding tradition at SVSU that profiles the work of creative writers. Dr. Arra Ross of the English Department currently directs the program and works to bring established and emerging voices to campus. Past guests of Voices in the Valley include poets Jamaal May, Tracy K. Smith, and Carolyn Forché; short story writer and novelist Peter Ho Davies; and memoirist Anne-Marie Oomen.

Each year a writer also visits SVSU in connection with the Stuart D. and Vernice M. Gross Award for Literature. The Gross Award carries a prize of $1,000 and honors publications, whether historical writing, fiction, or drama, linked to Michigan or the larger region. Mr. Gross was a published author, a historian who focused on the Saginaw area, and a reporter for *The Saginaw News,* as well as a former employee of SVSU.

Several of our visiting authors from the 2019–2020 school year have been gracious enough to let us reprint some of their work in *Writing@SVSU* on the following pages.

An Excerpt from
The Poisoned City: Flint's Water and the American Urban Tragedy

Anna Clark
Visiting Author, Winner of the SVSU Gross Award for Literature

Anna Clark is a journalist in Detroit. She's the author of *The Poisoned City: Flint's Water and the American Urban Tragedy* (Metropolitan Books, 2018), which won the Hillman Prize for Book Journalism and the Rachel Carson Environment Book Award, in addition to SVSU's Stuart D. and Vernice M. Gross Award for Literature. Clark's articles have appeared in *Elle*, the *New York Times*, the *Columbia Journalism Review*, *Next City*, and other publications. She also edited *A Detroit Anthology* (Belt Publishing, 2016), a Michigan Notable Book. Clark has been a Fulbright fellow in Kenya and a Knight-Wallace journalism fellow at the University of Michigan.

The following excerpt from *The Poisoned City* is taken from Chapter 9, "Switchback."

There was no toast. No congratulatory countdown. No cheers. But on October 8, 2015, almost eighteen months after the celebratory switch to the river water, Governor Rick Snyder announced that Flint would finally be reconnected to the Detroit system. The news came the same day that the Flint River Fest was scheduled to kick off—kayak giveaways, a fireworks show—but the festivities had been postponed due to the "current drinking water crisis." Snyder salted his announcement with a distinct desire to move on. "Again, this isn't about blaming anyone," he said.[1] "Right now, I want to stay focused in on the solutions and taking actions to solve problems."

It was a remarkable turnaround. But by now everyone knew the water was bad. The crisis was undeniable, what with empty Brita filter boxes piled up at the makeshift distribution centers

[1] "*Here's to Flint:* Broadcast Premiere of ACLU Documentary on the Fight for Democracy & Clean Water," *Democracy Now!*, March 8, 2016. Connecting to Detroit water was deemed the quickest way to get corrosion control running through Flint's pipes again, and more and more people had begun advocating for it. On September 28, 2015, Senate Minority Leader Jim Ananich sent an email to Governor Rick Snyder's office demanding a "swift transfer to a safe source of water until the Karegnondi Water Authority is complete next year." Dennis Muchmore, the governor's chief of staff, was already crunching the numbers for a switchback on October 1, the day of the state's reversal, though he also harbored concerns about how "some of the Flint people respond by looking for someone to blame instead of working to reduce anxiety," according to one of his internal emails. "We can't tolerate increased lead levels in any event, but it's really the city's water system that needs to deal with it." But, in an update to Snyder, Muchmore also said that a reconnection "may well be the only way to bring any confidence back to the community." Snyder replied: "We should help get all of the facts on the consequences of changing back vs. staying and then determine what financing mechanisms we have available. If we can provide the financing, then we should let Flint make the decision." Jim Lynch, Chad Livengood, and Jonathan Oosting, "Snyder Emails Detail State's Missteps in Flint Crisis," *Detroit News*, January 20, 2016, updated January 21, 2016.

and people waiting in long lines to receive a free filter, some with toddlers in tow. They took videos on their phones as Home Depot employees demonstrated how to attach the filters to their faucets.

On the south side of the city, LeeAnne Walters was coming to terms with the fact that her home, once a place of shelter for her family, was now known as ground zero.[2] "The citizens in Flint are relying on each other" for relief from the water crisis, she said, "because we have no choice." And there were her kids. Gavin, the four-year-old twin with outrageous levels of lead in his blood, had gained just a few pounds in the past year. He still struggled with anemia. He had developed problems with his speech.[3] LeeAnne had worked so hard to expose the toxicity in her house on Browning Avenue. Now she wondered whether she could remain there.

The inequity between communities, long latent, had been made excruciatingly vivid to people who lived outside Flint. For so long, the state had dragged its feet, dismissing the city as if it were too dysfunctional and impoverished for locals to be seen as an authority, even in the matters of their own lives. As Marc Edwards put it, Flint residents had been paying among the highest water rates in the world for "water that was not suitable for anything but flushing toilets," and they had been "told to like it."[4] The state had reversed course only after immense public pressure, a broadening media spotlight, and two independent water analyses left it with no other option.

"I'm happy that the city is finally doing what they should have done a long time ago," LeeAnne told a reporter, sounding weary.[5] "They should have taken it seriously back months ago when we tried to tell them, but they chose to ignore it." As Snyder made his dramatic announcement, he was surrounded by the state's heavy hitters—the mayor, the director of the [Michigan Department of Environmental Quality (MDEQ)], the president of the C. S. Mott Foundation. Still absent were the community organizers and scientists who had exposed the water troubles.

So the governor's turnaround was greeted with some bitterness. The $12 million bill for the reconnection to the [Detroit Water and Sewerage Department (DWSD)] would be divided among three parties. Snyder asked the state legislature for $6 million—he got it—and $4 million came from the Mott Foundation. The city was expected to pay $2 million. The matter of the essential length of pipe that had been sold to Genesee County was resolved: Flint would pay the drain commission one dollar per month to use it.[6] In less than a year, Flint was expected to cut off the connection to Detroit a second time and begin treating lake water from the Karegnondi Water Authority.

Completed within a week, the switchback was heralded by a *Detroit Free Press* editorial calling the Flint water crisis "An Obscene Failure of Government."[7] The paper, which had twice endorsed Rick Snyder in his gubernatorial campaigns, noted that he had appeared chastened at his public announcement. "He should," the editorialists wrote. "In Flint, he failed."

The consequences of that failure would play out for decades to come. While the lifelong effects of lead poisoning can be mitigated, they can't be cured. No switch could turn that back. It had affected children in their homes, but that wasn't all: three Flint elementary schools had

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[2] LeeAnne Walters, written testimony to the Michigan Joint Selection Committee on the Flint Water Public Health Emergency, Flint, Michigan, March 29, 2016.

[3] LeeAnne Walters's testimony in the 67th District Court, Flint, Michigan, on January 8, 2018, during the preliminary examinations in the criminal case against four MDEQ employees.

[4] Marc Edwards, "Saving Humankind from Itself: Careers in Science and Engineering as Public Policy," SciFest presentation, St. Louis Science Center, February 22, 2017.

[5] Monica Davey, "Flint Will Return to Using Detroit's Water After Findings of Lead in Local Supply," *New York Times,* October 8, 2015.

[6] City of Flint and Genesee County Drain Commissioner, "License to Transmit Water," October 14, 2015.

[7] Editorial Board, "Flint Water Crisis: An Obscene Failure of Government," *Detroit Free Press*, October 8, 2015. The switchback happened on October 16, 2015.

excessive lead levels, too, with one of them testing at 101 parts per billion shortly before the return to Detroit water.[8] There still hadn't been a satisfactory explanation for the rashes or hair loss or a number of other health problems that people thought might be connected to the water. It began to sink in that, no, even after the switchback, the water still wasn't safe. Bottled water and filters were still essential. Another three weeks would have to pass before the remaining river water would be cleared from the pipes, and it would take months, at a minimum, to rebuild the pipes' protective coating, even with the extra corrosion control that Flint planned to add to the properly treated Detroit water.[9] People were cautioned that there would probably be lingering issues with taste, odor, and color. Flint's infrastructure was in a worse state than it had been eighteen months earlier. The corrosive river water had also ruined hot water tanks and plumbing fixtures all around town, forcing people to pay for expensive repairs.[10] And most of all, public trust in the city, already shaky, was gone. It was difficult to imagine residents having confidence in their tap water when thousands of lead pipes still sat in the earth like so many ticking time bombs—and when the institutions that were responsible for fixing the problems were the very same ones that had caused them in the first place.

While a quick reconnection was a public health necessity, researchers at both Virginia Tech and Wayne State University in Detroit worried that there hadn't been enough sampling of the river water—it was important to know exactly what the city had been drinking since the spring of 2014. Up until the last minute before the switch, a number of people were scrambling to sample as much as they could, particularly in large buildings, including hospitals.[11] They were looking for the kinds of bacteria that would thrive in the conditions of Flint's water. Lead was not the only toxin keeping the scientists awake at night. They were right to be worried.

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[8] Dominic Adams, "Toxic Lead Levels Found in Water at Three Flint Schools," MLive—*Flint Journal*, October 8, 2015.

[9] Amanda Emery, "Flint Reconnects to Detroit Water, May Take 3 Weeks to Clear All Pipes," MLive—*Flint Journal,* October 16, 2015, updated September 19, 2017.

[10] Michael Freeman, phone interview with the author, January 2016; and "Notice of Class Action Administrative Complaint Against the United States Environmental Protection Agency," April 25, 2016, http://www.flintwaterclassaction.com/wp-content/uploads/Flint-EPA-Complaint.pdf.

[11] Marc Edwards, email message to the author, February 17, 2018.

At the Edge of a Dream,

Alice Derry
Visiting Author

Alice Derry's latest poems are in her book *Hunger* (MoonPath Press, 2018). Accompanying poet Tess Gallagher, Derry was delighted to visit many Michigan schools and locations in the fall of 2019 and honor a favorite poet, Theodore Roethke. She thanks Michigan for the warm welcome. Derry lives and works on Washington state's Olympic Peninsula. Her website is www.alicederry.com.

something said *Bruce Murdock*,
and you stood there, shy,
a little reluctant, your face,
its appeal of ironic humor.

That's all. Only a few seconds
of half-sleep when you
might come to me.
For those first months,
I never wanted to think
about poetry again.

Solace was the green mist of wonder
maples spread
over the valley, rain days,
fog days, exhaling
their flowers' firm, white-green belief
in the next season.

Words poured out anyway,
nearly drowned you
in their re-makes,
each refusal to
believe in your going.

For all the flowers' translucence,
after dark, it was *words,*
words, words.

You loved how they
hoard their uneasy jokes over centuries—
deep inside partner,
the French for *partition*,

double-faced cleave, most tender,
most brutal,

current uncertain, wind winds shadow
through sun's revelations.

If words were our yawing anchor,
I drift now.
Their rescue lay between us.

Oh, the cold days a spring
can stoop to, right after a week of deceptive
warmth. The maples have plenty
of time. They wait
for the shaking out
of their folded leaves.

for my late husband

Opening

Tess Gallagher

Visiting Author

Poet, fiction writer, essayist, and translator Tess Gallagher is the author of eleven books of poetry, including *Is, Is Not* (Graywolf Press, 2019), *Midnight Lantern: New and Selected Poems* (Graywolf Press 2011), *Dear Ghosts* (Graywolf Press, 2006), and *Moon Crossing Bridge* (Graywolf Press, 1992). Gallagher spends time in County Sligo, Ireland, and also in her hometown of Port Angeles, Washington. She visited SVSU in October 2019 as part of the Voices in the Valley series.

I entered this world not wanting
to come. I'll leave it not
wanting to go. All this while,
when it seemed there were two doors,
there was only one—this
passing through.

Photo credit: Morella Muñoz-Tebar.

A Brief Atmospheric Future

Matthew Gavin Frank
Visiting Author

Matthew Gavin Frank, who visited SVSU in November 2019 as part of the Voices in the Valley series, is the author of the nonfiction books *The Mad Feast: An Ecstatic Tour through America's Food* (W.W. Norton: Liveright, 2015), *Preparing the Ghost: An Essay Concerning the Giant Squid and Its First Photographer* (W.W. Norton: Liveright, 2014), *Pot Farm* (The University of Nebraska Press, 2012), and *Barolo* (The University of Nebraska Press, 2010); the poetry books *The Morrow Plots* (Black Lawrence Press, 2013), *Warranty in Zulu* (Barrow Street Press, 2010), and *Sagittarius Agitprop* (Black Lawrence Press, 2009); and two chapbooks. His forthcoming nonfiction book about diamond-smuggling pigeons is due out in 2021 from W. W. Norton: Liveright. He teaches at Northern Michigan University, where he is the Nonfiction/ Hybrids Editor of *Passages North*. "A Brief Atmospheric Future" first appeared in *Brevity Magazine*.

If we're to believe the neuroscientist Professor Marcus Pembrey, from University College London, who concluded that "Behaviour can be affected by events in previous generations which have been passed on through a form of genetic memory… phobias, anxiety and post-traumatic stress disorders… [even] sensitivity to [a] cherry blossom scent…," then the pigeon knows of its ancestors' lives as Genghis Khan's messengers, as carriers of Tipu Sultan's poetry, silk plantation blueprints, and schematics for the advancement of rocket artillery.

The pigeon knows that it was once used to announce the winners of the Olympics, the beginnings and the ends of wars; that Paul Reuter, founder of the Reuters press agency, compelled its progenitors to transport information about stock prices from one telegraph line terminus to another. That apothecaries depended on them for the delivery of medicine. That rival armies trained hawks to eviscerate the pigeons of their enemies, causing a communication breakdown. That we've given to them our voices, that we've made of their bodies the earliest and most organic of radio waves; that when we place our faith in the tenacity of the carrier pigeon, our lives and our loves and our heartaches and our deaths can float above us, and the most important parts of our self-narratives are on-air.

I nose deeply into the feathers of my pillow, know that a feather stripped of barbs is bone. The code of the body. The positioning system in the synapses, the electric impulses, the capillaries, the heart. My wife takes another pain pill and says something about trying again in the new year, that some couples—like her sister-in-law and brother—successfully conceive only after losing a half-dozen, and when they're—like us—in their low forties. Like all of us, the pigeon roosting in our eaves knows something but does not know how it knows it. The bird does not even coo. The bird, in fact, shows no outward signs of pleasure, or affection, at all.

The carrier pigeon's life is one of servitude, and thereby, mutilation. Of flight girdled. Trainers have designed tiny backpacks, fitted to the pigeon's bodies, and filled with anything from confidential blueprints for spacecraft meant to land on Mars, to heroin meant for prison inmates, to declarations of love and war, to blood samples, to heart tissue, to diamonds—anything we secretly desire, or desire to keep secret. Our underbellies, our interior lives, our fetishes, our wishes—some clandestine network mapping, ethnographically, the diagrams and fluctuations of our ids, tied to bird-backs and bird-feet, twining the air above us—the air we're so busy trying to dominate, bring down to our level. Perhaps it's not God or god who has the answers to our seemingly unanswerable

questions about ourselves, but the loaded-up pigeons, some of whom, in a crisis of weight, will randomly land, offer us a clue into the circulatory map of all the things we wish to hide from the rest of our race.

The pigeons slither along shafts of air, shafts within shafts. Wormholes. They don't eat worms so much as French fries, pretzel salt, hand-me-down popcorn. Anatomy dictates: when the pigeon steps forward, its head, for just a moment, is briefly left behind. There's something buried both in their little backpacks and their anatomy. Diamonds, blood samples, bloodlines, codes. They aim to deliver all of these things to our waiting hands. My wife and I sit up in bed, stretch our hands out in front of us, fingers splayed. We do these exercises together to increase, as the OB-GYN said, blood flow, to decrease the chance of her cramping in sleep. Our hands enjoying a brief atmospheric future, waiting for rest of our bodies to catch up. Our hands are the empty nests, the eggless zeros, reddening only because our hearts are beating with so many old sadnesses. We are ever circling our losses, trying to find the way into them, so we can find the way out. Always getting over, always recovering. We need salve. Medicine and diamonds. We need to convince ourselves that we are strong enough to carry the weight of a pigeon—their soft 9.3 to 13.4-ounce bodies. They come to us as we've trained them to do. They have popcorn skins in their throats. Ketchup in their feathers. We've trained them well, and they slither in the air above us, recalling their serpentine ancestors, counting the seconds until they can land.

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They're Calling Hunger *Food Insecurity* Now

Patricia Killelea
Visiting Author

Patricia Killelea is the author of two books of poems: *Counterglow* (Urban Farmhouse Press, 2019) and *Other Suns* (Swan Scythe Press, 2011). She is also a digital media artist, whose poetry films have been screened and shortlisted at Ó Bhéal International Poetry Film Festival, longlisted at Rabbit Heart Poetry Film Festival, and featured at *Moving Poems, Atticus Review*, and *Poetry Film Live*. She teaches English at Northern Michigan University and is poetry editor at *Passages North*. She visited SVSU in Fall 2019 as part of the Voices in the Valley program.

Hunger has four legs and putrid fur—
I know it because I've run my hands
across the ragged length of it,

felt its sharp bones jutting into
my voice Always hunger comes
pacing a few thoughts behind my own,
leaves imprints in the snow,

then picks up its step & bristles
in those last days before the end
of the world or the first of the month

Hunger has a name I keep trying
to forget, has a collar with a tag
I keep trying to lose, but always
its memory nuzzles against my own

For hunger knows
that even when the cash flows, there's no
filling up the old starvations: armies
of bellies that come howling down

howling Even when there's food

on our table forever now All these years
with instead of *without*

Even when new children
are learning hunger as I write these words

Even as I begin filling my own bowl twice.