



L. Brooks Lakin, 1936-2007

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The Park Journal

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How does work get chosen for The Park Journal?

All the work in this issue starts in a class or independent study at The Park School. The path to its publication begins with a teacher recommendation. Teachers recommend art and writing for the Journal because they find it to be curious, inspiring, disturbing, insightful or challenging – in some way, good. Students then decide whether or not they wish to submit their work to the editors.

The editorial board is made up of three faculty members and four students, chosen at random. This group changes each year, by drawing names from a hat full of the names of all interested people. The Journal also has a staff, including a managing editor, a graphic designer, and a copy editor.

The entries considered by the editorial board do not contain the names of their creators, as an attempt to lessen bias and favoritism. All submissions are considered for their originality, appeal and craft, and are not based on a theme or genre. Although a wide variety of work is desirable, there is no requirement of balance between academic disciplines.

The Journal is distributed to everyone connected to its creation: students who have work recommended, recommending teachers, editors, staff, illustrators, and those providing support and advice.

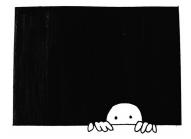
Many thanks to all of the Park teachers who recommended student work, to the students who agreed to submit them, and to the editors for their challenging choices. Most of all, thank you to our readers. We hope you enjoy these pieces as much as we have.

The Park Journal Staff

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We start at 12 A.M and end at 4 A.M,

The feeling of being sprayed with money as I dance takes over me, *Shebi mina Sha noni*, Wizkid is the beat heard all around.

Women cheer and suffocate me with love, respect is a must, so I call them my aunties. We aren't tied by blood, but with culture.

The cloth that covers my hair means something, when I walk into the building, it means something, The booming speakers and drums hurting my eardrums, mean something.

The oil that drips down my forehead on Palm Sunday means something.

I was supposed to be Camay, like soap, but Gabryel Folasade Oluwaremi Harris won, I think about how I dealt with the constant questions regarding my name, teachers struggling, even stuttering before they started, breaking out in a sweat in fear of mistakes. Honor confers a crown, I say, I am a queen, I say My name sticks like the taste of spicy asun lingering on your tongue. That same spicy smell entering your nostrils from breathing in jollof rice. It hits you and smacks you in the face, something you'll never forget.

The bass of the music signifies my pride, filling up the room, shaking your ears. And it escapes, leaving the building, letting everyone around hear what it has to say





Integrative Approaches to Treating Hot Flashes

Hot flashes are a symptom of various conditions, but are consistently experienced by people going through menopause. Not much is understood about them other than how they feel. Their frequency, duration, and intensity vary from person to person, but what stays constant is a sudden feeling of heat throughout the body, increased heart rate, sweating, and a rush of cool after it has passed.¹ Hot flashes can interrupt daily life and be a recurring source of pain.

There has long been a significant lack of proper information regarding menopause and adequate treatments for the symptoms. Hot flashes are the most common effect of menopause, yet for many years knowledge on the subject was lacking. This was the result of the medical field being male-dominated, the prevalence of harmful ideas about women's fragile mental states, and women's lack of control over their bodies. In an 1870 article in *The British Medical Journal*, a doctor wrote that he observed that a "strong lady ceased to menstruate at fifty; and, when fifty-two, she was suddenly told that she was on the eve of being deserted by a man who had lived twenty-five years with her as husband. This brought on delirium, which lasted a fortnight..."² This shows how profound their lack of understanding was, and even at the level of papers published in well-recognized medical journals. Because of this, the recommended treatments were not as thorough as those prescribed for other conditions. Treatments during the early 20th century included doctors' orders to "acquire and maintain healthy habits, get lots of rest, and exercise daily in the fresh air... to eat a moderate diet, shun alcohol, and avoid tight clothing... [and to enjoy] a change of scenery [in order] to keep women's minds from the details of domestic life."³ The prevailing idea was that women's behavior was the problem, and they could resolve their pain if they had more self-control or abstained from certain daily activities.

Even in the present day, when our understanding of medicine has progressed greatly from where it was hundreds of years ago, many of the current medical treatments for hot flashes come with serious side effects, and their efficacy may vary. Patients often turn to integrative approaches to dealing with hot flashes, and there has been success with certain herbal, physical, and mental approaches towards treating hot flashes that result from menopause.

¹ "Hot Flashes," accessed April 15, 2020, https://www.mayoclinic.org/diseases-conditions/hot-flashes/symptoms-causes/syc-20352790

² E.J Tilt, "On Uterine Pathology At The Change Of Life And After The Ménopause," The British Medical Journal, 2(512), 1870, 435–436, https://www.jstor.org/stable/25219874

³ J.A. Houck, J. A. "How to Treat a Menopausal Woman: A History, 1900 to 2000," http://homepage.ntu.edu.tw/~psc/ how to treat a menopausal woman.pdf

Currently, the medical treatment that most doctors prescribe is hormone treatment. Once in menopause, hormone levels in the body are reduced and can frequently fluctuate. Hormone therapy aims to balance the chemicals in the body by replenishing these hormones—but this isn't without risk. Excess hormones in a bodily system can lead to cancers, organ failures, and heart disease.⁴ The hormones estrogen and progesterone are used in this treatment; the quantity and type of hormone prescribed is reliant on the patient's prior conditions. For all cases, doctors aim to begin with the smallest dosage amount possible, and work up to larger quantities only once the prescription begins to lose efficacy. This is in order to reduce side effects from an influx of hormones, yet patients eventually find themselves requiring the higher dosages as their bodies become accustomed to the hormones.

Treatment options that do not include hormones are anti-depressant, anti-seizure, and blood pressure medications.⁵ They also can cause significant side effects, and have proven to be less effective, likely because they were developed to treat conditions unrelated to menopause.

Because of the flaws in the treatments provided by "traditional" medicine, many people experiencing hot flashes as a symptom of menopause have investigated integrative approaches to managing their pain. These strategies have provided relief to those suffering from the menopausal hot flashes without their having to take medicines and put themselves at risk of developing cancers or other dangerous conditions. Integrative strategies that have been recently used for the purpose of treating hot flashes include natural plant supplements; a focus on psychological state; and physical changes in movement, lifestyle, and environment.

The safest and most well-studied plants that have been used to treat hot flashes include black cohosh, soy, flaxseed, vitamin E, and evening primrose.⁶⁷⁸ Although the few studies that focused on these supplements have not been able to firmly conclude that they are cures, they have received positive feedback from users and have minimal side effects. An integral aspect to the use of plant supplements is paying attention to dosage and what quantity would be dangerous or fatal to take.

Treatments focusing on mental state include craniosacral therapy, reiki, attention to breathing, cognitive behavioral therapy, aromatherapy, hypnosis, and other forms of mindfulness.^{9 10 11} Since many of these rely on introspection, are non-invasive, and do not require consumption of any supplements, they do not present nearly as many negative effects. Some of them require aid from a doctor or someone trained in the treatment. Some patients may want to avoid needing to attend appointments, and the nature of the condition's longevity may make it impractical for patients to continue an expert treatment frequently for many years. However, the approaches that can be done independently do not present side effects and can afford the patient relief. Some patients may even prefer these types of approaches because they may feel more in control of their care and enjoy reduced stress levels.

The other category of integrative approaches is physical changes, including yoga, acupuncture, and massage therapy of both full-body and focused massage techniques.^{12 13 14} These approaches are utilized for a wide range of conditions and for

⁴ "Hot Flashes: What Can I Do?," accessed April 15, 2020, https://www.nia.nih.gov/health/hot-flashes-what-can-i-do

⁵ "Hot Flashes."

⁶ C D'Agata and D Rakel, "Supplements for Hot Flashes during Menopause," (Madison, WI: University of Wisconsin Integrative Medicine, 2011), https://www.fammed.wisc.edu/files/webfm-uploads/documents/outreach/im/handout_hot%20flashe.pdf

⁷ "Natural Remedies for Hot Flashes," accessed April 15, 2020, https://www.menopause.org/for-women/menopauseflashes/menopause-symptoms-and-treatments/natural-remedies-for-hot-flashes

⁸ "Hot flashes."

⁹ A. Johnson, L, Roberts and G. Elkins, "Complementary and Alternative Medicine for Menopause," Journal of Evidence-Based Integrative Medicine, 1–48. doi: 10.1177/2515690X19829380

¹⁰ Northwestern Medicine, "Integrative Women's Health,"accessed April 15, 2020, https://www.nm.org/conditions-and-care-areas/integrative-medicine/ integrative-womens-health

¹¹ S. Boss, S, "Natural Remedies for Menopause That Are Backed by Science," accessed April 15, 2020, from https://www.aarp.org/health/conditions-treatments/info-2018/menopause-natural-remedies-symptoms.html

¹² A. Johnson, L, Roberts and G. Elkins.

¹³ Northwestern Medicine.

¹⁴ "Hot flashes."

general well-being even without a medical condition. They present no side effects, and some are able to be done alone. Since menopause naturally presents later in life, some movement may be limited, but they can be adjusted for the individual and may benefit range of motion as well.

These integrative pain management strategies outlined above have helped those who suffer from hot flashes. It is beneficial for patients that integrative options are offered to them along with the traditional medicines, so that they have the ability to consider all their options and assess potential benefits and dangers. The acceptance of integrative strategies for pain management is beneficial for so many conditions, especially those such as hot flashes that have a long history of being overlooked in medicine. Integrative strategies can offer viable treatments to people who suffer from conditions that aren't as easily diagnosed, understood, or treated. They can help treat "invisible" illnesses, and although they aren't cures, they offer relief that cannot always be found, or at least not as safely or consistently, with traditional medicinal techniques.

Further Questions:

Are there any current studies dedicated to developing a more coherent treatment strategy?

Genetics definitely have an effect on the age of menopause and experience of symptoms. Do they impact which treatments are most effective?

Are there prevalent differences between the menopausal experiences of people who had a hysterectomy and those who did not? How do integrative strategies become accepted as a prescribable treatment? How many studies and what results are required in order for the benefits to be accepted?

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Inhale/Exhale

Addy Claybour Mixed Media, 4 ½ x 4 ¼ inches

Want a Beer, Sweetheart?

Rachel Kaplan

I am a die-hard New England Patriots fan. I watch every game religiously, can be counted on for any player news or team updates, and go to as many games as I can. Unfortunately, the stadium is 413 miles away. I cling to the hope of away games within reasonable driving distance that are on weekends my dad will actually be home. To say they are few and far between is an understatement. However, it being my junior year, I mapped out every city I would be going to for a college tour and checked to see if there would be a game there, so that I could use the tour as an excuse and kill two birds with one stone. Nothing.

I eventually figured it out. Mid-November, the Patriots would be in Philadelphia, and we could get there just before the 4:25 start time driving back from New Jersey.

At that point, I had never been to a Philly sporting event. I had heard stories and seen videos of drunk, crazy fans climbing light poles and lighting trash cans on fire. I have always known that Patriots fans are extremely hated, but as a young girl I had always been shielded from that hostility. No one, no matter how drunk or passionate about their team, would yell at a young girl with her father, one just ecstatic to be surrounded by people who love football as much as she did. I had always been free to wear my jersey and hat and cheer for my team. But when I was planning the day with my dad, he told me I couldn't bring a jersey to the game. I was shocked. Stumbling over my words, I eventually managed to spit out one simple question, then stopped and prepared to defend my jersey to no end.

"Why?"

"Because Philly fans are crazy. They'll beat the shit out of you." My jaw dropped. I didn't know what to say, or how to fight back, because his answer was so definitive. There was no getting around it, no argument to win. That was it. My cute, girlish charm was gone.

We got to the game in a crowd of angry Eagles fans, drunk and high and ready to crush any enemy fan who got in their way. The line to get into the stadium snaked all the way back to the parking lot. I, still feeling like a fragile little kid, stayed close behind my dad at all times. I had given in; I was not wearing a jersey. I did, however, have my favorite Patriots winter hat (I have five, all different) stuffed into my jacket pocket. I hoped with all my heart that my dad would see me for how I felt, a helpless child simply in love with a game and a team, too innocent to be of any harm or annoyance. He hadn't yet, and it stayed in my pocket, a bulging nuisance. The crowd ebbed and flowed through the parking lot, and we, two tragically lost tourists, followed. We were almost at the stadium when the line passed by a row of disgusting port-a-potties.

"I'm gonna go," my dad said confidently. I looked at him in utter confusion. "In *those*?"

"Yeah. Wait here." And I waited patiently, keeping my attention on the rowdy crowd around

me. When my dad finally emerged, I was beyond ready to walk away from the foul stench of sweat, beer, vomit, and weed as fast as I could.

"Let's go," I said. To do that, we had to walk by a group of about fifteen guys in their mid-twenties, drunk as shit and pretty unaware of their surroundings. One of them saw me coming.

"Want a beer, sweetheart? You're empty-handed," he slurred, reaching out with an unopened can of Bud Light.

"I'm all right, thanks," I responded politely, but curtly as I almost ran away from the group. My dad chuckled, but didn't think twice about it. As we waited in the endless security line, his comments played over and over in my head. I was a young girl walking *with my father* into the stadium. I was wearing sweatpants and a big, puffy winter jacket to protect me from the 40-degree rain and wind. I don't look very old. I had thought that I looked like the short young girl with yellow-blonde hair who could reliably get a baseball at any Orioles game she went to, or the girl who was so happy and innocent that she could still get high-fives from all of the Ravens fans when the Patriots scored. That guy hadn't seen me that way. None of them had. Why was that? What did he see that I didn't?

When you grow up as a girl in the 21st century, a few life lessons are standard. Never walk alone, especially at night. Someone needs to know where you are at all times. Don't do anything that could put you in a dangerous situation—including what you wear. I know the lectures by heart. But it's hard to truly comprehend unless you are put in a situation where this "advice" (in my house they are rules) is beneficial. I had always assumed that my rude awakening would come in college at a party, and I would be ready and expecting it. I would know when the switch would flip and all of a sudden I would be fair game to predators and rapists and kidnappers alike. I still don't know when it flipped. It had to have been before strangers would ask me where I'm at school and be shocked I didn't answer with the name of a college. Before waiters started leaving the wineglass in front of me at restaurants. Long before that time at the Quarry Starbucks when I was wearing a skirt, and a middle-aged man waiting for his drink—there with his daughter or girlfriend or whoever she was—was staring at my ass, ran over to pay for my drink, then continued staring at me as I waited with my friends. I could feel his eyes on me, like needles pricking my skin just enough that I couldn't ignore them. Not enough to hurt, but enough to pull all of my focus towards it. It's like having a song that you hate stuck in your head, and no matter what you do, you can't get it out. Or an itch that you can't reach, right in the middle of your back. Why did I feel ashamed, standing in that Starbucks? I'm allowed to wear what I want. The skirt wasn't very short and I was wearing a long-sleeve dark grey sweater and tall black boots. My hair was down, but it was raining that day so it had begun to curl up. I wore mascara, but that was it. That moment plays over and over again in my head, and I am still no closer to understanding it. He didn't see me as a child. A few years, or maybe even months ago, I'm sure that same man would not have bought my drink. Why did he now? Why can he now?

He wasn't paying it forward. If he had been, he would have paid for the mother with her young kids behind me in line. I don't want to spend the rest of my life, or at least the next few decades, being surrounded by people who don't see me as a child. Because not being a child anymore means that I'm subject to sexism and objectification. I have no alternative to being stared at by middle-aged men, because the only way I know how is by being a child. And I can't go back in time. I tipped the money I would have spent on the drinks instead. If I do something nice every time I feel objectified or threatened because I'm a girl, maybe I can do some good.

The game was starting just as we got through security. We got our food, navigated the maze of hallways and entrances, and eventually found our way to our seats. We were surrounded on all sides by loud, obnoxious, incredible Patriots fans. No one offered me a beer, or stared at me like I was theirs to stare at. Looking back at the little kids sitting behind me, fully decked out in jerseys and hats and face stickers, I put my hat back on.







A Very Baroque Sonatina

Listen here: <u>https://www.parkschool.net/etemeverybaroque</u>





















Bajo Las Estrellas

La oscuridad de la noche cubría el mundo en un manto frío. Las luces que colgaban en el cielo brillaban para iluminar las perlas del agua que descansaban en las puntas de la hierba en el campo. Las apacibles vacas estaban descansando de pie y un coro de grillos cantaba para las criaturas de la noche.

En la parte inferior de la colina, por debajo de los campos, un viejo trampolín descansaba. Nuestros cuerpos pesados comprimían los resortes del trampolín y con cada movimiento, la vieja estructura crujía. Tratamos de estar estáticos y así cualquier rebote no iba a interrumpir la calma de la naturaleza.

Eramos amigos, Pablo y yo. Buenos amigos, pero sólo amigos y nada más. Siempre había sido alguien que estaba allí para mí. Un día en la escuela, me tropecé con un escritorio y me caí, pero antes de caer al suelo sentí que un par de manos firmes me levantaron de las caderas. Miré hacia arriba y vi los ojos brillantes y verdes de Pablo que siempre me recordaban a un estanque reflectante. Sus ojos siempre eran cariñosos. Sentí una punzada en mi corazón, que no podía reconocerla como algo más que un latido rápido.

Pensé que sabía lo que era el amor. Había tenido mi primer novio mientras éramos inexpertos y rebeldes. Tratamos de apresurar nuestro amor y no le dimos tiempo para que se cocinara a fuego lento hasta que se convirtiera en un infierno furioso. Por eso, la chispa entre nosotros se desvaneció tan rápido como había llegado. Después, me quedé atrapada en un estado de vacío. Mi mente estaba en una neblina y mis ojos siempre estaban acristalados mientras tomaba la vida que ya no podía disfrutar.

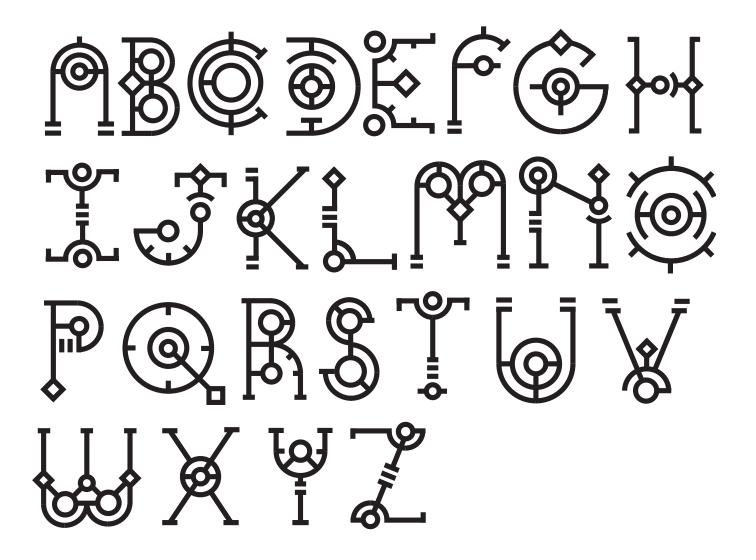
En el trampolín, la situación era diferente. Mis pensamientos eran de cristal y mis ojos estaban puestos en las estrellas, arriba. Pablo envolvió mi mano en la suya y continuó mirando al cielo. Me volteé sobre mi estómago para mirar esos bonitos ojos iluminados por la luna y sonreí. Nuestros almas estaban superpuestas y me sentí más viva que nunca. Me miró y su cara era un espejo mío: la luz de la luna mostró sus mejillas rosadas y una sonrisa grande. Yo pensé inmediatamente que esto era amor. No se trataba de rebelión o fuerza. No me equivoqué y Pablo me lo demostró con un movimiento de su mano.

Quería decir que estaba enamorada de él, pero cada vez que yo trataba, mi lengua me impedía que las palabras dejaran mis labios. Por fin, me miró con una expresión nerviosa y yo dije:

-Creo que me estoy enamorando de ti.

Él tomó un momento para responder, mientras mi garganta estaba en mi boca. Eventualmente, él dijo con una sonrisa grande:

María, he estado enamorado de ti por mucho más tiempo de lo que puedes imaginar.
Empezó a reír. Me senté y la trampolina se sacudió mientras lo hacía. Crucé los brazos y dije:
Bueno, entonces bésame, idiota.



Steamworks Serif

Luc Krishnan Digital Illustration

Quantitative Research on the Effects of Lysergic Acid Diethylamide on Pain

Aaron Sterling

Overall, there is not enough evidence yet for using Lysergic Acid Diethylamide (LSD) as a treatment for pain, but there are more and more studies being done, and it could become a decent treatment for pain at the microdose level.

Lysergic Acid Diethylamide is known as a psychedelic drug because of how it affects our brains when we take it. There are hundreds of changes that LSD makes on the brain, and scientists are still figuring out what some of them are, but there are four clear reactions that most scientists agree happen when taking LSD. The first two reactions have to do with a neurotransmitter called serotonin. Serotonin has many uses, including helping with our circadian rhythms, but it is mainly known for being the "happy" chemical because it is a big factor in our well-being. Most baseline antidepressants are Selective Serotonin Reuptake Inhibitors or SSRIs because they increase the amount of Serotonin in our brains. LSD has a structure extremely similar to serotonin, giving it similar effects to the "happy" chemical. This reaction happens in the raphe nuclei part of the brain, which is near the hippocampus and the cerebellum, and, scientists think, could have similar effects on those two parts of the brain. Obviously, this is a very simple explanation of how LSD reacts in our brain, but scientists are still trying to figure out what this means. In terms of pain, this neuroscience does not have a clear streamlined explanation because it could seem like more of a depression medication with the serotonin levels.

However, many scientists believe that pain can cause depression and depression can cause pain. Acute pain, quite often, will not worsen with depression because the pain will not continue. Chronic pain, though, can lead to depression because it takes months or years to wear off, if it ever does, leading some people to get depressed. LSD could be a pain medicine for these people; people who do not feel depressed with chronic pain may feel better for two weeks or so, but eventually it will wear off without consistent use, which is dangerous.

Multiple studies done tested whether Lysergic Acid Diethylamide (LSD) and psilocybin can be cures for depression, anxiety, and chronic illness. The goals were to see how LSD and psilocybin acted on patients with persistent pain. Psilocybin is the chemical in hallucinogenic mushrooms, which scientists suspect has a similar reaction in our bodies to both serotonin and LSD. In these studies, scientists gave LSD and psilocybin to patients with pain and depression. Overall, there was a finding in seven studies about LSD that these hallucinogenic drugs are sometimes beneficial for chronic pain, depression, and anxiety. Interestingly, in many cases, LSD has a higher percentage of positive benefits in terminal illness than in any other study. This could be a sign that LSD could make the pain easier to deal in life-or-death circumstances. Yes, these people are going to die, but it is better to see the beauty in life than to die sad, and LSD can do that for people. However, these were only a few cases, and more work has to be done on the drug before people can confidently take it without constant doctor check-ins. The study was not overwhelmingly in favor of LSD yet, so scientists want to do more research.

A different result from a new study of LSD suggests something similar as the previous study: in chronic illness, there tends to be a decrease of pain when LSD is taken. The study was done by Eric Kast, MD, in the Cook County Hospital in Chicago (Department of Anesthesiology). His test was on three patients, most of whom were in the pre-terminal stages of cancer. Kast found that LSD relieves pain much longer than other drugs, but many patients did not want a second dose. In this study, LSD was compared with two different forms of HCl -HCl dihydromorphinone and HCl meperidin-- as a pain relief drug. Kast studied these individuals in twenty-minute periods. For the HCl compounds, patients found relief for an average of three to six hours. When Kast gave these patients LSD, they felt some kind of pain relief for around 32 hours. He also concluded that patients "showed an unusual detachment from concern with their physical condition." The drug made people feel pain, but not in one specific sensory input, meaning that the pain was diluted and less significant to them. This study shows that people with a chronic illness--can get benefits from LSD. However, Kast says, more studies need to be done, and this is not the medicine for every patient. Yes, in some people, it can have positive impacts, but because the drug reacts differently for every person, sometimes the negatives outweigh the positives.

Overall, there is not nearly enough information about LSD to tell whether it should be used therapeutically. There are quite a few studies that show the impact for some patients can be positive, but many people are still afraid to try it as a pain medicine. One interesting new test scientists are coming up with is microdoses of LSD. This could give people with mental illness and chronic pain some of the benefits of LSD without having to go through all of the hallucinogenic aspects of the drug. Three questions I still have are these: How much does making chronic pain feel less important in someone's mind affect how much pain they feel? How does depression affect pain, and can helping with depression help pain in the long term? Lastly, what are the effects of other more common drugs on pain? Does medical marijuana help significantly enough with chronic pain that there is a good argument for legalizing it?

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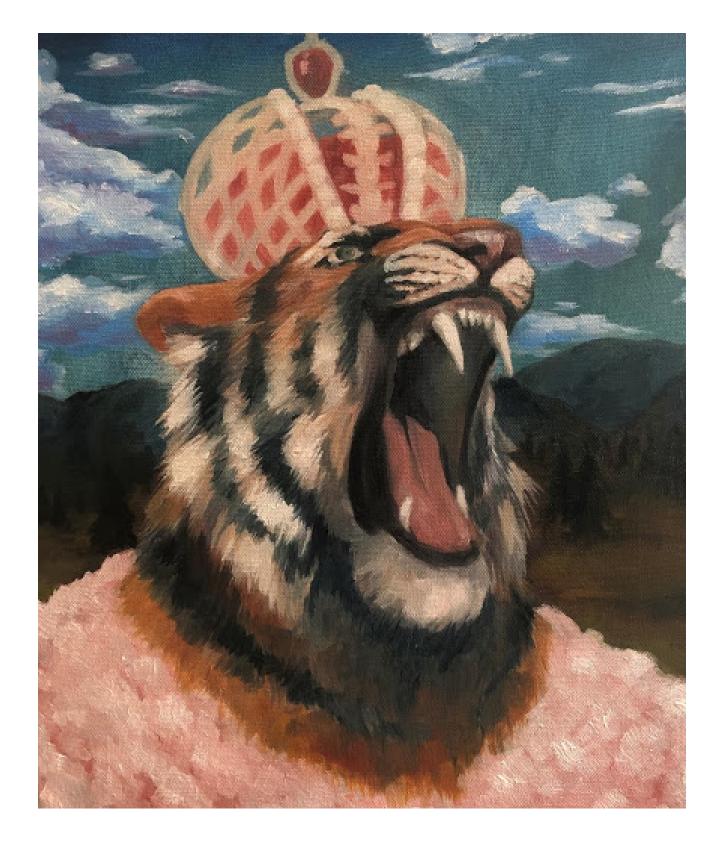
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The Fall of the King

Oil on Canvas, 12" x 16"

The Fall of the Asante Empire

At the end of the eighteenth century, the Asante Empire stood as the most economically and politically powerful polity in West Africa. It was an international force to be reckoned with. By the end of the nineteenth century, it had been reduced to a state of dependence on a new power in the region, Great Britain. This was the product of the Empire's struggles to navigate change in the world economy. The rise of the transatlantic slave trade transformed the Asante Empire's diverse economy into one that depended heavily on European--in particular, British--demand for slaves. When the transatlantic slave trade ceased and gave way to industrialization and anti-slavery in Great Britain, Britain's motives in the region shifted from buying enslaved individuals to isolating the Empire from European rivals and securing it for natural resources. The Asante rulers struggled to interpret this dramatic turnabout and adapt to the British tactics in a way that preserved their power. Over the decades, the British learned how to exploit this situation. They gained enough economic and political control in the Empire to eventually colonize it on January 1, 1902.¹

The notorious Gold Coast of Africa was originally comprised of a series of independent tribes that came together to form one of the most influential and powerful West African empires of all time: the Asante Empire, which was founded in the mid 1670's by Osei Tutu, a revered political visionary and leader alongside his priest Okomfo Okoye.² With their combined diplomatic and religious influence, both Okoye and Tutu managed to unite the differing tribes in the Gold Coast Region and create the Asante Union.³ Through unification, the Asante Union grew to be one of the most economically successful West African empires. Starting in the 1700's, it became a major producer and trader of essential products, such as salt and gold.⁴ By the 1800's, however, the Empire became a major local and international force in the trading, selling, and buying of enslaved individuals.⁵ The union expanded, with other tribes and small kingdoms joining in its midst, transforming it into an empire that would take up the entirety of the Gold Coast.

In the mid-to-late 18th century, before its economic dependency on the transatlantic slave trade, the empire relied heavily on profits gained through the exports of essential items such as

¹PBS Online, "Wonders: Ashanti Kingdom," <u>The Slave Kingdoms</u>, https://www.pbs.org/wonders/Episodes/Epi3/3_ wondr1.htm

² PBS Online.

³ PBS Online.

⁴ PBS Online.

⁵ PBS Online.

gold and salt.⁶ Salt was an integral part of the empire's economic prosperity. According to historian Kenny Mann, "The Asante thus acted as middlemen or agents in the trade of salt for gold, and collected huge taxes on these and all other commodities. .⁷ Mary Quigley also notes that "For each donkey-load of salt that left Ghana for the south, the King collected an export tax of two miqtals from its neighbors."8 Other products were also produced in the Empire, such as palm oil, cacao, and iron.9 But the most valuable, and perhaps the most notorious, was gold. It is said that in the Asante Empire, Mann notes, "gold was so plentiful that the King's hitching post was said to have been a 60-pound gold nugget, which would be worth more than \$300,000 today."10 However, Asante rulers understood that because of the bountiful amounts of gold hidden everywhere in the Empire, they would have to maintain its value. To do this, they needed to control the supply of gold in the local economy. "The location of the salt mines was common knowledge, but the location of the gold mines was kept strictly secret."11 Asante rulers thus declared that all gold nuggets found anywhere, within the territory of the Empire, belonged to them. Furthermore, the salt-gold trade enriched the empire's economy not simply because of international trade, but because of the local and regional wealth made from taxes on merchants entering the city of Kumbi to sell their goods.¹² "The salt-gold trade was the lifeblood of the kingdom."¹³ When merchants entered kingdoms, they had to pay taxes on every single trade item that entered the country: "For each load of salt coming from the north into the city of Kumbi, a merchant had to pay one gold coin, called a dinar."¹⁴ Merchants also had to pay another two dinars to take the remaining load of salt out of Kumbi to their next destination. This meant that each time a load of salt entered the kingdom, the Asantehene (the king) was three dinars richer.¹⁵ However, the majority of the taxes did not go to the Asantehene's personal fund, but to fund the government and the military which guarded its borders.¹⁶

In addition to commerce in gold and salt, involvement in transatlantic slave trade, was an important part of the Empire's economy.¹⁷ The empire was dependent on many diverse sources for economic wealth in the mid-to-late 18th century. However, during the early and mid-point of the 19th century, "exporting slaves became their main source of economic wealth."¹⁸ Before that time, the Empire was not unaccustomed to capturing and selling slaves locally and regionally, as they had been doing so for many years before the arrival of the British.¹⁹ The empire acquired slaves mainly in three ways: by enslaving prisoners of war, capturing refugees of defeated foes living in non-existent cities and tribes, and taking enslaved individuals from birth.²⁰ Local enslaved individuals were generally captured in war situations where Asantehenes (Asante Rulers) would enslave the remaining citizens of defeated kingdoms. The current Asantehene in the Empire, Osei Tutu expressed this notion in 1824: "But if I fight a king, and kill him when he is insolent, then certainly I must have his gold, and his slaves and the people are mine too...."²¹ The majority of the individuals enslaved from war became bodyguards or soldiers, or they worked in salt and gold mines, making them essential to the production aspect of the economy.²²

To the Asante, the capturing and enslavement of people was not morally undignified: it was a sign of cultural and

- ¹⁰ Mann, 14.
- ¹¹ Quigley, 13.
- ¹² Mann, 23.
- ¹³ Mann, 43.
- ¹⁴ Mann, 43.
- ¹⁵ Mann, 51.
- ¹⁶ Mann, 2.

¹⁹ Mann, 7.

- ²¹ Worger, et al., 14.
- ²² Mann, 14.

⁶ PBS Online.

⁷ Kenny Mann, Ghana-The First Kingdom of West Africa (Parsippany, NJ: Dillon Press, 1996) 6.

⁸ Mary Quigley, Ancient West African Kingdoms: Ghana, Mali, and Songhai (Portsmouth, NH: Heinemann, 2002) 20.

⁹ Mann, 7.

¹⁷ John D. Fage, *Ghana: A Historical Interpretation* (Madison: University of Wisconsin Press, 1959) 23.

¹⁸ Fage, 23.

²⁰ William H. Worger, Nancy L. Clark, and Edward A. Alpers, *Africa and the West: A Documentary History from the Slave Trade to Independence* (Oxford:

Oxford University Press, 2002) 34.

societal status that was expected and widely accepted. A major difference between the treatment of enslaved individuals in Asante culture and in British culture was the range of roles slaves could assume. In Asante culture, according to Mann, "some slaves were educated at the expense of their masters and even became governors or advisors to their rulers."²³ However, the two cultures mirrored each other by perpetuating the notion that those individuals were still enslaved and eternally bound to their masters, no matter how free they seemed. Mann writes, "Nevertheless, slaves were at the mercy of their masters, were often treated harshly, and suffered the anguish of being uprooted from their homes...."²⁴ These shared attitudes among the Asante and the British would not only help to foster the smooth growth of commerce in slaves between them--as will be revealed later on-but it would have a tragic impact on the course of those relations as the years progressed.

During the early 19th century, Asante rulers realized the immense potential wealth from involvement in the transatlantic slave trade.²⁵ Firearms were imported and brought to defend the empire of hostile neighbors and powers, as were other foreign goods, such as cigars, that helped mold and solidify the Empire's young bourgeoisie class.²⁶ All of these things were imported and bought at a much higher rate because of the Empire's involvement in slavery. Therefore, they began increasing the rate at which they captured individuals and adjusting the system of capture and enslavement they had developed over time. Instead of internationally trading individuals who had been captured from war, they focused more on the children of enslaved people. Individuals who had been enslaved from birth were generally more attractive to Asante slave traders and purchasers because they were less likely to escape, or resist because all they'd known was bondage.²⁷ According to "(Slatees) constantly prefer such as have been in that condition of life from their infancy, well knowing that these have been accustomed to hunger and fatigue and are better able to sustain that hardships of a long and painful journey..."²⁸ Individuals in these situations were more likely to be sent overseas to work in different countries.

The Asante Empire made an ambitious choice in becoming one of the most dedicated suppliers of enslaved individuals to the British, and their decision had rewarding results. The Empire was enriched societally and economically by this trade, and it also took the opportunity to import exotic and foreign goods, to enhance their control in local trade agreements.²⁹ "In exchange, they received luxury goods, and manufactured items, most importantly, firearms."³⁰ With a growing influx of foreign items, enriching Asante merchants and rulers, "a rising class of bourgeois African merchants, professionals, and other leaders began to build or join existing urbanized communities in trading towns along the West African coast."³¹ Trading enslaved individuals with the British was the gateway to the beginning of the modernization of West African coastal kingdoms such as the Asante Empire.

With the normalization and cultural acceptance of slavery, Asante Kings assumed those sentiments were shared with the British and would never change. They were wrong. Great Britain's official outlook on the slave trade (and slave-based economies) took a dramatic turn in the early nineteenth century. After Britain's abolition of slavery in 1833, a new reformed and modern outlook on the morals of slavery was conceived. Slavery was now considered barbaric and "unchristian," but more importantly it gave the British a false sense of justification to colonize and dehumanize African nations. ³²Getz writes, "to justify this domination, Europeans portray Africans as subhuman and in need of enlightenment and assistance in their evolutionary development toward 'humanness."³³

The root of these newfound philosophies about African peoples can be found in two major things: Britain's Industrial Revolution and the emergence of Christian missionaries. As explained by Getz, "industrial technology permitted Europeans

³² Fage.

²³ Mann, 32.

²⁴ Mann, 13.

²⁵ Mann, 43.

²⁶ Mann, 45.

²⁷ Worger, et al., 14.

²⁸ Worger, et al., 13.

²⁹ Fage, 13.

³⁰ Fage, 13.

³¹ Trevor Getz, African Voices of the Global Past (Abingdon-on-Thames: Routledge, 2013) 69.

³³ Getz, 70.

to impose their rule, relatively efficiently, on much of the rest of the world."³⁴ Objects of the Industrial Revolution, such as firearms, made invading and colonizing African nations much easier. Getz writes about "various new firearms, culminating in the development of the machine gun, an extremely efficient killing machine."³⁵

As for the introduction of Christianity in African nations, missionaries played a major part. For the British, the Asante nation represented a group of barbaric, sub-human individuals who needed to be saved. As written by Getz, "Thus missionaries and their supporters campaigned for European governments to live up to Christian ideals by providing military protection to evangelical endeavors in the so-called Dark Continent."³⁶ However, it was not just Christianity that emboldened British colonization, but also the opinions and assumptions of "racist European philosophers, with little or no scientific training."³⁷ These philosophers applied their elementary ideas of evolution, combined with their own ignorance as white male Europeans, to suggest that differences in skin color represented differences in species, insinuating the darker the skin the less human.³⁸ Getz explains this: "They then used their racist thought, garbed in pseudo-science, to encourage other Europeans to believe that it was the moral duty of their Christian societies to uplift the lesser-evolved."³⁹ This had a devastating impact on the Asante Empire as well as a jarring effect on the Asante rulers.

After Britain's abolition of slavery, Asante King Osei Bonsu understood the possible negative effects this would have on his kingdom's economy. He conveyed this dismay in a letter to British officials: "The white men who go to council with your master and pray to the great God for him, do not understand my country, or they would not say the slave trade was bad."⁴⁰ Bonsu brought his own experience of Asante's culture of slavery to bear--a culture he thought his own empire shared with the British. He then struggled to understand why that view shifted so drastically and abruptly: "But if they think it bad now, why did they think it good before?"⁴¹ Bonsu's confusion was not misplaced. For almost three centuries, the British had been trading goods with the Asante Empire, and both powers developed a sense of economic dependency and trust on each other.⁴² The abolition of the slave trade on Britain's part was a major blow for the Asante Empire. As explained by historian Trevor Getz, "The abolition of the transatlantic slave trade gradually ended this arrangement, and in the ensuing commercial crisis Europeans as well as Africans scrambled to find a way to replace the slave trade.⁷⁴³

Even within his questioning of British motives and goals, Osei Bonsu still had faith in the possibility of reinstating the slave trade with British. Bonsu, assumed that, like his own kingdom, Britain was highly dependent on the transatlantic slave trade.⁴⁴ In the meantime, he sought out other ways to maintain what had become their main source of profit. The Asante Empire still continued engaging in trading slaves with other European powers, such as the Portuguese.

The British did not leave the Gold Coast during this new era. Rather, they shifted their gaze from access to slaves to access to raw goods. Even without the slave trade, the Asante Empire was abundant in gold, ivory, iron, palm oil, salt, and countless other resources.⁴⁵ These were resources that Great Britain also desired, because they contributed greatly to the country's Industrial Revolution. These were also resources that competing nations and markets increasingly valued.⁴⁶ This explains why the idea of other European countries and kingdoms profiting and creating strong economic relationships with the empire would worry the British, if they were contemplating colonization. According to a treaty written by British officials in

- ³⁴ Getz, 71.
- ³⁵ Getz, 74.

³⁶ Getz, 73.

- ³⁷ Getz, 73.
- ³⁸ Getz, 73.
- ³⁹ Getz, 73.

- ⁴¹ Depuis, 23.
- ⁴² Fage.
- ⁴³ Getz, 73.
- ⁴⁴ Depuis, 23.
- ⁴⁵ Getz, 74.
- ⁴⁶ Getz, 23.

⁴⁰ Joseph Depuis, *Journal of a Residence in Ashantee* (Abingdon-on-Thames: Taylor and Francis, 1966) 23.

the Empire, "So long as the vessels of other countries are allowed to frequent the coasts, the forts will be unable to prevent the trade in slaves...."⁴⁷ The most plausible solution to eliminate slavery in the Asante Empire and infiltrate it economically was to prevent foreign ships from arriving to its coasts and reaching slave markets.⁴⁸ As written in the treaty, "Two or three small ships of war, with some troops or an extra number of marines on board, should be left constantly cruising on the coast, to prevent the approach of all vessels not British.³⁴⁹ It is clear here that Britain understood the geographic convenience of the Empire, and knew it would be difficult to prevent other powers from reaching the ports without patrolling the coasts.

To officially solidify their foreign relationship with the Empire and verify their future economic success, the British began taking certain diplomatic steps to accomplish this. The first step was requesting the founding of an embassy within the Empire, as explained in a treaty written by British official William Hutton: "We wish you to obtain permission from the King (of Asante) to send an Embassy to his capital..."⁵⁰ By sending an embassy, Britain could have official representatives and official foreign status in the empire outside of simply being a trading partner. The second was sending three representatives to scout and observe where certain goods were coming from. According to Hutton, "it will be necessary for them to observe, and report upon, the nature of the country; its soil and products; the names, and distances, and the latitude and longitude of principle places."⁵¹ Though these actions seemed harmless, Britain was progressively obtaining valuable information concerning the intricate ways in which the Empire's economy functioned. Before colonizing, the British needed to ensure that they would reap the most goods possible from the Empire's natural resources.

Before introducing economically invasive and restrictive policies, Britain first began with simply requesting the presence of British officials at the King's court. According to the treaty, "The King of Ashantee agrees to permit a British officer to reside constantly at his capital for the purpose of instituting and preserving regular communication with the Governor...⁵² This official was none other than Joseph Dupuis, a former Vice-Consul for the British Government, who arrived in the empire in 1824, and throughout his stay formed an amicable and trustworthy relationship with the Asantehene. Dupuis expresses his sentiments about the King in his journal: "For he was my good friend; and if I wanted anything to let him know" ...⁵³ Dupuis resided in the empire's capital, "Coomassie." As an ambassador, he was required to advise the Asante King when it came to the economic and political desires of Great Britain.

Dupuis and Bonsu often conversed about political decisions in their different countries; through these conversations, a relationship built on mutual respect was fostered. Dupuis writes of Bonsu's sentiments, "So I bear witness to you, O, ambassador of the great King, a truly benevolent friend to blacks of every nation."⁵⁴ In his journal, Dupuis made numerous detailed remarks about the agricultural economy in the Empire: "Among the trees and shrubs of small growth were cotton in abundance, some indigo, coffee, arrow-root, and gopro or war nut..."⁵⁵ He also made sure to detail the exact location of the gold mines. Of the different provinces he learned about, he wrote, "Gaman, and particularly its provinces of Ponin, Safoy, and Showy, contain the riches gold mines known to my informers, in this or any other part of Africa..."⁵⁶ It is clear here, that Dupuis was recording information for a purpose, not simply to write it down in his journal. He was, after all, an ambassador for the King of England. His job not only consisted of providing representation. He was surveying a region and collecting commercial intelligence for the British to exploit.

In 1827, the British created a treaty between the Governor and Council at Cape Coast Castle, Thomas Edward

⁴⁷ Worger, et al., 88.

⁴⁸ Worger, et al., 87.

⁴⁹ Worger, et al., 88.

⁵⁰ William Hutton, A Voyage to Africa: Including a Narrative of an Embassy to One of the Interior Kingdoms, in the Year 1820 (Whitefish, MO: Kessinger Publishing, 2010) 88.

⁵¹ Hutton, 57.

⁵² Hutton, 65.

⁵³ Depuis, 23.

⁵⁴ Depuis, 23.

⁵⁵ Depuis, 23.

⁵⁶ Worger, et al., 23.

Bowdich, and the current ruler of Asante, Sai Tootoo Quamina.⁵⁷ At this point, the British had successfully begun to infiltrate the Asante economic and political scene for three years since the instatement of Joseph Dupuis. For the British, it was time to begin introducing stricter legal agreements. The eighth clause of the treaty states that the Governor-in-Chief, Bowditch, can legally punish any citizen of Asante Empire of secondary offences: "The Governor-in-Chief reserves to himself the right of punishing any subject of Ashantee or Dwabin guilty of secondary offences...."⁵⁸ The treaty then states in the ninth clause that the King should send his children to be educated, in "full confidence of the good intentions of the British Government..."⁵⁹ This treaty, created between the ambassadors and the King of Asante, is a testament to British motives in controlling the Empire. They were attempting to exercise legal authority over Asante citizens, and beginning to educate the children of wealthy officialsto groom the elite for an extended but restraining relationship controlled by the British. It is clear here that Britain was seriously considering colonization.

It is unclear whether or not Asante officials were aware of British involvement in the cessation of trading enslaved individuals with other European countries. But it is evident that British officials were so emboldened by the obliviousness (most likely caused by linguistic and cultural barriers) of Asante officials that they included statements in their treaties such us "The officers of the Queen of England may seize every vessel or boat of ______ found anywhere carrying on the trade in slaves, and may also seize every vessel or boat of other nations......^{*00} The British realized the potential economic power the Asante Empire could gain if it continued to trade with other European countries as an independent entity and Britain was threatened by that notion. Getz writes, "While they were not always successful, their economic success in this period may have been partly responsible for Europeans' turn toward formal colonialism....^{*61}

Furthermore, inspired by the ignorant and racist justification that the Asante Empire, and many other African kingdoms, were comprised of barbaric, partially human and needy individuals, the British, driven by a false sense of compassion, felt even more compelled to colonize it.⁶² It is not far-out to suggest that the economic and political success of the Asante Empire and strong foreign relationships with other powers worried the British, especially as they were abolishing the slave trade. Two things are certain about this slow and progressive road to colonization started by the British. The first is that it began with Britain's involvement and rejection of trading slaves with the Asante Empire. Second, even after Great Britain's attempts to infiltrate the Empire's economy and political scene, it managed to peacefully resist British invasion for 30 years (starting from 1824 to 1854) and resist militarily for another 20 years after that.⁶³ But despite resistance, the growing involvement and influence of British officials in the Asante government proved to be detrimental for the empire's last rulers before colonization. British officials took advantage of the language barriers and the empire's desire to once again become a global economic power by posing as ambassadors of technological advancement, but really they were stripping the country of its remaining political and military defenses.⁶⁴ This reveals that the British never had any intention of economically and politically supporting the Asante Empire as an independent nation, but rather of forcing it into the cage that was economic dependency and colonization. After a myriad wars and conflicts, the Empire was finally declared an official colony of the British Empire in 1902, thus ending the story of the Asante Empire's admirable resistance against British colonization.⁶⁵

⁵⁷ Worger, et al., 23.

⁵⁸ Worger, et al., 23.

 ⁵⁹ Worger, et al., 23.
 ⁶⁰ Worger, et al., 23.

⁶¹ Getz, 23.

⁶² Getz, 23.

⁶³ Quigley, 45.

⁶⁴ Quigley, 3.

⁶⁵ Quigley.

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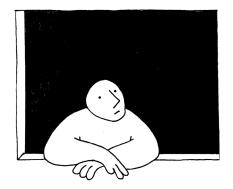
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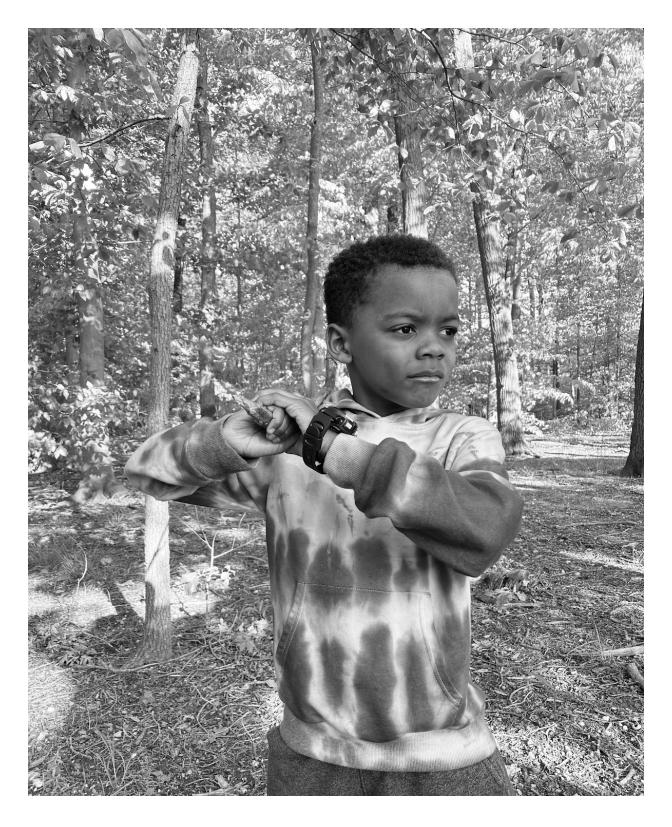
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Portrait in the Woods

Darryl France Digital Photo

What Things Fall Apart Can Teach Us

When I opened to the first page of Chinua Achebe's *Things Fall Apart* and began reading the first few paragraphs, I was embarrassed at my unfamiliarity with almost all the cultural and societal aspects Achebe referenced. As I am half Cameroonian, and Cameroon is a country that borders Nigeria and shares a complicated colonial and post-colonial history as well as many cultural similarities with Nigeria, I was expecting to understand and effortlessly breeze through the book using my experience and "vast" understanding. However, I came to find out that despite my identity, and the things I thought I knew, I felt I was still as clueless as the next American high school student in truly grasping the events occurring in the first few pages. As I read the last page, however, the anxiety and shame I felt at the beginning were no longer there. I felt confident that an ample portion of the holes in my knowledge of pre-colonial West African culture had been filled, I could safely say that I was no longer a clueless American high school student when it came to the cultural aspects of the novel; rather, I was an informed one.

While reading Achebe's novel I was introduced to a world that, while fictional, was still a historical account of life in a Nigeria that (for a few chapters) was unbothered, separate, and completely unrelated to Britain. At first, it was hard for me to grasp. But as I grappled with my own preconceived notions of what a pre-colonial Nigeria should look like, I was simultaneously being taught about what it *did* look like. Through Achebe's objective account I learned that not only did the novel include the typical everyday cultural and societal happenings, but also the personal struggles and emotional and physical problems that aren't unique to Western literature, but are a part of the human story. For example, in the second chapter of the book, Achebe gives us Unoka's, Okonkwo's father's, backstory, summing it up with his unfortunate and, like his life, worthless end. When Unoka died he had taken no title at all and he was heavily in debt. Any wonder then that his " son was ashamed of him?" In Igbo culture, wealth and prosperity were gained and determined based on how many wives one had, and one's successful harvests. Unoka, though kind and gentle-hearted, decided that his main profession would be in music. Unfortunately for him, his flute could not raise yams out of the ground or summon beautiful women to his home and he was judged and ridiculed for it. "People laughed at him because he was a loafer and swore to never lend him anymore money because he never paid back." Unoka's inability to provide and bring material wealth to his family dishonored him and severely embarrassed Okonkwo to the point where his identity and happiness as an adult were solely comprised of and dependent on his success and prestige. Then, there is the fact that Okonkwo regularly beats one of his wives, whose name is never revealed. And, lastly, there is the

surprising and almost Shakespearean ending of the novel where Okonkwo, so overcome by despair, shame, and defeat, commits suicide.

Of course, there are numerous other characters who engage in behavior that we may deem good or bad, helpful or destructive, depending on whom we're "rooting" for. But, in all honesty, I never really rooted for anyone. In a way I was rooting for the continuation of character and story development without the involvement of the British. I knew this wasn't going to happen, for this novel is literally about how the various traditions, institutions, and systems put in place by the Ibo fell apart, ushering in a new era of colonialism in Nigeria.

Achebe wrote this novel in 1958, in the midst of many brewing independence movements in Africa (most of which would be successful) during the infancy of the Civil Rights Movement in the USA, and after the revolutionary negritude movement that began in the '30s, a movement that celebrated and redefined literature written by writers across the African diaspora. Compared to other "classics" I've read, *Things Fall Apart* isn't anything like them in terms of style, setting, and story. But in my opinion, it should be considered a classic not just because of its content, but because of its cultural and historical significance. I suppose one could even say that it's a classic in the perplexing category of African Literature. Or maybe it should be considered a classic because it is one of the first novels of its kind to address the African experience through a lens of humanity, something which we can all relate to, debate and understand. Because once you bring back humanity, everyone is forced, whether voluntarily or involuntarily, to empathize with a character or with a person. For so long, because of European colonization and the transatlantic slave trade, the humanity of African peoples in literature was stripped away to justify and rationalize the maltreatment and malicious light that Africans were cast under (and in many ways still are) for centuries. Achebe's novel was such an important step in the redefinition of African culture and society in Western eyes.

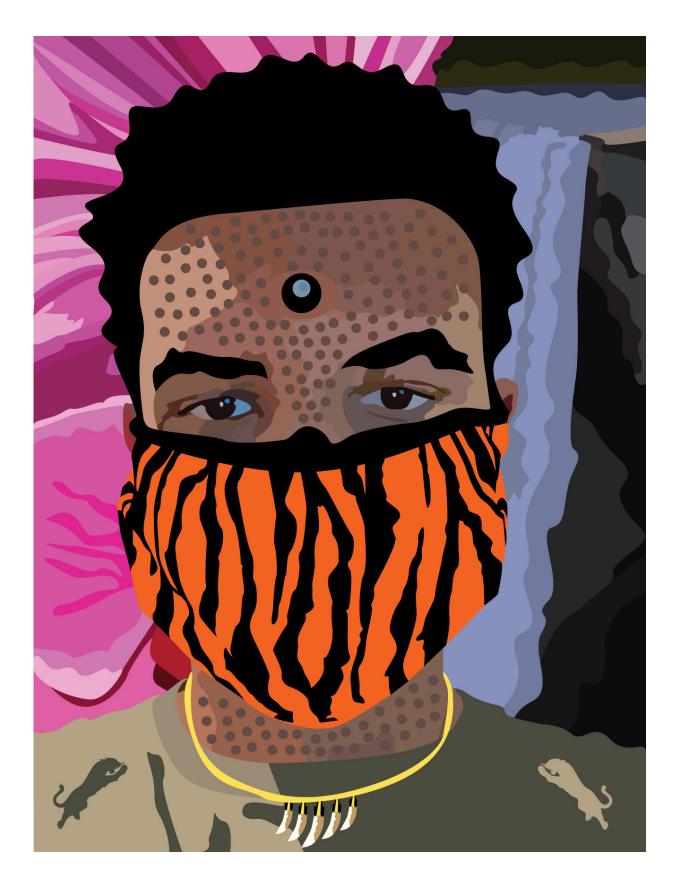
Novels have been used to chronicle and record history since they have existed. Whether intentional or not, novels, in many ways, are just more entertaining versions of history textbooks, with significantly fewer dates. People use novels set during wars, revolutions, invasions, peace, the conquering of empires, and the fall of empires to understand, in some way, what it was like to live through these times. What were the public sentiments and the private ones? Who supported and who was against? How was daily life drastically changed by these events? Who benefited and who suffered? In many ways novels written in or about those times can answer those questions for us or give us an idea of what the answers look like. In *Things Fall Apart* we see how the Ibo may have reacted to the arrival and presence of the British on their soil. Achebe depicts Okonkwo and those around him as irritated by the presence of the British, as if they were invasive insects, but seemed harmless enough that extermination didn't seem necessary. In Ibo culture, power and influence were measured by physical strength and material wealth. To them, the British were physically weak and had no material that was valuable to them. But because of the gross underestimation of, and lack of actions towards, those "insects" that were slowly and consistently nestling themselves underneath the floorboards, and behind the walls, the Ibo's house was infested, and eventually fell apart.

Achebe's novel was (and is) an integral account of the process of colonization through the view of the colonized. We can't really know Achebe's true intentions in writing this novel, or his desired reception by the Nigerian public and the Western world. But it does seem very likely that Achebe, as a writer writing a novel about a major event in world history from a side that had been silenced for so many years, would foresee that the novel would be used as a kind of surrogate history textbook, one read both for pure enjoyment because of Achebe's refreshing, sarcastic tone and straightforward storytelling, and for learning about and maybe gaining an understanding of life before British colonization. This novel teaches us that the history of formerly colonized African countries does not start with colonization, or even independence. This novel teaches us that, like every novel, there is always a story that allows us to connect, empathize, and relate to characters, even when those characters seem so different from us, whether through race, religion, or culture. *Things Fall Apart* is a lesson on hate, humility, and humanity.











Capsaicin as an Analgesic for both Acute and Chronic Pain

Max Miller

Capsaicin, a cultural and culinary spice extracted from chili peppers, can also be used to relieve pain. It can both relieve acute pain (pain that only exists temporarily) and chronic pain (generally characterized as pain that lasts for three or more months).¹ While capsaicin is theoretically proven to treat chronic neuropathic pain—a type of pain that gives symptoms of a sharp, burning pain throughout nerves as well as a numb and tingling sensation throughout the body—because of its binding and depolarization of receptor TRPV1, acute pain is less documented on. However, there are still methods that can demonstrate that capsaicin can be used as acute pain relief. This essay will demonstrate the purpose of capsaicin as an analgesic for both acute and chronic pain by first explaining the acute pain response, then presenting capsaicin as a pain reliever, and finally explaining its direct impact on chronic and acute pain.

The acute pain process starts with an action. For this example, let's say that I stub my toe. Afferent nerves in my toe (sensory nerves) send pain reports to the PNS, which then go through the ascending pathway, sending it to the CNS. This information goes to the axons in the dorsal root and then up to the brain, where the pain is processed. The brain exports the processed data through the efferent nerves, down the descending pathway, and back to the PNS.² When the data finally reaches the muscles again, I would feel my toe hurt from stubbing it. When dampening the pain, as seen with pain relievers, any part of this process is tailored, and thus the pain is reduced. This essay will show that capsaicin can be used as a pain reliever because of its binding to the TRPV1 receptor, a receptor in this pain process.

Capsaicin, acting as an agonist (compared to antagonist), can activate the TRPV1 receptor (also known as the vanilloid receptor subtype 1).³ When capsaicin is applied to any part of the body such that the nervous system picks up its presence, TRPV1 activity lessens, which is an act called

¹ (Jacques, 2019)

²(Guarraia, 2020)

³ (Jhaveri, Elmes, Kendall, & Chapman, 2005)

desensitization.⁴ Occurring in chromosome 17 (picture taken from Wikipedia), TRPV1's function in the body is to normalize body temperature. Additionally, when a human consumes spicy food, TRPV1 is one of the receptors that creates a feeling of spiciness. The entire TRP receptor family sends signals of nociception when the body is introduced to spicy food. A great example is wasabi (receptor TRPA1); although it is a delayed reaction, there is a profound and inundating response when you eat too much by accident... it isn't guacamole! The special thing about TRPA1 is that it's wasabi's only receptor, and the special thing about TRPV1 is that it is capsaicin's only receptor, according to Maulik D. Jhaveri, Steven J.R. Elmes, David A. Kendall, and Victoria Chapman in their document titled, "Inhibition of peripheral vanilloid TRPV1 receptors reduces noxious heat-evoked responses of dorsal horn neurons in naïve, carrageenan-inflamed and neuropathic rats." The picture to the left is the binding site of capsaicin to the TRPV1 receptor (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5326624/). Capsaicin, as aforementioned, is an agonist. The goal of an agonist is to depolarize the receptor to get the local nociceptive regions to be analgesic.⁵ The goal of an antagonist is to do the opposite. Once capsaicin is bound to TRPV1, the nociceptive axons are theoretically analgesic to neuropathic pain.

Neuropathic pain is classified as "usually" chronic.⁶ In determining capsaicin's role as a reliever of neuropathic pain, I was focused on specifically chronic neuropathic pain. A topical application of capsaicin can relieve neuropathic pain for up to three months, which is the generally accepted threshold for chronic pain.⁷ Authors Derry S, Rice ASC, Cole P, Tan T, Moore R from Cochrane wrote an article about capsaicin, specifically about its role as a topical substance that can relieve neuropathic pain. In the article, they analyze seven studies with a total 2,442 subjects. They found that: "About 4 in 10 people had at least moderate pain relief with capsaicin compared with 3 in 10 with control."⁸ They used a placebo for the control. Later in the article, the scientists mediated the data as low quality. It's interesting to note this study though because theoretically, neuropathic pain nerves should be. It could be the data, as the scientists concur, but nonetheless, there was positive growth. In the study by Jhaveri, Elmes, Kendall, and Chapman, there was testing on the TRPV1 receptor on rats. Given its positive results and the positive results from the Cochrane synthesis, I think there is enough evidence to somewhat prove an ability to relieve neuropathic pain.

Scientists are mainly focused on capsaicin's ability to relieve chronic neuropathic pain, so acute pain relief has not been tested much. However, capsaicin can still promote relief for acute pain. Similar to meditation, taking your mind off a particular pain can temporarily resolve an issue. Since acute pain is temporary, this rerouting of pain works. If I stub my toe, and then throw a patch of capsaicin on my arm, my pain will be redirected and, most of the time, I won't feel the pain from the stub. There is no evidence that shows that capsaicin and the TRPV1 receptor have an effect on acute pain, yet they should have an effect on chronic neuropathic pain. I'm aware that neuropathic pain can come in an acute form, but it's rare. Still, it exists, and that must not be disregarded when making a verdict. As a recommendation of therapy for acute and/or chronic pain management, I'd say give it a go. It's definitely subjective — as mostly all pain relief methods are — since it depends on your sensitivity to capsaicin, so it's definitely worth a shot to see if it may work for you!

Some lingering questions:

Since TRPV1 is activated by agonists, and these spicy agonists are on the Scoville scale, is there a correlation between the Scoville scale and the efficiency of analgesia? In other words, would a serrano pepper (10,000-23,000 scoville units) help with pain, but less?

Is there a superior location to place the capsaicin pad? What would the results be like if the pad was placed right along the back of the neck (spinal area)?

Is topical capsaicin cream more efficient than a capsaicin pad? Or consumption of capsaicin (I wouldn't want to test this, haha)?

- ⁷ (Derry, Rice, Cole, Tan, & Moore, 2017)
- ⁸ (Derry, Rice, Cole, Tan, & Moore, 2017)

⁴ (Editors at Wikipedia, 2020)

⁵ (Michael S. Leong, David Copenhaver, 2018)

⁶ (Holland & Moawad, 2020)

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Carey Street Taneya Dove Digital Photo

La Noche de los Feos-Otra Perspectiva _{Katie Gilbert}

He oído muchas veces el término: "fea". Otros han decidido que es mi etiqueta. Pero a mí, no me gusta estar confinada por palabras.

No puedo recordar los días en que me miraba al espejo y veía un pómulo completo. Crecí con esta imagen de mí misma, y aprendí a amar el rompecabezas de todas las partes de mi cuerpo. Puedo olvidar mi pómulo, a veces cuando estoy sola. Es solamente cuando siento los críticos ojos de otros que yo recuerdo mis diferencias.

Estaba en la cola del cine cuando sentí otra vez una mirada intensa. Podía sentir sus ojos en mi espalda. Estoy acostumbrada a las miradas de láser, que me penetran y me dejan cruda y vulnerable, pero esto fue algo diferente. Cuando me di la vuelta, mis ojos se encontraron con otro defecto. Me di cuenta que el calor que emitía su mirada no fue de crítica. Fue de curiosidad, de interés. Su mirada permaneció inmovil durante toda la duración de la película. Y él me esperó al final, me invitó a pasar un tiempo juntos, para finalmente hablar el uno con el otro.

Siempre había pensado que un buen amor me querría 'aún con' mi defecto. Pero ahora yo estaba enfrentada con alguien que me quería a causa de mi defecto. Y esto se sentía peor que alguien que hubiera tratado de ignorarlo. No es mi personalidad, no es mi humor ni mi corazón. Pero es lo que ve, y entonces es lo que piensa de mí. Y él pensó que nosotros íbamos a sentirnos perfectos juntos porque los dos sufrimos. Pero esto no es lo mismo que conectar al nivel del alma. Yo sabía todo esto, pero aún así acepté su invitación. Aunque yo me acepto a mí misma, sé que es más difícil para otros. No he encontrado el amor que quiero, y entonces decidí darle una oportunidad y abrir mi alma con la esperanza de crear una conexión.

En la confitería yo miré mi propia imagen familiar en mi espejo. Me sentía bonita y lista para mi cita. Pero entonces yo cerré el espejito y vi su cara, llena de sorpresa. Instantáneamente fui transportada a todas las perspectivas alrededor mío. En ese momento, tuve una claridad completa. El mundo no está listo para una persona fea que se ama a sí misma. Para evitar el aislamiento, necesito aceptar una vida solitaria, la más profunda solidaridad— la separación de mí misma.

Después de un tiempo que se sintió más largo de lo que fue, él decidió parar la charla y preguntarme algo serio.

-Usted se siente excluida del mundo, ¿verdad?

Consideré mi comprensión de antes. Él obviamente se sentía aislado por una marca en su cara. El mundo supone que yo también sienta lo mismo, él supone que yo sienta como él. Si quiero la oportunidad de experimentar algo como una relación con otro, necesito cumplir esta expectativa. Aunque esto signifique que me sienta más separada de mí misma, me llevaría a mí más cerca de otros.

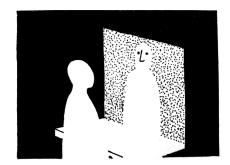
–Sí.

Casi no podía responder a su próxima pregunta. Me dolió oírle referirse a la chica a mi lado como 'normal', como si yo fuera algo antinatural, inhumano. Pero encontré la fuerza para dar la misma respuesta que antes. Esta respuesta, en su mente, abrió la posibilidad de estar nosotros dos juntos. Me ofreció una noche juntos, y yo acepté.

Toda la luz fue bloqueada por la cortina gruesa. En la oscuridad, sus manos me tocaron, pero con indecisión. Él había sido enseñado que la belleza solamente existe en la piel suave, sin marcas o imperfecciones— y lo creía. Él tenía dificultad de entender que su encuentro romántico— no aún romántico, pero físico— incluyera a alguien sin esta apariencia ilesa. Sin embargo, nosotros dos continuamos nuestra actuación de caricias y de placer. Cuando habíamos completado este acto que siempre habíamos considerado como la mejor manera de sentirse querido, nos echamos quietos.

Empecé a llorar. Finalmente mi apariencia física me causó sentir algo de repulsión. Tuve esta experiencia, en que pensaba que iba hacer algo normal, pero necesitaba esconderme de mí misma.

La luz ingresó otra vez al dormitorio. Con el nuevo día, mi mente estaba reanimada. No necesito cambiar o pretender cambiar para ser digna de amor. La aceptación de mí misma es más importante para mí que las opiniones de otros. Espero que ellos puedan aprender a amar la imagen que vean en el espejo, porque es una sensación de liberación cuando puedes vivir cómodamente en el hogar de tu cuerpo. Podemos empezar a reducir el aislamiento entre nosotros cuando eliminamos las separaciones que sentimos entre nuestra felicidad y nosotros mismos.





Listen here: <u>https://www.parkschool.net/gouchersonatina</u>





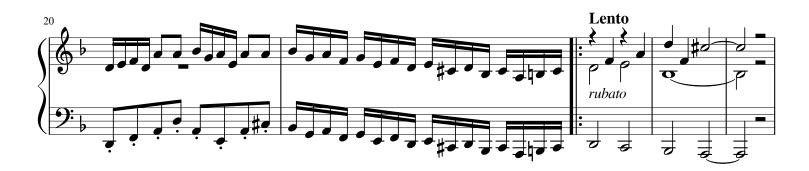


















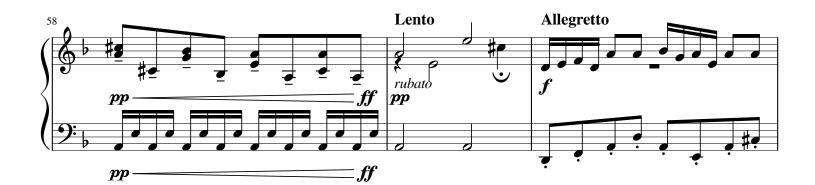
















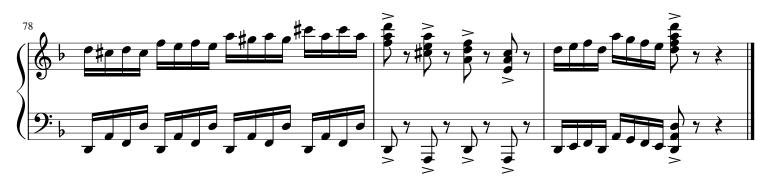












Small Places

Patate, Ecuador, is a small place, in a less small place, surrounded by equally small places. Though really, these places only seem small because of what is big. Up north is big; my home is big. Patate, I am not your tourist. I know this because I know things that tourists do not know. And although I am not a tourist, I am still an outsider at times. There are some things I might never understand.

Patate, I know that the water can turn off, frequently. That warm water, too, is a commodity. You have taught me that this thing I find myself in need of is in fact, unnecessary.

I saw that the flooding and the mudslides also can shut off the water. The power too, sometimes. You showed me how truly disastrous natural disasters can be: they take lives, leave first responders dead because the resources were not sufficient, because the municipality did not prepare accordingly. Firefighter Cedric Alvarez died at the hands of this insufficient system. I am not a tourist because I know how you mourn. I've seen the black mourner's ribbons pinned on the shirts of those who continue to work in a time of grief.

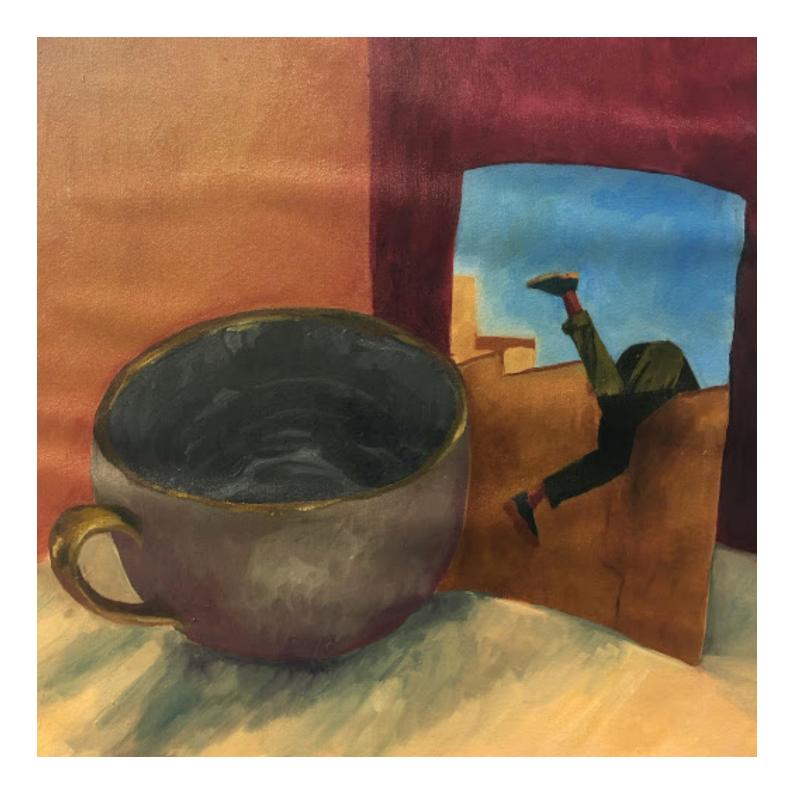
Most importantly to you it seemed, I ate your fruits. These fruits are grown by you, within you, around you, above you. Your fruits were neverending, los mandarines (madarin trees, your sort of "claim to fame") could line up for miles, con los aguacates también (avocados, also). Your families that took us in proudly showed us their farms, family run for generations. Everyone has a farm, whether it's small or large (large farms in Patate must be terraced into the hills because there are hills and mountains surrounding every part), whether they own a store, work for the municipality, or drive a taxi. By taxi, I mean: picture a taxi cab, but instead it's a truck. Now imagine riding in a taxi-truck, but with the most animated drivers who like to play loud music. They will play whatever music you ask them to. Your request for reggaeton will probably surprise them at first, as they have already put on an English station. The English station that reaches Patae is a mix of random American one-hit wonders. This is one of the small, funny cultural barriers that silently stand between us.

The best part about not being your tourist, was that I got to eat your food. By eat, I do not mean that I tried popular dishes to be exotic, to get a taste of your culture. I learned to eat your food in the way that you eat it, and I didn't always like it, because I am not you (I am still an outsider at the end of the day, and we must be honest about that because that is a fact), but I still ate it the way that you do. And I ate it everyday. Lucky for me, there was usually fresh bread involved.

Lastly, I was not your tourist because I spoke your language with you (or, I tried to). Tourists either do not do this or they do it for fun or to "culturally immerse" themselves in their chosen destination. I was not a tourist because I did not expect you to speak my language (though note that I am still an outsider, because we speak different languages). I did not expect you to change how you lived to please me. I did not expect you to serve me. If I had expected these things and been a tourist, I doubt I would have encountered your generosity, your homes, your families, your greetings on the street.

I spoke your language with you, I ate your food and your fruits with you, I lost water and power with you, because I wanted to understand all of those things that I now know. I wanted to understand it in the way that you would best be able to explain it. And sometimes, I still didn't understand things. And I accepted that ultimately I was still an outsider. An outsider, however, is different from a tourist. An outsider does not have to be ugly. A tourist is ugly.





Too Much Tea

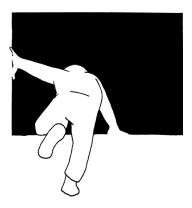
Lydia Smith Oil on Canvas

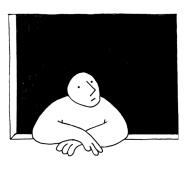
Corrections

In the winter 2020 edition of The Park Journal, in Sam Braman's piece "The Football Helmet," Charles Gardner Mallonee II was identified as having the nickname "Dub," and as having graduated in 1962. In fact, he graduated in 1954, and his nickname was "Dubby," as thought to be his father's double. It was Charles Gardner Mallonee's brother Lucky who graduated in 1962. This Journal was printed at Swanson Graphics in Baltimore, in June of 2020. There are 100 copies of this edition, each numbered on the back. The color of the cover appears to be tan but is, in fact, 'Cougar Natural.' The cover art was created by Park junior Parrish André, and reproduced on 80 pound paper. The insides are printed on 60 pound Soporset. The black-and-white pages were printed on a Xerox D125, with the (fairly-priced but not cheap) color pages printed on a Versant 80 Digital color press. The typeface for this edition is EB Garamond, an open-source version from the Garmond family of typefaces, named for 16th century Parisian engraver Claude Garamond. Confusingly, his name was spelled usually Garamont when he was alive.

The staff of the Park Journal would also like to express their gratitude for the work and fine craft of Rick Swanson at Swanson Graphics who, during his life, was a regular source of good advice and warm cheer.







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