

Creating Brain Space
A Field Guide for Designers

CORY DINSMORE

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By Cory Dinsmore
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Approved by Master's Examination Committee:

Tasheka Arceneaux-Sutton

Lorena Howard-Sheridan

Natalia Ilyin

Silas Munro

David Peacock

Ziddi Msangi

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CREATING BRAIN SPACE
A FIELD GUIDE FOR DESIGNERS



The samara seed symbolizes hope and endurance. They remind us that sometimes we need to fall before we can fly.



For
Garrett Owen Dinsmore

Who would have carried this book in his jacket
so he could show it to everyone he knows.

Until we meet again, Dad.

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Written by Cory Dinsmore

Edited by Taylor Shaw

Designed by Cory Dinsmore

Illustrations by Cory Dinsmore

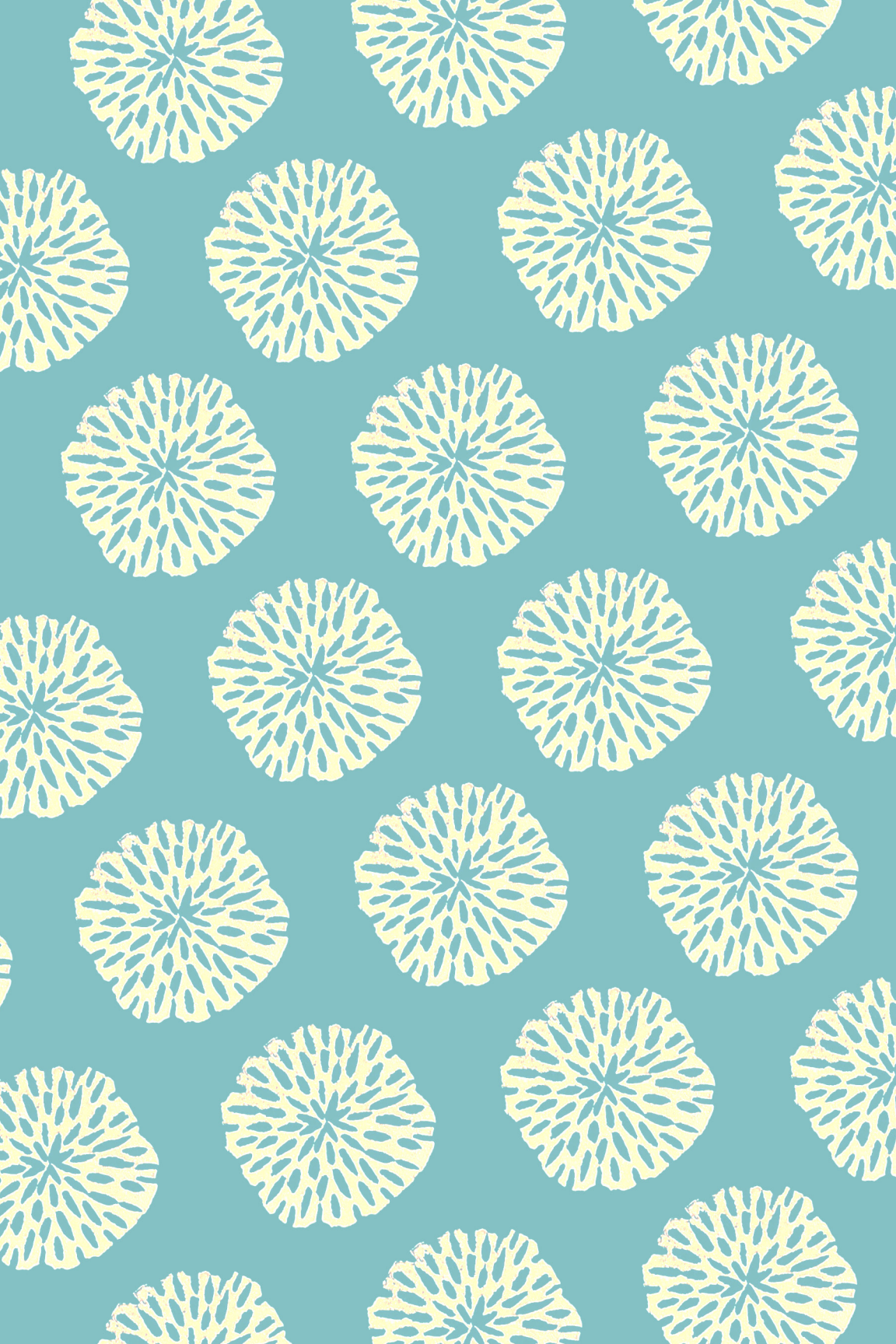
“Art brings our fears, loneliness, and anguish close to us. It does not rid us of difficulties, but enables us to live **courageously in their presence.”**

—Bruce Moon



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WHY AM I HERE?

Before becoming a graphic designer, I took a five-year path in clinical social work. During this time I worked closely with children, adolescents, and adults with complex trauma. My time in this field taught me a lot about myself as well as the resilience of others. I learned first-hand how the human brain works and what happens to our brains and bodies when we experience trauma and chronic anxiety. Leaving that path to go back to art and design, but kept this knowledge and experience close to my heart.

With this, I began to piece together the ways in which humans can harness their creativity. I had to look at which parts of our brains are used when we are flexing our creative muscles compared to the parts of our brains we use when we're struggling with being creative. I then looked at the ways we can live while generating creative energy and how to take care of ourselves to maintain it. This took research, including interviewing people in the field and piecing together the information I found. In the end I discovered something interesting that could possibly help others.

What I discovered was something called brain space, and why people who are generally more anxious, struggle with trauma or stress may need different rules around what strengthens their creativity. Brain space is a clinical term used to describe the room a person has for learning or thriving when their mind is busy keeping them safe.

Through books by authors such as Robin Wall Kimmerer, I found that nature relates to brain space and general wellness in ways I hadn't thought of before. Not only did I find a whole new outlook on what the Earth does for us, I eventually found the links from nature to creativity and the brain. This led me to write many different branches of research on this topic, including research on modern American society, nature, interpersonal relationships, addiction, and more.

This subject matter was not only built by looking inward and drawing on my own personal experiences, but by looking at the lives of those I've worked with in the past. It turns out that even though I love being a graphic designer and educator, there's a piece of me that still wants to help people. My hope is that each person—the designer, the creative soul, or someone dreaming of being one of these—can find solace here.



BRAIN SPACE

When I typed in “comfort and creativity” into Google, a dozen articles about how being in your comfort zone kills creativity popped up. These articles argue that the best way to be creative is by stepping outside of your comfort zone in every way possible. I realized that for some people this may just be true. Although, what about the people who already have limited brain space to create?

There are many creative people who are also sensitive beings, who have experienced traumatic life events, or have mental health struggles. These experiences can create difficulty when it comes to digging into your imagination and setting it out into the world. For these artists, comfort may be key. It could very well explain why many artists feel stuck within their work. Each person should have a strategy for their working style and not have to adhere to the style of “RUN AWAY TO A DIFFERENT COUNTRY, SLEEP IN THE MOUNTAINS, BE VULNERABLE AND INSECURE TO ALLOW YOUR CREATIVITY TO FLOW THROUGH YOU!”

Yikes, right? I’m sweating just thinking about it.

Many of us need to be comfortable and keep our brains at ease knowing that our basic needs are met in order to tap into that creative energy. Why, do you ask? It has a lot to do with brain space. When someone feels vulnerable, panicked, and anxious, they are thinking with a part of the brain which is wired to keep us safe. This is not the part of the brain that feeds creativity. You can’t have both. Bummer, I know.

When this happens, our bodies are doing exactly what they’re supposed to, which is confusing. Instead of completing your writing or creating art, you’re sweaty, upset, and having trouble processing. Your brain doesn’t know that you’re currently in the 21st century, living in a furnished, locked home, and sitting pretty at the top of the food chain.

When you have an anxiety disorder, your base line of anxiety is higher than the natural humans’. When you’re feeling anxious or upset, your brain assumes you’re either being hunted or you have run out of food. When your body and mind are responding to what it believes to be imminent death, you’re not exactly going to sit down at your desk and create your best work. Thinking about it in this way always makes me feel less like the inability to create is my fault.

I found an article that talks about “creating space in your brain to create”. This article touches upon creative introverted people who find themselves struggling to make art. They suggest ideas such as 3 morning pages every day, allowing yourself to be slightly distracted when coming up with ideas, and scheduling time to read fiction and poetry, watch movies, or see a play. Their philosophy is that creativity feeds more creativity, and I’d say they are onto something here.

Though I have to point out that to have the ability to sit and write morning pages, to be puttering around your house thinking of an idea or to take in a show, you would need to have a certain sense of calm. As an introvert, I would personally find all of these suggestions to be helpful. I have discovered over the years that I must be continuously reading for pleasure in order to write well and often. Once and a while a movie that I love will spark sudden creativity. These simple pleasures also comfort me. Coincidence? Maybe. But I think they work hand-in-hand.

Comfort and creativity feed off from each other. It makes sense when you think about the brain. Psychology today lists something called the “big 3” parts of the brain which work together while a person is creative. These parts of the brain are not active when triggered, anxious or upset.

“...the default mode network, the executive control network, and the salience network. Prior research suggests that they work together when it comes to being creative. The default mode network is what’s happening in the brain in a resting (but not sleeping) state, the brain’s “idle state.” The executive control network monitors what is going on, manages emotional parts of the brain, directs resources like attention, and oversees decisions and choices. The salience network determines which sorts of things tend to be noticed, and which tend to fly under the radar. In PTSD, for example, the salience network is scanning for threats.”

What they’re saying is that these three networks need to be at attention and functioning together rather specifically in order for you to be at a peak creative state. It’s the brain equivalent to building a pyramid out of delicate champagne glasses with 20 giants moshing around you. You have to put the giants to sleep first to have any chance at those glasses staying in one piece. Hopefully this gives you some insight into how delicate these brain spaces are. So, the next time you’re feeling ashamed for going another day without creating, don’t be so hard on yourself.

Now, how can we use this information to help us understand ourselves better and create more space to create?

“Just as the impact of burnout stifles healthy professional growth, emerging research shows that the chronic psychosocial stress that characterizes burnout not only impairs people’s personal and social functioning, it also can overwhelm their cognitive skills and neuroendocrine systems — eventually leading to distinctive changes in the anatomy and functioning of the brain.”
-psychologicalscience.org

There are many studies that show how burnout can negatively affect the brain. It impairs your working memory and can alter neural circuits, causing a cycle of neurological dysfunction. Our brains are not meant to be on overdrive on a consistent basis, we are not meant to be sitting on a computer all day and it’s not healthy to be too busy to interact with the people and things we most enjoy.

Our brains are much more simple than we realize. If a person stays in a place of stress, our brains don’t know that it’s our stressful job and lack of time. Our brain is going to assume we’re either about to be eaten or about to starve. We gain weight, lose our hair and our brains begin to alter. Our bodies are made to attempt to withstand many issues that could happen in the wild, but our new 21st century lives don’t match up.

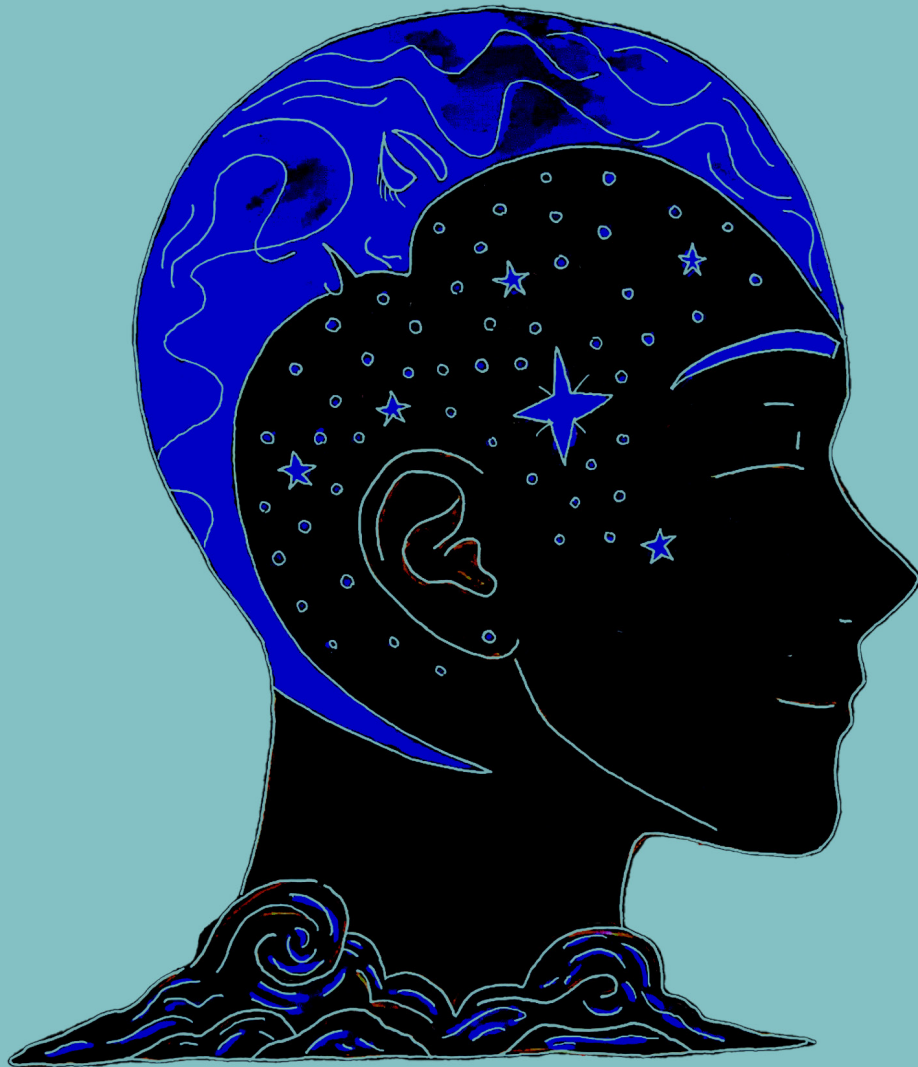
Can harnessing your creativity through healthy created brain space help you to be a better designer? Will celebrating ourselves as accomplished human beings help our creative minds make new discoveries with design? I believe the history of clinical research proves this to be so. In fact, I believe it’s needed. Something I’m going to touch on is the idea of doing everything you can to avoid burnout. Working long hours, sitting all day and failing to utilize self care can cause burnout and will eat up your brain space. So, first-thing’s-first, self-care is not a weekly pedicure and iced coffee. Self-care is essentially treating yourself as you would a child or a close friend. Let yourself feel your feelings, get enough sleep at night, spend quality time with your loved ones, and eat food that feeds your body.

Someone I admire once said “treat yourself like a person” and that is now my go-to phrase for myself when I need to be reminded to practice self-care. It perfectly describes what self care is. You are not a mythical super hero, you are not a machine. You are a living, breathing human being. People are not computers, we are more like gardens. We need sunlight, water, food, fresh air and love.

There are other more overarching ways of practicing self-care throughout your daily life as a designer that will help as well. One is to know your worth. If your projects are stacking up and you're not being paid enough to live comfortably, you're going to burn out. This is more about money and includes two parts: financial and emotional well being. Knowing what a project is financially worth for you, and balancing your projects with those that spark happiness and make you excited about your career.

Another important practice is balance. Having time to play as well as to work. The life of a designer can be difficult since work and home can blend together at times, especially if you don't go to an office every day. Setting ground rules and clear boundaries is important, and will give you energy throughout the week. This balance between work and pleasure creates brain space, which will foster creativity. That creativity, in turn, will make you a better designer. It's a cycle that will help your mental health as well as your base line creativity if you keep it sacred.

**“Freedom is what
you do with what’s
been done to you.”**
—*Jean-Paul Sartre*



HIPPOCAMPUS AND DEFAULT NETWORK

Creativity requires quite a bit of cognitive effort. Scientific discoveries have shown that the parts of the brain we use for creativity are the same parts of the brain which we use for memory. Many new tests are being developed that tap into other creative skills, from visual/spatial abilities essential for design (like drawing) to scientific abilities important for innovation and discovery. The most general creative thinking requires dynamic interaction between the brain's memory and its control systems.

We've talked about the big three network. Now I want to introduce you to another area of the brain that is important for creativity. It's called the hippocampus, and it's a seahorse-shaped region located in the temporal lobe of the brain. It just so happens to play an important role in piecing together details of experiences—people, places, objects, actions—both to accurately reconstruct past events as well as vividly construct possible future events. Research done with amnesiac patients showed important evidence for the role of the hippocampus in remembering and imagining.

But the hippocampus doesn't do everything. More parts of the brain are believed to be used, such as a large set of cortical regions collectively known as the default network, which happens to be one of the three pieces of the big three. This network was given its name from early studies which found that the areas it connects—such as the medial prefrontal cortex, posterior cingulate cortex, bilateral inferior parietal lobes, and medial temporal lobes—tend to activate “by default” when people are simply relaxing in a brain scanner without any cognitive tasks to do. When humans are left to our own devices, we tend to engage in all sorts of spontaneous thinking known as “mind-wandering”. This is when many creative ideas are crafted in an artistically-driven human's brain.

The second region of the big three is the salience network. I think the Journal of Neuroscience explains it best:

“The term “salience network” refers to a suite of brain regions whose cortical hubs are the anterior cingulate and ventral anterior insular (i.e., frontoinsular) cortices.”

If you're still awake after reading that quote, allow me to explain further. This network includes part of the amygdala, hypothalamus, ventral striatum, thalamus, and more. These regions activate when you are engaging in experimental tasks. And interestingly, nothing exercises the salient network quite like having a dynamic social life.

Dysfunctions of the salience network are, in fact, disorders of social-emotional function. Schizophrenia, bipolar disorder, major depression, ADD / ADHD, anxiety states, autism spectrum, and substance abuse disorders have all been linked to a disrupted connectivity within the salience network. Therefore, it would be a larger obstacle for someone with one of these disorders to reach that peak idle state that leads to that peak creative place.

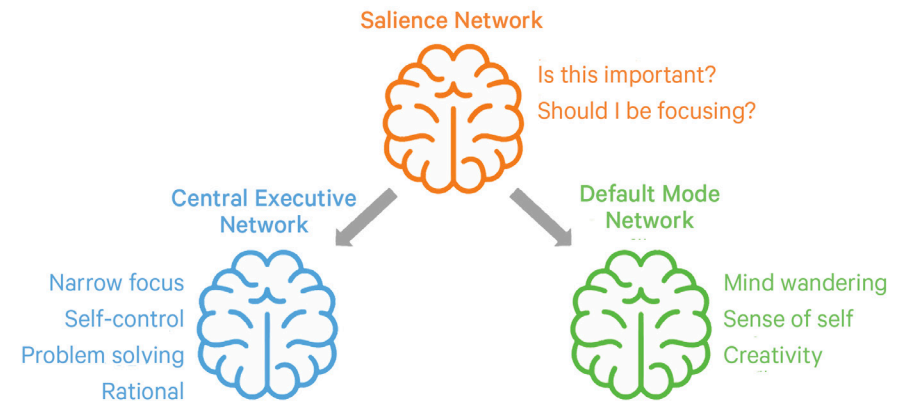
These regions of the brain react much differently (or do not light up at all) when a person is experiencing toxic stress, burnout, or traumatic events. In order to reach this place of cognitive relaxation, the person's amygdala would be required to be less active, which does not happen when triggered, anxious or upset.

The third piece of the big three is the executive control network, which maintains and operates information in working memory and is responsible for decision making. The executive control network is in control of problem solving when it comes to goal-directed behavior. This network comes alive during emotionally challenging activities and allows you to hold sustained attention on important tasks.

Because, after all, even though creative thoughts and experimental processing are important, we wouldn't get a lot done without the ability to keep our attention on the task at hand, would we? Moreover, this network is implicated in task-oriented processing within effective emotion-regulation. If there is overactivity within the executive control network, It can cause depression.

It's still up in the air as to how much cognitive effort goes into our creativity. But we do know that creative cognition calls on brain regions for both cognitive control and imaginative processes. The crazy thing is, these networks typically act apart from each other, where the activation of one would typically suppress the other. I know what you're thinking.. Curiouser and curiouser!

If there's one thing I want for you to get out of all this scientific mumbo jumbo it's that knowing about our brain and understanding how to best utilize it could change your life. It's important for creative people to understand how to support our memory, our hippocampus, and our default network so that we can best reach the creative parts of our brain and be successful designers. Creativity is important for design, it's important to society to have designers who are successful in both their work as well as in their mental state. It's important that we view ourselves as human beings. Learning how to make our bodies and spirits comfortable while feeding our creative curiosity is key.



"BIG THREE" diagram.

**Do you consider yourself
to be a creative person?**

“Yes, because I like to think outside of the box to come up with solutions to problems. I also like to use creative outlets to express/help me understand how I am feeling.”

“Sometimes, but I feel like as a designer, it’s mostly just the idea of repurposing others works in my own style. I suppose it’s a little bit of that imposter syndrome.”

“Yes, have been since a child...It became more of a lifestyle that naturally morphed into a career when other outlets didn’t make much sense from a personal and financial standpoint.”



CREATIVITY AS MAGIC

My father was a songwriter, and slept with a notepad and pencil on his bedside table. He had another on the front porch and a third stashed away in his truck. He would tell me that his best lyrics would come to him and wake him right out of a deep sleep, or when he was on a ladder two stories up in the air while building a house. He rarely seemed to take scheduled time to stop and write, like I do. He would sit on the edge of his bed at night and write his songs, then go back to sleep. This was a successful practice for him. He wrote many songs, both for himself and for artist guilds.

I remember asking him about this practice and he would say “I never know when a song will come to me. I just have to wait it out and know it will, it always does.” This type of faith is something we should all carry with us.

The ways of the brain are not common knowledge, though it should be. It’s important for us to understand our bodies and brain space to help with how we work, play, create relationships and make ourselves comfortable. Creativity has been a “mystery” to humans for a long time. It is thought to be something humans are aware of today, but I’m not so sure society has the handle on it we think we do. For many years, humans thought of creativity to be magical – which of course meant it didn’t come from us but of a higher power.

“In ancient Greece and ancient Rome people did not happen to believe that creativity came from human beings back then. People believed that creativity was this divine attendant spirit that came to human beings from some distant and unknowable source for distant and unknowable reasons. The Greeks famously called these divine attendant spirits of creativity ‘Daemons’. Socrates famously believed that he had a Daemon who spoke to him from afar. The Romans had the same idea but they called that sort of disembodied spirit a ‘Genius’.

— Elizabeth Gilbert

I have to admit, I don't blame them for this thought. A burst of creative energy can certainly feel like magic and mystery. A gift from a being much more powerful than ourselves. It is a freeing gift. Though going through periods without these surges of artistic experiences can leave you feeling as though your power is gone.

Here is the imposing question I've constantly wondered: why can't people accept that we ourselves are magic? Elizabeth Gilbert makes a good point when looking at the quote above, saying that this way of looking at creativity doesn't pile so much pressure on the artist. But this statement isn't necessarily how we think of creativity today.

I was surprised to learn that many entertain the idea of divine inspiration, which is an idea that formed a very long time ago. People in the ancient world once believed that Muses took form as gods appearing and speaking to artists and poets. Julian Jaynes published a book titled *The Origin of Consciousness in the Breakdown of the Bicameral Mind*. Here, he argues that those hallucinations of gods and spirits were more common thousands of years ago because human consciousness was at an earlier stage of development. Jaynes states that the early beings had “bicameral” minds, divided into two parts that could split into listening to the god as well as take directions, or dictations, from them. This implies that the muse experiences of the past were actually human experiences, and that's why conversations surrounding inspiration are so saturated with them.

It's an interesting take on the brain. He also argues that this way of thinking has died out, and the people who still have these split brains are now diagnosed as schizophrenics. Many artists, writers, and musicians still talk about muses today. Though they typically take the form of a beloved partner or friend instead of a spirit or god.



IMPOSTER SYNDROME

So, let's sit with something for a second. You have scheduled free time in your day in anticipation of having some creative time, and you freeze. Why? You're afraid you have no talent. You're afraid of being rejected, criticized, misunderstood-or worse-ignored. These feelings have a paralyzing effect on the mind. Though let's be honest, half the battle is to resist judging yourself.

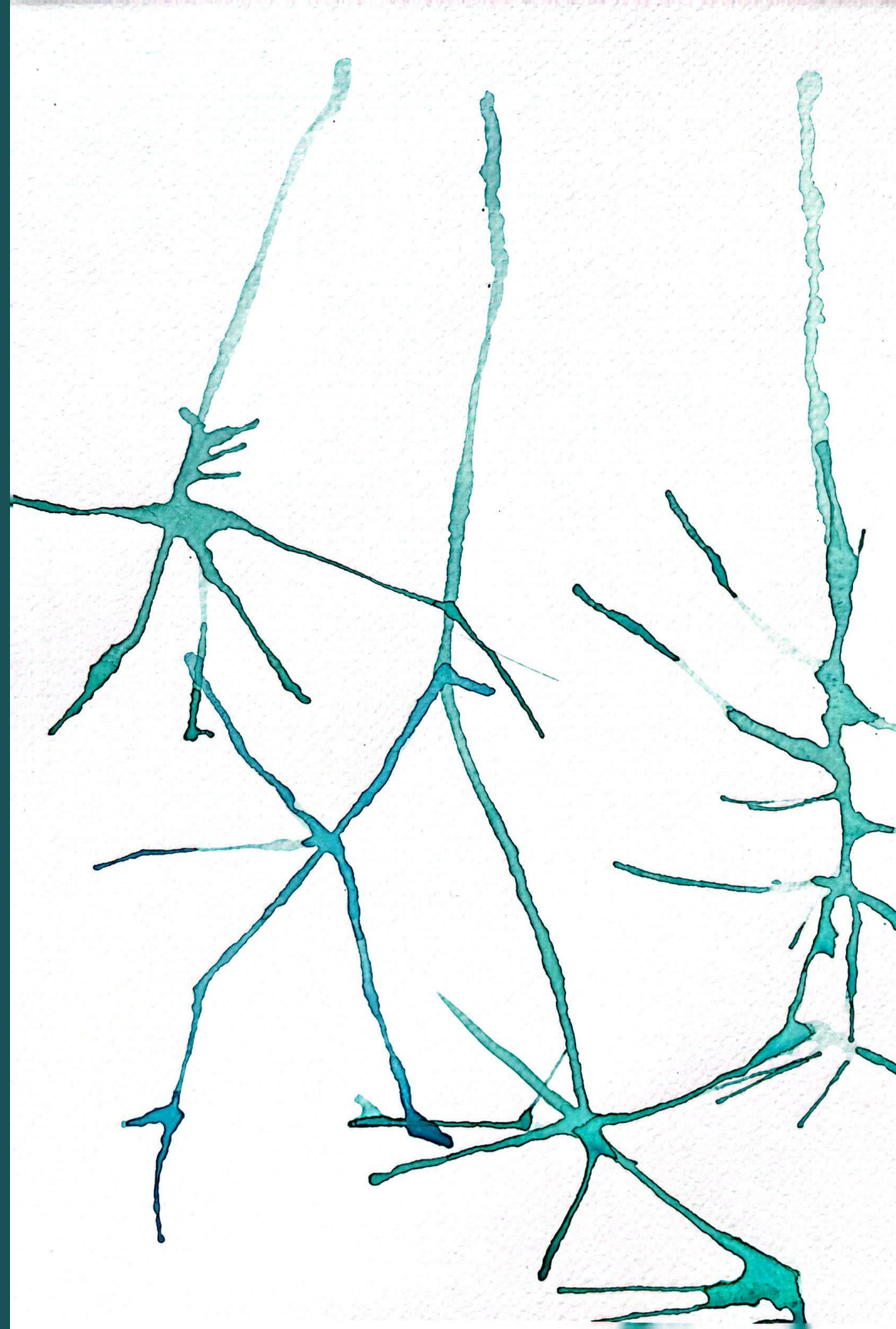
Creative imposter syndrome is often characterized by the thoughts of an artist worrying that they don't have "real" talent or feel they don't belong in the creative community. Insecurity is natural, and I've found that most people experience this occasionally. Those experiencing imposter syndrome are typically high achievers who continually move the goal post of when they will feel worthy. They raise the bar so often that they never reach "good enough". This is particularly difficult for artists since there is typically not an easy way to measure "good" in artistic areas.

Creatives and designers are so accustomed to living with imposter syndrome that we don't realize the ways in which it can keep us from gaining new opportunities when we don't feel we deserve them. But know that the world wouldn't be the same without your contribution. To combat these feelings, try breaking challenges down into small steps and then build your confidence by taking on small bites.

Creativity and courage take practice. Listen to yourself and generate ideas. Make space in your day to walk, think, and daydream. Keep doing things that intimidate you and be open to growth. Be vulnerable and open with others in your creative community. Sharing your experiences could help another person struggling with similar feelings. Sometimes it's helpful to simply recognize this experience as part of your life's journey. Expanding your knowledge and partaking in continuous learning can grow confidence.

It's important to note, however, that this mindset isn't worthy of an environment that marginalizes or oppresses you. Many are told they have imposter syndrome when in fact they work in harmful environments that are racist, sexist, transphobic, etc. Prioritize places to create, work, and play, that treat you the way you deserve.

Your mind will believe
everything you tell it.
Feed it faith
Feed it truth
Feed it with love.



**Have you found it
difficult to engage in
creative activities at times?**

“The fast-paced lifestyle of the design field sometimes doesn’t allow for those pockets of research into trends and practice the work that intrigues, but rather doesn’t fit into a financial model... When the business side overtakes the creative side, it makes you want to retreat.”

**“Absolutely!
Everyone hits road blocks.”**

“Most of the time. Many of my students don’t advance their assignment because they “want a creative solution, but can’t think of one.” For me, it’s very difficult to decide to be creative.”



SOCIETY HINDERS CREATIVITY

One summer day I found myself struggling to write. I also could not seem to complete what I needed to teach my upcoming class and couldn't find a shred of creativity within myself. While attempting to take a break I realized I was too anxious to simply sit on my couch and do nothing. So, I vacuumed the floors in my apartment instead and attempted to go back to my work. Nope, still nothing. As I sat at the table I noticed sunlight pouring into every window.

Vermont was having an unexpected heat wave and my tiny air conditioner didn't stand a chance. I wiped the sweat from my forehead and looked out the window. It was just past noon and all I had to show for the day were my freshly vacuumed floors. I realized that a change of scenery might aid my situation. An hour at the lake couldn't hurt, could it? I called my close friend and packed my beach bag. My one hour at the beach turned into two, and then three, as I swam in the cool water and sat on the hot sand with my friend. For a while I forgot I had anything to do at all.

When I returned home, I sat at my desk in the cool evening feeling like a completely different person, and successfully wrote multiple pages. I've been conditioned to work harder when work isn't coming easily instead of taking a break. Take note - if you go jump in a lake, and talk to a friend, your troubles will seem much less intense.

“We do not have to accomplish every task of the day before we can make room for play.”

— Morgan Harper Nichols

Taking breaks is okay. It's necessary and healthy. If you skip breaks it will catch up to you eventually. Your value and worth are not tied to your productivity and achievements, no matter who tells you differently.

In America specifically, our society is not made for feeding creativity. We typically work our lives away for just enough money to feed and house ourselves and our families, if we're lucky. Many jobs lack the space for creative thinking or the time to explore your own interests. In undergraduate college I was lucky enough to know many talented, creatively-based people who I was sure were going to become successful in their creative work. And they did—until they began working for companies in nine-to-five-plus overtime jobs. It would seem that the only people who pursued their true creativity were the ones who broke free from these jobs or never entered them in the first place. There are many reasons why this life is not helpful for creative minds.

One being that these work environments can create toxic stress and burnout. And we already know that a person in this state of mind isn't going to have the brain space to create or be creative. A big reason for this is that we are still living in a society that was meant for one person to work and another person to be at home. We were not meant to do it all ourselves. The hours in a week after spending 40+ of it at the office is not sustainable. Once you are home and you have cooked, cleaned, taken care of your family and god forbid even done your homework, where is the time to be creative?

Also, most people are only encouraged to utilize their creativity if they're being paid. Our modern society doesn't exactly push people to do things they enjoy because it makes them feel good. If they are good at being creative, they should use it to earn money! This can take the spark out of it for many people and their talent goes right on the back-burner again.

Making art for yourself is just as important as creating for someone else. And why is it important to have creativity flourish at work and at home? Because our society has seen a rise in both the demand and the desire to be creative, to bring something new into the world. Creativity has become a universal model for our culture and an imperative in many parts of our society. Human beings are highly creative and our natural intelligence allows us to create beautiful art and design. Despite having a powerful mind, most individuals are not creative because modern society does not support it.

I recently found the quote from the beginning of this section and had a realization. As a mental health rule for myself, I am mindful of attempting to “make room for play”. But with this being said, what I don't allow is for myself to not accomplish everything on my to-do list for the day before allowing myself to rest. Even if the items on my list were not particularly time sensitive, I would push myself to complete it before resting or playing. This practice has strengthened my ability to be timely and even ahead of the game, but has also affected my mental health.

This is a learned behavior. My family lived by this rule of accomplishing absolutely everything before allowing yourself a chance to stop or have any fun. Coincidentally, these same family members also suffer from anxiety. I wonder if there's a correlation there? I'm slowly learning that I need to end my "work day" earlier than I have been. My brain needs time to shut off. I need to have time with my loved ones—time to breathe in order for my brain and my body to be in full working order. Of course, this is easier said than done. It's especially difficult due to the many ways in which society stunts our creativity.



You have to be busy to be worthy.

Society tells us that we must stay busy to be worthy. The person who “hustles” is often centered as the hero image of American society. This person is successful, they are happy and able to support themselves. They work all day, get up at the crack of dawn to work out and do not stop until long after dinner. Their clothes are expensive, and their hair is always shiny.

Humans are conditioned to be busy for fear of not being enough. It would seem that many Americans wear busyness as a badge of honor. I’m busy, therefore I’m important and valuable, therefore I am worthy. And if I’m not busy, then I, myself, do not matter. In the book *Daring Greatly*, Brené Brown writes about numbing behaviors which we use as armor against vulnerability.

“One of the most universal numbing strategies is what I call crazy-busy. I often say that when they start having 12-step meetings for busy-aholics, they’ll need to rent out football stadiums. We are a culture of people who’ve bought into the idea that if we stay busy enough, the truth of our lives won’t catch up with us.”

Our culture shames people who are addicted to alcohol, drugs and even food. But our society has normalized the addiction of being busy. Heck, we praise it! Why, you ask? Because it helps our society stay on its game when humans do the work of three people and are paid only one salary. This is also a piece of generational trauma that has been passed down to most of us and we don’t realize that it isn’t a healthy lifestyle. Many older generations had to stay chronically busy to keep afloat, and they passed on that anxious habit to their children and their children’s children as a way to “keep them safe”. This culture of staying “crazy busy” is mixed with the fact that creativity is typically not valued or pursued in the workplace. Whether we realize it or not, we humans have a deep seeded need to practice creativity on a daily basis. And if we are going to be planted at a job that doesn’t bring that into our lives, we need the time outside of work to exercise that muscle.

The one thing we must remember is that humans are not machines. We have needs that go beyond our daily jobs. We need healthy routines, human connection, and time with our people to tether us to life. We need creativity and curiosity on a daily basis. As humans, we need to be listened to, hugged, smiled at, fed, and left to rest. We need to begin living in a sustainable way.

Anything that you create from a fear of not being enough will come from a place of panic-stricken anxiety. Making choices from this space won’t give you the results you’re hoping for. Though if you make choices from a space of clarity and feeling you are enough, you will be able to choose what feels right and what truly feels like you. So go ahead, take some time off. Do something unproductive. Give yourself permission. So, instead of feeding the part of you that feels it should be continuously running, try instead to slow yourself down. Take time for yourself to do nothing. NOTHING. You need to practice being in a state where you believe you’re good enough without constantly advancing. When you begin to truly believe this, you will be able to move forward more gracefully.

You have to start them young.

The life of staying busy begins when we are children and at school. I know personally from my time attending and working in the public school system that you only typically get one chance and you either sink or swim. This system is outdated, unhelpful and meant to distinguish who was meant to go onto further education or who was going back to run the family farm or work for the military.

Children have many talents that are killed throughout education. I watched a talk by Sir Ken Robbins, a British author and advisor on education in the arts. His teachings on creativity in education show how the educational system is the first step in squandering creativity in humans. He says, “We are educating people out of their creative capacities... we don’t grow into creativity, we grow out of it. Or rather, we get educated out of it.” He states that creativity is as important as literacy and that it should be treated as such.

One of the largest ways in which the educational system stunts creativity is by stigmatizing mistakes. Children by nature are not afraid to be wrong, but are educated into fearing the incorrect answer over time. As Sir Ken Robinson put it, “If you’re afraid to be wrong, you will not come up with anything original.”

Schools became what they are to meet the needs of industrialism. The most useful and prominent subjects are there because they were the ones you could get a job in, but that’s not the case in our current world. Schools have designed the system around themselves, to create teachers who continue the cycle. And often because of this, many highly-creative people no longer believe they are because it has been beaten out of them. In order to change this process, Robbins claims “We have to radically change our view of intelligence”. Harnessing creativity is what helps humans develop new ideas and work in a more productive way.

Isolation

The ways in which we are conditioned to be crazy busy doesn’t leave time for others. We joke about how “real friends” are the ones who constantly say that we need to get together but then never do because our schedules are always too busy. We often text or email instead of speaking to others on the phone or in person. Communication within our communities has become digitized and society convinces us that our interactions with people should be fast.

As a society, we often view creativity as being an individual trait—something that is concocted alone by someone who is generally introverted by nature. But real creativity depends on a community of like-minded people who can say “this is good, different and exciting.” Real creativity is innovative. It’s disruptive. It challenges and changes the way we think about established ideas.

While researching, I happened upon Mihaly Csikszentmihalyi, and his piece outlining his Systems Theory of Creativity; “Psychologists tend to see creativity exclusively as a mental process [but] creativity is as much a cultural and social as it is a psychological event. Therefore what we call creativity is not the product of single individuals, but of social systems making judgements about individual’s products.” Csikszentmihalyi’s Systems Theory explains that creativity is made up of the individual and the environment, which has two aspects: a cultural aspect he calls the domain; and a social aspect called the field. In his theory, He defines creativity as: “A process that can be observed only at the intersection where individuals, domains, and fields interact”.

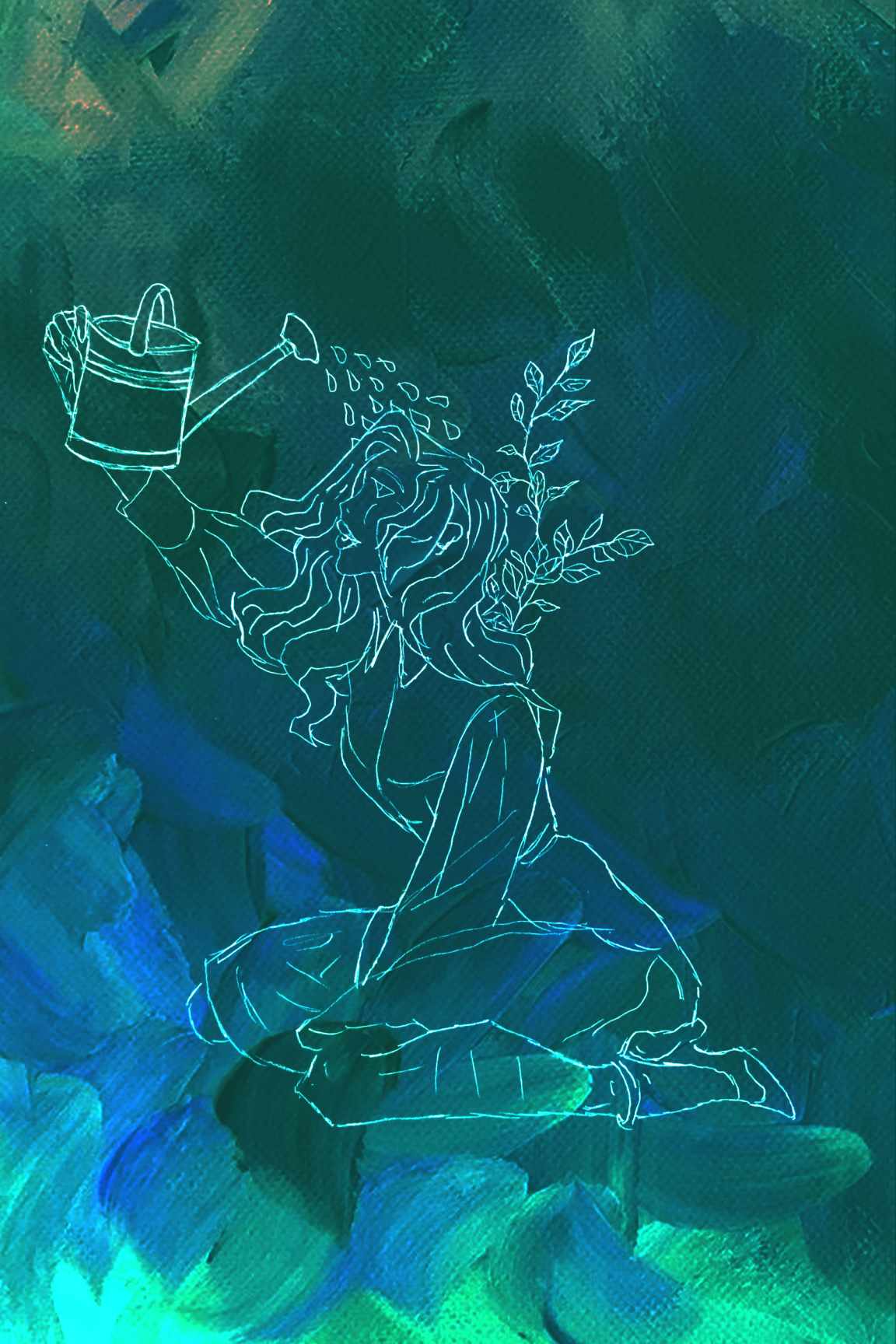
Humans are naturally social animals: we build communities, create teams, and typically like to be around others who share similar ideas with us. Research shows that being in isolation damages people both neurologically and psychologically. In a study done by Dr. Heidbreder, his team found that breeding rats in isolation caused them to have increased hyperactivity, and food hoarding behavior. Neurologically, these rats also experienced decreased dopamine and serotonin as well as an increase in chronic stress. After being isolated, these rats were unable to pull them out of a state of stress. For humans this is called solitary confinement, and the stress caused from isolation, can actually rewire the brain. In order for us to live and function in a necessary way, we need to be socialized in a way that is helpful to us.

When and where do you feel the most creative?

“Ironically, I feel most creative in the evening when I physically don’t want to work. haha! Having a personal space void of interaction and distraction is where I thrive. Creativity flourishes, for myself, when engagement with the outside world ceases.”

“In my home studio or office afternoons and evenings after the morning rush of admin, emails and calls and meetings are over.”.

“No specific time or place, rather, in specific circumstances. Both while under pressure and while daydreaming. It’s an oppositional relationship.”



WHAT CREATES BRAIN SPACE?

Being in nature

Robin Wall Kimmerer, the author of *Braiding Sweetgrass*, talks about a system of grief for people, one that is truly connected to the earth - “We spill over into the world and the world spills over into us.” The earth is able to give us gifts we cannot give ourselves. It is said that mother earth is known to feed hearts without being asked. She, in return, is fed by her giving. Life gives us gifts every day, but they are not meant for us to keep. Our job is to pass it on into the world and trust that what we put in is sure to come back.

There is a certain level of faith we forget we can put into the earth. In turn, we need to be open enough to receive what comes back to us. We overlook the fact that there is a foundation of everything we are and everything we have. Our lives are more than traffic lights, tall buildings, and machines. These are what we have created. Mother nature is who created us.

As Kimmerer explains it, “We are linked in a co-evolutionary circle”. We weed, prune, till, and fertilize for the plants to grow. We are taking our time to ensure the plants live and produce as best as they can. In return, they feed us throughout the year. Food plants and humans are forces in each other’s evolution. The thriving of one is crucial to the other. One can argue that this is a definition of love.

Nature is a connection we can utilize to develop our creativity. Our connection to the land is interrupted by technologies and routines. Technology has transformed the human experience and created opportunities. The advancements in travel, medicine, and communication have continued to increase exponentially throughout the past few decades. Though creativity and technology can work together (it’s a big part of my career), it could be impacting our creativity. We get a rush of endorphins when a notification goes off on our screen, and our brains are being used in a different way that doesn’t allow us the space for inspiration.

There is scientific evidence that shows the regions of the brain which fire up during creativity are the same regions that fire up when we spend time in nature.

“Keep your love of nature, for that is the true way to understand art.”

— *Vincent Van Gogh*

“When the prefrontal cortex (the region of the brain involved in planning complex cognitive behavior, personality expression, decision-making and moderating social behavior) quiets down, the brain’s default mode network kicks in. Suddenly, flashes of insight come to us. It’s akin to an “imagination network”: it’s activated when we’re not focusing on anything specific, and instead we’re engaged in mellow, non-taxing activities, such as walking in the woods. Our minds are allowed to idly wander or to dip into our deep storehouses of emotions, ideas and memories.”

- Candice Gaukel Andrews

The act of simply being in nature is enough to activate our brain’s default network, which relaxes our senses, muscles and quiets the other areas of our brain. This is a fancy way of saying “creating brainspace”. When your brain and body are not currently reacting to stresses and triggers, you have space to daydream, wonder, and think. It has also been proven that the more often you partake in these default mode-firing moments and work the right areas of your brain, you are able to access this brain space more easily—and readily—with time. This process is the same as building muscle. You have to lift weights regularly for your muscles to grow. As unfortunate as it is for those of us who would love to go to the gym once and leave with permanent results. We can’t, and neither can our brains.

The idea of being nurtured by nature has been rolling around in my head for years. From planting the seeds that now fill my basket with zucchini, lettuce, and onions, to seeking out nature for comfort during times of hardship. Humans have an obvious need to coincide with the earth to nurture our creative selves. We can spend so much of our lives indoors that we stop experiencing the urge to be outside.

Giving yourself the tools, experiences and surroundings will help create brain space. Think of it as a piece of self-care. Time spent outside works as creating time for the brain to quiet down. Nature gives our bodies the calming sense it needs to relax and allow us to think. It could be the key to getting where we need to be as a society and as artists.

Having a Tribe

My friend, who is working towards a nursing degree, sent me a video she watched for school. She titled the message: “Thanks for helping me live longer!” The video talks about the scientific studies that show how humans live longer when they are a part of a group of close individuals, friends, or a “Tribe”. Typically this group of people spend a certain amount of time together. Sometimes they eat together, celebrate accomplishments, talk, mourn or just be. These people live to be some of the oldest on earth.

It seems magical to me that what we eat or what we do for work is not necessarily the deciding factor for our health and well being. Or perhaps those who have close relationships in their lives naturally gravitate towards healthier choices elsewhere. Finding our tribe is a choice that could improve your life to the point of living to blow out over 100 candles. It’s those who laugh with us, cry, dance, drink tea, help us raise our children, and water our plants when we’re out of town. These people give us a deep sense of belonging. We feel understood when we’re around them. Our general levels of anxiety lower and so does our blood pressure. We smile and laugh more. Most importantly, we feel less alone. My husband is a therapist who often works with those in recovery. He has a tag line which he repeats all the time: “The opposite of addiction is connection”. Johann Hari dove into research on this topic and I admire the information he gives. He tells a story about the troops in Vietnam. Roughly 20% of them were using heroin while deployed. Once they went home they just... stopped. They had no treatment and no withdrawal symptoms. This doesn’t connect to the theory of “chemical hooks” that we always hear about.. So what if addiction isn’t just about these hooks? What if addiction is an adaptation to your environment?

A scientist named Peter Cohen asked the question: what if we don’t call it addiction? What if we called it bonding? Humans have a natural need to bond. When people are happy and healthy, they will naturally connect with each other. But if they are unable to connect with others due to being traumatized, isolated, or depressed, they will bond with something that will give them a sense of relief. Bonding and connecting with something is just human nature and it is the core of what we want as human beings.

Hari also mentions that many adults could at any time decide to spend much of their life drinking copiously without much of a consequence. But we don’t, because we have connections and bonds that we want to be present for. We have work we love, people we love, and healthy relationships. It’s the same reason many of us choose not to drink on a weeknight. Maybe it’s because we want to stay up late watching a movie with our family, or want to wake up feeling refreshed for work the next morning. All of these things are more important than going home to drink at night, no matter how hard our day was at work. New studies show that a core part of addiction is about “not being able to bear to be present in your life”.

Portugal spent years treating addicts the way Americans do. Punishing them, giving them criminal records, and keeping them away from reconnecting with society. Then they noticed that their drug problem was continuously getting worse. They eventually regrouped and decided to do the very opposite. They spent their money on reconnecting these addicted people with society. They funded job creation programs and gave loans for them to set up small businesses of their own. The goal was to ensure that every addicted person in their country had a reason to get out of bed in the morning. 15 years later, their injecting drug use was down FIFTY percent, and addiction numbers as a whole went down for the entire country.

As we all know, addiction can look different than we think. Many Americans are addicted to their smartphones in today’s world and the reason is mostly because it is a form of connection. Or at least a connection we believe we have. But as Johan Hari says, “When you have a crisis, it won’t be your twitter followers who come to sit with you. It will be your flesh and blood friends who you have deep, nuanced and textured, face to face relationships with”. So I believe it is true what my husband and Johann Hari always say. The opposite of addiction is indeed connection. I believe the best way to respond to addicted people is by being Portugal in a sense. To be there and respond to them in a way that helps them to feel less alone.

We are better together. We are better in our circle.

Humans are social animals and feel a natural need to belong. Having a tribe can give a sense of purpose. Their support and validation resonates on a deeper level because these people often have shared likes and goals. Having people around you who have similar experiences can often be beneficial because there is a sense of understanding. It is the core of who we are as beings. According to the book “The Element” by Ken Robinson, the right tribe will inspire you to be who you were meant to be. “For most people, a primary component of being in their element is connecting with other people.” Unfortunately, Colonized America has traded connection for possessions. This has resulted in America being one of the lonliest societies in existence.

Connection also has a positive impact on creativity. Close relationships and friendships are essential to our well-being and happiness. Connection feeds pieces of us that are essential to our mental health. These connections can include having positive collaborators, cohorts, and coworkers that feed a creative upward spiral. Having connections and “tribes” in creative lives can benefit creators; providing validation, courage, and growth in self-esteem, as well as enhancing cognitive and creative growth. Having connections around you can also lead to opportunities, and make it possible for that positive connection to grow into multiple areas of your life. When we have connections or tribes in our life, we are more likely to have less feelings of stress and anxiety. Having people who we feel close to and can rely on gives us a cushion to explore life in a different and more fulfilling way.

Humans are naturally social animals: we build communities, create teams, and typically like to be around others who share similar ideas with us. We seek commonality, which is why we love social networks. We find immediate friendships and connections there. Humans seek commonalities in others, and it makes us more likely to reach out to someone if we find something in common with them (like an American accent on the train when you’re in a non-english speaking country). You would have been much less likely to say hello if you passed them on the street near your home. Commonalities allow for trust to grow. This is because of the pack mentality that we naturally have. When we feel we’re in a trusted company, we’re more likely to experiment or be ambitious. We feel that this community we’ve built will help catch us if we fall. Our survival depends on this.

When you are boldly going into a space where you are being creative and showing the world what you’ve got, don’t forget to include your tribe into that space. We often try to enter into clubs that won’t let us in and forget that the audience can also include those we’ve already won over. Actually, it’s completely necessary. To be successful, we are going to need to let those who love us be in the audience to counteract those who we are trying to win over and don’t deserve our devotion.

Treat yourself like a ~~person~~ garden

I touched upon this while talking about the hippocampus, but I'm going to circle back. Let's talk about what self care really looks like. I want to dig into what it means to treat yourself the way you deserve.

In the busyness of life, we can often become the last priority. Family, friends, work, errands, our home, and our pets can often take center stage, and this often makes us feel good. It feels like we should be taking care of these things, and helping others does release dopamine. I'm not saying you shouldn't take care of others, make sure you have groceries and take time to clean your space; BUT, are you taking care of yourself along the way?

I can already see your panicked darting eyes as you attempt to find an example of the last time you did something to take care of yourself. It's more common than you think, and it's not too late to start. Self-care often requires discipline to do hard, and sometimes even boring, things that are good for us. Self-care isn't portrayed correctly in today's society and is often played up and aimed towards women with expendable income who can afford luxury items that are marketed as self-care. It's shown as an indulgent and often expensive luxury that we deserve to allot ourselves.



Just to give some insight, real self-care often looks like turning off the tv even though you so badly want to watch just ONE more episode, and going to bed to make sure you get enough sleep. It's taking the time to cook yourself a healthy meal after work instead of skipping a meal because you're too tired or eating something that isn't good for your body. It's going to the gym on a Saturday morning instead of sleeping in. It's saying no to something you don't want to do even though it might upset someone.

Self-care can look like going for regular walks, going to the doctor when you're sick, daily meditation sessions, or carving out time in your week to practice your favorite hobby. This can look a little different for each person. Self-care is not a latte every time you run an errand, it's remembering that you are a person, and not a machine. We are more like gardens; We need healthy food, enough sleep, sunshine, and fresh air to thrive.

True self-care is a way of life that helps keep balance, and it shouldn't cost you money. When you truly take care of yourself, you will find that you are a happier, more creative person, and a more engaged designer. It will give you the energy to work and play with meaning and purpose, as well as happiness.

You are talented.
You are capable.
You belong.

Boundaries

You can't practice self care without setting boundaries. You should have clear boundaries around your daily routines. Doing this will give you the room to show up for yourself and foster your creativity.

Healthy boundaries often look like:

- ⇒ Not compromising your values and needs for another person.
- ⇒ Respecting limits set by you or others.
- ⇒ Effectively setting and communicating your needs.

It's best to have a time and place for everything. Keep your work at work, keep home time at home. If you bring your work home with you and then attempt to create in the same space that you just spent hours anxiously completing your work for the day, you may find it to be difficult. This is because our brains often associate spaces with what they're designated for. For example, I can write in my office after work, but I can't create art there. There's a focus that I'm able to accomplish at my desk in my office, but creative acts are more difficult. It's easier to create at home in an uninterrupted, familiar space. What that space looks like may be different for one person than it does for another.

I find that I feel more creative when I take time to have fun. Like the self-care rule though, I am more creative when I find a balance between having time to have fun and time to be productive. To create a balance during free time will help your overall well-being. Who knows, it might even help you find time to be creative during your weekends or vacations.

Step 1: Jot down a list of your needs.

Identify what you need in your day to be successful. Once that is established, you can work around that time to create a schedule that also meets your needs. Think about what helps you feel good. Is your weekend going to be more restful and successful if you get 8 hours of sleep each night? Maybe you need to carve out an hour in the morning to work out. Possibly you need to set aside more time for meal prep.

Step 2: Hold yourself accountable.

In order to keep your healthy boundaries, you must hold yourself accountable to your needs. If you've set aside time to sit and enjoy your lunch, resist the temptation to check your phone or email. Try to think of your boundaries as your own personal responsibility. It's considered self-care to show up for yourself.

It's important to take a moment and recognize that this is all easier said than done. There will be days when you stumble, days when your boundaries fall and you spend the weekend binge-watching Netflix, and that's okay. We need to allow ourselves that time to do what we really want without shame. Because here's the thing: we are emotional beings, and if we beat ourselves up for falling outside of our crafted schedule, not getting enough done or are not able to be creative for ourselves, it's going to create a spiral. Setting boundaries can take time and practice! If you break a boundary, the best thing to do is recognize how it happened and try again.

"We like to think we are rational beings who occasionally have an emotion and flick it away," and carry on being rational. "We are emotional, feeling beings; who, on rare occasions, think."

I enjoy the way Brene Brown talks about humans being emotional beings. She makes an important point by saying when emotions are driving us, "thinking isn't in the passenger's seat, it's hog tied in the trunk." What stands in the way of us gaining the brain space we need is not a train of thought, but rather a deduction of emotion.

**When and where do you
feel the least creative?**

“When I’m tired, or a project has been through so many revisions it no longer resembles what the vision was.”

**“When I have something
pre-occupying my mind,
such as work stress, a long
to-do list, or other concerns.”**

“I feel least creative at work (non profit). I am working on a computer using software to keep track of donations/ donor relations when I am there so it doesn’t feel ideal for my creativity.”



Don't give power to critics.

One could say we live in the era of critics. These critics' voices have been amplified more than ever before. This is due to the age of social media we're living in. It's not an easy time for anyone to be creative. We're putting ourselves out there like never before in front of many people who aim to hurt and are holding metaphorical megaphones. When we're repeatedly set in the viewpoint of criticism and shame, the comments can start to stick. Then before we know it, we begin to hear those comments while we're in the process of creating. Then we stop, and it's difficult to start again.

I wish I had an easy way to fix this, but I don't. The only thing you need to know if you want to create, to make an impact in the world and to prove you were here, is to get in that arena. And if you get into that arena, "you're going to get your ass kicked" as Brene would say. There's no way of avoiding this. You have to decide that the outcome for yourself and for the world is worth it, and make the decision to refuse to give power to the critics.

When you find yourself hearing the unwanted voices of those critics, and you feel afraid, uncertain, and begin to compare yourself to others, just know that the way to do your best is by letting those feelings fall away and allowing yourself to stay vulnerable. If you put up a wall to protect yourself, you inadvertently shut yourself off from your creativity. Vulnerability may allow for feelings of anxiety, but it is also the source of creativity. The more you put yourself out there and show the world what you've made, the better off you'll be. There will always be the itty-bitty-shitty-committee telling you you're not enough.

We care about what people think because connection is important to us. It's not that you should go through life not caring about what others say. As tempting as it is, you can't push the critics out completely. You have to make a space for them, accept that they are always going to be there, and refuse to give weight to what they say.

It's important to note that constructive criticism is different. It's important to learn from and with your creative peers, to master your craft while inviting the knowledge and expertise of others. But if someone is not putting themselves in that same arena and also getting their asses kicked, you shouldn't be interested in anything they have to say.

**“The critic has to educate
the public; the artist has to
educate the critic.”**

– Oscar Wilde



COURAGE (IN CONCLUSION)

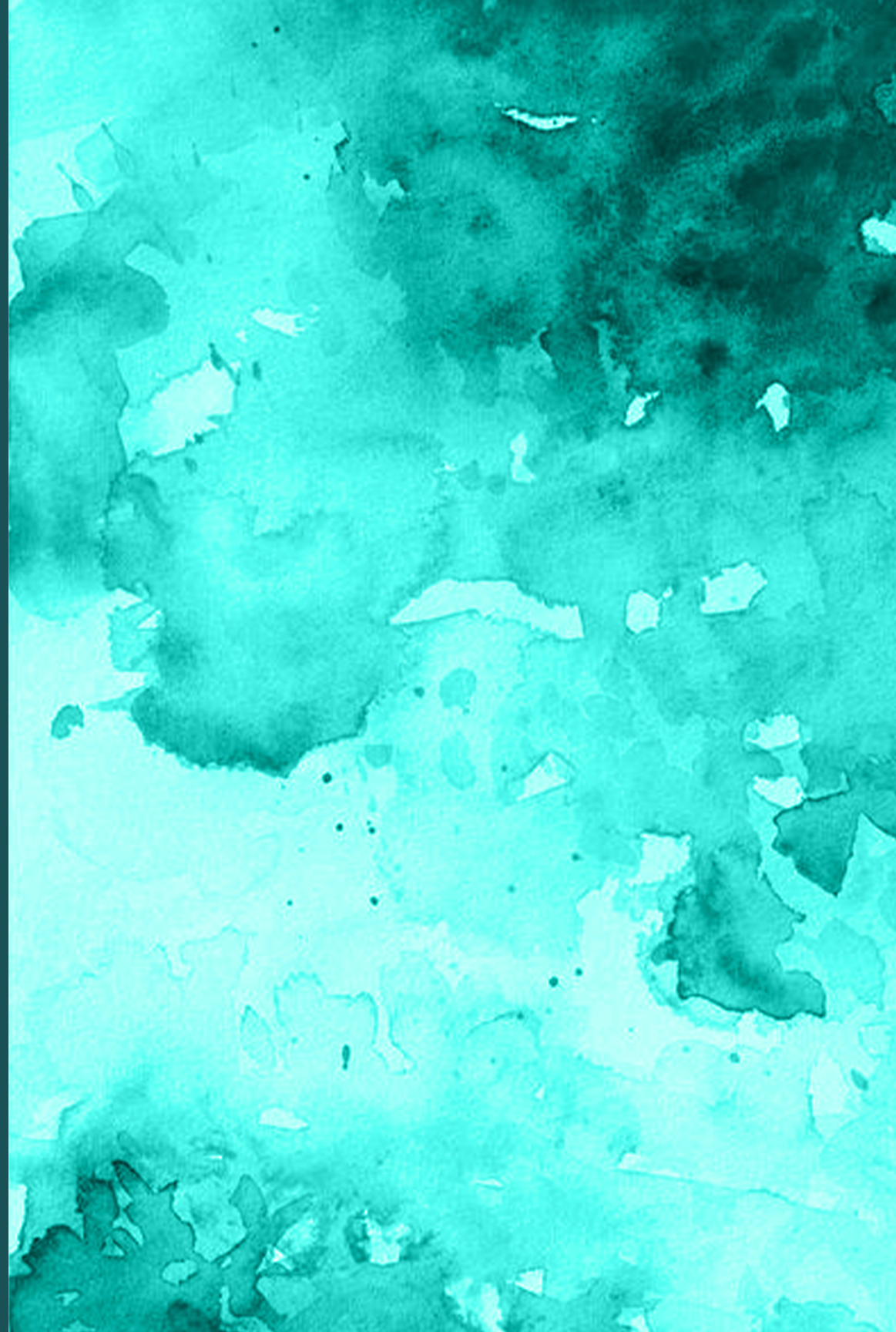
Now the last thing you need is courage. Go forward knowing that you have something special and golden to offer the world. Have the courage to live creatively. You will often find that when you create something and put it out into the world, you're going to feel similarly as you would if you had to give a speech in your underwear. Let yourself feel that feeling, and know you're probably going to feel it again. Choose to embrace the knowledge that you were invited to speak and you showed up.

Have the courage to recognize your worth and treat yourself the way you truly deserve. Understand that our colonized society was not created for your betterment. It was made for you to learn how to gaze up at the person above you and ask permission. The best thing you can do for yourself, your friends, and your students (if you're an educator) is to teach them how to find those answers themselves without having to look to that person looming above.

Once you begin, the act of creating will feed your courage. When you find yourself feeling unsteady, lean on your tribe and take time to treat yourself the way you deserve. Only give your time and energy to the people and spaces that do the same. Also, know that having courage does not mean you don't have fear. If your fear does not subside, go forward afraid. You will be happy you did.

“I wish you a kinder sea.”

– *Emily Dickinson*





“A ship in harbor is **safe
but that’s not what ships
are meant for.”**

–Unknown

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Colophon

Adobe Garamond Pro

The Adobe Garamond font family is based upon the typefaces first created by the french printer Claude Garamond in the sixteenth century. This serif face was created by robert Slimbach and released by Adobe in 1989. The Adobe Garamond design ins considered one of the most versatile fonts available today and certainly one of the most attractive and graceful in print.

Proxima Nova

Proxima Nova was released in 2005 and was developed by Mark Simonson. This sans serif bridges the gap between typefaces like Futura and Akzidenz Grotesk. The result is a hybrid that combines modern proportions with a geometric appearance. It is a strong, versatile geometric sans with industrial quality. Proxima Nova was originally released in 1994 as Proxima Sans, which is now discontinued.

Roboto

Roboto was designed by Christian Robertson. This sans serif holds a dual nature. It has a mechanical skeleton and the forms are largely geometric. At the same time, the font features friendly and open curves. Roboto has a more natural reading rhythm more commonly found in humanist and serif types.



