

Chaos by Julia Charlotte

When life feels chaotic, it makes me feel better to remember that it is; everything is depressing, but cover it in flowers

Last week I bought a bouquet of gerbera daisies for nine dollars. Their light pink petals lasted longer than I expected. Until they started to fade, browned around the edges, the green stems bent over the edge of the glass bottles in which they lived the end of their days. The water was murky with life matter. Today I bought a bouquet of gerbera daisies for nine dollars. There were no pink ones, so I bought red. They are alive and well.

“Strange attractors” is the mathematical term for the patterns created by points in motion acted on by chaotic dynamics. Any individual in motion will eventually begin to converge upon these attractors, never quite the same, but always quite similar. Once the objects in motion have entered the attractor, nearby objects diverge from one another but never depart from the attractor. The strange attractors draw the shape of a butterfly but no one who writes about math acknowledges this. Chaotic coincidence.

In 1969, David Cheever, a graduate school student from Fort Collins, Colorado, formed Floramerica, the company that initiated Colombia’s present-day billion dollar cut flower industry. I have never been to Fort Collins or to Colombia, but I love flowers.

In 2019, I thought I was going to die, and then I received an unexpected message from an Australian man I had met in Spain. I did not die. A butterfly must have brushed his cheek.

When I’m asked “why did you even date him” I shove their mouths into sunflowers in the hopes that they’ll swallow some shine. They make me wonder, what if my therapist was wrong. What if it was my fault. What if I secretly wanted it. Then I tell myself I don’t need those thoughts, and I turn them into clouds and let them float away. Too many clouds and it rains, feeding the thorny plants already rooted into my skull.

In 1982, Benoit Mandelbrot wrote “The Fractal Geometry of Nature” about the infinitely complex, infinitely recursive, infinitely self-reflective nature of fractals. Each section of a fractal mathematically defines the whole. As macro or micro as I see it, its essence remains the same, like one mile of beach reflecting a whole coastline, one broccoli floret illuminating a whole vegetable, one triangle on a snowflake looking like an entire blizzard. They are everywhere, the math of nature, a way to understand life, they embody how something microscopic can enlighten something infinite, how one object with defined edges smaller than the eye can see, or perhaps the size of one thought bubble, can in a strange and infinitely complex way reflect one chaotic whole.

In 2017 I told my therapist that I felt guilty complaining. It makes me feel needy, I said, statistically, the terrible universality of the experience, I said, so many people, especially women my age, I said. He shook his head and said that while he understood the sentiment, the quantity of trauma that we talked about was “let’s say, not so common.” I felt guilty about comparing and ranking horrible experiences, and less guilty about needing him to remind me that I don’t have to hate myself.

How does a pink flower from Facatativa, Colombia sit in my windowsill in rural Vermont? The flap of a butterfly’s wings must have carried it here.

In 380, Hypatia was the first (recorded) female mathematician and the world’s leading astronomer. They say she was murdered for her work and beliefs. She was murdered for being a woman.

In 2016 I went to my third overall college party, and an older college boy told me he liked my necklace. He had also been to that same city in Peru. He told me he was on the baseball team then told me his girlfriend was looking for him but it was nice to talk about Peru.

Every fall, North American Monarch butterflies migrate millions at a time, utilizing warm air currents to travel the whole journey from Canada to as far Mexico in just months. There the population spends the winter. It then takes four generations, each only living a month or two, to make the return journey to the North. In the north, a super-generation of butterflies is born;

each individual lives for up to eight months to fly the entire southward journey. No single butterfly has traveled the whole migratory loop. No one truly knows how the butterflies know where to go, why different generations live such varying lifespans, how their delicate wings found such unprecedented strength.

In 2017 I no longer counted how many college parties I had been to because the answer was plenty. I went to a party that had many men at it, and one of them tried to talk to me, but he told me that he liked my bracelets, but he tried to touch my wrists, so I left without a word, my breath caught in my throat as if even the thought of him could strangle me.

In 1961, a meteorologist named Edward Lorenz discovered the butterfly effect. He realized that infinitesimal changes in the start values on his computing programs drastically altered the long-term outcomes. He discovered that, theoretically, the addition of the gentle flap of a butterfly's wing in Battambang, Cambodia could cause a hurricane headed towards my grandparents' house in Tampa, Florida. The academic community credits Lorenz with the discovery of chaos theory. He discovered chaos.

In 2016 I went to my third overall college party, and an older college boy told me he thought my bracelets were cool. He had also been to that same city in Costa Rica. He told me he was on the football team and that it was nice to talk about Costa Rica. He asked for my phone number and I gave it to him. We went on a date four days later.

He was a strange attractor because even after he tried to kill me I kept circling and looping, leaving and going back to him. My therapist told me it's called Stockholm Syndrome, but it felt more like a butterfly's wings pushed me. He smelled like flowers in the worst way possible. The strange attractor and the therapist.

In 2018, my therapist said the letters P-T-S-D, a poison parsnip that has grown inside me, taken root in my spinal cord, releases toxic spores into my fractal shaped nervous system.

My brain draws fractals, beautifully iterative and complex waves that converge upon my strange attractor: the hallucinatory nightmare that no matter how hard I try to avoid, to escape,

to ignore, to move on from, to just stop thinking about, my thoughts infinitely return to the loop shaped like chaos. My trauma is the size of a butterfly that eats my brain from the inside out.

In 2016 after my first 10 and a half weeks of college parties, a guy who I had been dating for six weeks held both of my wrists in one hand, so tight that it bruised. His other hand pinned me to the wall. His pinky grazed my trachea as he said "I'm going to kill you. I'm going to kill you. I'm going to kill you" I thought of Hypatia.

In 2014 my math teacher told us that fractals are proof that God exists. I believed her until she made that the answer to an exam question.

In 2016, I started college and they placed me on a hall with all upperclassmen, and one other boy from my year. I was sure it would be horrible, but on that very first day we became best friends. He's still my best friend. Sometimes it feels like we were meant to meet, to live next door to each other. Like the chaos was on my side.

Sometimes when life feels meaningless, I lie in my bed and look at pictures of fractals. Zoomed in snowflakes, Romanesco broccoli, the Mandelbrot set. Fractals have an inexplicable beauty in their non-repeating patterns, like the ineffable appeal of one friend's advice over another, one book's chaotic combination of letters, one hand's touch on my face.

In 2017 it took me four months to tell even my therapist about the rape because I had entirely forgotten that it happened. Forgotten. She theorized memory suppression, coping, survival mechanisms. I think the butterflies ate the memory for as long as they could, until they got too full and vomited it all back up

In 2018, I met an Australian man in Malaga, Spain, and we talked about writing. He wanted to write screenplays, and I did not know what I wanted to write.

After the vine shaped like a man's hand burned my throat, safety seemed like a path that would never intersect with my own, remaining entirely parallel so that I can see it, wish for it, but never have it. I had a friend, though, the only other freshman on my nonfreshman hall from my first semester. I called him that night. And he has sent me bouquet after bouquet of flowers

every single day since. "I know about it. I know it happened. If you don't feel safe I will come to you. If you don't want to be where you are, you can always come to me" He is an extraordinary butterfly, sent to me by chaos. He flies even in blizzards.

I buy bouquets of flowers from the grocery store. "From Colombia" they say on a small sticker. They come with a small plastic packet of nutritional powder, for the plants, and thick plastic straws around their stems. Sometimes they come with instructions on how to keep them alive the longest. Sometimes they don't. They made it all the way from Colombia, though.