When *homo sapiens* first began walking the earth, there was not too many differences between us and all the other creatures we shared the planet with. We had one goal and that was to survive. As time has gone on, humans have developed ways of producing food, building larger, more protected shelters, and discovering forms of medicine that have kept us alive much longer than ever before. Because of these developments, our goals have evolved and we've been able to look beyond simply surviving. We've acquired more and more time to sit and think, which lead to asking questions. A lot of these questions revolved around our inner workings, both philosophical and physical, from *Why am I here?* to *How am I here?*

I am a human being, and I too have questions. Why do people have favorite colors? What is the purpose of domesticating cats? Who invented grilled cheese? One day over spring break, I was sitting in my room, staring at a poster I have pinned up on my wall of a drawing of a strange yellow man. The yellow man was wearing bright red and green clothes, and the more I stared at it the more I started noticing patterns in his clothes and around his body that I have never seen before. As my gaze moved from the poster, I started noticing more and more patterns, in the wood of my dresser, the fabric of my sheets, even the shadows cast on my wall. And so I asked myself a new question, a question that at the time, I had no idea the magnitude of: *What else has patterns?*

Every day of your life your mind is exposed to an abundance of patterns. Not just the ones you would typically think of, such as the floral pattern in your grandmother's bathroom or the checkered pattern on your favorite sweater, but patterns like how you know to take a left at the pizza shop and then a right at the yellow house to get to your favorite coffee shop or the steps you go through to get dressed in the morning. In fact, patterns aren't just limited to your vision- patterns can be recognized throughout all the five senses. Ever notice how when you smell, touch or taste something and it immediately evokes some sort of emotion or memory? Or how you can tell when your mom is mad because of that certain tone in her voice that she only uses when you've truly messed up? This is all because of pattern recognition, or "patternicity".

"Patternicity," as explained by Dr.Michel Shermer, publishing editor of *Skeptic Magazine* and author of *Why People Believe Weird Things* and *The Mind Market*, is "the tendency to find meaningful patterns in both meaningful and meaningless patterns." It is our brain's way of registering the patterns we come in contact with. There are two types of mistakes that can potentially occur when the brain perceives a pattern- a type I error, or a false positive, where one believes a pattern is real when it's not, or a type II error, a false negative, where one does not believe a pattern is real when it is (Shermer). If this is a bit confusing, imagine you're in a classic horror movie. You are running from the killer, and you hear a rustle in the bushes. Say you make a type I error, and run even though it turns out to only be a rabbit. You are cautious yet safe. Or, you make a type II error, and assume it's only a rabbit, when it is actually the killer, and suddenly you are dead.

Humans are more likely to make a type I mistake, because although we have intellectually moved beyond simply survival, it is still hardwired into our brains.

Pattern recognition not only assists in our decision making, but also our learning. Dr.Shermer specializes in studying the patterns in human thought processes and why we believe the things we do. He says our minds are geared towards believing, and that we want to believe that point A connects to B connects to C because it is the way we naturally learn, through something calling "association learning," much like how

Pavlov's dogs began to salivate when they heard the bell (Shermer). B.F. Skinner, a scientist who studied behaviorism in the 1950's, ran an experiment similar to Pavlov, but with a pigeon. This pigeon was conditioned to press one of two keys in a pattern and it would be given a reward. The pigeon then was rewarded at random times, completely unrelated to the keys it presses. This lead the pigeon to figure out any sort of pattern it could, even if it was completely unrelated to pressing the keys, like spinning around or jumping (B.F. Skinner). This sort of response can be compared to what we know as superstition.

Ever wonder if you're being creative and thinking outside the box, or just going crazy? Because of patterns, there's a connection between the two. "The lunatic, the lover, and the poet have such seething brains, such shaping fantasies" said William Shakespeare (Waldman). Apophenia, according to the Merriam-Webster dictionary, is "the tendency to perceive a connection or meaningful pattern between unrelated or random things (such as objects or ideas)," and is believed to be what the lunatic, lover, and poet all have in common. Coined by German scientist Klaus Conrad, the word "apophanie" (*apo*, away and *phaenein*, to show, in Greek) was originally used to describe the acute stage of schizophrenia during which unrelated details appear to be filled with connections and meaning. Apopheny, a false realization, can be compared to epiphany, "a true intuition of the world's interconnectedness." Swiss psychologist, Peter Brugger, says apophenia is "a weakness of the human cognitive, the pervasive tendency...to see order in random configurations," an "unmotivated seeing of connection" or the experience of "delusions as revelations." To put it simply, apophenia is when the brain makes too many patterns. This overabundance of patterns both assists poets create their metaphors, connecting one subject to another, but is also the driving force behind conspiracy theories (Waldman). As humans grow from children into adulthood, a majority of us learn how to recognize the important patterns, the ones that aid us in making less mistakes and ignore our apophenia. In fact, often our definition of an intelligent person is usually directly related to their pattern recognition abilities.

So, patterns can be seen both in your grandmother's bathroom and in the human brain, the easily understandable and the more complex. Not only are patterns essential for how we learn, but also the ways in which we live, including how we talk, socially interact, dress, and just about anything else we do. Patterns in history have been happening since human beings started building civilizations, and have continued on to present day. Our ability to recognize patterns can help us understand our past, present, and future.

In their book *The Generations*, William Strauss and Neil Howe introduce the theory that a cycle repeats itself every fourth generation in America, ever since the English established colonies in the country. These four different generations, Outer Driven, Awakening, Inner Driven and Crisis, each have different ideals, themes, and moods that go along with them.

Outer driven (most recently Boomers), or the idealists, typically seek conformity and stability. Individuality isn't seen as a priority, yet society's future seems bright. Idealists focus on social issues, as well as questioning and challenging the morals of institutions. They are born at a time where crime is low, the distinctions between gender roles are widening, substance abuse is low, and economic growth is steady.

Awakening (most recently Generation X or 13ers), or the reactives, challenge the old institutions and values that harbor them. They are more likely to focus on inner values and the self rather than community. They problem solve in a practical way and concentrate on survival. Crime is one the rise as well as substance abuse, public order deteriorates and the economy takes a turn for the worst. On the other hand, gender roles diminish and artistic activity is high.

Inner driven (my very own generation, the Millennials and before that the Missionary Generation), or the civics, are community focused. It is a time of coming together, productivity, and conformity. Danger is overcome and new ideals are discovered. Crime is rising, and gender roles are very wide.

Crisis (the generation that's currently being produced), or the adaptives, are over-protected, sensitive, and unlikely to take big risks. War is very likely, although both crime and substance abuse reduce. Artistic license is minimal and gender role divisions widen. Conformity is valued highly and new sets of ideals are likely to be adopted.

It is very important to realize that we are all small parts of a continuing pattern, that started long before we were born and is projected to last long after we are dead. As we know, patterns help us learn, which stays true even when speaking of patterns in history. But what do we do with the information we obtain? I hope to learn how to navigate life as a Millennial through studying my own pattern in history as a part of an Inner Driven Generation.

The Glorious Generation
1648-1672

The Glorious Generation was the colony's first mostly-native born generation. People were becoming more aware of children's health and well-being, and for the first time, the Massachusetts assembly ordered towns to provide primary schooling for children, which quickly spread through the rest of New England. The Glorious children were not only being more protected, but also pushed to be achievers.

As the more educated Glorious Generation came of age, they were described as "Confident rationalists with a steady eye on the future" (Strauss and Howe, 141). These young men and women were also forced to band together and create tight, reliable communities, because of all the disputes between the colonies and England. The young Glorious also pushed the elderly out of commanding positions, and set up things such as Committees of Public Safety.

As adults, the Glorious worked to build new institutions that promoted order and productivity. Unlike the generation before them, the Cavaliers, these adults did not wander. They remained community-oriented and took pride in that. However, gender roles did widen and women were expected more than ever in America to stay home. The duty of men was "to bring creation into order" (Strauss and Howe, 142). Wealth began to spread throughout the colonies, and the Glorious midlifers also took pride in that. The Glorious weren't risk takers, but rather focused on establishing order. As they grew old, they became selfish and felt themselves superior to the younger generations because of all that they had achieved.

The Glorious Generation saw themselves as gifted, and made sure everyone knew. Although they were focused on community, which can be a positive thing, it was

taken so far that any sort of individualism was frowned upon. People were only seen as small part of a larger structure, and their single duty in life was to do their part to keep the structure growing. The Glorious Generation was so productive that it blinded their ability to reflect on their achievements.

The Republican Generation
1742-1766

A better awareness of health and nutrition for the children of the Republican Generation caused the average height to rise half an inch. Later in life, the typical Republican soldier was at least two inches taller than the typical English Redcoat they were fighting in the Revolutionary War. Parents of the Republican Generation focused on nurturing their young, and children were also raised with new forms of education, moving away from the English education and toward a more optimistic, colonial style of teaching.

As Republicans grew, into "respectable youngsters," and then "competent, cheerful and selfless" adults, they showed the same hyper productivity as the civic generation before them, to the point of arrogance. Though their community-oriented ideology proved extremely useful in terms of industry and politics, it was pushed to the point of anti-individualism and created social tensions towards those who deviated from norms. It was also believed that sexual and political orders were directly linked, and the women were seen as corrupt and disruptive, while men were the voice of reason.

The trend of efficiency continued, leading Republicans to believe they could conquer anything. From 1787 to 1819, America's size quintupled, and the Republican Generation had a hold on most political positions. As time went on however, the "Republic of Virtue" expanded to the "Empire of Liberty," and they worried that the optimism and innocence of their youth was beginning to disintegrate. The cold, distant attitude of next generation coming of age rattled them, and as they aged their fears became reality when the Liberty Generation took over.

Outwardly, Republicans entering old age displayed energy and confidence, though on the inside they were in despair over the fact that they had spent their entire lives working and producing, while completely ignoring their faith. Additionally, the world they had built up so high was now being torn apart by the youth that were focused more on their feelings than productivity.

Many technological advances were made and the history of America has changed forever because of the Republic Generation, but at what cost? Yes, they did vastly expand our country, but went about it in a selfish and greedy matter. Additionally, they were so focused on their own achievements that they hardly took the time to invest their knowledge and talent in the next generation. The irony in all this is that the founding fathers of the Republic Generation were better obedient sons than they were guiding father's

The G.I. Generation

1901-1924

The trend in child safety rose once again, and slogan such as "Don't Give the Baby Beer to Drink" appeared in supermarkets and on billboards. The scout groups such as Boy Scouts, Camp Fire Girls, Girl Scouts and 4-H Club that were popping up everywhere not only kept children occupied, but taught them how to help others, work as a team, and respect their elders. Along with that, public education introduced ideas of productivity over all else. More teens were attending school than ever, which created new social settings. Social standards grew stiffer as everyone was listening to the same song, watching the same movies and wearing the same clothes. Not only were the youth being taught community but also conformity.

Though the country was going into The Great Depression, the coming of age G.I.s stayed as hopeful as ever. An emphasis was put on planning, optimism, frugality, and community. The 1930's were a time of unity, and as World World II struck, their convictions only hardened. Soldiers fought with ferocity, while back at home women dominated the industrial workforce for the first time in history and the last time since. As they grew into adults, the confidence G.I.s felt after the war blossomed into entitlement.

The post-war G.I. adults were held on a pedestal and given better benefits from the government than their elders. Veterans brought a no-nonsense attitude to the workforce and education system. In fact, G.I.s often had a more mature, stern-minded convictions than their elders. They brought the same practicality into politics, feeling that they needed to clean up the mess the generation before them had made. The economy grew, and America was producing the supposed best and often biggest creations in the world. Yet again however, sex roles were wide. The "ideal" man was a leader and showed no fear while the women were devoted mothers to their herd of Boom Generation children.

The G.I. Generation was addicted to victory, and as a result, grew a level of over-confident hubris. However, reality hit hard when the conflict in Vietnam occurred, which created generational tension between G.I.s and their Boomer children. With that came a surge in urban riots, crime, substance abuse, and sexual freedom. Basically everything the G.I.s were so vehemently against. The men that had once run the country were now under attack by not only children, but also women. Everything was coming unhinged.

The G.I.s were a part of the most productive time in America, but didn't think about the consequences of their actions. America is now faced with unprecedented public and private liabilities, exported assets, a depletion of sources both in our country and around the world, and a global environment on the brink of collapse. The G.I.s grew up in a time when anything was possible, but now the younger generations must face the fact that that is not at all true.

The Millennial Generation
1984-2002

Now here were are, in the Millennial age the, third cycle of the inner driven generation, with endless information at the tips of our fingers and more patterns that ever to learn from. As the pattern seeking beings we are, that shouldn't be too difficult. But what have we learned? Our part of the pattern seems to be a well-oiled machine, picking up the pieces of our predecessors and putting them back together, each time getting stronger and stronger. The problem is, what other inner drivens seem to have forgotten is,

we're not machines, we're human beings and we do have limits. Yes, it is a good thing to work as a team, to be productive, and to get things done, but it's also important to be an individual, to think for yourself, and have compassion for others.

In the scenario that we end up as the hyper-productive generation, like those who came before, it is crucial that we deliberate on all of our productions, not only considering how this will assist us, but also how it will hurt us, breaking the pattern that has been occurring time after time. We are not the last generation, their will be others after us, and if we are not conscious of the effects we have, there won't be any resources left for the coming generations.

Despite their ability to make big changes in our country, a mistake that our antecedents made was their disregard for the well being of the next generations. As the pattern goes, the inner driven generation is given an abundance of love and nurturing from the day they are born, and are encouraged by their elders to achieve and be successful, yet they do not do the same for their own offspring. Instead of simply criticizing the younger generation, it would be more beneficial to support and guide them, instilling good habits but also letting them grow with their own sets of ideology.

As it has been proven, patterns are all around us. They are in our brains, on our walls, and in our history. No matter who you are, or when you were born, patterns touch all five of your senses, every day of your life. But, you also have the freedom to recognize them, and the chance to improve upon your way of life. Patterns are not only capable of changing us, but we are capable of changing them.

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