## It Was Just a Game

When I was young I remember going on long car rides with my dad. I would get in the car, excited for the "games" that came along with rides with my dad. It was our little way of bonding. The game was something we shared together with no one else. It was something that connected us and made us closer. He would give me a list of numbers (no these were not random numbers). Each number had a purpose in its spot. All the numbers adding to the pattern that would form. They were all telling me something, whispering in my ear "you can figure it out".

My goal, to figure out the pattern and give the next few numbers in the sequence. They started out easy. The patterns would be adding or subtracting a certain amount, then multiplying and dividing would become a part of the game. Soon there were imaginary numbers and multiple patterns that combined to make the sequence. It was my goal to figure out what those patterns were. For example, he might say something along the lines "one, two, six, seven, fifty-six". Looking at the numbers it may seem as though they have no relation to one another. How could a number jump so drastically from seven to fifty-six? I would sit there and go through possible patterns in my head, trying to relate the numbers in any possible way using the math knowledge that I had. Finally, it would come to me. It wasn't easy to see at first, but after thinking hard you see the pattern. I would get so excited and yell back "fifty-seven, three thousand three hundred six!" The pattern was a simple adding and multiplying. First you add one and then multiply by the one greater than the number you get. 1, 1+1=2,  $2\times3=6$ , 6+1=7,  $7\times8=56$ , 56+1=57, 57x58=3,306. If I could find more than one way of coming about that list of numbers it would make me feel a certain amount of joy. It made me feel as though I had "broken" the pattern by giving a counter to what my dad thought the pattern should be. Although breaking the pattern was rare it was a little extra source of adrenaline.

I became very good at this game. It became a challenge; How fast can I solve the pattern? I oddly looked forward to these games in the car. The game became instinctual. Once I got in the car I knew exactly what would happen. When I tried to explain to my friends why I found it so enjoyable I could not find words to describe it. It was unexplainable. It was all about reading the numbers, trying to comprehend what they were trying to tell you. I would ask myself "How does this number relate to the previous or the one to come?" From those little games in the car my intrigue in math began.

I just loved the art of numbers. I just loved the way it was so calculated and meticulous. I just loved the way the numbers spoke to me. I just loved math.

In sixth grade everyone took a standardized test. This test was to decide which students would be skipping seventh grade math and moving straight to eighth grade math. Out of the whole sixth grade class only thirty would be chosen for this opportunity. For me this was not something that would be horrible to be in. I enjoyed math so much that it didn't seem like a school-related subject. I made it a necessity that I get into that class. It was not just because I was hard on myself, but more that I loved math and wanted to extend that knowledge.

When the test came around I blew through it quickly. In my head I played through the games. Slowly connecting one number to the others in the problem. I found myself understanding problems that were unfamiliar to me just by finding patterns like I did as a little girl. Next thing I knew I was done with the test. I anxiously waited to find out the results. Even though I had made math a game in my head I have always taken it very seriously. I have never felt like I have thought of it any less than what it truly is. I know that math is very hard and that there are so many aspects to it and I think that is what draws me to it so much. When I got into the class I was so excited. Getting in meant that I had successfully learned the language of the

numbers (at least to a 6th graders knowledge). All of those games in the car were fun but also helped me succeed. I felt special knowing that I had done well in something I loved. It was a privilege to get into the class, and a privilege that I had earned.

The teacher that taught the class was my math teacher for three years. My whole middle school math was surrounded and enriched by this teacher. Her name was Mrs Windle. Although she never could quite say my name right (it would always be AN-DREE-uh or on-DREE-uh) I learned so much about myself and the capabilities I had. She pushed me to think outside the box and to not be complacent with knowing only one way to do something. There is no conventional way that math should be done. Just like synonyms in writing there were synonyms for math. You could say 2+2 or 1+3, but they both meant four. She gave me more drive to be adventurous and dare-devilish when it came to solving a problem. I began to wonder other ways to write problems or get the desired answer.

As I went through school I added to my math vocabulary. Slowly growing and putting together the pieces that made up math. I loved the language and I became so fluent in it that it became second nature. The car ride games slowly faded and became less frequent. As my knowledge grew the game became too easy and just stopped giving me that feeling of adrenaline that it once gave me. Nothing bad, I just outgrew the little math game. My knowledge in math had surpassed anything that could be placed into a pattern. By my senior year in high school I had taken every possible higher level math class offered at my school and passed both AP exams that I had taken. It made me feel so great about myself.

I had worked so hard to understand and become one with math. It was all paying off.

With all this hard work I had put into schooling, applying for college was very nerve wrecking. I had applied to many universities and a few were on the top of my list. I knew very little about

Davis but from the little I did know it seemed like a good college.

Once I got to Davis I realized I was no longer the top of the class. Everyone here is incredibly smart and has so much to offer to the university. I was not prepared for that. I was so used to being able to breeze through every math class that I had taken. Coming to Davis I finally felt that rush of adrenaline that I had felt as a kid, sitting in the car. It had come back and the feeling was great. My peers challenged me and I had to try harder to stay on the top of the curve. Although everyone is so very smart here I feel like I still had a small advantage over them.

I realized subconsciously that I had incorporated those small little games in the car into my classes. I thought of math in a different way than my peers. As my classes have gotten harder I often find myself looking for patterns in problems. By finding patterns it makes future questions easier to solve. Sometimes I solve complete problems by finding patterns from previous problems that I had encountered. When I am asked how to do something I refer to those patterns not realizing that those patterns are in my head and no one else understands them.

Throughout my life I have always played these games in my head. These number games kept me entertained. Through everything it was something I knew I could rely on. It was a language that was familiar to me. I had grown up loving the numbers and the way they spoke to me. Unlike other subjects math is universal. Anyone around the world can learn to appreciate numbers. Numbers are the same anywhere you go. I once had a teacher tell me math and numbers are the universal language of the world. No matter where you are two plus two will always be equal to four. That has really stayed with me. It has made me want to keep growing in the language. I have always thought that if I learned the numbers then I could in theory "speak" to anyone around the world. It has made me want to grow in math and never be okay with just knowing the math that I have to know. It truly is magnificent that we can all understand this

"language". It is something that brings us all together.

Math has given me something to do. It made my career choice. My major was heavily impacted by my love for math and growing knowledge. Although I am majoring in biochemistry, math and science go hand in hand. One heavily impacts the other and I love that application and dimension of math.

It started out as a game. It was just a game. It turned out to be my passion. It became my world. It is my language.