

# Memories, good and bad, make us who we are

by Mark Pavilons

It's funny what we remember sometimes.

Recently, I awoke from another in a series of odd dreams. As I sat up, my thoughts turned to my dad's final hours.

He died of lymphoma on a summer's evening in 1998. During most of his years suffering from the disease, he remained symptom-free. In the end, he began to become agitated, shaky and restless.

I remember that evening very well. Kim and I visited, chatted with him for a while and comforted my mom. His last words to me, and I recall them with crystal clarity, were: "You have a beautiful family; take care of them."

We only had Lexie, who was just six months old at the time. Unfortunately, my dad never got the chance to see his other two grandkids. I know he would have been over the moon and proud of them all. Maybe he is.

Our memories are quite tricky, and science is still figuring out just how and where our memories are formed and stored.

According to experts, our long-term memory, which can last a lifetime, has an immeasurable capacity. The brain contains an estimated 100 billion neurons. If each one has 1,000 or more connections to other neurons, this produces roughly

100 trillion connections in which our memories can be stored.

We process our experiences and hold onto them in three ways: sensory memory, short-term memory and long-term memory. It's said two parts of the brain are main areas where our memories are stored: the hippocampus and amygdala.

Based on this new information, the new estimate is that the brain can hold at least a petabyte of information, about as much as the World Wide Web currently holds. This is 10 times more than previously estimated.

But memory is not as simple as a computer's binary code. Each one of our experiences impacts how we approach all future ones. Our emotions affect our memory and as we know, the more traumatic ones are permanently etched in our brains. There are "memory genes" and scientists have found that sleep and dreams continually reorganize our memories. We have "grid cells" that help us with our spatial memory.

There's been a long-standing myth that our brains record everything in exact, minute detail, but that has found to be incorrect. The reality is, our brains decide what's important to remember. We all know that coins have a "head" and a "tail" but the tiny details are fuzzy. We don't really need to know all the distinct features of a coin, unless of course, you're a coin dealer.

Some say our memories are really "who we are." Without them, we lose our identity and sense of self. We are the sum of our experiences.

I remember when a staffer at Etobicoke hospital called and said my mom passed away. It was March 10, 2010, a Wednesday. I travelled to the hospital and sat with her for a while, saying my farewells. I shared small talk and spoke out loud, not really caring if anyone could hear me. It was my way of coping. I knew my mom's soul had already departed. This hour of my life wasn't quite as awful as you'd think, because my mom's quality of life had diminished immensely in the weeks leading up to her death. As strange as it seems, I really enjoyed our final one-sided chat.

"You know that pain and guilt can't be taken away with a wave of a magic wand."

They're the things we carry with us, the things that make us who we are. If we lose them, we lose ourselves. I don't want my pain taken away! I need my pain.

These words, spoken by James Kirk in *Star Trek V: The Final Frontier*, often come to mind. They're true, of course.

For me, most of my bad memories are ever present, almost like a haunting shadow that won't leave my side.

Some people can remember with vivid detail their younger years. I really don't recall anything prior to age 5. The only memory I have was falling asleep during nap time in kindergarten, and for some reason the teacher let me sleep in. I awoke to singing, as the rest of the class assembled and continued on with their activities, while I, groggy-eyed, woke to their laughter.

Fast-forward to September of 2009 at the Bolton Fall Fair. My daughter and I were waiting for the Ferris wheel to disembark. In one chair was a woman and her teenage daughter. They were staring at me, pointing, laughing and they even took a photo of me.

There's no question they were taken aback by my rhinophyma. It's a skin disorder that causes the nose to become enlarged and bulbous. Scar tissue continues to build and grow and the nose ends up looking like cauliflower. It tends to affect men in their 50s and 60s, but I developed it in my 40s.

I can't describe the feeling in my gut that day, but I felt sick to my stomach and felt like someone hit me in the back of the head with a baseball bat. It was the nudge I needed to follow through with surgery. It was considered cosmetic, so it was expensive, but my wife felt I really needed to do it for myself.

I was awake, with only a local anesthetic. The surgeon used an electric scapel, and he sculpted my nose back into shape. I still recall, as the anesthetic began wearing off, the pain I felt from this instrument. As the tears ran down my face I remained silent. The doctor noticed and promptly gave me more anesthetic.

Like Kirk, I needed my pain to remind me of my humility.

Conversely, I remember with joy my wedding day, the birth of our children, and the many wonderful occasions Kim and I have spent together. I recall vividly the sunsets and sunrises, the ocean breezes and tropical drinks. Being away in those places was like shedding a second skin, and getting rid of that shadow of mine.

So, are all of these memories who I am? Of course they are. Who would I be without them?

We all have experiences we'd prefer not to remember, but we don't have that luxury.

Life is all memory, according to Tennessee Williams and the present goes by so quickly you can hardly catch it.

Memory is also the mother of all wisdom. Use it wisely, and don't discount its importance.