Transplanted Memories

"Memory is a way of holding on to the things you love, the things you are, the things you never want to lose."

- Kevin Arnold -

There have been anecdotal accounts of transplant recipients picking up memories or personality traits of their donors. This is often simply dismissed as nonsense or sometimes chalked up to the trauma associated with transplant surgery. On the other hand there are those who have speculated about some type of cellular memory affect associated with the received organ. However, this flies in the face of what we believe about our memories being stored solely in the brain.

Jaime Sherman, 28, was born and raised in Tucson but she never liked Mexican food. She craved Italian and was a pasta junkie until she underwent a heart transplant at University Medical Center, after battling a heart defect since birth. "Now I love football, baseball, basketball. You name it, I follow it," said Sherman, a psychology student at Arizona State University. "And Mexican food is by far my favorite."

Then Jaime learned that her donor, 29-year-old Scott Phillips, who died of a head injury after a fight at a Phoenix bar, was a sports fan who loved Mexican food. He played on several teams at Kansas State University and followed college and pro sports. Sherman's changes occurred well before she knew anything about her donor.

Those who speculate about cellular memory still have no real solid working hypothesis for how cells that are not involved in brain function could be altering thinking process of recipients. There simply seems to be no connection. However, experiences such as Jaime's are not all that rare. At the same time there is at least one case that simply astonished doctors. In this case there was a major transformation of the recipient that was objectively proven.

Demi-Lee Brennan, 15, of Canberra Australia received a donor liver when she was 9 years old and her own liver failed.

Brennan's body changed blood type from O negative to O positive when she became ill while on drugs to avoid rejection of the organ by her body's immune system. Her new liver's blood stem cells then invaded her body's bone marrow to take over her entire immune system, meaning the teen no longer needs anti-rejection drugs. Her body was transformed into a perfect match by the donor organ (detailed in The New England Journal of Medicine).

This had never happened before but establishes that there are things going on at the cellular level that we don't completely understand. Is it possible that cells from any donated organ could similarly invade the brain as well as the immune system?

Claire Sylvia received a new lung and heart from an 18-year-old youth who died in a motorbike accident. She began to exhibit his tastes, habits, and thoughts. She craved foods she formerly disliked, was attracted to new colors and, unlike her usual self, became impetuous and

aggressive. She dreamed of a man called "Tim L.," who (she later found) fit the name and appearance of her heart donor. She never met or new Tim whose identity was concealed from her as a matter of medical policy.

(Claire Sylvia and William Novak, A Change of Heart (New York: Little Brown and Co, 1997).

One possible answer is offered by Dr. Candace Pert, a pharmacologist and professor at Georgetown University. Dr. Pert suggests that the mind is not just in the brain, but also throughout the body. "The mind and body communicate with each other through chemicals known as peptides", says Dr. Pert. "These peptides are found in the brain as well as in the stomach, muscles and all of our major organs. I believe that memory can be accessed anywhere in the peptide/receptor network. For instance, a memory associated with food may be linked to the pancreas or liver and such associations can be transplanted from one person to another."

One thing to keep in mind (pun intended) is that our brain really doesn't work like most of today's computers. The neurons in our brains are part of a neural network which involves feedback from the output of neurons, through other neurons and nerves, and back to the input of the neuron. In recent years there has been a lot of research into the use of technological neural networks to make computers that are self learning and do not have to be told in advance how to process information to reach conclusions. The interesting thing with the neural network of our brains is that our brains communicate with virtually every part of our body. So in a sense every part of us is connected to the neural network and just might be part of the memory system inadvertently.

In a sense our memories may be stored within us almost holographically. The neurons of the brain may store much of our memories but perhaps not everything. In a hologram, all parts of the hologram store the picture. If you cut off the right side of the hologram you don't lose the right side of the picture. Instead, the apparent window through which you view the hologram is restricted but the right side information is still there. If you then cut off the top you don't lose the top of the picture but the window through which you seem to be seeing the picture is reduced again. The top is still there, but just a little harder to see.

If memories are stored in us holographically with all of our organs being part of the neural network that holds those memories, then it isn't much of a stretch to imagine a memory moving from a donor to a recipient as an organ is "patched in" to the neural network of the recipient. The transplanted memory might be a little vague or might simple be a change in preferences that seems to come from nowhere. But is there another possibility?

Most any parent will tell you that their newborns come "pre-wired" with a personality. They are not blank slates. They come with moods, likes, dislikes, and built in attitudes. Where does this come from?

If we consider that there is more to us than the three dimensional physical self imbedded in a fourth dimension of time then there might be an answer. Perhaps part of what we consider the "self" may exist beyond our four measurable dimensions, and our body is the interface. An analogy would be your keyboard and display being your interface to the internet. That part of

you which is expressed and stored on the internet comes through that interface, but the interface isn't you. The interface is just your way of interacting with the world of the internet. So if your body is really just the interface between the real you and this life we consider to be reality, then what happens if part of that interface is moved to a different body?

If there is a link between the higher dimensional self and each part of our body, then if a part of that body is transplanted we might effectively experience a cross-wiring of communication. The self might suddenly be communicating with the new body and interacting with it in the way it was used to doing with the old body. The higher dimensional self being the true repository of memories would then communicate those memories to the new body. The higher dimensional self would also inject its personality into the new body. Of course the old personality would be there as well, but if the new personality is stronger it might override the old personality. This would tend to explain why some transplant recipient experience the phenomena and some do not. It simply depends upon which personality has the stronger link.

Whatever is going on perhaps those who believe our emotions come from the heart may not be completely wrong.