"Mind Over Matter"

September 2015

Wood Type: Honduran Mahogany. I chose this type of wood for its beautiful color, grain patterns, and because its firmness is optimal for easy and enjoyable carving.

Weight: 1.13 pounds (0.51 kilograms); for comparison, the weight of an average human brain hemisphere is in the range of 1.43 to 1.54 pounds (0.65 to 0.70 kilograms).

Modeled After: A brain hemisphere of an anatomist and educator displayed at the Science Museum of Minnesota.

Location: My teacher's Artistic Wood Carving Studio in Minneapolis, MN.

Time Period: A total of 62 hours of carving (Fall 2014 to Fall 2015).

Carving Tools: Only hand tools (a dozen of different types of gauges and a mallet) were used during the carving process.

What Led Me to Carve It?

Prior to this project, I carved two other brain hemispheres. As a Gerontologist and Dementia Behavior Specialist, I use my wood-carved brain hemispheres as educational tools when I guide family members and professionals in person-directed approaches for caring for elders with Alzheimer's disease and other forms of dementia. I use it primarily to raise awareness about one of the most ancient parts of the brain – the amygdala. This part of the brain is responsible for attaching emotions to memory. In Alzheimer's disease, the ability to feel the full range of emotions we all feel remains relatively intact in many people much later than the ability to remember (short-term memory), speak, and understand. Proactively meeting the emotional needs and validating the subjective experiences of elders with Alzheimer's disease (for instance, by using the communication techniques of the Validation Method) often has a calming effect on these individuals and is critical for optimizing their psychological well-being. However, these human needs and experiences are often overlooked or insufficiently met at home and in long-term care homes, which commonly leads these individuals to experience emotional distress, anxiety, fear, and develop various forms of distressing and unsafe behavioral expressions.

I am thrilled and honored to have my wood carved brain hemisphere displayed at the Cushing Center of Yale University and hope that you will enjoy seeing it.

Credit To My Teacher: Konstantinos Papadakis, an old world wood carving master, started carving wood when he was 9 years young on the island of Crete. He is now 80 years old. He recently asked the following question when he reflected on his early years in Greece and his feelings when he first learned about woodcarving: *"Have you ever fallen in love?"*

The Practical Value of the Wood Carved Brain Hemisphere to Caregivers

Dr. Sumner Richman, a caregiver of an older woman with Alzheimer's disease, said about the image of the wood carved brain hemisphere:

"As a biologist, I am fascinated by the anatomical and physiological complexity of organisms in general and the human brain in particular as I learn more and more about Alzheimer's disease. Viewing your brain helps me to remember what is going on in my wife's brain to cause her to react in particular ways as I try to respond in meaningful and helpful ways."

The image could be helpful to family and professional caregivers in learning about the different parts of the brain, their functions, and the progressive deficits in them. Images and tangible objects are often helpful when guiding caregivers about the importance of assessing, anticipating, and proactively compensating for the cognitive disabilities experienced by people living with dementia.

Seeing the different parts of the brain hemisphere could help caregivers in learning about the stages of Alzheimer's disease and other forms of dementia. While there is considerable variation across individuals with dementia (such as the duration of the disease and the manifestation of symptoms), it often helps caregivers in knowing, anticipating, and planning for the unique care-related challenges at each stage of the disease trajectory. More importantly, it enables them to shift from a biomedical "deficit-based" care approach to the more dignified, effective, and safe person-directed "strength-based" approach. Thus, by identifying those parts of the brain that continue to function fairly well into the disease (i.e., the remaining abilities, such as long-term memory, emotions, musical and artistic abilities) and proactively focusing on them, caregivers are in a better position to optimize the psychological well-being of these individuals. This key care principle is reflected in Professor's Christine Kovach's term "Anticipatory Care" approach, which is defined as:

"Actions taken before the usual time of onset of a particular need or problem in order to prevent or moderate the occurrence of the problem."

The image could also encourage caregivers to pursue their aspirations in the intersection between neuroscience and the arts. This could encourage them to seek and make arrangements for sorely needed regular breaks from the physically and emotionally demanding daily care tasks. Engaging in personally meaningful artistic activities could enable them to provide better support and care to loved ones.

My hope is that they will find it useful,

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