A Symphony Beneath the Bone

A Braided Creative NonFiction Essay

In the sterile brightness of the operating room, consciousness pulses gently beneath my gaze. The surgeon makes a precise incision on the patient's temple. A tool, resembling a paint scraper, separates skin from skull, the fibers beneath resisting like Velcro being torn apart. The surgeon's hand moves steadily, confidently. Beneath his fingers lies a universe of neurons, hidden for now by bone. The drill whirrs, a sharp mechanical cry echoing through sterile silence. Dust blooms, and with it, a smell permeates the room—formaldehyde mingled with something primal, unsettling. I remember this smell most vividly, imprinting itself on my memory as the surgeon penetrates the skull's parietal section. The bone yields, opening like a fragile lid over the delicate interior. Greyish-white dura mater envelopes the darker, pulsing mass beneath—the brain itself. It moves rhythmically, steady, like a quiet heartbeat. Blood vessels stretch across its surface, an intricate network more complex than any human highway system. Beneath this complex vascular web is a clear and undeniable pathology—a large, pale meningioma the size of two golf balls presses insistently against the delicate tissue, tethered stubbornly to the dura. The patient's brain pulses visibly, vulnerable and exposed. Inside that pulsating tissue, housed within billions of interconnected neurons quietly firing, exists an entire identity—dreams, memories, fears, and motivations—encoded in cells communicating in a silent, ongoing symphony we recognize as consciousness.

Ontology defines a being as the fundamnetal essence of existence, categorziing reality ito neat divisions, mainly particulars and universals, concrete and abstracts. particulars are singulars, irreplacable entities, like the patient on the table, her life tabginle, irreplaceable. Universals are broader, shared repeatedable qualities like the concept of health, pain, identity, or even consciousness itself. Yet ontology itself falters when we stand in the operating room, witnessing a consciousness laid bare, laid to rest, but not perminently. Where does consciousness fall between particular and universal? Is it concrete? Is it abstract? These distinctions blur beneath the stark fluroscent lights illuminating human vulnerability in all of its essence both physically and consciously.

Neuroscience attempts to unravel the intricate relationship between the physical organ - the brain - and the intangible experience we call thought, emotion, identity, and experience. In the operating room, I was witnessing neuroscience;s uestions enacted in stark, uncompromising detail. How does a physical anomaly, a tumor pressed against the soft delicate tissue of the neural tissue, alter the intangible realms of personality, memory, experience, and self-awareness? Neuoscientists understand consciousness as emerging from neuronal interactions. Electrical signals firing in rhythmic patterns produce what we experience as thought and experience. Electrochemical pulses send neurotransmitters to communicate at astonishing speeds, leaping synaptic gaps, communicating information. But science's meticulous detail stll struggles with the mystery of subjective experience.

How do these tanglible interactions yeild intangible thought?

The neurosurgeon is calm. He is playing heavy metal on a speaker in the operating room, while he is operating on her brain. The surgeon tells me to come closer. He directs me to look into the cavity of her skull, and he asks me to identity anatomical regions being dissected and navigated through. This open brain, pulsating, softly, now manipulated to have shown the tumor in its full glory for easy extraction. The surgeon asks for the cauterizer. He begins to detach the tummor, the tissue being touched by the tool becomes burnt and sperated. The sound of burning tissue sizzles in the room. Smoke eminates from the tissue, an acrid smell drifts upwards, and it fills the room.

Ontology classifies reality into substances, properties, relations, and states of affairs. Substance is the brain itself, concrete and tangible. Properties are its grey-pink gue, its soft texture. Relations are formed by the neurons linking and communicating, creating states of affairs such as consciousness or awareness of self. But standing there, the limitations of those categories becomes aparent. They fail to explain how subjective experience arises from mere physical matter. Consciousness does not fit into ontology's tidy classifications. It resists definiions, and encapsulation, spilling over boundaries set by philosophers attempting to catalog existence. Consciousness transcends the clear lines we've drawn between matter and thought, between biology and identity.

The spinal surgery offers yet another glimpse into physicality's intersection with consciousness. Another patient lay face-down, anesthetized and vulnerable. The surgeon meticulously exposed the vertebrae. He had cleaned the bone well. It was clearly visble and distinctly white. The surgeon removed damaged bone with a metalic drill. He cleanly removed damaged ligaments, all to remove a stenosis, a narrowing compressing nerves causing pain. His spine layed exposed, stark bone gleamed under the surgical lights. Electrodes threaded into every muscle, and nerve, all throughout the body, measuring the eletrical potential of the body. This network of nerves, intricately branched from the spinal cord, carring signals vital for sensation, movement, and perception. Seeing this living map of nerves, sensing the fragility of it all, it highlighted the interplay between structure and experience. Damaged vertebrae had disrupted signals, it created pain and loss of function in the patient's left leg. neuroscience had shown us preciely how these physical changes alteres experiences like pain, sensation, and movement. Understanding the neural pathways offered some comfort but not much when comprehending the subjective agony experienced by the patient prior to the operation.

Ontology searches endedless for the precise boundary between mind and matter. The spinal surgery, the craniotomy, blurred these distinctions. If identiy and consciousness rely critically on the physical integrity of neurons and nerves,is consciousness biologyical or does it exist indepently as ontology's "abstract objects", intangible and eternal, only temporarily housed in tissue?

The neurosurgeon for the craniotomy's hands moved with precision. The tumor

had been freed, and now rested in a sterile container. He told me that he was going to send it to pathology for identification. He carefully inspected the operation, ensuring all the cancerous cells were removed. The packed the open space with surgical compression tissue. He sealed the dura mater. He put a tube into the space, and covered the hole left in the skull with a metal plate, leaving the tube out. He temporarily sutered the skin close, leaving the tube for drainage over the next couple days. The pulsating conciousness beneath it all resumes its hidden operations, invisible once more beath the skin, and artifical bone, to be replaced by the real bone in a few days.

Neuroscience teaches us that identity is indeed fragile, a delicate symphony played upon the neural circuits of the brain. Ontology reminds us that identity transcends mere physicality existing also in the intangible realm of ideas, concepts and self-awareness. Standing in the operating room, I had witnessed firsthand the intricate delicate structure housing a patient's consciousness, reminding me that understanding consciousness demands mebracing ambiguity. Consciousess is at once physical and abstract, universal and particular, concrete and immeasurably elusive.