

On a Quest for Consciousness

Diane Hennacy Powell, MD, Sees Key in Glia



Powell works with an autistic patient, in 2015. A savant, this patient could speak seven languages by the age of two.
(Photo used with permission from Dr. Diane Hennacy Powell, 2019.)

Perception

“No problem can be solved by the same level of consciousness that created it.”

—Albert Einstein

Suspended windows of colored glass filter high noon sun and swirling incense down the shadowed Tudor hallway, as the “hard” question of consciousness spins about the scientific sphere. How does our physical brain generate something so elusive as awareness? Dr. Diane Hennacy Powell has a theory, which she explains as she swivels her antique desk chair opposite the worn leather couch that she usually reserves for the patients she sees here at her home in

Medford, Oregon. Her theory hints at human psychic ability, such as telepathy—communication absent of any known sensory input—and other anomalous experiences that have been widely rejected by the scientific community. Her idea first started while on faculty at Harvard Medical School. Powell encountered a patient who claimed to be psychic. “She was aware of current circumstances in my life, and she made predictions for me that ended up being true.”

As a veteran neuropsychiatrist who specializes in brain function, Powell applies Einsteinian physics to the mystery of consciousness in an attempt to explain *psi*—psychic phenomena yet to be proven by physical or biological sciences. Her new theory denounces a century-outdated brain model, which experts highly depend on to understand how the brain works. The current model is based on materialism—the belief that nothing exists outside of the physical realm. Powell postulates that the primary function of the brain is not to generate information, as materialism dictates, but to *receive* it by means of an electromagnetic energy stream and then process it like a computer. She studies the extraordinary “psychic” capability demonstrated by autistic savants in combination with her research that suggests the brain’s glial cells could be the key to support her theory proving psi. “I have personally seen evidence,” she says. “There’s so much evidence, we’re just swimming in it.”

Parapsychology is the study of psi, a term derived from the twenty-third letter of the Greek alphabet, ψ . It also refers to the mythical Greek goddess, Psyche, whose name means “soul” or “mind.” Extrasensory perception—ESP—relates to psi abilities that occur outside of known channels. These include clairvoyance—having knowledge without means of attainment; precognition—knowledge of future events; and telepathy. Another type of psi is of physical character, called psychokinesis—influenced by a person “willing” an action.

Her chosen field of psychiatry taught Powell that beliefs in psychic phenomena are bred by mental instability and within two years of the 2009 publishing of her first book, *The ESP Enigma: The Scientific Case for Psychic Phenomena*, Powell herself was accused of being mentally unsound. A fellow psychiatrist reported to the Medical Board that Powell had written a book on ESP. Despite her clean mental health history, the Board voted to suspend her license for three months. During this time, she endured intense psychological and neurological testing. At the next Board meeting her license was restored. “When somebody attacks my character, and they admit they didn’t read my book, it’s because they don’t want to know.”

The ESP Enigma presents an array of documented psychic occurrences. Powell applies her medical training specific to brain function, her experience as a practicing psychotherapist, and her expert interpretation of parapsychology to scientifically explain how such phenomena could even be possible. At the time, critics dismissed the evidence presented in the book as entirely anecdotal. They said it lacked hard science. *Publishers Weekly* wrote in its literary review, “Powell is woefully short on mechanisms to explain the phenomena she claims are so common . . . her evidence is consistently below par.”

Powell thinks the cumulative data presented would have been considered sufficient evidence for other areas of research. She feels there has been a “massive campaign” against this kind of science. “Scientists in general have taken emotion out of their sense of what is important for proof.” She identifies “left-brained, analytical people” as least likely to experience psi and most likely to label anomalous experiences as *pseudo*, fake.

Powell attributes this reaction to lurking fear. Precognition, for example, denies free will. Telepathy robs us of private thoughts from inside our own minds. But Powell ascertains it is the study of anomalies like these, which are documented across spans of time and culture, that will

lead to a better understanding of consciousness. And while she feels that “most scientists have taken the stand that something as extraordinary as psychic phenomena requires the data to be extraordinary as well,” she offers a comparison of paranormal experiences to white crows. This is an idea that comes from the nineteenth century Harvard philosopher and “Father of American psychology,” William James. If you want to prove that not all crows are black, don’t go about trying to show that none of them are black. Instead, simply prove that one of them is white.

Conscious Conscience of the Collectively Unconscious

“I shall not commit the fashionable stupidity of regarding everything I cannot explain as a fraud.” –Carl Gustav Jung

From their raised perch on her hardwood desk, the plastic noodles of the brain replica peek over her shoulder as Powell verbally dismantles the current “inadequate” model that “does not account for significant scientific advancements.” Materialism dictates that the brain generates consciousness, it just can’t explain how. “The reality is,” Powell says, “nobody has an idea how the brain works; nobody has any idea how the brain would generate consciousness.” When solutions are limited to those that reside strictly within the brain, science cannot account for matters such as free will or creative thought.

Studies of the brain and its involvement with consciousness have thus far been focused on neurons. These cells are known for their ability to transmit information across a synaptic pathway—the small gap between cells used by a neurotransmitter to pass impulses. They only account for ten percent of all brain cells, but neurons grabbed the attention of researchers over a century ago with the invention of the Golgi stain, a technique used to make cells visible under a

microscope. Neurons selectively took up the stain, while the remaining “white matter” of the brain was visibly transparent.

There is no dispute that neurons contain information. As Powell describes, an injury to the brain can selectively wipe out all “vegetable” words while other vocabulary remains intact. But how is the brain able to efficiently integrate information if it is relying solely on neurotransmitters and their “clunky” chemical synapses? Powell suggests it is the work of the glial cells.

From the Greek word meaning “glue,” glia was once thought to function solely as support to neurons. Powell’s fingers wiggle the air around mention of the “all important” neurons—they can’t even survive in a petri dish without glial cells. On the contrary, glia in petri survive fine without neurons. These cells even appear to manipulate and orchestrate the activity of neurons by enveloping and monitoring the synapse.

The brain model Powell proposes is focused on a specific type of glia called astrocytes—“stars”—named for their similar shape. Comprising up to forty percent of the brain, astrocytes outnumber neurons two to one. Furthermore, they can explain how vivid dream thoughts are possible, while a brain model based on materialism cannot.

Neurons require sensory stimulation, which is absent during the dream state. Astrocytes function independently, which suggests that consciousness may transcend the brain. Consciousness could exist *outside* of the body. This supports Powell’s theory that the brain is not the source of information but is truly just its navigator. She postulates that data is conveyed by way of a scientifically established electromagnetic highway.

Powell regards the brain as a biological laptop, stating that artificial intelligence experts have calculated its processing power to be 10^{16} neuronal transmissions per second. That is only

10⁵ more processing power than today's computers that simply follow a binary string of logical yes and no questions to arrive at a conclusion. In comparison, the human brain has the capacity to simultaneously process multiple streams of information and choose much more complex answers from vast numbers of possibilities. "Most of the information we obtain about our surroundings involves electromagnetism," Powell explains.

Glial cells are "loaded" with potassium channels, which allow all cellular life to create an electric current that produces a magnetic field. Some of our evolutionary adaptations capitalize on electromagnetic energy, she says. The sensory organs in our heads detect varying frequencies and our eyes can locate electromagnetic waveforms. As part of her theory, Powell proposes that electromagnetic properties could provide a scientific explanation for such anomalous experiences as telepathy.

Renaissance Woman

"Learning never exhausts the mind." –Leonardo da Vinci

During her undergraduate studies at Ohio State University, Powell got "hooked" on the neurosciences—studies of the structure or function of the nervous system and the brain—thinking they would help her to understand consciousness. She later graduated from Johns Hopkins Medical School in 1983 and continued at Hopkins to complete her residency training in neuropsychiatry.

Her first memories are of living on the Hanford Reservation, a large research facility located in Washington State that produced military weapons until its closure in 1987 and was founded during WWII as part of the Manhattan Project—codename for the top-secret engineering of weaponized plutonium and the first atomic bomb. Powell remembers her father,

having already earned three graduate degrees, was studying the biological effects of radioactivity. “What I got from my father was this interest in science, in a very broad way.” She sat with him in his study for hours, working problems of reason like a puzzle. By the age of seven, she was solving high school math.

But for Powell, logic is just one function of the formula. Her mother was gifted with language and, not unlike Powell herself, was fluent in several. “I studied all the sciences, math and genetics, all that,” she says, “but I did so from within the humanities, comparative literature and language. I really developed an awareness of how cultural language choices limit or expand our sense of reality, which shapes our insight into psychology.” The multiple disciplines fed into her understanding of what she calls “the human condition.”

As a distant relative to the great peace advocate, Ammon Hennacy, Powell has contributed to publications on spirituality and human rights. Her works include *Beyond Forgiveness: Reflections on Atonement* and *The 2007 Shift Report: Evidence of a World Transforming*, in addition to the PBS documentary called *The Science of Peace*, on which she served as a panelist.

Her 1989 contributions in biological research for the International Human Genome Project helped reveal revolutionary evidence for the emerging field of epigenetics. It was found that “junk” DNA—what was once considered to be inconsequential to our gene composition—is in fact the control center for gene expression, similar to the way that neurons have overshadowed glial cells.

From the depths of the mansion, a clock *bongs* the second hour as Powell returns her story to the psychic she encountered at Harvard. The woman predicted where Powell and her family would eventually move, which job her husband would choose, and the birth of her only

daughter. Powell concludes that the “psychic” was somehow able to access remote information in a similar, yet more remarkable, way that autistic savants—individuals with autism who exhibit extraordinary and unique skills—seem to access profound knowledge from an unseen source.

At the London Institute of Psychiatry in 1987 Powell cultivated an expert understanding of autism and savant syndrome. During a recent control study, she examined a child named Ramses whose mother claims that he was telepathic with her since the time before his birth. Ramses could read seven languages out loud by the age of two and by four he was solving algebra.

“If anyone could prove telepathy,” Powell says, “I predicted it would be non-vocal autistic children with savant skills.”

She thinks telepathy shouldn’t be any more difficult to fathom than savant syndrome itself.

Absolute Apparition

“Yes, I have tricks in my pocket, I have things up my sleeve. But I am the opposite of a stage magician. He gives you illusion that has the appearance of truth. I give you truth in the pleasant disguise of illusion.” –Tennessee Williams

A young physicist by the name of Albert Einstein probably wasn’t fixated on psi when he published his theory on special relativity, but Hermann Minkowski built upon Einstein’s ideas about reality and illusion, and prophesized in 1908 that the dual concepts of space and time are “doomed to fade away into mere shadows.” The individual components of both time and space could actually be folded into one single four-dimensional construct that Minkowski called “spacetime.”

Today, Powell uses a study field of four-dimensional holographic design to investigate the parameters of remote information retrieval. She describes the concept similar to a light signal moving through spacetime. “What’s hard for people is this nonlocality thing,” she says, “and that’s because we’re fooled into thinking that this world is three dimensional, and we’re tricked to believe that time moves forward like an arrow.”

Her description of a “true holograph” registers no loss of time. Its message would deliver instantly, as if traveling through no space. Since lasers are used in laboratories to create holograms, Powell is investigating biological connections to light, reality perception, and information retrieval. Science has shown that biological beings emit biophotons, what Powell describes as “informational packets of light,” so we know that humans literally glow. While this has pleased new-age thinkers, who claim to have the ability to see colorful fields of “aura” energy emanating from a body, Powell also finds potential to prove psychic communication.

Neurons contain microtubules, cylindrical structures that transmit light with uniform frequency and have significant electromagnetic properties. She proposes that they signal coherent light as a means to encode information, possibly mimicking lasers by forming an organic fiber-optic system. All it takes is interference patterns created by light waves from two lasers to create a three-dimensional holographic image, and Powell sees the possibility for information storage within this design. “Data about everything is embedded everywhere.” Her chair *sproings* from her excitement. “So, if all the information is right here,” she points to a spot next to her, “that means all the information is right here,” she points to a different spot. “Just like it’s right there, too. And there, and there.”

If it’s true, then Powell might also discover an explanation for an illusionary experience that piqued her curiosity at the age of thirteen. A magician performing at her friend’s birthday

party asked her to choose any book from the shelf. There were so many books, so she was astonished when the magician read from across the room each selection exactly as it was written. She checked around for hidden mirrors, any sort of tricks. She found none, but “seeking the truth” became her life’s work. “If we don’t have a model for understanding all phenomena,” she concludes, “we also don’t have one to discount anomalous experiences.”

One

“...while some may see them as the crazy ones, we see genius, because the ones who are crazy enough to think that they can change the world, are the ones who do.” –Steve Jobs

Powell’s most recent work is part of the worldwide movement for positive mental health, and the prevention of suicide. According to the National Center for Health Statistics, suicide is the second leading cause of death for people ages ten to thirty-four. Playing the role of a psychiatrist treating the mother of a suicide victim, Powell appears in Michel Pascal’s Sundance Festival docudrama, *I Am Never Alone*. It is expected to release in February 2020. “When someone takes their own life,” Powell says, “they’re in a spiritual crisis.”

She is further collaborating with Pascal to create a film documentary that explores infinite life and the question of reincarnation, belief that the soul is reborn into a different body following death.

On December 10, 2019, she will appear at Carnegie Hall as a guest speaker with producer Pascal who will perform meditative singing, along with inspirational author, Deepak Chopra. The event supports the global movement, #NeverAlone.

“This type of work,” Powell says, “will have a much larger impact on people.”

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