

“The mystical brain: Neurotheology and the Spiritual experience; Implications for Unitarian Universalists”

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Good morning everyone. Today, I dedicate my talk to Joan Burnett who has worked to provide our Nature Coast Unitarian Universalists congregation with inspirational talks to awaken our spirits and move us towards dimensions of truth. Talks that remind us that Unitarian Universalism is a living tradition, open to change through questioning, direct experience, and the reason of science. In the eulogy for the late physicist Stephen Hawking, the Reverend John Hall, Dean of Westminster Chapel in London said: “We believe it to be vital that science and religion work together to seek to answer the great questions of the mystery of life and of the universe.” Currently, there is an expanding interest worldwide by theologians and scientists regarding the science of religion better known as neurotheology. Today, I am going to be talking to you about neurotheology and the mystical mind.

First, a story ... It's a mid summer's eve at the small one room Church of Christ in rural Double Creek, North Carolina. The only two areas of public interest near here are Mount Airy, home of Andy Griffith, and Pilot Mountain, a prominent landmark for Indians and settlers of earlier times. The evening is hot and humid and the windows are open with a faint breeze being drawn by the open doors at the back of the sanctuary.

The congregation is fanning in a quasi rhythm with those old timey paddle fans (some of you remember the ones with the ads for local merchants on the back).

The rousing music of the Virginia based quartet has finished some time ago.

I'm a young boy of 8 or 9 years of age sitting with my grandfather looking at a painting of Jesus staring up at the heavens out of the baptismal font in the front of the church; a halo around his head and a dove lingering above while John the Baptist looks on. We are listening to the guest preacher who has been invited from outside the area to lead the annual summer revival. He has just finished the story from the Book of Daniel, Chapter 3, of Shadrach, Meshach and Abednego and the fiery furnace. The tempo in his sermon is starting to pick up speed and intensity, and the story now interweaves with scenarios of hellfire and brimstone, and the all powerful saving grace of the blood of Jesus.

I feel a change in the energy in the room as people begin to move about us.

One woman who was just sitting next to us is now lying in the middle of the floor just outside our pew shaking and evoking strange incantations. Others are assisting people who appear to be weak-kneed and lost in some trance induced teary-eyed bliss. What on earth was happening?

I would later hear from my grandfather that some of the congregates were overtaken by the holy spirit and that the sounds emitted were those outside our realm of understanding.

The Lord God had spoken through these folks in the power of tongues or glossolalia. Truth or fiction as to what I had been told, I did not forget this experience. Fast forward some 60 years and Jerry Stoltzfoose, pastor of the Freedom Valley Worship Center in Gettysburg, Pennsylvania is lying on an exam table at the University of Pennsylvania Medical Center being prepared for a nuclear medicine procedure. A gamma-emitting radioisotope is racing into his bloodstream. He is being prepared for brain imaging, not for the diagnosis of a neurological disease, but rather for monitoring during a session of speaking in tongues. The physician in charge of the procedure is Dr. Andrew Newberg, one of the world's leading experts in the study of spirituality and the brain. He has spent almost 3 decades conducting neurotheology research. I'll share the results of his neuro-imaging session with pastor Stoltzfoose later in the talk. The term neurotheology was coined by Aldous Huxley in his prophetic book *Island* in 1962.

The first usage of the term neurotheology in a scientific context is attributed to James Ashbrook in his 1984 article titled: Neurotheology: The working brain and work of theology. Ten years later Lawrence McKinney's classic (1994) book Neurotheology: Virtual Religion in the 21st Century gave the field its official name.

Early on, the work of neurotheology was to attempt to identify whether or not a specific 'God spot' exists within the brain. Now, as opposed to a specific God spot, advanced neuroimaging has revealed multiple areas of brain activation and deactivation during mystical experiences. Dr. Newberg and others suggest that a mystical mind is intrinsic to every human being and accessible to all of us given the right set of circumstances. A current definition for neurotheology that I prefer comes from the Iranian Journal of Neurology. The definition states: "Neurotheology is the ... field of study that seeks to understand the relationship between brain science and religion and strives to explain the neurological ground for spiritual-mystical experiences such as: "the perception that time ... or self-consciousness have dissolved, and there is a feeling of oneness with the universe." In their writings, William James and Frederick Happold describe key characteristics of a mystical experience: First, the experience can defy our adequate description and expression. The experience may provide us with insights and illuminations about our life or spiritual journey. A mystical experience is typically brief and cannot be sustained for long. We can facilitate the mystical experience by voluntary practices and behaviors, however, when mystical consciousness sets in, it is not unusual to feel that our own will is in abeyance, and we are held by a superior power or intelligence. A very common characteristic of the mystical experience is the perception of the oneness of everything. Happold states: "To the mystic is given that unifying vision of the One in the All and the All in the One." (Happold 1990: 47) James and Happold tell us that "The mystical experience is not understandable unless we are prepared to accept that there may be an entirely different dimension from that of clock time or indeed of any other sort of time." The mystic "feels himself or herself to be in a dimension where time is not, where all is always now." (Happold 1990: 48)

Present studies of the mystical experience are facilitated by new technologies, with breakthrough advances in neuroscience. Dr. David Linden, professor of neuroscience at Johns Hopkins states: "neuroscience is fundamental to understand our human experience and the biological substrate of our humanity, the brain." Our brain, a three pound mass of soft tissue encased in the human skull is considered the most complex organ of the human body. Bill Ambrose, president of Ambrose Enterprises who developed a series of videos on the brain goes so far as to call the brain the most complex organism in the universe. Neuroscientists contend that our brain contains approximately one hundred billion cells or neurons with over one hundred trillion connections between them. A miraculous design in the physical spacing between the neurons typically prevents the hardwiring of the neurons which leads to neuroplasticity, and our ability to learn and change our minds and our behaviors over a lifetime.

Today on PubMed a database of biomedical literature, there are over 150 papers that have looked at the effects of various spiritual practices on the human brain and body. Positive effects include improvements in depression and anxiety, decrease in blood pressure, enhanced immune system functioning, and reduced overall mortality associated with people who have regular spiritual practices. Dr. David Spiegel, medical director of integrative medicine at Stanford University says that spiritual practices like meditation and prayer involve parts of the brain that are significant for self-reflection and self-soothing. His research shows that prayer and meditation can lower our reactivity to traumatic and negative events, and be very useful in situations where we're barely able to cope. During times of stress, our central nervous system becomes hyper-activated and can prevent us from thinking clearly, and over time, can lead to various physical, psychological, and behavioral problems. According to Dr. Spiegel and others, when we engage in spiritual practices such as meditation and prayer, we trigger a cocktail of brain chemicals and hormones that lead to a more healthy relaxation response during life's stressors. I saw this first hand in my clinical practice with patients who suffered from stuttering conditions, voice disorders, and tinnitus disturbances.

These conditions were exacerbated by increased stress and central nervous system arousal. The conditions were also improved and in some cases eliminated with biofeedback, autogenic training, and the learning of meditation techniques and relaxation responses (such as those developed by Dr. Bensen at Harvard Medical School). It is clearly documented that spiritual related practices can alleviate physical and emotional pain and suffering, and provide benefit in our everyday stressful lives. So, beyond some of the empirical health benefits of spiritual related activities, why should we be interested in Neurotheology?

Well, as Unitarian Universalists we are seekers by nature and our minds are open to the possibility that we can find truth in the many messages that come our way. In her sermon titled: The Dance of Science and Religion, UU Reverend Ellen Cooper Davis asserts that “neurotheology matters to us as people of a liberal faith because we

are the people who expect you to bring your brain to church.” We affirm she says, “the discoveries of science as one of the forces of wisdom from which our living tradition draws.”

Rev Davis believes that Neurotheology “will provide Unitarian Universalists with new ways to think about and articulate our spiritual journeys.”

She feels that our UU voices for diversity and inclusion can appear irrelevant in the increasing polarized culture where the fundamentalism of either believing or

non-believing are the only options that get taken seriously. The neurotheology

assertion that religious, spiritual, or mystical experience need not be exclusive, fits well with the UU principle of a free and responsible search for truth and meaning. Reverend Davis sums it up when she says that “rather than one religion being right and everyone else being wrong, there are many valued ways of reaching the “unitary mind state” that is associated with a deep spiritual (mystical) experience.” To me, her use of the phrase “unitary mind state” is a key concept in the quest for spiritual freedom and diversity.

A “unitary mind state” appears at first glance to be counter to freedom and diversity. However, on examination at the neurobiological level there is a paradox encountered where we can experience unique spiritual, mystical events while displaying a “unitary mind state” as revealed through various neuroimaging procedures. Neurotheology is documenting that when it comes to viewing the mystical mind, we just may be unitarian and universal. I agree with Reverend Davis in feeling that neurotheology can offer a great deal to our intra-faith religious discussions if we enter the findings with open minds and hearts. Which leads me back to pastor Stoltzfoose and the results of his brain imaging session during his speaking in tongues. Science has identified that the part of the brain that makes us individual as humans is the cerebral cortex; specifically the frontal lobes primarily situated behind our eyes.

Dr. Newberg has captured imaging data recorded from pastor Stoltzfoose’s experience of speaking in tongues. The images revealed severely decreased activity in his frontal lobes during the speaking in tongues.

Now to the skeptic, this finding supports the idea that the expressions emitted from speaking in tongues are nothing more than uncontrolled, meaningless babble. To pastor Stoltzfoose, the absence of frontal lobe activity is seen as evidence that his speaking in tongues is in fact not generated by his human mind, but rather by surrender to the will of God that overtakes him.

We may scoff at this position, but listen to the words of Sir John Eccles, Nobel Laureate.

He says, “after a lifetime of study it became apparent that the brain is not the origin of the mind but the other way around. The mind controls the brain, which acts as a receiving station (like a radio) with thoughts being similar to radio waves and the brain being similar to the receiver.” The Dalai Lama has stated that “the idea that brains create consciousness is a metaphysical assumption, and not a scientific fact.”

Dr. Neal Grossman retired associate professor of philosophy at the University of Illinois states: We believe that we can now assert, not only as a matter of faith, but also as a matter of science, that consciousness is independent of the brain.” The question remains, is this independent consciousness GOD?

Reverend Cooper reminds us that: "One of the primary tenets of Unitarian Universalists' faith is our belief that revelation is not sealed, that new truth is constantly breaking forth into our lives and into our world ..."

"It is a sign of great hope she says that in this present culture of extremes that Unitarian Universalism has a friend in science."

Michael Pupin writes in the New Reformation that ... "the work of leading people into their spiritual heritage is the work of religion and science."

Of all religious organizations, Unitarian Universalists may be in the best position to utilize neurotheology to lead people to their spiritual heritage, as we in our principles "affirm and promote the wise counsel to heed the guidance of reason and the results of science."

Michael Pupin also tells us, "science and religion supplement each other, they are the pillars of the portal through which we enter into the world where divinity resides." That world where divinity resides lies within the neurobiological "unitary mind state." Not with the petty differences supported by orthodox religious bias, but within the pure light of the mystic within each of us.

Charles Bennett author of *A Philosophical Study of Mysticism* says: "The mystics themselves have described their attainment as a seeing into the meaning of the universe, a seeing of how all things fit together." They have come forth and said in unison: there is another kingdom in Nature. This Kingdom has its own laws, its own phenomena, and its own intimate relationships. It is the kingdom of the spirit." "We have found it and you too can ascertain its nature." He goes on to say "that there is a process where we no longer need to seek a vision of divine reality, but know ourselves to be that reality itself." How do we accomplish this process?

In his book, *Letting go: The pathway to surrender*, Dr. David Hawkins tells us that: "our innate capacities for wellbeing and inner peace are within all of us."

"They do not depend on outer circumstance or personal characteristic; they do not require belief in any religious system." The message of Christ and of every great teacher is that the "Kingdom of Heaven is within us."

Dr. Hawkins asks: "if the kingdom of heaven is within us, why do we often "feel like hell"? "How can we get free of the sludge of non-peace and escape the negative feelings and judgments that muffle the mystical mind within us?"

The answer, which appears to be counter-intuitive to all of our worldly conditioning is "letting go" ... Letting go of our Ego-Self. Dr. Hawkins affirms that "surrender of the ego-self is the surest route to total fulfillment." One of the most significant findings in Dr. Newberg's neurotheology research into the *Talking in Tongues* is the shutting down of the frontal lobes and the "letting go" that we hear about in the mystical experience.

Long ago, we ate of the fruit of the tree of knowledge and that may suffice for living in this world, but appears as a distinct disadvantage for entering the kingdom of the mystic, the home of the spirit, and the resting place of our true being. Neurotheology has shown us that the answer lies in images on an MRI screen as our ego-self is relinquished, and the mystical "unitary mind state" overtakes our cranial space.

UU Hymnal reading #655 reminds us "that in searching for the truth be ready for the unexpected." I certainly did not expect that the neurotheology research by Dr.

Newberg would lead me to discover that the mystical "unitary mind state" is being sought after by so many segments of society.

In particular, I was blown away by the writings of Stephen Kotler and Jamie Wheal in their book *Stealing Fire*. They describe that millions of dollars of advanced imaging equipment is currently being utilized in a "mind gym" specially constructed in Norfolk Virginia, where Navy Seals learn to enter a "unitary mind state" that they call ecstasis. The term ecstasis was first described by Plato, and like the mystical experience, the normal waking consciousness is replaced by two components: Extreme euphoria and the sense of connection to a higher power and greater intelligence. Once entering ecstasis, the Seals' awareness shifts and they stop acting like individuals and start acting as a single entity ... or what they describe as the "hive mind." A senior military official relates that "more than any

other skill, SEALs rely on this merger of consciousness as the real secret to being a SEAL." Once entering a state of ecstasis the SEALs' brains are in an altered reality and they experience a sense of selflessness and timelessness where super performance becomes possible. And, if this wasn't enough, their EEG readings show that like pastor Stoltzfoose the prefrontal cortex of their brains, the seat of the individual self, shuts down. Their brain chemistry changes, and they merge into the "unitary mind state" described by mystics down the ages. Additionally, Kotler and Wheal discovered in their research that well beyond the SEALs, the quest for the mystical "unitary mind state" has expanded into professional athletics, fortune 500 companies, financial organizations, tech firms like Google, health care providers, and universities around the world. The idea that a mystical "unitary mind state" can improve life experience and performance is now mainstream. With neurotheology leading the way, we now have access to the precise adjustments to our body and brain that let us create mystical states ourselves at will. To use the words of Dr. Newberg, "technology is providing us with a cliff notes version of ... how to encounter the divine." Recently, I lost a best friend and mentor of 40 years Dr. Tony Zenner. Tony was a devoted Speech-Language Pathologist and scientist to the end. A reformed catholic, he didn't suffer orthodox religious ideals, but he did, I believe, have a slant towards the mystical. A short while back, Tony wrote a book titled *The Last Ride Up* detailing a horse trip with a friend into the Montana mountains. In his chapter on *The Meaning of Life On a Horse* Tony writes: "I found myself on a horse going up a mountain in the middle of somewhere; wondering what I would find out about me and my place in the universe."

"In preparing for such an event", he says "you absolutely must shed all biases, prejudices, and guilt, and have opened your mind emotionally to the unknown."

He reiterated his personal rules for discovery as he prepared for his journey: PROMISE yourself to not be afraid ... of the process or the results. Be resolute in allowing the process to happen and continue. Open your mind to "incoming" without filtration. FEEL your open mind transferring to your total self ... ACTUALIZE. ACTUALIZE, that is the word of the day. For without actualization, there is no need for the pentecostalist to talk in tongues, or the Navy Seal to enter ecstasis, or the Google Tech and Athlete to go into FLOW, or for you and I to experience the "unitary mind state" described by the Reverend Cooper.

After experiencing the mystical mind, which neurotheology affirms is our birthright, our work really begins. In her book *The Work: Eso-teri-cism and Christian Psychology*, which I highly recommend, Rebecca Nottingham writes: "that with the authentic experience of the mystical mind everything will be different about a person transformed in this way."

You can expect she says to see ... peace, patience, tolerance, humility, a distinct absence of negativity, and an appreciation of life under all circumstances. I would add to this Eckhart Tolle's description: "more joy ... right now."

Jack Kornfield relates in his wonderful book *After the Ecstasy, the Laundry* that there is no fixed path for us to follow to encounter the mystical mind. He tells us: "that whenever we have the experience of touching the timeless reality of the mystical mind, we are healed. It may, he says, come to us when we are caught in fear or longing, love or jealousy, joy or anger, success or failure, or lost in the melodrama of our life.

Then in a moment we will hear a quiet voice say, "I really got caught up by that one, didn't I?" and in that moment we laugh and are free." That is the freedom of a mystical mind ... which Neurotheology asserts is available to all of us ... here and now. As Unitarian Universalists we are blessed to have a friend in science, and for the opportunity to discover and share the mystical mind ... the divine, through living out the Unitarian Universalists' principles and practices. Now, as my friend Tony would say, it's up to each of us ... to ACTUALIZE. Thank you and peace be with you during these critical times.

The End.