



NEIGHBORHOOD UNITARIAN UNIVERSALIST CHURCH

Extreme Exertion, Mild Dehydration and Hypoxia . . . or Touching Tao

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July 27, 2014

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“Spirit of Life, Come unto me.” We sing this each week, but do we really think about the words? Spirit of life, come unto me. . . What would we do if it did? Whatever you think of as that spirit – God, Goddess, Tao or Cosmic Consciousness. What if suddenly in a moment of grace that opened up to you?

Or perhaps it has . . . It has for me.

In 1981 I climbed a 13,000 foot peak in the backcountry of Yosemite. It was not the first mountain I had climbed, nor would it be the last. But this time . . . well. There was no clear trail to the top but I could see the rocky summit gleaming through the snow. My hiking partner had stopped halfway up but I was determined to stand on the summit, even if I went alone. I had climbed nearly an hour when I paused for a rest. I was probably about 12,000 feet high. I sat listening to the song of a tiny bird perched on a rock about 10 feet from my head. The song was a wonderful variety of trills and notes that were inexpressibly pure, a river of sound from such a tiny thing. My senses seemed more alive, and that song entered my soul with no impediment from thought. It was as though there was no “me” between us, merely pure being touching pure being. I know of no words for the experience, “connection” is too thin. I was the song.

As I resumed, the climb got steeper and rockier with patches of snow. I turned into a walking/climbing automaton, heading relentlessly toward the peak shimmering in the blue sky ahead. I kept looking up and telling it – I’m coming, I’m coming. My mind drifted free of my body and sheer will alone kept it moving. I could hear my breath, feel my heartbeat, but they were distant trivial things.

The wind and a faint gurgle of melting snow became the only extraneous noise. All else was silence. I felt less and less of an interloper, more a part of the mountain with each step. The mountain took on an *aliveness* for me and welcomed me into its soul. How else to describe the experience? I was not a separate entity, toiling up its side, but a part of it. I knew everything that was on the mountain, beyond merely what my eyes could see. I felt the life sheltered under the rocks, the marmots and the birds. Pausing for breath, I closed my eyes and saw the small alpine flowers growing in sandy spots between boulders ahead. *And they were there.* I felt the trickle of melting snow through the rocks as if it were my own blood. *And it was there.* I knew everything that was on that mountain. It sounds terribly mystical, but it was so.

At the top I looked around and found a shimmering totality of life, a great whole Being, extending into the valley, embracing the mountains and the lakes clear to the horizons. Within was the great living Being, *this world*, and *I was part of it*. I had entered the heart and soul of the mountain.

More than 30 years later *this* moment of grace remains vivid in my memory. Time had stopped. Thought had stopped. Self had expanded, and found acceptance in the wider world.

Unknowingly, somehow I had climbed into the Tao, that Cosmic Consciousness. The Spirit of Life *had* come unto me.

And then . . . I had to come down, back to normal life. Sometimes I try to convince myself that it was nothing more than extreme exertion, mild dehydration and hypoxia. How else to integrate such an experience with the rational part of myself, with my logical left brain?

We are quite familiar with the logical, word-focused left side of our brain. We *like* definitions, logical connections and reasons. Much of our self talk is done in words, we process our experiences verbally. As a congregation I would bet most of us prefer to function this way. Yet we sing for the Spirit of Life to come unto us. Not so rational, is it? If you talk to people who backpack, or who sail or just stare in awe at some great natural wonder, many are not surprised. Experiences of RMSE - Religious, Mystical or Spiritual Experiences as they are termed in the current literature - are quite common. In 2009 The Pew Forum reported that

“Nearly half of the public (49%) says they have had a religious or mystical experience, defined as a “moment of sudden religious insight or awakening.” This is similar to a survey conducted in 2006 but much higher than in surveys conducted in 1976 and 1994 and more than twice as high as a 1962 Gallup survey (22%). In fact, this year’s survey finds that religious and mystical experiences are more common today among those who are unaffiliated with any particular religion (30%) than they were in the 1960s among the public as whole (22%).”ⁱ

Two other researchers, Laski and Greely, independently found that “natural triggers” accounted for 20 - 45% of the total RMSEs they studied.ⁱⁱ

Well, as can be expected, there has been a great deal of research into such experiences. From William James’s experiments with nitrous oxide in 1882, where he wrote out his profound “insights”, later seen as verbal nonsenseⁱⁱⁱ, to Dr. Michael Persinger’s stimulation of the right temporal lobes with electromagnetic waves, commonly called “The God Helmet” – researchers have sought to induce an RMSE. RMSEs are generally characterized by loss of the sense of self, of space and time, associated with a profound sense of emotion. Current research in the neurosciences has been focused on the identification of the neuroanatomy, or on the neurotransmitters most active during intense spiritual activities. Most of the contemporary research is termed “Reductionist” – *which* parts of the brain are working and *how* do they do so.

Neuroimaging studies are frequent, some with Qualitative Electroencephalogram, or QEEG as a control. Dr. Andrew Newberg has studied a wide variety of spiritual experiences with neuroimaging, ranging from Tibetan monks in deep meditation and Franciscan nuns in deep prayer to charismatic Christians speaking in tongues and spirit writers in Brazil. He finds the frontal lobes activate in those doing focusing activities such as prayer, conversely they shut down for “flow” activities, such as speaking in tongues. But *all* groups quieted the right temporal lobe – our source of the sense of self and of our physical space.

Others travel different research pathways, like Dr. Persinger, with his “God Helmet”, or those studying the deeper mechanics of neurotransmitters, called the “God Molecule” in one popular book. Even human evolution and genetics have been considered. In his book with the provocative title, *Did Man Create God: Is Your Spiritual Brain at Peace with your Thinking Brain?*, Dr. David E. Comings argues for an evolutionary-based, brain-constructed spiritual function. It’s all genetics, a survival mechanism to enhance social groups and reduce our fear of death. “Spirituality is hard-wired into the brain.” he says.^{iv} Search Google and you will find a wide variety of these researchers writing for non-scientific audiences. You can even buy a “God Helmet” to try out for yourself.

It seems as though I’m not the only one seeking answers.

But there is a problem. Most of these popular books are nothing more than anecdotal reports or they tout mystical states that are notoriously non-replicable and fail in double-blind studies, as did the “God Helmet”. The peer-reviewed studies, such as those of Dr. Newberg, tend to be descriptive, without drawing any unsupported conclusions about the reality of the experience itself. And most take the reductionist perspective, that these experiences are nothing more than internal brain activity.

Where does all this leave us? The areas of the brain active during an RMSE are known, but not *how* the experience happens. The neurotransmitters involved are known, but these are not unique molecules, they follow common pathways. Studies of the shape of Neanderthal brains or their burials, surveys of spirituality among twins, and other similar social research lead some to conclude it’s all genetic hard-wiring with *no true external source*. Scientists agree that merely imaging a portion of the brain does not specify what that portion is doing. We cannot image the thought or the experience. Neuroanatomy alone cannot account for something as “simple” as mind, much less a mystical experience.

Despite all the fascinating research, there is little help for those of us who seek to understand rationally the experience of becoming one with the mountain.

But with rereading that journal entry I find that in many ways it was like a deep meditation. Now I have to confess, I had a great deal of trouble learning to meditate. Each time I tried to focus my attention on my breath - *in and out*, I found myself getting short of breath. I found myself breathing deeper, faster. Meditation went out the window. I do better focusing on a phrase. Perhaps that is how I quiet my chattering left brain. Looking back over the experience on the mountain, I had focused my attention on the peak. I expected to be short of breath at that altitude. My breath, my heartbeat and eventually my self became distant as I climbed. The right temporal lobe quieted. The song of the bird entered me as music does, directly bypassing thought. Perhaps this is what put me in a place of frontal lobe focus. “I’m Coming” became a chant, a sort of prayer. A sort of meditation similar to those in which expansion of the self and merging with the Oneness has been reported.

In his book *Zen and the Brain*, Dr. James H. Austin analyzes his own meditation experiences from his perspective as a neurologist. Dr. Austin has trained in Zen meditation extensively, including several long retreats in Japan and London. He takes the neuroanatomy and the neurochemistry apart, giving possible explanations for aspects of the RMSEs reported by generations of Buddhist teachers. He is reductionist by nature, but is so aware of his own intense spiritual experiences that he admits, after 700 pages, there *is* something beyond the physical brain and its chemistry, beyond merely its interconnecting neurons. He says "Have we learned anything about meditation? If so, it will not be from applying EEG electrodes to the scalp, but from the deeper act of practicing the meditative mode ourselves and infusing it into the present moment. Finally each day's practice starts to become life's meditation, by one life, within all life. "v

Perhaps if we consider the spiritual experience as a sort of *emergent* property of mind and brain we can feel comfortable not explaining everything. The concept of Emergence, or that the whole is greater than the sum of its parts, originated in the social sciences. It is controversial in the hard sciences, such as neuroanatomy. Still, consider the blending of two gases - hydrogen and oxygen. There is nothing in the properties of either of these two gases that would predict *water*. And not just water, but water in all its interesting phase changes: ice, snowflakes, clouds. Could there be in the interaction of the physical brain some *emergent property* that under the right conditions of focus and rhythm leads to an unfolding of our inherent spiritual nature, connecting us with Something outside the purely physical realm?

Was my summit experience merely a brain flooded with the chemicals of fatigue and exertion, mildly dehydrated and a little hypoxic?

A brain flooded with sensory input after intense meditative focus?

Or something bigger, Something outside that poor tired brain?

Did the Spirit of Life, *outside of myself*, truly come unto me?

What makes anything true? *Truth* is a category. It comes from our left brain, our logical brain and RMSEs typically come from the right brain, defying logical explanation for those who experience them. Even Dr. Austin had to admit his own satori experiences were beyond words. Could a "leap of faith" mean acceptance that we do not understand it all? That the words do not map to the experience as they would for an inanimate object such as mountain. There is an old saying: facts are what happened, truths are about what those events mean. As the Tao Te Ching tells us "the core and the surface are essentially the same, words making them seem different only to express appearance. If names be needed, wonder names them both. From wonder into wonder existence opens."

The truth is . . . I have no ultimate answer. Was it real? It was for me. Before I even knew "Spirit of Life" my leap of faith was to believe it to be true, to assign a meaning I cannot defend

logically. From wonder into wonder, somewhere along that climb, existence opened for me. I hope that someday it will for you as well.

ⁱ <http://www.pewforum.org/2009/12/09/many-americans-mix-multiple-faiths/>

ⁱⁱ Lasky, Marghanita *Ecstasy, A Study of Some Secular and Religious Experiences* (Available on Google Books) and Greeley, Andrew *The Sociology of the Paranormal: A Reconnaissance* (also on Google books)

ⁱⁱⁱ Taken from Atlantic Monthly 1996 <http://www.general-anaesthesia.com/misc/nitrous-philosophy.html>;
also <http://www.uky.edu/~eushe2/Pajares/jnitrous.html>

^{iv} Comings, David Did Man Create God? (Pg 502)

^v Austin, James H., M.D. Zen and the Brain, (pg 697)