

# Brief Support For Neurotheology

## East & West Worldview

Franklin Carnes

For the longest time I have been interested in both the sciences and in religion. As a child growing up in a Unitarian Universalist church I was taught to observe and draw the perennial threads from various practices. Interestingly enough, despite this open view of what religion is, I was also taught by the mainstream that science and religion are not to be mixed. One thing that I drew from each religion, however, is that each seems to be a science of its own. Thus, over the past year or so I've taken time off school to learn a bit more about religion and the mind, essentially to delve into neurotheology. A relatively new field of science, finally there is a widespread recognition of the overlaps between science and religion, highlighting the merits of cross-cultural examination/collaboration and the value of having the two coalesce. By integrating the sciences with religion, the Western sciences can avoid having to reinvent the wheel in many senses and stands to gain a lot from the sea of knowledge available in the East. The West has been known to be space of progressive, experimental, and scientific knowledge. Generally this meant moving away from Religion for answers and towards the humanities instead. What scientific value has Eastern religion got to the West?

As it turns out, there is quite a bit of scientific value. In the Hindu cultures there is a large focus in yoga on breathing, as well as in Buddhism. In Hinduism this is known as Pranayama (प्राणायाम) and is described as a way to balance your life force, a way to sustain your body. As it turns out, beyond the anecdotal evidence for Pranayama, various research and medical institutions across the world have begun research and found that such exercises do have beneficial effects on your body and your health. These range from stimulation of your

limbic system<sup>1</sup>, decrease in depression (by healthy activation of the GABA system)<sup>2</sup>, and stimulation of your vagus nerve (your 'rest and digest' system)<sup>3</sup>.

Instead of focusing on the merits of Yoga, I would like to bring the focus to another system being researched in the West. Being a sort of existential therapy, Buddhism is one of the first religions being brought in to bridge the gap and clear up various preconceptions about the relationship between religion and science. There are many practices to be found in the Buddhist traditions regarding how to identify your state of being and how to make it more balanced. One technique is an interpersonal dialogue to work through the knots in one's mind and to calm the waters, so to speak. In other words, to take notice when your mood starts to deteriorate and to then disengage yourself from negative thoughts and rumination<sup>4</sup>.

Another of the many practices that is starting to catch on in the West (moreso, at least, over the last decade or so) is meditation. Meditation is one of the ancient practices prescribed by Buddhist teachers over the centuries that is now being researched in the West. I believe it is quite related to the Pranayama of Hinduism, for a large part of meditation is the regulation of breathing. Richie Davidson at the University of Wisconsin - Madison has conducted, and is conducting, research on how the Buddhist religion and how serious, intentful practice effect the brain.

One discovery was that meditation and mindfulness practices have beneficial effects on the neuroplasticity of the brain<sup>5</sup>. A few other such studies conducted elsewhere recently found that meditation reduces the rate at which your telomeres shorten<sup>6</sup>, in other words, increasing the

---

<sup>1</sup> [http://www.huffingtonpost.co.uk/entry/breathing-in-nose-boosts-memory\\_uk\\_584a8bf8e4b0b7ff851cc59d](http://www.huffingtonpost.co.uk/entry/breathing-in-nose-boosts-memory_uk_584a8bf8e4b0b7ff851cc59d)

<sup>2</sup> <https://www.ncbi.nlm.nih.gov/pubmed/22365651>

<sup>3</sup> [http://www.huffingtonpost.com/kripalu/yoga-practice\\_b\\_4762303.html](http://www.huffingtonpost.com/kripalu/yoga-practice_b_4762303.html)

<sup>4</sup>

[https://www.researchgate.net/profile/William\\_Marchand/publication/229160025\\_Mindfulness-Based\\_Stress\\_Reduction\\_Mindfulness-Based\\_Cognitive\\_Therapy\\_and\\_Zen\\_Meditation\\_for\\_Depression\\_Anxiety\\_Pain\\_and\\_Psychological\\_Distress/links/00463528307ab3cf40000000.pdf](https://www.researchgate.net/profile/William_Marchand/publication/229160025_Mindfulness-Based_Stress_Reduction_Mindfulness-Based_Cognitive_Therapy_and_Zen_Meditation_for_Depression_Anxiety_Pain_and_Psychological_Distress/links/00463528307ab3cf40000000.pdf)

<sup>5</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2944261/>

<sup>6</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3057175/>

amount of times your cells can reproduce (the shorter your telomeres, the less your cells reproduce, the sooner you die). Meditation is also showing to preserve your brain structure and to maintain levels of grey and white matter in the brain, thus reducing the rate at which your brain degenerates<sup>7</sup>.

To take it a step further, not only is research finding various religious practices and theories to be scientifically true<sup>8</sup>, researchers are finding that psychedelics can catalyze such religious experiences and produce similar therapeutic effects. Psychedelics, like religion, were rather taboo in our society for a while, at least in terms of combining them with science and therapy. Now it is being found that the way a psychedelic is able to bring one keen awareness of the senses, and thus to separate the senses from the self, is pretty similar to the way Buddhism teaches you to frame life. The realizations introduced can help guide one towards a healthier mind and body<sup>9</sup>. Both affecting the senses of a person, these “..techniques that mediate experiential access to the unconscious tend to activate initially the sensory organs... They seem to represent a *sensory barrier* that one has to pass through before the journey into one’s psyche can begin” (Grof, 1988)<sup>10</sup>. I won’t go too far into this now, though I thought it was worth mentioning because the religions of the East definitely include entheogenic substances in their traditions.

By observing Eastern traditions we can gain quite a bit of insight into how the mind, body, and soul are united, and how to experience and mediate this trinity. While many subscribe to Western or Eastern ideals specifically, perhaps solely, science and tradition are

---

<sup>7</sup> [http://www.huffingtonpost.com/sonimacom/the-science-of-meditations-effects-on-aging\\_b\\_8688678.html](http://www.huffingtonpost.com/sonimacom/the-science-of-meditations-effects-on-aging_b_8688678.html)

<sup>8</sup> <http://qz.com/852486/cognitive-science-backs-up-the-ancient-indian-philosophy-that-were-conscious-even-in-deep-sleep/>

<sup>9</sup> [https://s3-us-west-1.amazonaws.com/mapscontent/research-archive/published/Mithoefer\\_Grof\\_Brewerton\\_2016.pdf](https://s3-us-west-1.amazonaws.com/mapscontent/research-archive/published/Mithoefer_Grof_Brewerton_2016.pdf)

<sup>10</sup> Adventure of Self-Discovery, The: Dimensions of Consciousness and New Perspectives in Psychotherapy and Inner Exploration - Stanislav Grof

joining forces to help humanity progress, avoiding having to reinvent the wheel in many ways,  
and to reaffirm the importance of one another.