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NEUROTHEOLOGY: GOD’S SPOT IN/IS THE BRAIN

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Psychiatrie

God & the brain. How are we wired for spirituality?

While the term Neurotheology is new, the basic ideas have been around for thousands of years.

In the new field of Neurotheology, neuroscientists seek the biological basis of spirituality. Is God all in our heads?

Many cultures have developed technologies for altering consciousness & inducing spiritual experiences.

The new field of Neurotheology is to examine what specifically happens within the brain when a person has a religious or spiritual experience.

Early research shows that, not only does a person’s brain activity change in particular areas while that person is experiencing a religious epiphany, but such epiphanies can be occasioned, for some people, by stimulating various parts of the brain by various means.

These findings underscore the importance of permitting individuals free and tolerant access to the full-spectrum of consciousness and the freedom to achieve various state of mind by various means.
By building a bridge between science and spirituality, Andrew Newberg believes we can achieve what many doctors, physicists, and theologians consider impossible: to pinpoint the origin of consciousness. Newberg insists that if we elevate our understanding of mind, body, and spirit, we will one day penetrate the mystery of the source of life itself. When that happens, he says, we will discover the true nature of reality, rather than our subjective experience of it, which we cannot verify.

Newberg and D’Aquili began their study with a group of devout practitioners of Tibetan Buddhist meditation. Each man was taken into a room, wired with an IV, and given a length of twine to pull once he reached a peak meditative state. Each sat before a single flickering candle, inhaling the gentle aroma of jasmine incense, quieting his mind as he journeyed inward. Newberg waited next door for a tug on the twine. When he felt the tug, Newberg entered the room, injected the man with a radioactive liquid that travels through the bloodstream into the brain, and whisked him into the SPECT room for a scan.

The images he captured showed that the brain’s prefrontal cortex, called the seat of attention, lit up in a brilliant vermilion, indicating an increase in blood flow, or neural activity, due to the meditator’s state of deep concentration. However, the upper rear area of the brain, known as the orientation association area, had gone dark, turning a deep shade of blue. This is where we get our ability to orient ourselves in space and time, which gives our bodies a sense of physical limits. It is also where the brain “makes” our sense of an individual “self” existing in, and apart from, the physical universe.

The darkness in this area told Newberg that when a meditator took a metaphorical dive inside, the outside world receded; effectively blocking the sensory input that ordinarily streams into our brains. With no information flowing into that area, the brain cannot create a boundary between self and outside world, or locate itself in physical reality. As a result, Newberg explains, it has no choice but to perceive that self as endless, interwoven with everyone and everything. This perception is utterly real to the subject, as real as apple pie.

“I experience … the emptiness of conditioned existence,” explained one of the Buddhists in the study. “Sometimes I have a feeling of energy centered in my heart. At the same time, I visualize this energy going out into infinite space.”

The chromatic changes on the scans were key to understanding the euphoric, otherworldly states described by so many mystics across time, geography, and culture. Christian monks, Jewish Kabbalists, Himalayan yogis, Sufi whirling dervishes, and Buddhist meditators all speak of an altered state where the self is
absorbed into some larger force or being, described as the spiritual All or the mystical Nothing, depending on one’s perspective.

Newberg later replicated his findings with a study of Franciscan nuns who were scanned during moments of profound contemplative prayer. The brain activity or lack thereof, was remarkably similar to the monks’, although the nuns’ brains showed increased activity in the region that creates language. And whereas the Buddhists described their transcendent moment of meditation as contact with the universal consciousness where the self no longer exists, the sisters tended to describe this moment of prayer as a merging with a tangible God, “a greater connectedness with all of creation a sense of union with a Presence”. Both describe a place of boundless peace, unity, infinity.

The results also revealed something remarkable: The thalamus in both Buddhists and Franciscans was asymmetrical, suggesting that the brain structure of serious spiritual practitioners differs from most people. Whether their brains are different as a result of sustained spiritual practice, or whether they were attracted to the practice because their brains were different to begin with, is still an open question.

Newberg began his research hoping the scans would illuminate the mysterious connection between “human consciousness and the persistent and peculiarly human longing to connect with something larger than ourselves.”

“There is a universal quality about the mind,” he says. “If you slice everyone’s head open, which I don’t recommend, you would find pretty much the same thing. Likewise, there is a lot to be said about the universality of religion and spirituality. We all have the same deep questions and we all reach for explanations. Maybe this research can help us get closer together and make the world a better place.”

Believe what you want, but either way, those who draw any serious mechanistic or theological conclusions ought to have their heads examined, as well...