

Digital Divine: *Exploring the Possibilities for Electromagnetic Entheogens*

Abstract

What is God, where can I find it, and why am I here? These are all questions that have plagued the minds and souls of humans throughout history, and the use of plant and chemical entheogens¹ to enhance the ability to connect spiritually dates back to the beginning of man's quest for the answers. (Anthology, 2000) This isn't about the dogmatic search for a church or the religious containment of belief and behavior. This is more about the collective tendency for humans to seek out and establish a relationship with a higher power or entity. Whether for salvation or enlightenment, the quest crosses geographical, racial, and economic boundaries. (Bowker, 2006)

This project will explore the history, practice and possibilities for using digital media and select frequencies from the electromagnetic spectrum in the form of color and sound as an alternative conduit for spiritual connection. In the age of computers, Internet and mobile forms of digital media, the expansion of potential passageways to divine experience has increased, potentially creating new possibilities for spirituality, and made accessible a personal and individual digital, spiritual connection. The human desire for divine connection is the inspiration and the project goal is to investigate a way to enhance the states of consciousness requisite for spiritual connectedness using new media as the platform for Digital Divine.

¹ Entheogens are substances that generate mystical experiences. Other terms used in different contexts are psychedelic and hallucinogens. An example is peyote used by shaman for spiritual, ritual practices. (Anthology, 2000)

Project Foundations

Literature and media review

Digital Divine is the state of consciousness achieved using digital media to enhance the search for spiritual experiences. The understanding of what this potential, digital connection is comes from an eclectic and somewhat eccentric collection of media ranging from psychological, theological and philosophical scholarship to anecdotal accounts of mystical experiences, native religions and an interest in the folk practices of many cultures as well as the electromagnetic spectrum, phenomenology, Synesthesia, metaphysics, quantum theory and astrophysics. The interests in so many fields of study merely influence the scheme of this exploration. They are collectively the underlying catalysts for the processes that led to this investigation into electrentheogens² and power the motivation to establish the concept of Digital Divine.

One of the catalysts for this investigation into potential electrentheogenic experiences³ comes from the issues of spirituality addressed by Abraham Maslow's hierarchy of needs and explorations into peak-experiences. Maslow's explanation for the spiritual element of development seems locked in the human psyche at all levels of hierarchic needs whether one is searching for food or self actualization.

“Other broader aspects of the attempt to seek safety and stability in the world are seen in the very common preference for familiar rather than unfamiliar things, or for the known rather than the unknown. The tendency to have some religion or world-philosophy that organizes the universe and the men in it into some sort of

² The term is not found in any dictionary but is a combination of the words electromagnetic and entheogen and is the method behind the concept of Digital Divine.

³ Electrentheogenic experiences are any electronic or digital media used in a spiritual context to induce or evoke spiritual awareness and, or states of consciousness.

satisfactorily coherent, meaningful whole is also in part motivated by safety-seeking.” (Maslow, 1943)

This inherent characteristic motivates the question, are we driven up the ladder of hierarchic needs by our spiritual connection? And, in the context of mobile technologies like cell phones and personal media devices, can technology grant access to digital, divine experiences to reach a higher state of consciousness and achieve full human potential in regards to spirituality? Maslow also proposed the use of psychedelics for initiation of “peak experiences”⁴ as “scientific investigation of transcendence” to better understand the “experience of illumination or revelation.” (Maslow, 1994) This experience could also be what is described later in this paper as spiritual experience and can range from a state of contentment to extreme happiness and chemically induced states of consciousness discovered by shaman.

“While the experiences generated by entheogens are not necessarily spiritual or religiously meaningful in and of themselves, if attended to with the proper mind set with the proper intention and consumed in a context of sacredness and spirituality, they can be powerful catalysts for spiritual growth and development. While not everyone who consumes entheogens becomes spiritually awakened or transformed, many are, and those with knowledge of the workings of these sacred plants, the shamans, mystics, and visionaries, have developed methods and techniques that serve to help guide others on their spiritual, religious, or healing paths.” (Ball, 2006)

⁴ “Peak experiences” are “revelations or mystical illuminations or ecstasy of some acutely sensitive prophet or seer.” (Maslow, 1994)

Of the few remaining native religions, Shamanism is the most widely spread practice. Many native religions have been displaced by Judeo/Christian and Islamic religions throughout the world and are now mostly found in remote areas like the Amazon and Indonesia. There are other areas in North and South America and Africa that still have some form of their original belief systems, but they have been changed by the exposure to the missionary religions. There are many differences between native religions, but the most common characteristics are the belief in spiritual beings, and the importance of ritual and myth. (Bowker, 2006) So, why do seemingly unrelated, geographically diverse religions have similar rituals and myths? Some people believe it is the “unity of the human mind.”⁵ (Eliade, Couliano, & Wiesner, 2000)

The definition of spirituality (in some instances interchangeable with or referring to religion)⁶ in the context of Digital Divine is a state of consciousness beyond the confines of one’s own physical being relating to the mind as separate from the body and connected to a greater whole affecting one’s current physical circumstances as well as the collective experience of what it is to be in harmony with a divine energy on a global and possibly universal level. This state of consciousness is an experience of the individual and can manifest as a deep consciousness of self in relation to the world or as what some people would call a religious experience such as “seeing God” or receiving “messages” in daily life that lead the person down a particular path in life. The experience can be as simple as the pleasure derived from watching a favorite movie or listening to a favorite song. It can also manifest as a state of being like when someone

⁵ These patterns will be mentioned briefly in the subsequent paragraphs relating to frequencies and potential wavelength variations. This is not a primary concern for the investigation into electrentheogens, but is remotely related to it and will be the subject for future inquiry.

⁶ Religion can incorporate spirituality, but refers more to the communities who share similar beliefs and practices and follow specific rituals without necessarily experiencing spirituality. Religion can mean so many things to different people that it often times become contradictory, but in general, it is the result of human search for meaning in the universe. (Bowker, 2006)

achieves a high state of mind when doing good deeds for others or the sensation of “stopping to smell the roses.” Sometimes the simple pleasures in life are the most profound spiritual experiences and have nothing to do with religion or dogmatic ritual. These spiritual experiences are based on the individual’s belief system and subject to the dogma of the governing structure and can be experienced by multiple people in the same organization in different ways. One person can smell a rose and think of “God” while another smells the same rose and thinks of their deceased spouse and the day they walked through the garden holding hands. Both experiences are spiritual, yet they are personal, unpredictable and subject to the intent of the individual.⁷

The link between spirituality and digital media has been explored since the birth of super computers. The link between humans and computers is like the religious connection between gods and humans in the biblical sense that one created the other. The question then, is it cyclic?⁸ In Jennifer Cobb’s *Cybergrace: The Search for God in the Digital World*, the link between creation of humans and our creation of machines like computers are one in the same and thus the connection between cyberspace and god(s) is inherent.

"Living a life informed by the sacred amid a technological world poses our greatest spiritual challenge. As we begin to actively engage this challenge, we often come to believe that we must make a choice — spirit or machines. But as computers such as Deep Blue have shown us, distinctions such as this are becoming increasingly difficult to make. Nature has spawned us. We have spawned machines. Any line drawn between these realms quickly becomes

⁷ This is a general understanding that does not have a particular source of reference and is based on personal interpretation from life experience and countless unidentified sources. In other words, it is a memetic understanding.

⁸ If divine energy created us, and we created computers, do digital media create divine energy?

arbitrary, a realization that seems to generate a great deal of confusion and fear. But this does not have to be the case. As we reach into the future in search of the age-old spiritual values of truth, beauty, goodness, and love, cyberspace can be a powerful ally. Through the medium of computation, our spiritual experience can be extended in profound ways. We can choose to embrace our cohabitation with computers as a moment of vast evolutionary potential, guided by sacred experience and ethical reflection." (Cobb, 1998)

Cobb's many anecdotal accounts of digital experiences exemplify digital media as a divine or spiritual experience. Cobb's almost mystical account of human/computer interactions and her understanding of the connection between spirituality and digital media is the established foundation for the concept for Digital Divine and this investigation will expound on her thoughts to create new media, divine experiences.⁹

Not everyone is of the same opinion as Cobb when it comes to the existence of a digital, spiritual experience. Some of the literature about electronically stimulated brain function and spirituality counters the ideas of spirituality as positive and functional and presents information "proving" ideas of spiritual experiences found in the brain as dysfunction and psychological disorder. *"No matter what neural correlates scientists may find, the results cannot prove or disprove the existence of God. Although atheists might argue that finding spirituality in the brain implies that religion is nothing more than divine delusion."* (Biello, 2007)

⁹ This investigation uses Cobb's book as a spring board for further investigation into the spiritual connection with digital media putting a new millennia spin on her established ideas by incorporating contemporary uses of the Internet and mobile technologies into the spiritual equation.

Some researchers also refer to spirituality as “Mystical Misfirings”¹⁰ and relate religious experiences to epileptic seizures. (Biello, 2007)

It is important to keep all sides of the issue of spirituality in consideration when exploring the possibilities for divine connection through digital media. The numbers of believers in some sort of spiritual entity or essence is large, but it is not absolute in all humans and only 82 percent of Americans believe in God. (Harris Interactive Inc., 2005) These findings do not necessarily include spirituality in general and some belief systems do not include “God” in the terminology. So, for this investigation, the terms divine energy, spiritual, spirituality and believer will be also be used to describe experiences and the vast numbers of people who believe in something.¹¹

In connecting spirituality to digital media it is also important to look at and understand at least on a basic level, the electromagnetic spectrum. These phenomena described in wavelength, frequency and energy encompasses everything we see, hear and feel.¹² (NASA, 1997-2008) In the grand scheme of things, and from a more philosophical point of view, the spectrum could potentially be divine energy¹³ and our personal vibrations may possibly act as spectrum filters fine tuning the spiritual information we receive.

¹⁰ “Scientists and scholars have long speculated that religious feeling can be tied to a specific place in the brain. In 1892 textbooks on mental illness noted a link between “religious emotionalism” and epilepsy. Nearly a century later, in 1975, neurologist Norman Geschwind of the Boston Veterans Administration Hospital first clinically described a form of epilepsy in which seizures originate as electrical misfirings within the temporal lobes, large sections of the brain that sit over the ears. Epileptics who have this form of the disorder often report intense religious experiences.” (Biello, 2007)

¹¹ The general understanding of the term “God” is used to express an entity that is often the subject of religious belief or worship and is the entity many people wish to reach and seek approval from via spiritual practice. It is also used as a universal term to describe a variety of monotheistic entities including Judeo/Christian and Islamic religions. (Bowker, 2006) I prefer to use the term “Aka” (also known as... pronounced Ah-Kah) as an all-encompassing term to describe all beliefs including atheistic beliefs including Eastern and folk practices, but for the purposes of this paper will continue to use the terms mentioned for broader acceptance and understanding of the concepts herein.

¹² NASA’s *Imagine the Universe* explains the electromagnetic spectrum in these terms for people interested in understanding the universe. The spectrum is broken down into major areas of frequency from radio to gamma with specific examples of each with illustrations.

¹³ This concept has various defining idiosyncrasies but a general interpretation could be “The Almighty isn't dead, he's an energy field. And your mind is an electromagnetic map to your soul.” (Hitt, 1999)

These spectrum filters or, frequency prints,¹⁴ could be the determining factor in what we believe.

Frequency prints may also have some relevance for the understanding of the “unity of the human mind” referenced earlier in native religions. When considering the geographical differences of similar belief systems and technological advancements throughout history, and when looking at the variations in wavelengths of particular frequencies, it seems plausible that the distance between locations could potentially match the distance between wavelength crests of a given thought or belief.¹⁵

As part of this discovery process into the possibilities for electrentheogens, the idea of making the process reciprocal has surfaced repeatedly. Scanning people’s spiritual frequencies as part of an electrentheogenic experience is potentially viable and the manipulation of brainwaves and the harnessing of them for neurological research is by far the most relative for the topic of inquiry. Michael Persinger, a neuropsychologist studied similar phenomena a decade ago looking for the

“physical sources of spiritual consciousness...His theory is that the sensation described as ‘having a religious experience’ is merely a side effect of our bicameral brain’s feverish activities. Simplified considerably, the idea goes like so: When the right hemisphere of the brain, the seat of emotion, is stimulated in the cerebral region presumed to control notions of self, and then the left

¹⁴ Frequency prints are (unconfirmed) hypothetical biological transceivers with unique and individual characteristics from person to person much like finger prints without the friction ridge. There are no current studies on this potential phenomenon, but the concept of people generating a specific frequency based on, or determining their beliefs is viable when considering the complexities of the human brain and its ability to transmit and receive various frequencies for applications such as Magnetic Resonance Imaging, Electroencephalography and Transcranial Magnetic Stimulation. These frequency prints can potentially be expressed in various digital media in the form of perceived frequencies or images and sounds that occur between frequencies, as with binaural beats and phi-phenomena. This perceived space between realities could potentially be where “God lives” in the human brain and psyche and is a topic for further exploration and scientific experimentation.

¹⁵ This is an unconfirmed, unexplored hypothesis worthy of future investigation.

hemisphere, the seat of language, is called upon to make sense of this nonexistent entity, the mind generates a 'sensed presence'." (Hitt, 1999)

Considering the reciprocity of electrentheogens, there are many existing products that stimulate and capture brain waves, but most are done with electrodes that contact the people being scanned. Neurological apparatuses like transcranial magnetic stimulation (TMS) are used to stimulate neurons in the brain with electric currents to improve mood. (Mayo Clinic Staff, 2006) As for recording brain function, there are a number of means including electroencephalography (EEG) structured to identify variances in brain function or voltage regulation for use in anger management and depression treatments along with many other neurological anomalies. (Mayo Clinic Staff, 2007) There are some wireless apparatus that are being used for game interface. *"The Emotiv EPOC now makes it possible for games to be controlled and influenced by the player's mind."* (Emotiv Systems) And *"The Wild Divine Project provides multimedia solutions to promote self-care and wellness...products integrate the use of proven biofeedback technology with creative, computer-based tools to reduce stress and help you to achieve optimal health."* (Wild Divine) but the subject still has to mount a headset or put something on their body.

The idea of hard-wiring a person to change or enhance the consciousness is a concept that has been researched for years by various individuals and organizations like *Cyberkinetics* and their *BrainGate* Neural Interface System, a device being designed to help motor-impaired people control objects like computers, telephones and other machines in their environment. (Cyberkinetics - Neurotechnology Systems, Inc., 2005)

The wired consciousness¹⁶ is also the subject of many science fiction works like William Gibson's novel *Neuromancer* and the science fiction thriller *The Matrix* by Larry and Andy Wachowski. It even finds its way into lyrics and song titles like *The Psycho-Social, Chemical, Biological And Electro-Magnetic Manipulation Of Human Consciousness* by Jedi Mind Tricks.

“What blinds us to our own increasingly cyborg nature is an ancient western prejudice- the tendency to think of the mind as so deeply special as to be distinct from the rest of the natural order. In these more materialist times, this prejudice does not always take the form of belief in soul or spirit. It emerges instead as the belief that there is something absolutely special about the cognitive machinery that happens to be housed within the primitive bioinsulation...of skin and skull. What goes on in there is so special, we tend to think, that the only way to achieve a true human-machine merger is to consummate it with some brute physical interfacing performed behind the bedroom doors of skin and skull.” (Clark, 2003)

The use of color and the science behind it has been explored by artists, scientists, philosophers and many other people throughout time. Aristotle's recognition of color interactions and relation to light from sun and fire were mere precursors to the further studies of people like Leonardo da Vinci and his observations of simultaneous contrast and the added studies of Sir Isaac Newton and his experiments with light to Johann Wolfgang von Goethe's contestation of Newton's theories taking the process back to a visual phenomenon. (Zelanski & Fisher, 2003)

¹⁶ Relating to the idea of mind control as being “plugged” into an external source. It can also be in a sense the idea that we are already “plugged in” in the sense that we use external apparatus to enhance our physical selves in the context of “being human-technology symbionts.” That we as humans use technologies to improve or enhance ourselves in a cyborg sense as with the use of pen and paper and cell phones etc. (Clark, 2003)

The psychology of color is disputed by many psychology and scientific communities and tends to fall into alternative studies and is used in alternative medicine quite frequently. It is considered to be a living energy and is based on the law of resonant colors interaction. Each of the visible colors of the spectrum are said to have specific interactions with the human body and contributes to particular associations of mood and sensation and can have effects on the human psyche and physiology. (Association of Alternative Medicine)

These various color theories and discoveries do not address the phenomena of light and color in motion or the relation of color to various output mechanisms. The most relevant investigations into motion and color phenomena are in film, video and gaming and various concepts around the phenomena of after images, persistence of vision and visual perception and are often disputed due to inconsistencies in terminologies. Some scholars refer to the phenomena of motion from still images as phi phenomena, beta phenomena apparent motion and a plethora of other terms.¹⁷

¹⁷ Some information relating to the illusion of motion and/or phenomena related to color and motion – synesthesia – after images- RGB color model –(addresses movement in color-VRsystems) computational models of Visual Perception (gaming) - The aperture problem in motion perception – beta movement (still image _ball from left to right) – phi phenomenon (cloud of background color) – magna phi — “A typical explanation of persistence of vision went something like this: when the human eye is presented with a rapid succession of slightly different images, there is a brief period during which each image, after its disappearance, persists upon the retina, allowing that image to blend smoothly with the next image. Such an explanation might begin to account for a sense of constancy of the light source (flicker fusion), but it is, of course, a totally inadequate explanation of the illusion of motion in the cinema. The proposed fusion or blending of images could produce only the superimposition of successive views, as in Marcel Duchamp's painting "Nude Descending a Staircase" or a frame from Norman McLaren's Pas de Deux. The result would be a piling up of images, or at best a static collage of superimposed still pictures, not an illusion of motion. It is the obvious inadequacy of the explanation, coupled with its recurrence in film literature for almost a century, that arouses one's curiosity about the origins of the notion and the means by which it has been perpetuated.” (Anderson & Anderson, 1993)

Sound and its effects on the human brain are very widely studied and the resources for binaural beat¹⁸ study are phenomenal and the information on how to create them is abundant. *Hemi-Sync* and *Brain Sync* are two different companies incorporating the use of binaural beats as a method to entrain the brain to achieve altered states of consciousness for a variety of uses from diet control to relaxation and depression treatments. The Monroe Institute is a non-profit research organization using sound to create altered states of consciousness for what they determine to be altruistic endeavors to help humanity.¹⁹ Using separate sounds to create a unifying frequency, they hope to contribute to the wellness of their consumers.

“The sensation of auditory binaural beats occurs when two coherent sounds of nearly similar frequencies are presented one to each ear with stereo headphones or speakers. The brain integrates the two signals; producing a sensation of a third sound called the binaural beat. Binaural beats originate in the brainstem's superior olivary nucleus, the site of contralateral integration of auditory input. The binaural beat is neurologically conveyed to the reticular formation which uses neurotransmitters to initiate changes in brain-wave activity” (The Monroe Institute, 2004)

Desired Outcomes

By briefly examining various world practices and beliefs and evaluating their potential contributions to the overall human experience as deriving connectivity thru progressive

¹⁸ Binaural beats are brainstem responses to the interaction of two different frequencies heard in either ear. (The Monroe Institute, 2004)

¹⁹ “*The Monroe Institute is a 501(c)3 nonprofit education and research organization devoted to the exploration of human consciousness. Over the last 30+ years thousands of people have attended TMI's life-enhancing residential programs, and millions worldwide have benefited from Hemi-Sync® learning exercises on audio cassette and compact disc. TMI's methodology does not contain any dogma, nor does it espouse any particular belief system, religion, or political or social stance. Because our methods are non-invasive, the participant is always exercising individual free will.*” (The Monroe Institute, 2004)

introspection, this investigation proposes to show in the post production analysis, how the various rituals and practices relate to each other and translate into digital media and the idea of Digital Divine.

The concept of brain wave manipulation is becoming a booming enterprise from companies wanting to sell a physical sensation created with binaural beats. There are free downloads of brainwave generators that use binaural beats to induce various states of consciousness with minimal artistic influences as well as full scale sleep sounds and meditation tools for sale that use the same technology as the freeware with a better ambient sounds package and marketing campaign. Most of these software sensations are auditory only. The desired outcome of this investigation is to create a consciousness enhancing experience that can be accessed via mobile devices and internet with stereo headphones for individual mediation using established technologies and ideas and incorporating the brain's response to color.

Methods/Tools

By placing one sound frequency on the left and one on the right at a difference between 0.5Hz and 20Hz, a binaural beat could be made to play as a background track for a more artistic composition. The predominant frequency would be in the delta range between 1Hz and 4Hz to maintain a frequency similar to that of deep meditation. To this sound art an added experiment in color theory creating similar vibrations with colors adding an extra layer of vibratory texture and involving another of the senses for a more fulfilling experience. These meditation tools and further explanations for Digital Divine and the investigation of it will be made available to the public via the Internet. A website

dedicated to the concept will be launched in May 2008 and elements of it will be accessible from multiple technologies including computers and some cell phones.

The sound portion of the meditation tools will be created in a number of programs ranging from Absynth to SoundForge and the visual elements will be created using multiple programs including, but not limited to Flash, Final Cut Pro, PhotoShop, Resolume, etc.

Project Goals

- Establish a framework within contemporary study to define the idea of Digital Divine.
- Articulate the potentials of digital media as a spiritual outlet and/or conduit for greater understanding.
- Determine the essence of a digital, spiritual experience.
- Create a digital audio/visual project to represent the theory of Digital Divine.
- In addition, the project would have to sustain a frequency or binaural beat long enough to entrain the audience brainwaves to match in order to enable a meditative state of mind potentially creating a spiritual experience for at least some members of the audience. The expectation would be to produce an altered state of consciousness likened to psychoactive enhanced meditation or at the very least, the deep sense of focus attained while watching an engrossing movie.

Outline/Timeline

- Implement feedback and refine sources by February 2008
- Project Proposal submitted by March 2008
- Read revised sources by March 2008

- Work on project thru April 2008
- Refine and finalize project May 2008
- Submit project and post production analysis May 2008
- Project presentation May 2008

Conclusion

Some scholars may find the connections made in this study to be examples of Apophenia²⁰ rather than definitive scientific discovery, but this is an exploration of perceptions. Spirituality is a perception determined by the perceiver much like the perception of binaural beats and phi-phenomena.²¹

Spirituality is a requisite for self actualization and entheogens can be considered a requisite for greater connection to spirituality and through digital electrentheogens, humans can potentially evolve on an individual and spiritual level. The abundance of mobile communications in the form of cell phones and pocket PCs is making digital connections to divine experiences potentially more available to a cross section of economic and cultural groups expanding connectivity and heightening our ability to explore and understand our desire to connect with the greater whole and is ultimately changing the processes for how we communicate with others and our consciousness.

The study of binaural beats and other theories of sound coupled with the energy experienced when applied color theory is added to the experience could potentially change a willing person's state of consciousness, ultimately leading to a connection between people and the digital, divine experience.

²⁰ **Apophenia** "is the experience of seeing patterns or connections in random or meaningless data" (Wikipedia)

²¹ The secret is in the frequency prints of digital media...i.e. binaural beats are the perceived frequencies between two sound frequencies and the phi phenomenon is the perceived frequency between still images – "God" lives in the frequency prints – the perceived spaces between realities. (unconfirmed) hypothesis -

Bibliography

Anderson, J., & Anderson, B. (1993). The Myth of Persistence of Vision Revisited. *Journal of Film and Video* , 45 (1), 3-12.

Anthology. (2000). *Entheogens and the Future of Religion* (Vol. 2). (R. Forte, Ed.) San Francisco, CA, USA: Council on Spiritual Practices.

Association of Alternative Medicine. (n.d.). *Color Therapy*. Retrieved April 28, 2008, from Biopulse: <http://www.biopulse.org/color.html>

Ball, M. W. (2006). *Mushroom Wsdom: How Shamans Cultivate Spiritual Consciousness*. (B. A. Potter, Ed.) Oakland, CA, USA: Ronin Publishing, Inc.

Biello, D. (2007, October). *Searching for God in the Brain*. Retrieved April 24, 2008, from Scientific American: <http://www.sciam.com/article.cfm?id=searching-for-god-in-the-brain>

Bowker, J. (2006). *World Religions: The great faiths explored & explained* (First ed.). New York, NY, USA: DK Publishing, Inc.

Clark, A. (2003). *Natural-Born Cyborgs*. New York, NY, Usa: Oxford University Press.

Cobb, J. (1998). *CyberGrace: The Search for God in the Digital World* (1st ed.). New York, NY, USA: Crown Publishers, Inc.

Cyberkinetics - Neurotechnology Systems, Inc. (2005). *Cyberkinetics - Neurotechnology Systems, Inc.: BrainGate Neural Interface System*. Retrieved April 28, 2008, from Cyberkinetics - Neurotechnology Systems, Inc.: <http://www.cyberkineticsinc.com/content/medicalproducts/braingate.jsp>

Eliade, M., Couliano, I. P., & Wiesner, H. S. (2000). *The HarperCollins Concise Guide to World Religions*. New York, NY, USA: HarperCollins Publishers, Inc.

Emotiv Systems. (n.d.). *EmotivEpoc*. Retrieved April 26, 2008, from Emotiv.com: <http://emotiv.com/>

Harris Interactive Inc. (2005, December 14). *The Religious and Other Beliefs of Americans 2005*. Retrieved April 24, 2008, from Harris Interactive: http://www.harrisinteractive.com/harris_poll/index.asp?PID=618

Hitt, J. (1999, November). *Wired 7.11: This is Your Brain on God*. Retrieved April 26, 2008, from Wired: http://www.wired.com/wired/archive/7.11/persinger.html?pg=1&topic=&topic_set=

Maslow, A. H. (1943). A Theory of Human Motivation. *Psychological Review* (50), 370-396.

Maslow, A. H. (1994). *Religions, Values, and Peak-Experiences*. (E. Williams, Ed.) New York, NY, USA: Penguin Group, Inc.

Mayo Clinic Staff. (2007, May 21). *EEG: Checking your brain's electrical activity*. Retrieved April 26, 2008, from MayoClinic.com: <http://www.mayoclinic.com/health/eeg/BN00053>

Mayo Clinic Staff. (2006, July 24). *Transcranial magnetic stimulation: An experimental depression treatment*. Retrieved April 26, 2008, from MayoClinic.com: <http://www.mayoclinic.com/health/transcranial-magnetic-stimulation/MH00115>

NASA Goddard Space Flight Center. (1997-2008). *Electromagnetic Spectrum - Introduction*. Retrieved April 9, 2008, from NASA's Imagine the Universe: http://imagine.gsfc.nasa.gov/docs/science/know_11/emspectrum.html

The Monroe Institute. (2004). *The Monroe Institute - Hemi-Sync Process*. Retrieved April 29, 2008, from The Monroe Institute : http://www.monroeinstitute.com/content.php?content_id=39

Wikipedia. (n.d.). *Apophenia - Wikipedia, the free encyclopedia*. Retrieved April 28, 2008, from Wikipedia: <http://en.wikipedia.org/wiki/Apophenia>

Wild Divine. (n.d.). *Biofeedback - Stress Relief - Wild Divine Healing Rhythms*. Retrieved April 26, 2008, from Wild Divine: <http://www.wilddivine.com/>

Zelanski, P., & Fisher, M. P. (2003). *Color* (Fourth ed.). Upper Saddle River, New Jersey, USA: Prentice Hall Inc.