

Review Article

## A Transdisciplinary Look at Paranthropology: An Emerging Field of Exploration

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### ABSTRACT

*Paranthropology: Anthropological Approaches to the Paranormal* collects the best articles from the first two years of *Paranthropology* journal's publication. It describes a quiet yet relentless revolution going on within the life and social sciences and arts. While physicists, biologists, medical doctors, and psychologists have commented for years on anomalous experience, anthropologists maintained a largely conventional observer attitude within their field. Most avoided the risks of "going native" by suspending professional orientation and experimentally entering a participatory mindset to describe their host cultures from the inside out. If researchers inadvertently experienced anomalous events in the field they were often as reluctant to admit them, for example, as professional pilots are to report UFOs.

Even the most successful and well-respected "parapsychologists" have been reluctant to assume such a title. Perhaps their struggle was viewed as a cautionary tale by anthropologists thrown into the boiling pot of traditional shamanic practices, such as shamanic flight, paradoxical healing, warring sorcerers, and disturbing supernatural occurrences in field work. Such overdue efforts should be heartily welcomed by the transdisciplinary community. Anthropology has origins in the humanities, the natural sciences, and the social sciences. So does paranthropology, which focuses on the persistence and reproduction of anomalies with correlated myths, ideology, cultural grammar, and social logic.

In the words of its editors, "*Paranthropology: Journal of Anthropological Approaches to the Paranormal* is a free on-line journal devoted to the promotion of social-scientific approaches to the study of paranormal experiences, beliefs and phenomena in all of their varied guises. The journal aims to promote an interdisciplinary dialogue on issues of the paranormal, so as to move beyond the skeptic vs. advocate impasse which has settled over the current debate, and to open new avenues for inquiry and understanding."

**Key Words:** paranormal, parapsychology, anomalous experience, treatment philosophy, shamanism, transpersonal anthropology, clinical paranthropology, taxonomy of consciousness, neurophenomenology, temporal lobe lability, neuromythology, hypnosis, mutual hypnosis, physics, neurotheology, trance, dissociation, anomalistic psychology, cultural grammar.

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## Multi-disciplinary Orientation

The 2012 anthology, *Paranthropology: Anthropological Approaches to the Paranormal* celebrates pioneering exploration and attempts to lay down some basic principles for research, theory and practice, fusing humanities and science. The journal *PARANTHROPOLOGY* has broken through the wall of silence and dared to subjectively and objectively examine experiences formerly considered "supernatural" -- unexplainable personal and cultural phenomena. Rather than approaching the mechanics of psi, ethnographical studies describe correlations of the narrative logic of myths, ideology, investments, and modes of social thinking.

Ultimately, the central theme here is that we should 'get inside' the narrative tradition of our subject matter without self-delusional abandonment. A global, pre-modern, spiritual healing phenomenon known as shamanism may be one of the most significant discoveries expressing the nature of the transpersonal. Winkelman points out, "The universals of shamans, and other shamanistic healers, reflect something fundamental about human nature. The universals of alterations of consciousness and crosscultural manifestations of soul flight experiences, spirit and animal identities, healing and divination practices, and other aspects of shamanistic healers, reflect a biological basis."

In Chapter 2 of the anthology, "Reflecting on Paranthropology", Mark A. Schroll defines paranthropology as, "our investigation into humankind's primordial practices for exploring alternate states, stations, and domains of awareness known as the anthropology of consciousness". Early anthropology had a disconfirmatory agenda toward anomalous experiences, even though informants reported stories concerning so-called psychic phenomena such as telepathic communication or out-of-body experiences. But anthropologists generally don't take such stories seriously, instead viewing them functionally or semiotically rather than as parapsychological "evidence", according to David Young in his chapter "Dreams and Telepathic Communication".

In Chapter 3, Charles Laughlin tells us, "*In the 1970s, concern with more existential issues such as experience, cognition, consciousness and symbolism began to shift from the wings to center stage. Concerns which were once considered marginal in interest, like performance, myth, healing, trance states, etc., became phenomena of prime concern to anthropologists, both in fieldwork and in theory construction. And it was in the midst of this reorientation that the transpersonal movement began to make some slight headway in anthropology. . . Transpersonal anthropology is simply the cross-cultural study of the psychological and sociocultural significance of transpersonal experiences.*"

Editor Jack Hunter gives us a useful orientation on "Anthropology and the Paranormal":

*"Charles Laughlin defines transpersonal experiences as 'those experiences that bring the cognized-self into question' and transpersonal anthropology as 'the cross-cultural study of the psychological and sociocultural aspects of transpersonal experience' (Laughlin 1994:5). A transpersonal anthropologist is, therefore, 'one that is capable of participating in transpersonal experience; that is, capable of both attaining whatever extraordinary experiences and*

*phases of consciousness enrich the religious system, and relating these experiences to invariant patterns of symbolism, cognition and practice found in religions and cosmologies all over the planet' (Laughlin 1997). Through participating fully in the host culture, to the extent of accessing culturally relevant experiences, the transpersonal anthropologist is able to gain a perspective on a particular culture that could not be attained through any normal means of objective observation."*

Indigenous people don't consider such phenomena supernatural as non-ordinary experiences are part of their natural world. They perceive nothing abnormal about the underlying nature of reality, a world occupied by spiritual beings, non-physical intelligences and paranormal powers. Such distinctions are cultural constructs that help us discern and see through our own constructs about life, death, and the afterlife. Polyphasic cultures recognize the importance and value of other states of consciousness for their individual and community psychological wellbeing and connection with their habitat.

Anthropology has shifted its focus from attempting to explain away supernatural beliefs to an approach that accepts the significance of subjective anomalous experience in the development of such beliefs without applying a reductive interpretation, Hunter says. The contention is that immersive anthropology facilitates cognitive empathic engagement so one "sees what the natives see". Scientists exploring consciousness risk being transformed in the process of exploration.

Some report they need "to participate in the cultures they study in an effort to understand the processes through which transpersonal experiences arise, and are interpreted, in their natural setting." "The magico-religious practices and beliefs of a society do more than simply maintain its structure and are actually directed towards psi-conducive goals, which may perform significant social functions in themselves." (Hunter)

Regardless of nomenclature, supernatural, paranormal, extraordinary or anomalous experiences are assigned the umbrella term, 'psi' phenomena which includes various types of "inner power". Social psychologist and parapsychological researcher Daryl Bem defines psi as 'anomalous processes of information or energy transfer that are currently unexplained in terms of known physical or biological mechanisms'. Whatever they represent, such experiences are intrinsic aspects of the natural world. Whether we acknowledge psi or not, new generations of anthropologists will continue to encounter instances of psi / spirit during their field research.

Schroll cites psi-pioneer Dr. Stanley Krippner in the "Physics of Psi":

*"My feelings about psi phenomena are that they're alleged interactions between organisms and other organisms, or organisms and their environment that appear to violate mainstream science's concepts of space, time, and energy. Furthermore psi phenomena apparently exist, but they are not supernatural, they are natural; they are not paranormal, they are normal. They're anomalies; we just haven't figured out how they fit into the scheme of things. . ." (Schroll, 2010b:4)*

Schroll elaborates in a Special Issue of Rhine Online: Psi-News Magazine, 2011, and in two additional articles in late 2011 published in a Special Topics Section, *International Journal of Transpersonal Psychology*:

*"Thus it [psi] is a transformative, ecstatic, or transpersonal encounter within us and our relationship and/or co-evolution with planet Earth and all its creatures. Including (to the extent it is possible) an awareness of our co-evolution with the universe, space-time, matter and consciousness (Krippner and Schroll, 2011).*

Of potential interest to paranthropologists is Cohn's study (1999), which suggests the following:

*"[S]econd sight [is] a psychic ability that has for centuries been believed, in Scotland and other traditions, to be hereditary. The ability manifests itself through the person having spontaneous vivid imagery through different senses which apparently gives information about a spatially or temporally distant event. A total of 130 family histories were constructed and examined using segregation analysis. Second sight seems to be consistent with an autosomal dominant mode of inheritance, particularly for small family sizes. People with the trait were also evenly distributed with respect to their birth order position, in line with the expectations of a genetic model. It is argued that if other studies find a similar mode of inheritance in other cultures, then second sight could be a creative mental ability where the hereditary aspect lies in the sensitivity of the sensory systems which convey the experiences."*

All cultures have their taboos, and this scientific taboo has long separated the investigator from the very object of his or her observation. Transparency, rather than objectivity becomes the goal. Immersive or participatory excursions are balanced by critical thinking and systematic comparisons with the spectrum of possible interpretations. Hopefully, the participation of a few well-respected individuals from a variety of fields will inspire future generations of anthropologists to courageously open their minds and psychic boundaries.

Paranthropology faces many of the same challenges encountered in "blue sky" parapsychology and parapsysics before such subjects were tentatively "re-admitted" to the conventional study and literature of their respective fields. Military interests drove much of the work in the former disciplines, but anthropology and sociology do not share in that funding or clandestine development. Because the content of these "fringe" areas is controversial is no reason to banish its investigators to the margins of serious inquiry. In fact, such explanatory gaps have the most to teach us about the deep nature of reality and our being.

In the anthology's Afterword, Winkelman proposes two paradigms that help us understand anomalous phenomena: 1) the shamanic paradigm; and 2) and the integrative mode of consciousness as a clarification of the concept of altered states of consciousness (ASC). They are based on cross-cultural methodology and a neurophenomenological perspective.

*Shamanic altered states inevitably incorporated dream processes by engaging in overnight rituals that first prevent sleep by hours of dancing, drumming and singing; after exhaustion, the participants then collapse into vivid dreamlike states. Ritual has the potential to produce an activation of lucid dreams. Lucid dreams engage an interaction between waking and dream consciousness that can produce cognitive integration and therapeutic outcomes, reflecting a greater awareness of the information-processing capacities of the unconscious, involving pre-egoic and prelinguistic levels of symbolization (Laughlin, McManus & d'Aquili 1992).*

## Cultural Contagion

In the past, each science functioned like a reality tunnel, directing what could and could not be looked at without peer approval and consensus. Each had little to do with other specialties or departments. Every science also comes with its own mythologies as well as models. Science likes to call them "assumed truths," but unconscious aspects can be as or more influential.

Neuromythologies support the new materialism which may or may not be able to allocate certain functions and behaviors to particular areas of the densely interconnected brain or genetic structure. Myths express deep existential concerns that have consequences for human behavior. They have imaginal and philosophical elements and interpretations which may contain some objective truth.

The pejorative term is normally applied to numerous woo woo ideas surrounding the brain, psychology, and neuroscience. But it can be equally applied to those fields themselves, each of which functions as a culture with subcultures within the system. Where is the anthropology of science being done, with the possible exception of philosophy of science? Cultural practices essentially generate and embody group trance states (consensus) in primitive and sophisticated societies. Cognition constrains culture in producing science.

Mythologizing also arises in the popularization of scientific findings, which are misconstrued and misapplied by the public. In this view, brain-based approaches require the same scrutiny as those experiences traditionally allocated to the "supernatural". More specific framing doesn't necessarily lead to a better evidential basis. Educational practices which claim to be concomitant with the workings of the brain may or may not be so.

No science or even the arts can continue to exist in isolation from the others with which it is holistically related and informed. Progress in other fields can be shared with good effect in a free exchange of information. Luminaries and lesser-known authors can shortcut their process by assimilating relevant results from the entire landscape of academic studies, while re-contextualizing their observations and conclusions in light of such information. Such readily-available specialty journals facilitate the free exchange of information by filtering and condensing the available material.

Anthropology cannot objectively examine cultures without taking the worldview, including supernatural beliefs and spiritual technologies of such cultures into consideration, and they must do so in a multi-disciplinary fashion. That is, the postmodern nuances of consciousness and culture can be described from several different frames of reference, some of which lie beyond the normal scope of practice in anthropology. But a comprehensive study of man and consciousness is in no way limited to that.

Consciousness in its many forms remains the conundrum that unites physics, biology, and cultural studies. Some time ago, Bateson called for a theory of consciousness that is neither supernatural nor mechanistic. Current models of consciousness which depend upon coherence do not explain possession, dissociation, out-of-body experiences near-death experiences, and addictions, for

example. Consciousness, thought, and culture are irreducibly welded together and form the basis of human adaptive skills.

Consciousness studies spans a repertoire of specialties from neuroscience, to neurotheology, to creativity, to quantum mind, dreaming, transpersonal studies, and more. While psychologists have long examined parapsychological events with a cross-cultural eye, anthropologists themselves, with a few exceptions, have been ill-trained and reluctant to do so. In the vacuum, other experts and paraprofessionals have conducted their own investigations of anomalous phenomena in a wide variety of ethnic cultures.

Winkelman describes typical shamanic transactions:

*Parallels between shamanic and hypnotic phenomena include: fantasy-prone and dissociative characteristics; family tendencies in susceptibility suggestive of genetic contributions; developmental paths involving injury, illness, and trauma; a tendency for artistic production and cognitive flexibility; spontaneous out-of-body experiences; and the use of monotonous procedures that focus attention and limit conscious awareness.*

*Dissociative experiences involving a separation of the body from the environment are a key aspect of hypnosis that promotes an engagement with an alternate reality. This reality is generally interpreted in premodern cultures as a spirit world in which these powerful others can act upon our well-being through emotional impacts that can produce notable biological responses.*

## **Exploring the Frontier**

While it used to be found in a horizontal geographical direction, in a global society, the frontier is found at the leading edge of all fields -- in frontier science. While that term used to be a pejorative, it now offers a valid arena for the unfettered growth of ideas, which may be critiqued and honed without risk of professional censure.

Thus, *Paranthropology Journal* represents a real breakthrough for the field, providing leaders in this trend a peer-reviewed outlet for their innovative findings and a place to share methodology on how to proceed further. A revisioning of the psychophysical roles of ritual, symbol, experience and brain function offers a more well-informed basis for field observations of cultures and sub-cultures. Intelligent voices provide rigorous arguments that open new territory for investigations, as well as new ways of investigating old ground.

Physics has shown us that at the most profound level, all experience is ultimately subjective. It therefore colors our observations, framing and reporting, particularly when it relates to models of human behavior. Biology has discovered that there are quantum and electromagnetic effects that condition our essential being.

Neurotheology shows how such parameters modulate our beliefs and internal perceptions and interpretations of our experience of "reality". There is a relationship between symbols and the

structure of the brain, a symbolic organ. The symbol-making potential of the pre-frontal cortex enabled extended family and social bonds.

The symbolic function operates in cognition by symbolic penetration. This process amplifies the activation of a relatively limited sensory event. It comes to communicate with, evoke, and become associated with a more ramified, complex, and far less limited set of cognitive structures operating within the nervous system. (Laughlin)

"Bootstrapping" accelerates this process. Genetics, epigenetics, and meta-genetics are not irrelevant and the same must be said for neuroplasticity, neurophenomenology, memes, and self-awareness. Rewriting the brain's potential means rewriting our own, including how we study and view the world and humanity around us.

### **Extended Consciousness**

Gifted environments provide "a rich variety of representations", "stimulating learning environments", and "empowering environments" that foster specific paths of development in protective attentive envelopes. The whole arena of open-source online journals encourages such environments, allowing scholars from several fields to actively come together and explore the ideas of one another without academic boundaries.

Humans live in social groups that split and reform. Social and personal bonding also derive from the set-points of physiological systems which produce defining behaviors, including mirror neurons, the limbic system, and the anterior cingulate, to name a few. Affect, such as guilt, shame, pride, pain, conscience, memory, identity, social- and self-consciousness eventually shape societies. We are learning to understand mindsets though we are unable to effectively describe the consciousness that underlies and makes them possible.

Psyche is not separate from society. Disorders of the self share much in common with disorders of culture. Societies act out the same sort of functional and dysfunctional patterns we find in individuals at a grander scale. It relates to our understanding of affect, beliefs, narrative, mythopoetics, cognition, the unconscious, imagination, wisdom, healing, etc. as they apply to all "ways of being" in the world. The questions of who and what humans are requires open-minded exploration in terms of the history of the universe, life and humankind.

Mar and Peterson describe how "good stories" reduce the entropy of traumatic events, by integrating it back into a functional, low-entropy person/world/goal system:

*Integrating the information contained in the traumatic event allows for the functional reformulation of basic axioms (constants). "The world is a safe place," violated, becomes "the world is not always a safe place, but when it is unsafe I can still cope." "My self is predictable" becomes "my physical and mental self may vary, but I have the proper support to bring them back into a familiar state when necessary." The reduction of uncertainty associated with the narrative update process reduces felt anxiety and psychophysiological stress. It is the cascade of beneficial psychological and physiological processes accompanying this reduction in anxiety and stress that*

*accounts for the well-documented health benefits and increases in productivity attendant upon the construction of coherent self-relevant stories.*

## **Discussion**

In Chapter 1, Lee Wilson summarizes his arguments against over-zealous empiricism as follows:

*"As a particular mode of critical thinking about the world and our place in it the remit of anthropology is not to reduce one form of life to another. Veena Das remarks that 'anthropological knowledge is precisely about letting the knowledge of the other happen to me' (1998:192). It is the interplay between forms of knowledge and diverse perspectives that holds my attention, the possibility of disclosure, discrepancy and insight generated from juxtaposition and reflection. The critical space for this engagement might be generated by the sceptical practice that I have attempted to outline here, an appetite for enquiry sharpened by the withholding of assent. A sceptical anthropology thus draws into question the grounds for all knowledge leaving only the play of 'fluxes of knowledge' (Deleuze 2006:50) and the acceptance of incessant enquiry as the only means of stabilisation in epistemic free-fall. The notion of sceptic, as the Spanish poet philosopher Miguel de Unamuno points out, 'does not mean him who doubts, but him who investigates or researches as opposed to him who asserts and thinks that he has found' (de Unamuno 1924)."*

Laughlin concludes his chapter with a rather obvious suggestion:

*However, no one should ever be forced into such explorations, for such work often requires years of preparation, arduous self-confrontation, and advanced spiritual maturity (usually requiring a slow developmental seasoning), to say nothing of possibly dangerous ordeals, encounter with fearful 'supernatural' entities, radical loss of ego boundaries, and the like. The very best we can hope for, we believe, is to sensitize the discipline to the existence and legitimacy of transpersonal experiences, and the significance of an understanding of such experiences to an explanation of alien symbolic and religious systems.*

Those wishing to pursue paranthropology more deeply might enjoy *The Trickster and the Paranormal*, by George P. Hansen (2001), which covers psychic and deceptive practices of shamans and other magico-religious practitioners from both a field and laboratory perspective. A foundational work on the structures of consciousness and symbolic process, the classic by Laughlin, McManus & d'Aquili, *Brain, Symbol & Experience: Toward a Neurophenomenology of Human Consciousness*, is a must-read.

Also of value to anthropologists and other researchers are taxonomies of consciousness, which function as orienting maps of inner experience and transpersonal consciousness. They systematically cover exotic cognitive factors and unusual powers and abilities, including the effects of trance, drugs, yoga, self-hypnosis, mutual hypnosis, meditation, brainwave feedback, dream consciousness, pathologizing, and more. Among the best are those by John Curtis Gowan (*Trance, Art & Creativity*), Charles Tart (*Altered States of Consciousness*), Michael Washburn (*Ego & the Dynamic Ground*), and Stan Grof (*The Adventure of Self Discovery*). Anthropologists

have observed that taxonomies are generally embedded in local cultural and social systems, and serve various social functions.

Altered States of Consciousness (ASC) lose their irrational character seen as alternative ways of gaining knowledge or framing reality that relate to ego dissolution or transpersonal development. They comparatively specify the amount of awareness and arousal involved, including combinations of self-awareness, environmental awareness, and spiritual awareness (Fischer). Paranthropology studies whether these states, including spiritual intelligence, are internally consistent or dependent on social or cultural factors. Transcendental awareness may be passive while conscious state expansion is active. Edinger, Fischer, and Washburn address transpersonal issues in social, psychological, and biological terms.

Another necessary tool for paranthropologists is knowledge of the spectrum of psychophysical manifestations and pathologies that modulate perception. Some maladies and head injuries are relevant, in addition to the usual range of personality disorders, psychoses and pathologies. Problems in either or both temporal lobes create troubles with memories, fears, confusion, anxiety, abnormal sensory perceptions, visual and auditory hallucinations, spaciness or amnesia, *déjà vu* and *jamais vu*, unusual abdominal pain or headaches, religious or moral preoccupation, excessive writing, overemphasis on trivia, and of course seizures. (Miller, 2003).

Dr. Daniel Amen sums up the symptomology with ten defining points: 1). Disturbance of auditory sensation and perception; 2). Disturbance of selective attention of auditory and visual input; 3). Disorders of visual perception; 4). Impaired organization and categorization of verbal material; 5). Disturbance of language comprehension; 6). Decreased long term memory; 7). Altered personality and affective development; 8). Altered sexual behavior; 9). Inability to perceive or remember events; 10). Damage to the inferior aspect of the temporal lobe – decreased memory in proportion to tissue damaged.

Persinger and others have assembled Inventories and Questionnaires potentially valuable in establishing certain parameters in fieldwork (see Appendix A and Appendix B, this article). Such lists can help researchers target specific vectors by devising their own screenings.

## Conclusions

In conclusion, we hope to see many more provocative and insightful articles from *Paranthropology*, including theoretical and methodological contributions to the developing anthropology of the paranormal. Basic human energies and motivations drive our pursuits. While treatment philosophies and counseling are beyond the practice of most anthropologists, Clinical Paranthropology fosters awareness of how anomalous experiences may be related to or contribute to various health related issues.

Anomalistic Psychology means working with people in the clinical setting who claim to have had strange experiences and/or abilities that they could not explain. In paranthropology, the process of the experience is just as important as the exploration of the reported phenomena. Psi is an inherent

part of the whole pattern of life. Perhaps we need to ask what it tells us about life together on planet Earth.

Even myths that no longer work in articulate social worlds continue to create effects from the subarticulate level. Mythic logic works at the level of the given. Despite our rationales, neither naïve acceptance nor denial keeps psi experiences at bay. They condition the natural and social worlds with transcendent worldviews. Paranthropologists should continue examining their own cultural and mythic grammar about such phenomena to broaden the data base that could potentially answer our questions. Intellectual critique mostly serves the interests of intellectuals.

Meanwhile, we can speculate on what kind of "work" would constitute "years of preparation" befitting a paranthropologist. Issues might include realizing our own changing vocabularies and facile levels of rationalization as well as mythically-based "romantic" visions of holism and "spiritual worlds" (this world/other world) or other mythic grammars of our own cultures. There are likely as many answers and avenues as there are seekers. This is the essence of self-actualization and individuation.

With a spirit of social experimentation, Charles Tart suggests, "In point of fact, most spiritual systems have many ways in which they could be improved and have areas in which they have no answers or the wrong answers. Thus they need more research, they need an enlightened kind of science to broaden their horizons and make them more effective."

Psi phenomena transcend ethnic and national identities and can instantly transport us to a "foreign land" even when we are at "home".

## Appendix A

"Personal Philosophy Inventory" (Makarec and Persinger, 1990)

Makarec, K., & Persinger, M. A. (1985). Temporal lobe signs: Electroencephalographic validity and enhanced scores in special populations. *Perceptual and Motor Skills*, 60, 831-842.

Makarec, K., & Persinger, M. A. (1990). Electroencephalographic validation of a temporal lobe signs inventory in a normal population. *Journal of Research in Personality*, 24, 323-337.

*(Sample items indicating complex partial epileptic temporal lobe signs.)*

While sitting quietly, I have had uplifting sensations as if I were driving over a rolling road.

I often feel as if things are not real.

At least once, before falling down, I had an intense smell from childhood, apparently for no reason.

Once, in a crowded place, I suddenly could not recognize where I was.

I have had a vision.

People tell me I "blank out" sometimes when we're talking.

When relaxed or before falling asleep I sometimes feel pleasant vibrations moving through my body.

Sometimes in the very early morning hours I have meaningful experiences.  
I have heard an inner voice call my name.  
I use hunches more than simple learning to solve new problems.  
Sometimes an event occurs that has special significance for me only.  
I have had experiences where I felt as if I were somewhere else.  
There have been brief times when I felt very close to a Universal Consciousness.  
I have had dreams of floating or flying through the air.  
At least once in my life I have felt the presence of another being.

*(Sample items indicating Psi experiences or exotic beliefs)*

I have been taken aboard a space ship.  
I would like to time travel.  
When I have a tough decision a sign will be given and I will know what to do.  
If God told me to kill, I would do it in His name.  
I think there is a good possibility that I have lived a previous life.  
Telepathy is a real phenomenon.  
An inner voice has told me where to find something and it was there.  
Alien intelligence is probably responsible for UFOs.  
I have felt as if I have left my body.

## **Appendix B**

“Subjective Experiences Questionnaire” (Ruttan, Persinger and Koren, 1990) {exit survey}

Ruttan, L. A., Persinger, M. A. & Koren, S. A. (1990). Enhancement of temporal lobe-related experiences during brief exposures to milligauss intensity extremely low frequency magnetic fields. *Journal of Bioelectricity*, 9(1), 33-54.

*(Sample items indicating targeted experiences test for vestibular, depersonalization, and imaginings.)*

I felt dizzy or odd.  
I felt the presence of someone or something near me.  
There were tingling sensations.  
I saw vivid images.  
There were pleasant vibrations moving through my body.  
I heard an inner voice call my name or speak to me.  
I experienced anger.  
I experienced sadness.  
The experience did not come from my own mind.  
I heard a ticking sound.  
There were odd smells.  
I experienced terror or fear.  
There were odd tastes in my mouth.  
I felt as if I were somewhere else.  
I experienced thoughts from childhood.

The same idea kept occurring.  
I felt as if I were spinning around.  
There were images from dreams I've had.  
The red light became brighter or darker.

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