

Neurotheology, Spirituality and a Virtual God.

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".. we are confronted with the task of finding out how those who have faith in a Divine Being could have acquired it, and whence this belief derives the enormous power that enables it to overwhelm reason and science." (Freud 1939).

Several atheists including Dawkins (2006), Hitchens (2007) and Wright (2009) have argued recently against the existence of God. However, they have failed to consider the possibly huge influence of people's psychology upon their religion beliefs. The psychological interpretations that I will present are at the moment mostly hypotheses. But on the other side, the Catholics believe in sacred mysteries for which there also is no proof, because they are still mysteries. So groups fore and against the existence of God are at an equal disadvantage because of insufficient evidence.

The correct meaning of the word 'religion' is important. It is derived from the Latin word 're-ligare'. 'Ligare' means to bind or come together, and the prefix 're' means to do it repeatedly. So on Sundays, when we come together as a group we are creating a religious experience. On the secular level, the principal religion of Canadians is watching hockey games. In this talk, I wish to present some new knowledge of human psychology that creates a foundation for the human creation of religious beliefs and an explanation for the ancient origins of a God or gods.

The origin of the old religions. Old religious beliefs must have been fashioned from a combination of external and human sources. I suggest that the external experiences included the paranormal, the occult, clairvoyance, telepathy, healing in response to mass prayer and predictions of the kind made by Nostradamus (Cheetham 1989). Verified observations of these phenomena cannot be explained, nor can they be influenced using our current knowledge. Individuals in ancient societies may also have experienced these rare events and placed them in the same category as the mystical forces that controlled rain, thunder, earthquakes, solar eclipses, fertility, fire, war, death and rebirth. We can easily understand why people who had no knowledge of the causes of these phenomena, created anthropomorphic gods to whom they gave names and to whom they offered sacrifices for favourable consideration and protection.

This mythology must have formed a framework to which was added behavioural rules and cultural traditions. Dogmas were likely created by priests who thereby gave themselves considerable power. I regard these priests as astute observers of nature and of people's psychological needs, and responded by creating rituals to help the general population placate the forces that the priests had deified. I agree with the views of Newberg et al. (2001), that religions are essentially cultural mythologies. But it is difficult to separate religious myth from cultural tradition. This is evident in Islam and Judaism. Even in our essentially atheist society, the popularity of the Christian festivals of Christmas and Easter, shows how our secular culture has transformed religious holy days into a celebration of excessive materialism and consequential waste.

The mystical aspects remain unexplained by definition, but it seldom affects us and rarely do we hear of anyone who can influence these phenomena. So let us say that the mystical aspects amount to 5% or less of our own philosophy. The greater part of our philosophy consists of acts of self-support and hopefully of humanitarian generosity. So let us examine the new evidence that points towards a psychological origin for God and gods.

Neurotheology. Neurotheology is a new term that means the study of the brain's function in relation to religious experiences. Several methods of scanning the living brain have given us a good understanding of the principal functions of the numerous regions of the brain and how they interact as a high-speed communications network. Functional magnetic resonance imaging (fMRI) provides images of oxygen consumption. Another scanning technique that detects the metabolic rate and glucose utilization in brain tissue is called positron emission tomography or PET (Raichle 2010).

This latter technique was used by Newberg et al., (2001) to study the brains of meditating Buddhist monks and Franciscan nuns. As they reached deep meditation, the activity of the posterior part of the parietal lobe was reduced. When these subjects were asked what they had experienced during meditation, the monks described a feeling of being united with the whole universe. The nuns had a similar experience but felt that they had been in the presence of God.

Michael Baigent in *The Jesus Papers* (2007), wondered why the Egyptian temples had so many empty rooms or catacombs carved into their basements. He surmised that these rooms may have been used to assist people to enter into meditation and supposedly travel to Amenta, the world of the afterlife. Similar methods may have been used in the gnostic mystery religions of the Mediterranean prior to the emergence of Christianity. The biblical Saul (Paul) is credited with having been a Pneumatist who initiated students into the second level of Gnosticism (Freke & Gandy 2003) which may have included meditation. Food deprivation in prison and starvation by walking in the desert for only a few days would have resulted in visions from memories of stories of God and Satan.

We now know that the left parietal lobe receives sensory information from many sources to form an abstract image in the mind of self. The right parietal lobe complements this image by informing the mind where the self is located within its surroundings (Newberg et al. 2001). Although meditation is a very relaxing and beneficial practice, it is unlikely that it will give you a return trip to the Afterlife where Osiris will greet you.

Hallucinogenic drugs and religion. A similar experience of the loss of self and of time was described by Aldous Huxley (1954) while taking mescaline, which contains the drug LSD. Rather like some visual artists, he lost the appreciation for time and space and felt something in common with the furniture in the room. LSD also reduces brain activity by slowing glucose metabolism.

Hallucinogens appear to have been an important part of the religious practices in Sumer, in the region of Yemen. The Sumerians regarded hallucinogenic plants with great reverence, believing that some flowering plants and mushrooms contained the supernatural powers of the gods (Allegro 1970).

In ancient times, mental experiences during meditation may have lead to the belief in the afterlife, and of a supposed knowledge of divine mysteries. These experiences could have shaped the ancient god-centered religions including Christianity.

Prophetic visions. Hallucinations may be visual, olfactory or auditory or they may be combined as in schizophrenia. Notable religious leaders who suffered from brief revelations and visions include Abram (Genesis 15), Samuel, St. Paul, St. Augustine, Hildegard von Bingen. Mohammed's visions lasted for 20 years (Sarwar & Toropov 2003). Natural hallucinations can occur periodically, and between these attacks a small proportion of people are able to function fairly normally. In our present-day society, some patients do benefit from antipsychotic drugs (Javitt & Coyle 2004). During an episode, a person may speak as though prophesying by relaying a message supposed by some to be from God. In reality, the message must originate in that person's brain, perhaps from their subconscious memory.

Mohammed's perceived 'messages from God' can be attributed to the prophet's own memory and experiences. His visions which continued for 20 years, started when he was 40 after a life of trading with Jews, Christians and local tribesmen with other local beliefs. I believe that his first wife was a Christian. So he must have heard and remembered many of the stories about the Judeo - Christianity God which he reproduced and interpreted as coming from Allah.

Research has demonstrated that electrical malfunction in the temporal lobe can cause epilepsy and hallucinations (Biello 2007, Murphy 2008). With our current medical knowledge, most people would not accept a person having visions, as a prophet of a god.

Many of the religious leaders in the past claimed to have had visions or hallucinations of receiving messages from God, and this gave them the stature and the conviction to teach and enforce their religious views. But we can now suggest that those who became leaders were most likely suffering from brain function aberrations or could have been using drugs to enhance their religious experience and their control of those who would listen.

The subconscious mind, love and the parent-god. Freud (1928) believed that people's religious views were acquired when they were children from adults. He believed that adults were not able to remember events that had occurred in their first three years of life, and termed it infantile amnesia. This view has been challenged recently by Faber (2004). Faber believes that as adults, we are not conscious of our early babyhood experiences, but those experiences are probably archived but still accessible in our subconscious memory. Freud was the first to introduce the concept of an unconscious or subconscious memory, but he did not apply it to babies and very young children.

Research involving the exposure of individuals to images of various short durations indicated that the memory occurs initially in the subconscious and only the longer pulses are relayed to the conscious part of the brain for a decision on any necessary action (Douglas 2007). A number of our routine activities such as walking, rely on our subconscious memory and allow us the efficiency of doing the easier tasks on 'auto-pilot'.

After birth, the baby is entirely dependant upon parents and caregivers for feeding, comfort and for quick responses to cries for attention. It is suggested that the baby

remembers these early experiences, and when it becomes a child and later an adult, it subconsciously remembers being helped by huge, all-knowing, very strong, protective and loving forces. The hypothesis is that the adult's concept of a personal, loving god is derived from these subconscious memories of protective and loving parents. God is really a parent-god. Because mothers are the primary support for babies at least during the first six months, god-fearing adults should have a female god, instead of an authoritative male god.

The right and left hemispheres of the brain. In his 2006 book *The God Delusion*, Richard Dawkins reported (p.102) on a survey of the religious views of distinguished scientists. Most of them were atheists but 6% believed in a personal God. In surveys of less educated people the percentage of believers was higher. So the question is: how can a person with exceptional reasoning ability also have a belief that relies on faith and not on logic? The answer may lie in the functioning of the brain's left and right hemispheres.

The left hemisphere of the brain is suited to organizing information, objective analyses, reasoning and language. The right hemisphere is more intuitive, creative and emotional (Ornstein 1980). I think the answer to Dawkins' dilemma could be that the ability of the left hemisphere to reason religious claims may be eclipsed by strong, emotional religious convictions from the right hemisphere. So a respected scientist with a brilliant analytical mind in chemistry may hold unreasonable and unsubstantiated religious views from his emotional right hemisphere.

My idea is supported by the hypothesis that people had bicameral minds as recently as 5000 years ago. The bicameral mind concept proposes that the brain's two hemispheres used to function almost independently (Jaynes 1976). Today we see peoples' behaviour during hallucination, the hypnotic state, religious ecstasy and of children aged three to seven having imaginary companions. It reveals a brain that 'has a mind of its own', that needs to be regulated by other parts of the brain to give a controlled, responsible consciousness.

The heroes of Homer's *Iliad* and the early writings in the Torah indicate that it was normal for people to rely on perceived voices to advise them, instead of being able to rely on their own reasoning and judgment. It is suggested that the right side of the brain might have generated an idea that would be perceived by the left side as a voice delivering a command or message. Examples are Samuel's perception of God's call to him (1 Sam 3) and Mohammed.

Spirituality. It appears that Spirituality is an important part of the belief of many Unitarian Universalists. Spirituality is used to describe the perceived relationships that people feel towards other people, towards nature and an awe of the cosmos. It gives them a feeling of belonging; that they are not alone in this sometimes forbidding world. Spirituality may be an aspect of the parent-god syndrome. We constantly recognize our helplessness or vulnerability and perhaps we long for the ordered life of our babyhood. God-fearing believers have their God or gods to look after them. UUs are not so fortunate and are not convinced about God. But they may have that same need for a parent-god, so they subscribe to spirituality. They may find that to be without some form of ultimate justice, or ultimate love, is just unbearable. There will be other UUs who do not believe in

spirituality. They can accept that there is no afterlife and no spiritual force, and they accept their life as transient within the evolving cosmos.

The one difficulty that I have with spirituality or New Age religion, is that advocates have brazenly taken their vocabulary from god-centered religions. I strongly object to this practice because it reduces previously meaningful terms to something that may become vague and essentially meaningless. 'God' was originally used to define a supposed supernatural power, but now it can be an unexplained ethereal presence within us and in both animate and even in inanimate objects.

Miracles used to be attributed to supernatural intervention in our rigidly defined physical world. Apparently, Emerson had the audacity to use 'miracle' to describe any phenomenon that he found natural but exceptional, but which could be readily explained physically. So 'miracle' is no longer supernatural but can mean almost anything. If words are used in other contexts with differing meaning, their impact and communicative value are lost and the language is greatly weakened. The English language is threatened if new words are not generated, or old words are not hyphenated or qualified creatively.

Humans need to be social. Probably we have often experienced a feeling of helplessness and of being very much alone. From a social point of view, there is safety in numbers. We do need friends, so we join groups and perhaps develop an identity within the group whether it is familial, religious, tribal or political (Newberg et al. 2001). We may also gain a feeling of security by realizing that we are part of an hierarchical social system (Tiger & McGuire 2010). We may belong to a family. Let us say that the family answers to the local mayor, who reports to the provincial premier, who in turn reports to the Prime Minister. American presidents tend to believe that their guidance is divine. Hopefully, most Canadian Prime Ministers rely on the democratic process for inspiration. The appreciation of the hierarchical relationship is very important for the individual's need for a feeling of security and could be related, in part, to the parent-god syndrome which may have dogged us all our life.

The great majority of believers are unwilling to reexamine their beliefs. They are quite sure that their faith is correct, and to start to question it would be an outright condemnation of themselves. They would lose their chance of salvation and the expectation of life in heaven at the end of this experience. It is also possible that adult Christians enjoy attending church because it reminds them, subconsciously, of the days when they were small children and attended church with their parents. If they were to deny the truth of their faith it would be as though they were denying a life time of family values. These needs and loyalties are deeply entrenched, and it is obviously difficult to persuade believers that their God is only a human parent god, and the dogmas are all man-made.

Religion and a virtual god. The social aspects of our lives are clearly very important. We need to come together as a group. We need to have a religion in the original sense. We need to share and reinforce our humanitarian convictions because they benefit us as well as those we help. This is where our social justice program becomes so important as well as our individual involvements in other groups away from the church. Those people who believe in a judgmental God, may serve God first through worship, for their own benefit, and treat their fellow beings as second class. For Unitarians our friends and fellow

travellers are in the dimension of reality. If Unitarians believe in a god, it is a virtual god. I think that our god is virtual because we may use the term as a respectful metaphor, and in a sense of our humility and honesty. Our belief respects the truth and reality and generally avoids the supernatural dimension. Thank god for that!!

Summary. Recent research has revealed some of the intricate and complex workings of the human brain. This has allowed us to realize that there is a hidden sub-consciousness which works seamlessly with the conscious mind. We suspect that this sub-conscious memory has retained memories of our early babyhood, when our parents appeared to us like gods, to use adult terminology. This parent-god experience is shared by everyone and may explain why we think that there must be an ultimate truth and an ultimate justice. Coupled with a fear of the great unknown, these feelings can lead to a belief that there must be a personal, protective-god. Our minds are very creative and they can easily mislead us with dreams, revelations or epileptic hallucinations or just problem solving solutions.

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