

# Chapter 11

The Meditative Brain - A Biological Basis for  
Philosophy, Economics, History, Politics,  
Literature, Social Movements, Feminism,  
Alternate Sexuality and Globalization

## Introduction

Meditation can modulate body metabolonomics and brain function. The mechanism is by induction of the heme oxygenase system. Meditation induced heme oxygenase which converts heme to carbon monoxide and bilirubin. Bilirubin and biliverdin are free radical scavengers and mops up free radicals. Free radicals are required for the function of the NMDA dependent thalamo-cortico-thalamic feedback reverberatory circuit crucial in consciousness. This circuit mediates working memory and focused attention. Free radicals also activate NMDA and by its capacity of diffusing freely through the brain systems can induce NMDA activity, synchronized burst firing of neurons in different parts of sensory areas producing perceptual synchronization. This mediates consciousness. Thus the scavenging of free radicals by heme oxygenase leads to suppression of consciousness and meditative trances. Heme oxygenase induction suppresses ALA synthase. Thus heme is depleted from the system. There is increased porphyrin synthesis leading onto porphyrinuria and porphyria. The stimulus for porphyrin synthesis comes from heme deficiency. Porphyrins can organize into self replicating supramolecular structures called porphyrions which are induced by meditative practices. The porphyrins can self organize to form macromolecular structures which can self replicate to form a porphyrin organism. The photon induced transfer of electrons along the macromolecule can lead to light induced ATP synthesis. The porphyrins can form a template on which RNA and DNA can form generating viroids. The porphyrins can also form a template on which prions can form. They all can join together - RNA viroids, DNA viroids, prions - to form primitive archaea. Thus the archaea are capable of self replication on porphyrin templates. The self replicating archaea can sense gravity which gives

rise to consciousness. They can also sense the anti-gravity fields which gives rise to the unconscious brain. Thus there can be both self replicating archaea and anti-archaea regulating the conscious and unconscious brain. Thus the climate change stress mediated increased porphyrin synthesis leads to prefrontal cortex atrophy, cerebellar dominance, cerebellar cognitive affective disorder, quantal perception and Neanderthalisation of the population. The porphyrions are self replicating supramolecular organisms which forms the precursor template on which the viroids, prions and nanoarchaea originate. Meditative stress induced template directed abiogenesis of porphyrions, prions, viroids and archaea is a continuous process and can contribute to changes in brain structure and behavior as well as disease process.

The homo neanderthalis society was matrilineal and the homo sapien society was patrilineal. The homo neanderthalis as described in previous papers had increased actinidic archaeal growth and archaeal magnetite/porphyrin mediated quantal perception. This gave a feeling of collective unconscious and universal oneness. The homo sapiens had decreased actinidic archaeal growth and archaeal magnetite/porphyrin mediated quantal perception was minimal. This gave rise to individuality in homo sapiens as opposed to societal consciousness in homo neanderthalis. This is the biological basis of the features of homo neanderthalis society - primitive communism, socialism, democracy, female dominance, alternate sexuality, creativity in art and literature, spirituality, eco-consciousness, peaceful co-existence and a globalised world. The homo sapien society was selfish, primitive capitalistic, undemocratic, dictatorial, patriarchal, more masculine, less creative in art and literature, non-spiritual and material, heterosexual, exploitative, polluting, nationalistic and with an increased propensity to war. The phenomena of global warming leads to increased extremophilic actinidic archaeal growth and neanderthalisation of homo sapiens leading to the resurgence of neanderthalic features in society. The study evaluated

actinidic archaeal growth in individuals with different personal characteristic features of socialistic, capitalistic, democratic, dictatorial, feminist, male chauvinist, artistic, creative literary characters, alternate sexuality, eco-conscious, nationalistic and globalised outlook. The results are presented in this study.<sup>1-16</sup>

## Materials and Methods

The blood samples were drawn from two groups (1) the neanderthalic matrilineal population with outlook of altruism, primitive communism, socialism, democracy, female dominance, alternate sexuality, creativity in art and literature, spirituality, meditative practices, eco-consciousness, peaceful co-existence and a globalised world (2) the homo sapien patrilineal population with outlook of selfishness, primitive capitalistic, undemocratic, dictatorial, patriarchal, more masculine, less creative in art and literature, non-spiritual and material, heterosexual, exploitative, polluting, nationalistic and with an increased propensity to war. The estimations done in the blood samples collected include cytochrome F420 activity.

## Results

The results showed that the population with neanderthalic features and characteristics of altruism, primitive communism, socialism, democracy, female dominance, matrilineal, alternate sexuality, creativity in art and literature, spirituality, eco-consciousness, peaceful co-existence and a globalised world had increased cytochrome F420 activity. The results showed that the population with homo sapien features and characteristics of selfishness, primitive capitalistic, undemocratic, dictatorial, patriarchal, more masculine, less creative in art and literature, non-spiritual and material, heterosexual, exploitative,

polluting, nationalistic and with an increased propensity to war had increased cytochrome F420 activity.

*Table 1. Cytochrome F420 activity.*

		Neanderthalic (meditative)	Homo sapien	F value	P value
CYT F420 %	Mean	23.46	4.48	306.749	< 0.001
(Increase with Cerium)	±SD	1.87	0.15		

## Discussion

### Neurobiology of Economics - Communism and Capitalism

The homo neanderthalis society and matriarchal societies had increased magnetite mediated quantal perception. There was a feeling of the collective unconscious and the oneness of the world. The individual existence was meagre. The society existed as a universal whole. This gives rise to the feeling of altruism, compassion and love. This resulted in a society where societal consciousness was dominant. There was a feeling of sharing and giving. This was the basis of primitive socialism and communism. There were no hierarchal structures and the society functioned on a commune basis. Eastern societies had a more communal and social basis.

The homo sapiens and patriarchal societies had decreased magnetite mediated quantal perception. There was no feeling of collective unconscious and oneness of the world. There was a feeling of individuality and self. The society existed for the individual or family. There was no feeling of altruism, compassion and love. Individuality and dog-eat-dog mentality was dominant. There was no feeling of sharing or giving. The aim was to amass wealth for the individual and the family. There were hierarchal structures and society functioned on the basis

of wealth and privilege. This evolved into capitalism. Western societies had a capitalistic basis.<sup>1-16</sup>

## **Neurobiology of History and Politics**

The homo neanderthalis had increased quantal perception. This gave rise to a feeling of oneness and equality. There were no hierarchal structures and there was a feeling of universal whole. This was exemplified in neanderthalic societies. Democracy evolved in the ancient Indian republics of the medieval age. The Harappan society was also democratic. There was tolerance of minorities.

The homo sapiens had decreased quantal perception. There was more of individuality, selfishness and the need to control others. This gave rise to dictatorship, kingship and non-democratic structures. The Nazi Germany is an extreme example of the homo sapien behavior of selfishness and dictatorship. There was no tolerance of minorities as seen in the Nazi attitude to Jews who were neanderthalic in origin.<sup>1-16</sup>

## **Neurobiology of Social Organization, Feminist Movement and Alternate Sexuality**

The homo neanderthalis had increased growth of cholesterol catabolizing archaea which gave rise to sex hormone deficiency and male-female equality. The homo neanderthalis had a matriarchal society with features of alternate sexuality with asexual features. There was female dominance and female leadership. There was increased quantal perception in the neanderthalic brain leading onto an equal society without hierarchy. This was a sort of primitive communism with sharing and compassion. There was no premium on individuality. There was less of consumerism and more of environmental

consciousness. The environment had a soul. It was predominantly a give and take society. The society was equal and there was no apartheid. The invading homo sapiens, the Aryans imposed the caste society on the peace loving sudric Neanderthals. The Rig vedas contain vivid description of this war.

The homo sapiens had decreased growth of cholesterol catabolizing archaea which gave rise to increase in sex hormones and male dominance. The homo sapien society was a patriarchal society with male dominance and male leadership. It was predominantly heterosexual. There was decreased quantal perception leading onto a society in which individuality had a premium. This gave rise to a capitalistic society and consumerism with very little environmental consciousness. The environment did not have a soul. It was predominantly a take-take society. The society was organized on a caste basis with homo neanderthalis as the underdog sudra and the homo sapiens as the ruling class. It was a form of apartheid.<sup>1-16</sup>

## **Neurobiology of Language, Literature and Art**

The homo neanderthalis had increased archaeal infection. This gave rise to vocal tics and motor tics. The motor tics correlated with the vocal tics leading onto the evolution of language. Language evolved due to a possible epidemic la tourette syndrome. Later on literature evolved. The homo neanderthalis had increased quantal perception and extrasensory perception. This gave rise to the world of imagination and literature. Early literature evolved in Eastern neanderthalic societies.

The homo sapiens had less of archaeal infection and a less dominant tics syndrome. The evolution of language was less effective in homo sapiens. The homo sapiens had decreased quantal perception and extrasensory perception. The world of imagination and literature was less evolved in them.

The homo neanderthalis had prefrontal cortex atrophy and cerebellar dominance. This gave rise to appendicular and axial ataxia. This leads onto the evolution of abstract painting. Abstract painting was introduced by Picasso who belonged to the Basque-Celtic society which had a neanderthalic basis. The gait ataxia and appendicular ataxia gave rise to unsteadiness of hands and limbs which later on evolved into dance. The vocal tics lead onto music and the ataxic speech gave rise to the cadence of music. The Eastern societies gave a lead to dance, painting and music.

The homo sapiens had prefrontal cortex dominance and cerebellar atrophy. There was no ataxia. Dance, music and painting were undeveloped in them. The Western societies tend to explore the field of music, dance and painting in less evolved way.<sup>1-16</sup>

### **Neurobiology of Religion, Society and Spirituality**

The homo neanderthalis had increased quantal perception. There was a feeling of oneness of the world and the collective unconscious. This gave rise to the concept of Jungian archetypes. There was increased spirituality and a feeling of a universal soul. Eastern neanderthalic societies were more spiritual and full of universal Godliness.

The homo sapiens had decreased quantal perception. There was no feeling of oneness or the collective unconscious. There was no concept of the Jungian archetypes. There was a decreased spirituality and feeling of universal soul. Religion was more organized, hierarchal and a way of controlling society. It was religion without spirituality. This gave rise to wars on the basis of religion. The semitic societies had their crusades and the modern war on terror. There was no equal war based on religion in the Eastern world.<sup>1-16</sup>

## **Neurobiology of the Feminist Movement and Alternate Sexuality**

The homo neanderthalis had increased growth of cholesterol catabolizing archaea which gave rise to sex hormone deficiency and male-female equality. The homo neanderthalis had a matriarchal society with features of alternate sexuality with asexual features. There was female dominance and female leadership. There was increased quantal perception in Neanderthals and a feeling of oneness of male and female.

The homo sapiens had decreased growth of cholesterol catabolizing archaea which gave rise to increase in sex hormones and male dominance. The homo sapien society was a patriarchal society with male dominance and male leadership. It was predominantly heterosexual. There was decreased quantal perception with male dominance and inequality.<sup>1-16</sup>

## **Neurobiology of the Environmental Movement**

The homo neanderthalis had increased quantal perception and a feeling of oneness with the world. The plants, animals and the earth had a soul. The human being felt at oneness with the world. This leads onto the concept of eco-spirituality. There was no consumerism or exploitation. The world existed along with environment.

The homo sapiens had no quantal perception. There was no feeling of oneness with the world. The plants, animals and earth had no soul. The human being was apart from the world. God gave the world to human being to exploit and enjoy. There was no concept of eco-spirituality. There was consumerism and exploitation of the environment. This leads onto global warming, pollution and destruction of the world.<sup>1-16</sup>

## Neurobiology of Globalization and the Internet Dominated World

The homo neanderthalis had increased quantal perception and felt that the world was one. There was a feeling of global consciousness. The increased perception of low level EMF due to increased porphyrin production leads to prefrontal cortex atrophy and cerebellar dominance. The conscious perception is decreased and quantal perception dominates. The world becomes uniform and one.

The homo sapiens had decreased quantal perception and didn't feel one with the world. There was no feeling of global consciousness. There was decreased perception of low level EMF due to decreased porphyrin production producing prefrontal cortex dominance and dominance of conscious perception. The world belongs to the individual. The world is not perceived as one. The world is divided into nation-states and principalities.<sup>1-16</sup>

## Neurobiology of History, War and Peace

The homo neanderthalis had increased quantal perception and this gave rise to a feeling of universal oneness and uniformity. There was increased love and compassion. There was no war, but universal peace. The homo sapiens had decreased quantal perception and this gave rise to a feeling of individuality and tribal consciousness. There was no love or compassion. There was war and no universal peace.

The major wars of history are between the peace loving homo neanderthalis and aggressive homo sapiens. The Ramayana war was fought between the neanderthalic asuric Ravana army and the homo sapien Rama army. The Mahabharata war was between the homo sapiens Pandava army and neanderthalic Kaurava army. The world wars were imposed upon the world by the homo sapiens and their tribal consciousness. Hitler and Mussolinis are

prime examples of it. The only atomic bombing of the world were also conducted by the homo sapiens allied army.<sup>1-16</sup>

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