

Chapter 6



Internet Exposure, Climatology and Human Conflict - The Modern Neanderthal Civilization and the Cro-Magnon Neanderthal Conflict - Evidence from Human Biology



Introduction

The internet exposure leads to low level EMF induced heme oxygenase induction in the brain. The brain heme is depleted leading to increase in ALA synthase and porphyrin synthesis. The porphyrins self aggregate to form supramolecular organisms called porphyrions. The porphyrin acts as a template for the formation of RNA viroids, DNA viroids, isoprenoid organisms and prions which symbiosed to form nanoarchaea. The nanoarchaea contain magnetite and are magnetotactic and can have quantal perception as well as low level EMF perception. This leads to more of brain endosymbiotic nanoarchaeal growth. The nanoarchaea are capable of methanogenesis which contributes to global warming. The global warming related to internet exposure can produce still further increase in endosymbiotic archaeal symbiosis.

The extremes of climate change produce endosymbiotic archaeal growth. The archaea are cholesterol catabolizing organism. This results in neanderthalisation of the human species. This occurred during the ice age and is possibly a continuing phenomenon during the periods of global warming. The homo neanderthalis are matrilineal and the residual matrilineal societies of the Dravidians, Semites, Basques, Celts and Berbers are neanderthalic. The global warming produces endosymbiotic archaeal growth and neanderthalisation. This produces brain changes with the cerebral cortex becoming dysfunctional and cerebellum becoming dominant. This is due to increased perception of low level EMF by archaeal magnetite. This produces changes in human society, behaviour and disease patterns.¹⁻¹⁷

The endosymbiotic actinidic archaea forms the basis of life and can be considered as the third element in the cell. It regulates the cell, the neuro-immune-endocrine system and the conscious/unconscious brain. The endosymbiotic actinidic archaea can be called as the elixir of life. A definite

population of endosymbiotic actinidic archaea is required for the existence and survival of life. A higher density of endosymbiotic actinidic archaeal population can lead to human disease. Thus actinidic archaea are important for survival of human life and can be considered as crucial to it. Symbiosis by actinidic archaea is the basis of evolution of humans and primates. The increase in endosymbiotic archaeal growth can lead to the induction of homo neanderthalis. This endosymbiotic archaea induced neanderthalisation of the species leads to human disease like metabolic syndrome X, neurodegenerations, schizophrenia and autism, autoimmune disease and cancer. The reduction in endosymbiotic archaeal growth by a high fibre, high medium chain triglyceride and legume protein ketogenic diet, antibiotics from higher plants like *Curcuma longa*, *Emblica officianalis*, *Allium sativum*, *Withania somnifera*, *Moringa pterygosperma* and *Zingiber officianalis* and transplantation of colonic microflora from normal homo sapien population can lead to deneanderthalisation of species and treatment of the above mentioned diseased states. The colonic microflora of neanderthalised diseased states like metabolic syndrome X, neurodegenerations, schizophrenia and autism, autoimmune disease and cancer when transferred to the normal homo sapien species leads to generation and induction of homo neanderthalis. Thus primate and human evolution is symbiotic event which can be induced the modulating symbiotic archaeal growth. Human populations can be divided into matrilineal Neanderthal population in South Indian Dravidians, Celts, Basques, Jews and Berbers and the Cro-Magnon population seen in Africa and Europe. The symbiotic archaeal colonization decides which species - Neanderthal or Cro-Magnon to which the society belongs to. It is tempting to postulate symbiotic microflora and archaea determining the family behavior and traits as well as societal and caste behavior and traits. The cell has been postulated by Margulis to be a symbiotic association of bacteria and viruses. Similarly, the family, the caste, the community, nationalities and the species itself is determined by archaeal and

other bacterial symbiosis. Symbiosis by microorganisms especially archaea drives the evolution of the species. In such a case symbiosis can be induced by transfer of microflora symbionts and evolution induced. Transfer of colonic microflora predominantly archaea and modulation of endosymbiotic archaea by a paleo diet and antibiotics from higher plants can lead to interconversion of human species between homo neanderthalis and homo sapiens.

Global warming induces a genomic change in humans. Global warming induces endosymbiotic archaeal and RNA viroidal growth. The porphyrins form a template for the formation of RNA viroids, DNA viroids, prions, isoprenoids and polysaccharides. They can symbiose together to form primitive archaea. The archaea can further induce HIF alpha, aldose reductase and fructolysis resulting in further porphyrinogenesis and archaeal self replication. The primitive archaeal DNA is integrated along with RNA viroids which are converted to their corresponding DNA by the action of redox stress induced HERV reverse transcriptase into the human genome by the redox stress induced HERV integrase. The archaeal DNA sequences that are integrated into the human genome forms endogenous archaeal human genomic sequences akin to HERV sequences and can function as jumping genes regulating genomic DNA flexibility. The integrated endogenous genomic archaeal sequences can get expressed in the presence of redox stress forming endosymbiotic archaeal particles which can function as a new organelle called the archaeaons. The archaeaon can express the fructolytic pathway constituting an organelle called the fructosome, cholesterol catabolic pathway and digoxin synthetic forming an organelle called the steroidelle, the shikimic acid pathway forming an organelle called the neurotransminoid, antioxidant vitamin E and vitamin C synthetic organelle called the vitaminocyte as well as the glycosaminoglycan synthetic organelle called glycosaminoglycoid. The archaeaon secreting RNA viroids is called the viroidelle.

Symbiosis by microorganisms especially archaea drives the evolution of the species. In such a case symbiosis can be induced by transfer of microflora symbionts and evolution induced. Endosymbiosis by archaea as well as archaeal symbionts in the gut can modulate the genotype, the phenotype, the social class and the racial group of the individual. The symbiotic archaea can have horizontal and vertical transmission. Endosymbiotic archaeal growth leads to neanderthalisation of the species. The neanderthalised species is matrilineal society and includes the Dravidians, the Celts, the Basques and the Berbers. The inhibition of the endosymbiotic archaeal growth leads to evolution of the homo sapiens. This includes the Africans, Aryan invaders of North India and the Aryan derived European population. Symbiosis mediated evolution depends on the gut flora and the diet. This has been demonstrated in the *Drosophila pseudoobscura*. The *Drosophila* mates only with other individuals eating the same diet. When the *Drosophila* gut microflora is altered by feeding antibiotics they mate with other individuals eating different diets. The diet consumed by the *Drosophila* regulates its gut microflora and mating habits. The combination of the human genome and the symbiotic microbial genome is called the hologenome. The hologenome especially its symbiotic microbial component drives human evolution as well as animal evolution. The evolutionary distance between species of wasp depends on the gut microflora. The human gut microflora regulates the endocrine, genetic and neuronal systems. Humans and primate evolution depends on endosymbiotic archaea and gut microflora. The endosymbiotic archaeal growth determines the racial differences between the matrilineal Harappan/Dravidian societies and the patriarchal Aryan society. The matrilineal Harappan/Dravidian society was neanderthalic and had increased endosymbiotic archaeal growth. Endosymbiotic archaeal growth and neanderthalisation can lead to autoimmune disease, metabolic syndrome X, neurodegeneration, cancer, autism and schizophrenia. The Neanderthal gut flora

and endosymbiotic archaea was determined by the non vegetarian ketogenic high fat high protein diet consumed by them in the Eurasian steppes. The homo sapiens including the classical Aryan tribes and African ate a high fibre diet and had lower archaeal growth both endosymbiotic and gut. The dietary fibre intake determines the microbial diversity of the gut. The high fibre intake is associated with increased generation of short chain fatty acids-butyric acid by the gut flora. Butyrate is a HDAC inhibitor and leads to increased generation and incorporation of endogenous retroviral sequences. The high dietary fibre intake related increased HERV sequences leads to increased synaptic connectivity and a dominant frontal cortex as seen in homo sapien species. The neanderthalic species consume a ketogenic non-vegetarian high fat high protein low fibre diet. This leads to decreased generation of endogenous HERV sequences and reduced genomic flexibility in neanderthalic species. This produces smaller cerebral cortex and a dominant cerebellar cortex in the neanderthalic brain. The homo neanderthalic species by the low dietary fibre intake starve their microbial self. This leads to increased endosymbiotic and gut archaeal growth. The mucous membrane lining the gut becomes thinned out as the gut bacteria eats up the mucous lining of the gut. This results in leakage of endotoxin and archaea from the gut to the blood breaching the barrier and produces a chronic immunostimulatory inflammatory state which forms the basis of autoimmune disease, metabolic syndrome, neurodegeneration, oncogenic and psychiatric disorders. The Neanderthal species eat a low fibre diet and have a deficiency of microbiota accessed carbohydrate generating short chain fatty acid. There is a deficiency of butyrate generated in the gut from the dietary fibre which can produce suppression of the chronic inflammatory process. The Neanderthals have got the fermentation by-product deficiency syndrome. The induction of neanderthalic species depends on the low fibre intake induced high archaeal density endosymbiotic and the gut microflora. The homo sapiens species

consume a high fibre diet generating large amounts of short chain fatty acid butyrate which inhibits endosymbiotic and gut archaeal growth. The microbial self of the homo sapien species is more diverse than that of the neanderthalic species and the archaeal population density is less. This results in a protection against chronic inflammation and the induction of diseases like autoimmune disease, metabolic syndrome, neurodegeneration, oncogenic and psychiatric disorders. The homo sapien species have a higher intake of dietary fibre contributing to around 40 g/day and a diverse microbial gut flora with less of archaeal population density. The butyrate generated from dietary fibre produces an immunosuppressive state. Thus the symbiotic microflora with less of archaeal density induces a homo sapien species. This can be demonstrated by experimental induction of evolution. A high fibre high MCT diet as well as antibiotics derived from higher plants and fecal microbiota transfer from sapien species can inhibit the Neanderthal metabolonomics and phenotype and induce the evolution of homo sapiens. A low fibre high fat high protein diet as well as fecal microbiota transfer from the Neanderthal species can produce Neanderthal metabolonomics and phenotype inducing the evolution of homo neanderthalis. Transfer of colonic microflora predominantly archaea and modulation of endosymbiotic archaea by a paleo diet and antibiotics from higher plants can lead to interconversion of human species between homo neanderthalis and homo sapiens. The hologenome especially the microbial flora endosymbiotic/gut drives human and animal evolution and can be experimentally induced. Symbiotic microflora drives evolution. Every animal, every human species, different communities, different races and different caste have their signature endosymbiotic and gut microflora which can be transmitted vertically and horizontally. Thus symbiosis drives human and animal evolution. The colonic and endosymbiotic archaea and other microbes like clostridial clusters determine the species, race, caste, community and personal identity of

the individual. The identity of the individual-personal, community, caste, race, nationality and species is determined by the colonic and endosymbiotic archaeal and clostridial clusters. Predominant archaeal symbiosis produces homo neanderthalis and less prominent archaeal symbiosis and dominant clostridial clusters in the gut produces the homo sapien species. Each individual, race, nationality, caste, creed and community have the endosymbiotic and colonic microbiota signature. This colonic and endosymbiotic microbiota signature is transferable by the change of endosymbiotic and colonic microbiota from one group to another. Thus the evolution and identity based on individuality, race, nationality, caste and creed can be induced.

This can be interpreted on the basis of Villarreal hypothesis of group identity and cooperativity of RNA collectives. Archaeal symbiosis in the gut and in the tissue spaces determines speciation of human beings as homo sapiens and homo neanderthalis. The endosymbiotic archaea can secrete RNA viroids and viruses and there is a viroid-archaeal host relationship between the two. A dynamic state of virus lysis and persistence can occur in archaea suggesting that viral addiction can occur in archaea. The RNA viroids in the archaea coordinate their behavior by information exchange, modulation and innovation generating new sequence based content. This occurs due to a phenomenon of symbiosis in contrast to the concept of survival of the fittest. The generation of new RNA viroidal sequences is a result of practical competence of living agents to generate new sequences by symbiosis and sharing. This represents highly productive RNA viroidal quasi-species consortia for the evolution, conservation and plasticity of genomic environments. The behavioural motives of the RNA are single stem loop structures. They have self folding and group building capabilities depending upon functional needs. The evolution process depends upon what Villarreal calls RNA stem loop consortia. The whole entity can function only if participatory groups of RNA viroids can get their function

coordinated. There is competent denovo generation of new sequences by cooperative action and not by competition. These RNA viroidal group consortia can contribute to the host identity, group identity and group immunity. The term used for this is RNA viroidal sociological behavior. The RNA viroids can build groups that invade the archaea and compete as a group for limited resources such host genomes. A key behavioural motif is able to integrate a persistent life style into the archaeal colony with the addiction module forming competing viroidal groups that are counter balancing each other together with the archaeal/host immune system. This leads to creation of an identity for the archaeal colony and the homo neanderthalis host. Viroids can kill their host and also colonize their host without disease and protect the host from similar viruses and viroids. Together with lysis and protection we see a viroid colonized host that is both symbiotic and innovative acquiring new competent codes. Thus the viroid-host relationship is a pervasive, ancient force in the origin and evolution of life. Cumulative evolution at the level of RNA viroids is like a ratchet effect used for transmission of cultural memes. This learning accumulates so that every new generation must not repeat all innovative thoughts and techniques. Quasi-species of RNA viroids are cooperative and exclusive of other quasi-species. They have group recognition differentiating self groups and non-self groups allowing for quasi-species to promote the emergence of group identity. With group identity via counter related addiction modules two opposing components must be present and work coherently and define the group as a whole. Biological identity is constituted by dynamic interaction of cooperative groups. Virus addiction module is an essential strategy for existence of life in the virosphere. Viruses are transmissible and can persist in specific host population leading to a form of group immunity/identity since identical but uncolonized host population remains susceptible to a killing action of lytic viruses. In this way we see that viruses are necessary providing opposing

functions for addiction (persistence/protection and lytic/killing). Viroids can function as consortia, an essential interacting group and provide a mechanism from which consortial function could emerge in the origin of protobiotic life. Genetic parasites can act as a group (qs-c). But for this group to be coherent they must attain group identity and this is typically via an addiction strategy. Antiviral and proviral system in the archaea will themselves emerge in the host from virus derived information. The archaeal viruses themselves provide the critical function required for antiviral defence. The opposing functions are the basis of addiction modules. Thus the emergence of group identity becomes an essential and early event in the emergence of life. This is coherent to the basically group behavior of RNA viroids in archaea. This group selection and group identity are needed to create information coherence and network formation and to establish a system of communication-code competent interactions. This identity serves as information also for the ones that do not share this identity. This is the beginning of self/non-self differentiating capability. In this way viroids promote the emergence of group identity in archaeal colonies and host humans. The archaeal colony identity depends upon the colonizing set of RNA viroids producing a coherent network that is inclusive opposing functions and favours the persistence of parasite derived new information. On the basis of population-based functions of RNA DNA can be considered as a habitat for consortia RNA. Thus RNA viroids of the archaea are involved in complex multicellular identity. This is called as the Gangen hypothesis by Villarreal. The Gangen describes the emergence of commonly shared code use, group membership and collective living function of RNA viroids. Communication is a code depended interaction and transmission of infectious code defines the origin of the virosphere. This issue refers to the idea of collective of RNA viroids with inherent toxic and antitoxic features should be able to transmit or communicate these agents and their features to a nearby

competing population. It strongly favours the survival of RNA viroidal population with compatible addiction modules that will inhibit agent toxicity and allow persistence of new agents. This is thus the survival of the persistently colonized set which is an inherently symbiotic and consortial process. It also promotes increasing complexity and identity/immunity of the host collective via a new agent colonization, and stable addition. Thus the transmission of RNA agents attains both communication and recognition of group membership. In this way the emergence of the virosphere must have been an early event in the origin of life and group identity. Viruses and viroids are genetic parasites and the most abundant living entities on earth. The virosphere is a network of infectious genetic agents. Evolution, conservation and plasticity of genetic identities are the result of cooperative consortia of RNA viroids that are competent to communicate. Thus the archaeal viroidal consortia can symbiotically share and communicate producing new sequences and give an identity to the archaeal colony. The low fibre diet and extreme temperatures of the Eurasian steppes leads to archaeal multiplication and induction of the homo neanderthalis species. The archaeal colony's characteristics are determined by the cooperative consortia of RNA viroids in the archaea and the archaeal colony identity determines the homo neanderthalis identity. Thus the archaeal colonies with their quasi-species consortia of RNA viroids determine the homo neanderthalis identity. The new sequence generation by the RNA viroidal consortia's symbiotic sharing character contributes to the diversity in the behavior and creativity of the homo neanderthalis population. The archaeal RNA viruses and viroids and the archaeal colonies themselves protect the homo neanderthalis population from retroviral infections. Thus the homo neanderthalis population is retroviral resistant and the quasi-species consortia of archaea and archaeal viroids gives them a group identity as retroviral resistant. Thus the quasi-species consortia of archaea and RNA viroids give homo

neanderthalis colonies their identity and idea of self. The homo neanderthalis is resistant to retroviral infection like the Australian aboriginals and the endogenous retroviral sequences in the Neanderthal genome are limited. This leads to lack of plasticity and dynamicity of the human genome and the cerebral cortex in ill-developed with a dominant impulsive cerebellar cortex in the homo neanderthalis population. This produces the impulsive creative surrealistic spiritual neanderthalic brain. As the extreme of temperature goes off and the ice age ends the archaeal population density also comes down. This also can result from the consumption of a high fibre diet in the African continent. The high fibre diet digested by clostridial clusters in the colon promotes butyrate synthesis and butyrate will induce HDAC inhibition and expression of retroviral sequences in the primate genome. This leads to increase in endogenous retroviral sequences in the human genome, increasing genomic dynamicity and the evolution of complicated cerebral cortex dominant brain with its complex synaptic connectivity in the homo sapiens. This leads onto a logical, commonsensical, pragmatic and practical homo sapien brain. The homo sapiens due to lack of archaea and the RNA viroids are susceptible retroviral infection. Thus the archaeal colonies and RNA viroidal quasi-species consortia determine the evolution of the human species and the brain networks. Thus extremes of temperature, fibre intake, archaeal colony density, RNA viroidal quasi-species, group identity and retroviral resistance decides on the evolution of homo sapiens and homo neanderthalis as well as the brain networks. The present extremes of temperature and low fibre intake in civilized society can lead to increase in archaeal population densities and quasi-species RNA viroidal networks generating a new homo neanderthalis in a new neanderthalic anthropocene age as opposed to the present homo sapien anthropocene age. The archaeal population densities and quasi-species RNA viroidal networks determine homo sapien/homo neanderthalis species, racial, caste, community, national, sexual, metabolic,

phenotypic, immune, genotypic, neuronal, psychiatric, psychological and individual identity. The archaea secretes the trephone digoxin which can edit the RNA viroids and generate new sequences. Archaeal dipolar magnetite and porphyrins in the setting of digoxin induced membrane sodium potassium ATPase inhibition can produce a pumped phonon system mediated quantal perceptive state and quantal communication in the RNA viroidal symbiotic system generating new sequences by steroidal digoxin enzymatic editing action. This gives rise to archaeal RNA viroidal quasi-species symbiotic diversity and identity to species, race, caste, sex, culture, individual and national identity.

The roots of Western civilizational disease can be related to the starvation of the colonic microflora. The colonic microflora depends upon complex carbohydrates derived from dietary fibre. The processed food of high protein, fat and sugars is digested and absorbed in the stomach and small intestine. A very little of it reaches the colon and widespread use of antibiotics in medicine has produced mass extinction of the colonic microflora. The colonic microflora is extremely diverse and the diversity is lost. There are 100 trillion bacteria in the colon belonging to 1200 species. They regulate the immune system by inducing the T-regulatory cells. A high fibre diet contributes to colonic microbiota diversity. Interaction with farm animals like cows and dogs also contributes to the colonic microflora diversity. The typical Western diet of high fat, high protein and sugars decreases the colonic microbiota diversity and increase colonic/endosymbiotic archaea producing methanogenesis. The colonic archaea feed upon the mucous lining of the colon and produces leakage of archaea into the blood and tissue system producing endosymbiotic archaea. This results in a chronic inflammatory state. The high fibre diet of Africans, South Americans and Indians produces increased colonic microbiota diversity and increase in clostridial clusters generating SCFA in the gut. High fibre diet is protective against metabolic syndrome and diabetes mellitus. Metabolic

syndrome is related to degeneration, cancer, neuropsychiatric illness and autoimmune disease. A high fibre diet of upto 40 g/day can be called as a gut diet. The colonic microflora especially the clostridial cluster digests the fibre generating short chain fatty acids which regulates immunity and metabolism. High fibre diet increases the colonic mucus secretion and the thickness of the mucus lining. A high fibre diet produces increase in clostridial clusters and mucous secretion. This produces a strong gut blood barrier and prevents metabolic endotoxemia which produces a chronic inflammatory response. High dietary fibre intake and the diversity of the colonic microflora with prominent SCFA producing clostridial clusters are interrelated. The clostridial clusters metabolise the complex carbohydrate in dietary fibre to short chain fatty acids butyrate, propionate and acetate. They increase the T-regulatory function. A high fibre diet increases the bacteroides and reduces the firmecutes of the colonic microflora. A high fibre diet is associated with a low body-mass index. A low fibre diet produces increase in colonic archaeal growth as well as endosymbiotic tissue and blood archaea. This produces more of methanogenesis rather than short chain fatty acid synthesis contributing to immune activation. A low fibre diet is associated a high body-mass index and chronic systemic inflammation. Germ-free mice show cardiac, pulmonary and liver atrophy. Gut microflora is required for the generation of organ systems. The gut microflora is also required for generation of T-regulatory cells. High fibre intake produces more colonic microbiota diversity and increase in clostridial clusters and fermentation by products like butyrate which suppresses inflammation and increases T-regulatory cells. A low fibre diet produces increase in archaeal growth, methanogenesis, destruction of the mucus lining and leakage of the colonic archaea producing endosymbiotic tissue and blood archaea. This produces an immune hyper-reactivity contributing to the modern plagues of civilization-metabolic syndrome, schizophrenia, autism, cancer, autoimmunity

and degenerations. The gut microbiota drives human evolution. The humans don't host the gut microbiota but the gut microbiota host us. The human system forms an elaborate culture laboratory for the propagation and survival of the microbiota. The human system is induced by the microbiota for their survival and growth. The human system exists for the microbiota and not the other way round. The same mechanism holds good in plant systems. Plant started the colonized earth as they started symbiosing with bacteria in the roots systems which can derive nutrients from the soil. Human beings form a mobile culture laboratory for the more effective propagation and survival of the microbiota. The microbiota induces the formation of specialized immune cells called innate lymphoid cells. The innate lymphoid cells will direct the lymphocytes not to attack the beneficial bacteria. Thus the endosymbiotic archaea and the gut archaea induce human, primate and animal evolution to generate structures for them to survive and propagate. The source of endosymbiotic archaea, the third element of life is the colonic archaea that leaks into the tissue spaces and blood systems due to breach in the gut blood barrier. The increase in colonic archaea is due to the starvation of the gut microbiota consequent to a low fibre diet. This results in increase in colonic archaeal growth and destruction of clostridial clusters and bacteroides. The increase colonic archaeal growth in the presence of gut starvation due to low fibre diet eats up the mucus lining and produces breakages in the gut blood barrier. The colonic archaea enters the blood stream and produces endosymbiosis generating endosymbiotic archaea and various new organelle-fructosoids, steroidelle, vitaminocyte, viroidelle, neurotransminoid, porphyrinoids and glycosaminoglycoids.

The human brain can be considered as a modified archaeaon colony network. The archaeaon are eternal and can last for billions of years. The human brain is basically an information storage system. The archaeaon has got dipolar magnetite and porphyrins and can function as quantal computer. The archaeal

colony with its dipolar magnetite and porphyrin in the setting of archaeal digoxin induced membrane sodium potassium ATPase inhibition can function as a pumped phonon system mediating quantal perception. The archaeon in the brain is capable of information storage at a point in time and space. The experiences and information stored in the archaeon is immortal and eternal. The archaeon can have a wave particle existence and can exist in multiple quantal possible states and can inhabit multiple quantal multiverses. The interaction between information stored in quantal computers in multiple different archaeon systems all over the universe by the quantal interactions results in eternal existence of information in quantal multiverses. The information in the quantal multiverses can have a particulate existence creating a newer mode by quantal interactions between information stored at multiple points of time. This creates the particulate mythic world of human existence. These are what are called as Samsaras. The mind is uploaded into information in the neuronal archaeal colony network and its quantal computers. The information stored in the archaeal colony network mediated quantal state is eternal and can be considered as a digital version of the brain, a mind downloading technique or whole brain emulation. The archaeal colony network stores the human experiences in an eternal manner and can contribute to biological reincarnation.

The increase in endogenous EDLF, a potent inhibitor of membrane sodium potassium ATPase, can decrease this enzyme activity. The results showed increased endogenous EDLF synthesis as evidenced by increased HMG CoA reductase activity, which functions as the rate limiting step of the isoprenoid pathway. Studies in our laboratory have demonstrated that EDLF is synthesized by the isoprenoid pathway. The endosymbiotic archaeal sequences in the human genome get expressed by redox stress and osmotic stress of global warming. This results in induction of HIF alpha which will upregulate fructolysis and glycolysis. In the setting of redox stress all glucose gets converted to fructose

by the induction of enzymes aldose reductase and sorbitol dehydrogenase. Aldose reductase converts glucose to sorbitol and sorbitol dehydrogenase converts sorbitol to fructose. Since fructose is preferentially phosphorylated by ketohexokinases the cell is depleted of ATP and glucose phosphorylation comes to a halt. Fructose becomes the dominant sugar that is metabolized by fructolysis in expressed archaeal particles in the cell functioning as organelle called fructosoids. The fructose is phosphorylated to fructose 1-phosphate which is acted upon by aldolase B which converts it into glyceraldehyde 3-phosphate and dihydroxy acetone phosphate. Glyceraldehyde 3-phosphate is converted to D-1, 3-biphosphoglycerate which is then converted to 3-phosphoglycerate. The 3-phosphoglycerate is converted to 2-phosphoglycerate. 2-phosphoglycerate is converted to phosphoenol pyruvate by the enzyme enolase. Phosphoenol pyruvate is converted to pyruvate by the enzyme pyruvic kinase. The archaeon induces HIF alpha which upregulates fructolysis and glycolysis but inhibits pyruvate dehydrogenase. The forward metabolism of pyruvate is stopped. The dephosphorylation of phosphoenol pyruvate is inhibited in the setting of pyruvic kinase inhibition. Phosphoenol pyruvate enters the shikimic acid pathway where it is converted to chorismate. The shikimic acid is synthesized by a pathway starting from glyceraldehyde 3-phosphate. Glyceraldehyde 3-phosphate combines with the pentose phosphate pathway metabolite sedoheptulose 7-phosphate which is converted to erythrose 4-phosphate. The pentose phosphate pathway is upregulated in the presence of the suppression of glycolytic pathway. Erythrose 4-phosphate combines with phosphoenol pyruvate to generate shikimic acid. Shikimic acid combines with another molecule of phosphoenol pyruvate to generate chorismate. The chorismate is converted to prephenic acid and then to parahydroxy phenyl pyruvic acid. Parahydroxy phenyl pyruvic acid is converted to tyrosine and tryptophan as well as neuroactive alkaloids. The shikimic acid pathway is structured in

expressed archaeon organelle called the neurotransminoid. The fructolytic intermediates glyceraldehyde 3-phosphate and pyruvate are the starting points of the DXP pathway of cholesterol synthesis. Glyceraldehyde 3-phosphate combines with pyruvate to form 1-deoxy D-xylulose phosphate (DOXP) which is then converted to 2-C methyl erythritol phosphate. 2-C methyl erythritol phosphate can be synthesized from erythrose 4-phosphate a metabolite of the shikimic acid pathway. DXP combines with MEP to form isopentenyl pyrophosphate which is converted to cholesterol. Cholesterol is catabolised by archaeal cholesterol oxidases to generate digoxin. The digoxin sugars digitoxose and rhamnose are synthesized by the upregulated pentose phosphate pathway. Glycolytic suppression leads to upregulation of the pentose phosphate pathway. The expressed archaeon organelle concerned with cholesterol catabolism and digoxin synthesis is called the steroidelle. The suppression of glycolysis and stimulation of fructolysis results in upregulation of the hexosamine pathway. Fructose is converted to fructose 6-phosphate by ketohexokinases. The fructose 6-phosphate is converted to glucosamine 6-phosphate by the action of glutamine fructose 6-phosphate amidotransferase (GFAT). Glucosamine 6-phosphate is converted to UDP N-acetyl glucosamine which is then converted to N-acetyl glucosamine and various amino sugars. UDP glucose is converted to UDP D-glucuronic acid. UDP D-glucuronic acid is converted to glucuronic acid. This forms the uronic acid synthetic pathway. Uronic acids and hexosamines form repeating units of glycosaminoglycans. In the setting of glycolytic suppression and fructolytic metabolism fructolysis leads to increase synthesis of hexosamines and GAG synthesis. The GAG synthesizing archaeon particles are called the glycosaminoglycoids. The expressed archaeon particles are capable of synthesizing antioxidant vitamin C and E. The UDP D-glucose is converted to UDP D-glucuronic acid. UDP D-glucuronic acid is converted to D-glucuronic acid. D-glucuronic acid is converted to L-gulonate by enzyme

aldoketo reductases. L-gulonate is converted to L-gulonolactone by lactonase. L-gulonolactone is converted to ascorbic acid by the action of archaeal L-gulo oxidase. The vitamin E is synthesized from shikimate which is converted to tyrosine and then to parahydroxy phenyl pyruvic acid. Parahydroxy phenyl pyruvic acid is converted to homogentisate. Homogentisate is converted to 2-methyl 6-phytyl benzoquinone which is converted to alpha tocopherol. 2-methyl 6-phytyl benzoquinone is converted to 2,3-methyl 6-phytyl benzoquinone and gamma tocopherol. Vitamin E can also be synthesized by the DXP pathway. Glyceraldehyde 3-phosphate and pyruvate combined to form 1-deoxy D-xylulose 5-phosphate which is converted to 3-isopentenyl pyrophosphate. 3-isopentenyl pyrophosphate and dimethyl allyl pyrophosphate combined to form 2-methyl 6-phytyl benzoquinone which is converted to tocopherols. The ubiquinone another important membrane antioxidant and part of the mitochondrial electron transport chain is synthesized by the shikimic acid pathway and DXP pathway. The isoprenoid moiety of ubiquinone is contributed from the DXP pathway and the rest of it by tyrosine catabolism. The tyrosine is generated by the shikimic acid pathway. The archaeon particles concerned with the synthesis of vitamin C, vitamin E and ubiquinone which are all antioxidants are called the vitaminocyte.

There is a high incidence of autism and Neanderthal anthropometric phenotypes in the Nair community of Kerala. The Nair community is matrilineal and is one of the few functional matriarchies in the world and speaks the Dravidian language with similarities to Celtic, Scythian, Berber and Basque societies. The autistic brain is comparable to the large sized Neanderthal brain. Autistic and matrilineal societies like Nair can be considered as fossilized remnants of the Neanderthal population. Endosymbiotic actinidic archaea using cholesterol as an energy substrate has been described in systemic disease from our laboratory. The autistic and Nair population were studied for actinide

dependent cytochrome F420 activity suggestive of endosymbiotic archaeal growth.¹⁻¹⁷ This hypothesis was studied by evaluating the endosymbiotic archaeal growth in populations derived from matrilineal societies.

Materials and Methods

Three groups, 25 numbers in each group were chosen for the study-the autistic population diagnosed according to DSM criteria, the normal Nair population and the normal non-Nair population. The matrilineal characteristics and Neanderthal anthropometric characteristics of normal Nair and non-Nair population as well as autistic population were studied. The blood samples were drawn in the fasting state before treatment was initiated. The estimations done in the blood samples collected include cytochrome F420 activity, Cytochrome F420 was estimated fluorimetrically (excitation wavelength 420 nm and emission wavelength 520 nm). The statistical analysis was done by ANOVA.

Results

The results of the study were as follows. The Nair and autistic and civilizational disease group had increased cytochrome F420 activity.

Table 1. Incidence of autism in Nair, autistic and non-Nair population.

Groups	Autism	Percentage
Nair	68 cases	68
Non-Nair	32 cases	32
Total	100	

Table 2. Anthropometric features in Nair, autistic and non-Nair population.

Groups	Neanderthal anthropometric	Total	Percentage
Nair	72 cases	100	72
Non-Nair	21 cases	100	21
Autism	81 cases	100	81

Table 3. *Neanderthal metabolonomics.*

		Nair	Non-Nair	Autism	F value	P value
Cytochrome F420	Mean	4.00	0.00	4.00	0.001	< 0.001
	±SD	0.00	0.00	0.00		

Discussion

Neanderthal and Cro-Magnon Population in Modern World

The internet exposure leads to low level EMF induced heme oxygenase induction in the brain. The brain heme is depleted leading to increase in ALA synthase and porphyrin synthesis. The porphyrins self aggregate to form supramolecular organisms called porphyrions. The porphyrin acts as a template for the formation of RNA viroids, DNA viroids, isoprenoid organisms and prions which symbiosed to form nanoarchaea. The nanoarchaea contain magnetite and are magnetotactic and can have quantal perception as well as low level EMF perception. This leads to more of brain endosymbiotic nanoarchaeal growth. Neanderthalisation is a symbiotic event due to archaeal symbiosis. The Neanderthals had increased symbiotic actinidic archaeal growth. This occurs in extremes of climate like ice age and global warming. The homo neanderthalis evolved from the bonobo primates consequent to this symbiosis. There is increased neanderthalisation of homo sapiens during global warming consequent to increased actinidic archaeal growth. The homo neanderthalis never became extinct but survives as matrilineal societies in the lower Eurasian region. The initial matrilineal neanderthalic civilizations were the Harappan, Sumerian-Akkadian, Assyrian, Etruscan, Minoan, Celtic, Basque, Semitic, Jewish, Arabic, Australian aboriginal civilization. The civilizations are all matrilineal. The initial neanderthalic civilization survives as the lower caste Sudras of India, Dravidians, Australian aboriginals, the Persians, the Semitic Arabs, the Semitic Jews, the Berbers, the Basque, Greeks, Celts and native

Americans. The people inhabiting these civilizations are religious, intuitive, feminine, child-like, dreamy, somnolent, communal conscious, primitive socialistic, more sexual groups. The body habitus of these populations are shorter, sloping forehead, recessive chin and more fairer in colour. This is opposed to the Cro-Magnon population in the northern part of Eurasia and Africa. These populations are scientific, logical minded, patriarchal, more adult-like, more wakeful, fascist and less sexual. The neanderthalic populations inhabit the Indian Ocean rim in southern Asia, west Asia as well as in the peri-Mediterranean region. The Neanderthals originated initially from the mythical Lemurian supercontinent in the Indian Ocean. The earthquakes and tsunamis in the Indian Ocean led to the breakage of the supercontinent and migration of Neanderthals to Harappa, Sumeria, Egypt and Basque. The Harappan civilization was predominantly neanderthalic. They are the Asuras described in the Rig veda. Most of the descriptions in the Rig veda pertain to the Asuras with the Rig vedic Gods being predominantly asuric. Sanskrit was possibly the Harappan language. The Devas described in the Rig veda were the Cro-Magnon Aryan invaders. The Rig veda describes continuing conflict between the Asuras and the Devas. Finally the neanderthalic Harappan Asuras were subdued and conquered. The Cro-Magnonic Aryans who conquered Harappa became the upper caste Hindu elite and the Harappans Asuras became the lower caste Sudras. The Cro-Magnon Aryans took over the asuric Gods, Vedas and language and made it their own. The Harappan civilization of the Asuras was extremely advanced and the Cro-Magnon Aryans were a primitive nomadic tribe. The Cro-Magnon originated in Africa and migrated to Eurasia. The Cro-Magnon population subdued the neanderthalic population and tried to exterminate them. There was also interbreeding and intermixing between the Cro-Magnon and neanderthalic population. The modern neanderthalic societies are in the peri-Indian ocean area of India, Iran and Semitic Arabs. They also

inhabit the peri-Mediterranean area as Semitic Jews, Berbers, Basque and Celts. The predominant African and north European population is Cro-Magnon.

There is an eternal conflict between Neanderthals and Cro-Magnon. The Cro-Magnon tried to exterminate the Neanderthals but they survived as the Jews, Arabs, the lower caste Indians, aboriginals and native Americans. These are the people which the Cro-Magnon excluded from society. The underclass of Indian and European civilization was neanderthalic. With the advent of global warming an increasing archaeal symbiosis the neanderthalic population becomes activated and they try to exterminate the Cro-Magnon. The symbiotic archaea generates new viruses which infects the non immune Cro-Magnon and tries to exterminate them. The hot spots of global conflict and terrorism can be localized to neanderthalic areas. The Neanderthals dominate three world religions-Jews, Muslims and Hindus. The Cro-Magnon is predominantly the Africans and the Europeans. They follow the Christian religion. World conflicts are basically between the neanderthalic races and the Cro-Magnon races. This is exemplified by the Jewish leadership of the Russian and French revolutions with its idea of liberty, equality and fraternity. The neanderthalic ideas basically tried to create an equal society. The Buddhist movement and religion among the religious lower caste of India can be thought of as a neanderthalic uprising against the Aryan Cro-Magnon domination. The present rumblings in the Muslim Semitic world manifesting as global terrorism is a reflection of the neanderthalic Cro-Magnon conflict. The conflict is basically between the Cro-Magnon ideas of colonisation, capitalism, free market globalisation, rightist, Fascist, Nazi ideas and the neanderthalic ideas of equality, democracy, freedom and socialism. The Cro-Magnonic civilization produces increased greenhouse gases leading to increased endosymbiotic archaeal growth. Endosymbiotic archaeal growth is the basis of neanderthalisation. Neanderthalisation is a symbiotic event and not a genetic change. This results in expansion of the existing neanderthalic

societies—the Semites, the Dravidians and southern Europeans and extinction of the Cro-Magnon Aryan phenotype. The present neanderthalic areas include south Europe, India, Iran, the Arab peninsula, the Jewish homeland and the Australian aboriginals. The Cro-Magnon areas include Europe and Africa.

Neanderthal and Cro-Magnon Brain Structure and Function

The Neanderthals were cerebellar dominant. The cerebellum is concerned with intuition and extrasensory perceptive phenomena. The Neanderthals were retroviral resistant. The archaea metabolises cholesterol and generates digoxin which produces membrane sodium potassium ATPase inhibition and intracellular magnesium deficiency. Magnesium deficiency produces reverse transcriptase inhibition. Digoxin itself modulates RNA editing. The retroviral resistance leads to a deficiency of endogenous retroviral sequences. The endogenous retroviral sequences function as jumping genes required for the dynamicity of synaptic connectivity. Dynamic synaptic connectivity is required for cortical function. The cerebral cortex is dysfunctional in Neanderthals leading to cerebellar dominance. The Neanderthals inhabit a cerebellar world. The neanderthalic population is psychedelic, spiritual, dreamy, more feminine, intuitive, equal and female dominant. They had a communal life. They were hyper sexual and promiscuous. They can be compared to bonobo monkeys. They were matriarchal and female dominant. They are child-like have dreamy sleep, somnolent, altruistic and docile. The neanderthalic population believed in communal living and was of hyper sexual behaviour. The unconscious mind was dominant in Neanderthals. They had pre-cognition and post-cognition. They had telepathy and clairvoyance. They could have mediumistic possession and could go into hypnotic regression. They had poltergeist phenomena, group personality, multiple personality, split personality alien abduction phenomena, memory of past life, incubus and succubus. They had a magical civilization of dreams. They were subjective,

personal, emotional, irrational and dreamy. They preferred the dark and nights. They had more of autism and schizophrenia. They had more of attention deficit hyperactivity and addiction. They were magical, had dominant art and religion were sexual and believed in things without proof. The belief was intuitive. They had shamanistic and magical consciousness. The Neanderthals were left handed and right hemisphere/cerebellar dominant. They were creatures of the senses and created a spiritual dreamy civilization. They were children of the dark. The self old brain of vampires, troglodytes, demons and the occult belongs to the Neanderthals. The cerebellar dominance and hypertrophy leads to cerebellar dysfunction and ataxia of speech as well as motor movements. Ataxic speech leads to the evolution of music. Ataxia of motor movements leads to abstract art. Thus the Neanderthal brain with its extrasensory perception is extremely artistic. Digoxin and dipolar magnetite in the setting of membrane sodium potassium ATPase inhibition produces a pumped phonon system modulating quantal perception. Quantal perceptive phenomena are dominant in Neanderthals. This leads to increased extrasensory perception. This also produces a feeling of oneness and equality called the collective unconscious. This produces the socialistic equal Neanderthal society. The Neanderthals were also more spiritual and unconscious dominant. The cortical dysfunction leads to loss of hemispheric differentiation and sexual differentiation. Right hemisphere is predominantly masculine and the left hemisphere feminine. This results in asexual behaviours and cerebellar dominance leads to hypersexuality. The Cro-Magnon population believed in pair bonding and family patterns. They were more violent and aggressive. They were patriarchal and male dominant. They were adult-like and logical. They had rightist and fascist tendencies. They were conservative in their sexual practices. They were conscious, egoistic, wakeful, male dominant, favoured the light, objective, impersonal and cruel. The conscious logical brain dominated. They depended upon proofs, logic were detached, asexual and male

dominant. The Cro-Magnon were predominantly left hemisphere dominant and right handed practical people. They created a material civilization. They had a rational consciousness. They were children of the light.

The global warming produces endosymbiotic archaeal growth and neanderthalisation of homo sapiens. All these produce a dualistic consciousness. The left wing versus right wing and the conservative versus liberal. It produces a double self and divided self. It results in a Caine and Abel as well as Jekyll and Hyde personality. The Neanderthals had sloping forehead, small jaw, occipital bun and large cranium. They were shorter in height and the body weight was bigger. The brain size of Neanderthals was larger. The second toe of the feet was bigger than the big toe. They had the simian crease. The homo sapiens had a smaller brain and smaller cranium. They were taller.¹⁻¹⁷

References

- [1] Weaver TD, Hublin JJ. Neandertal Birth Canal Shape and the Evolution of Human Childbirth. *Proc. Natl. Acad. Sci. USA* 2009; 106: 8151-8156.
- [2] Kurup RA, Kurup PA. Endosymbiotic Actinidic Archaeal Mediated Warburg Phenotype Mediates Human Disease State. *Advances in Natural Science* 2012; 5(1): 81-84.
- [3] Morgan E. The Neanderthal theory of autism, Asperger and ADHD; 2007, www.rdos.net/eng/asperger.htm.
- [4] Graves P. New Models and Metaphors for the Neanderthal Debate. *Current Anthropology* 1991; 32(5): 513-541.
- [5] Sawyer GJ, Maley B. Neanderthal Reconstructed. *The Anatomical Record Part B: The New Anatomist* 2005; 283B(1): 23-31.
- [6] Bastir M, O'Higgins P, Rosas A. Facial Ontogeny in Neanderthals and Modern Humans. *Proc. Biol. Sci.* 2007; 274: 1125-1132.

- [7] Neubauer S, Gunz P, Hublin JJ. Endocranial Shape Changes during Growth in Chimpanzees and Humans: A Morphometric Analysis of Unique and Shared Aspects. *J. Hum. Evol.* 2010; 59: 555-566.
- [8] Courchesne E, Pierce K. Brain Overgrowth in Autism during a Critical Time in Development: Implications for Frontal Pyramidal Neuron and Interneuron Development and Connectivity. *Int. J. Dev. Neurosci.* 2005; 23: 153-170.
- [9] Green RE, Krause J, Briggs AW, Maricic T, Stenzel U, Kircher M, Patterson N, Li H, Zhai W, *et al.* A Draft Sequence of the Neandertal Genome. *Science* 2010; 328: 710-722.
- [10] Mithen SJ. *The Singing Neanderthals: The Origins of Music, Language, Mind and Body*; 2005, ISBN 0-297-64317-7.
- [11] Bruner E, Manzi G, Arsuaga JL. Encephalization and Allometric Trajectories in the Genus Homo: Evidence from the Neandertal and Modern Lineages. *Proc. Natl. Acad. Sci. USA* 2003; 100: 15335-15340.
- [12] Gooch S. *The Dream Culture of the Neanderthals: Guardians of the Ancient Wisdom*. Inner Traditions, Wildwood House, London; 2006.
- [13] Gooch S. *The Neanderthal Legacy: Reawakening Our Genetic and Cultural Origins*. Inner Traditions, Wildwood House, London; 2008.
- [14] Kurtén B. *Den Svarta Tigern*, ALBA Publishing, Stockholm, Sweden; 1978.
- [15] Spikins P. Autism, the Integrations of ‘Difference’ and the Origins of Modern Human Behaviour. *Cambridge Archaeological Journal* 2009; 19(2): 179-201.
- [16] Eswaran V, Harpending H, Rogers AR. Genomics Refutes an Exclusively African Origin of Humans. *Journal of Human Evolution* 2005; 49(1): 1-18.
- [17] Ramachandran V. S. The Reith lectures, BBC London. 2012.

