



# Chapter 7

**Climate Change and Brain Language  
Functional Evolution-Metaphoric  
Sexual Memes, Archaeal RNA Viroidal  
Quasi-Species Consortia and the  
Origin of Human Languages  
and Culture**

## Human Brain as an Archaeal Network

The human brain can be considered as a modified archaeon colony network. The archaeon are eternal and can last for billions of years. The human brain is basically an information storage system. The archaeon 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.

## **Memes, Genes and Endosymbiotic Archaeal RNA Viroids-Evolution of Culture**

Memes are building blocks of mind. They are also the building blocks of culture. The memes make up language and religion. The origin of speech can also be related to archaeal RNA viroidal quasi-species consortia. Speech origin can be compared to an epidemic la tourette's disease which consists of vocal tics, motor tics, coprolalia and obsessive compulsive disorder. It is due to post streptococcal anti glycolytic anti brain antibodies affecting the brain. The archaea and RNA viroidal modulation by extraterrestrial and terrestrial contacts with the brain and symbiosis can produce vocal tics and coprolalic words and phrases akin to la tourette's disease producing a primitive form of speech. The motor tics would have evolved to artistic dance and drama forms. The primitive vocal and motor tics which would have been the substratum for civilized speech would have originated as a tic syndrome consequent to extraterrestrial and terrestrial archaeal and RNA viroidal infection and symbiosis. The initial vocal and motor tics would primarily have been related to sexual content and could have contributed to a coprolalic form of speech. The archaeal symbiosis in homo sapien population would have produced a dominant neanderthalic population and the subservient lower class and caste homo sapien population would have been labeled and described the synonyms of this coprolalic speech and vocal tic form of spontaneous speech. The RNA viroidal quasi-species consortia is capable of being constantly edited by archaeal digoxin contributing to widespread diversity of the RNA viroidal quasi-species consortia contributing to species identity with regard to speech. The RNA viroids are capable of transynaptic transport and can function as neurotransmitters modulating brain function. The RNA viroidal quasi-species consortia are infective and can be transmitted within a defined population giving characteristic identity to the vocal and motor tics and coprolalic speech. This

would have given rise to different languages which behave like mutated viral populations. The different family of languages corresponds with the diversity of archaeal viroidal RNA quasi-species consortia edited by archaeal digoxin. This form of coprolalic speech and vocal/motor tics and gestures with predominant sexual content are subcortical in origin and localized to the basal ganglia and cerebellum. Cerebellar cognitive affective disorders give rise to impulsivity and tics and coprolalic speech are impulsive and are out of cortical control. Swear and obscene words persist even in the presence of global aphasia and destruction of the cerebral cortex. The coprolalic speech and corresponding vocal and motor tics can be converted to signs and ideograms with sexual contents due to motor tics or cerebellar dysfunction producing appendicular ataxia. The ideograms meanings are changed when multiple ideograms are combined. This gives rise to the origin of written language and alphabets of all languages as are exemplified by the Harappan script. Languages are a consequence of archaeal RNA viroidal infection and symbiosis of the brain and spread in the community producing endemic vocal tics syndromes of different characteristics for each group of population. This phenomenon can also be called as viro-linguistics or neuro-linguistics. The obscene coprolalic language and tics with sexual imageries would have evolved into the primitive sort of religion. Swear words with obscene content induce greater skin response to electric stimulation. Swear words also have a cathartic effect as noticed by the time duration to which the person using those words can immerse his limbs in subzero temperature. Coprolalic languages and tics give a cathartic effect or transcendence. Swear words or coprolalic words are the most common words used in English language. They are used for a specific purpose or as emotional intensifiers. The obscene words are coprolalic language are localized to the cerebellum and its limbic connections. Cerebellum is the site for counting, formalities, rituals, lyrics, magic and dance forms. Thus the coprolalic language

and obscene tics would have evolved into a form of primitive religion which gave communities a sort of transcendence. This can be noted in the worship of Shiva and Shakti and similar cults in other parts of the world. The concept of Shiva and Shakti is the oldest concept of God and can be traced to the Harappan civilization. Thus language and religion evolved out of archaeal RNA viroidal quasi-species consortia infection of the brain and a cerebellar cognitive affective disorder. The RNA viroidal quasi-species consortia are capable of immense diversity owing to constant editing by archaeal digoxin. The RNA viroids are capable of transynaptic transports and sculpt synaptic connectivity networks for each domain of language and religious function which are capable of dynamic changes from second to seconds. They are localized in the sub-cortical cerebellar networks and are automatic, impulsive, primitive, sexual and sensual. They can be considered as memes or the unit of cultural transmission. Memes are constituted by archaeal RNA viroidal quasi-species consortia with each different QS consortia constituting one meme which is transmissible in the community by infection and gives identity to the community. The language and religion are infectious and can be considered as equivalent to epidemics and endemics of viral infections which are susceptible to constant changes by mutations. Viral tracking procedures are now used to track the origin of languages.

## Language Evolution and Tics Syndrome

Language evolution has been related by different authors to cries of pain and delight due to vocal and motor tics as comparable with the non-linguistic vocal tics of la tourette's syndrome. TS is due to dopamine receptor supersensitivity. The archaeal shikimic acid pathway produces dopamine excess contributing to vocal and motor tics as well as coprolalia the basis of language, music, religion, dance and painting. Motor tics and appendicular ataxia would have contributed to abstract art of painting and dance. The archaeal and RNA viroidal infection

re-wires the brain, changing synaptic connectivity and species specific language and art forms arises out of horizontal genetic transfer of RNA viroidal quasi-species consortia generated from archaea and susceptible to archaeal digoxin editing giving it widespread diversity. Thus viroidal vectors quasi-species consortia which are infective can give rise to cultural memes which are transmissible and give rise to language, music, dance, literature, painting, religion, spirituality and everything which is sublime to humanity. The archaeal RNA viroidal quasi-species consortia modulated brain synaptic networks leads to cerebellar dominance and shape the communities and individuals political, social and economic views. Cerebellar dominance due to archaeal RNA viroidal quasi-species consortia leads to impulsivity, altruism, extrasensory quantal perception and group communication, dominance of group over individual and feelings of contact with the collective unconscious. This gives rise to ideological patterns in the brain of social justice, altruism, primitive communism and spirituality. These patterns are consequence of archaeal RNA viroidal quasi-species consoritial diversity and symbiosis producing a cerebellar cognitive affective disorder and cortical dysfunction which basically contributes to a neanderthalic brain. The homo sapien brain has less of archaeal symbiosis and RNA viroidal quasi-species consortia and structures synaptic networks coding for selfishness, civil society, secular society, capitalism, individuality and less of spirituality. The cerebellar cognitive affective disorder consequent to archaeal RNA viroidal quasi-species consortia contributes to spirituality, altruism and can generate a community of leaders who can guide and set the community on course. This leads us to the origin of the archaea and RNA viroidal quasi-species consortia. The intergalactic space contains a network of porphyrions and embedded archaeal and RNA viroidal giant colony functioning as molecular quantum computing cloud in the intergalactic space. The archaeal magnetite contributes to the intergalactic

magnetic field and the condensation of the cloud leads to the formation of star system and galaxies. The archaea and RNA viroidal quasi-species consortia are derived from the interstellar massive porphyrion and archaeal quantal computing cloud which functions as a massive God-like extraterrestrial intelligence. This archaeal quantum computing cloud in the intergalactic space gets transferred to earth by meteoric impacts and produces archaeal symbiosis on primates and homo sapiens producing changes in culture generating language, art, painting, dance, music, literature and spirituality. This fits into the Freudian hypothesis of a sexual substratum for unconsciousness. Freud based unconscious desires on the basis of sexual instincts and recent mind as a combination of reason, will and passion. Freud regarded the problem from inside the individual that is for the world of human sexual instincts and constructed an irrational world of the mind. The basis of life is replicate. Replication depends upon sex and therefore sexual instincts form the basis of language, culture and religion. This can be called as a form of esoteric spirituality. The la tourette's syndrome with its vocal and motor tics with sexual motives consequent to archaeal RNA viroidal symbiosis can lead to the evolution of abstract painting, dance, transcendent spirituality and language arising from sexual swear words. Thus archaeal RNA viroidal induced epidemic la tourette's syndrome and sexual vocal and motor tics would have formed sexual memes with a genetic diverse RNA viroidal quasi-species consortial counterpart diversified by archaeal digoxin mediated RNA editing. Thus the Freudian psychology of sexual instincts and unconsciousness can lead to a sexuality mediated transcendence going on to the realm of Jungian mysticism.

The ancient societies have examples as evidence of this in the worship of Shiva and Shakti as well as yoni and linga. Ancient Hindu religion had sexual practices integrated as part of worship. Swear words and obscene words were also part of worship in certain temples in the subcontinent. This points to

obscene vocal and motor tics as the origin of language, dance, music and spirituality due to archaeal and RNA viroidal quasi-species consortia infection and symbiosis of extraterrestrial origin due to periodic meteoric impacts. They generate the units of cultural transmission, memes as described by Dawkins. Memes are RNA viroidal quasi-species consortia edited and diversified by archaeal digoxin and structured onto synaptic networks which can also be infective in a population. Their origin is extraterrestrial and a part of the intergalactic molecular porphyrion and archaeal quantum computing network which gives rise star systems and planets also.

## **RNA Viroidal Quasi-Species Consortia and Samsaras**

The archaeal RNA viroidal quasi-species consortia can function as neurotransmitter having transynaptic transport and can modulate synaptic connectivity. The archaeal RNA viroidal quasi-species consortia are subjected to editing by archaeal digoxin and generate new RNA viroidal quasi-species consortia depending upon informational inputs in the outside world. This creates states of mind or samsaras. They can be compared to mutating viral infection. One state of mind gives rise to another state of mind and one set of synaptic RNA viroidal quasi-species consortia gives rise to another synaptic RNA viroidal quasi-species consortia by digoxin mediated editing. The archaeal magnetite is capable of quantal perception of low level electromagnetic fields from fellow human being's brain and this can inhibit membrane sodium potassium ATPase activity and modulate digoxin synthesis altering the nature of the RNA viroidal quasi-species consortia. These RNA viroidal quasi-species consortia can get transcribed to the DNA by reverse transcriptase and get integrated into the neuronal genome producing dynamicity of the genome. Thus the archaeal magnetite can modulate interbrain informational transfer by quantal perception of low level EMF producing changes in transynaptic networks of



RNA viroidal quasi-species consortia and neuronal genomic structure by the integration of viroidal sequences into it. The intergalactic magnetic field of the archaeal and RNA viroidal molecular quantal computing cloud can also be perceived by neuronal archaeal magnetite modulating the transynaptic network of RNA viroidal quasi-species consortia and its integration into the neuronal genome altering it. The Samsaras are states of mind and are momentary and there is no permanent state of mind. The states of mind during the existence of a personality end with the mortality of the personality, but the totality of its actions creates a state of mind or Samsara independent of the previous personality. Thus there is no continuous consciousness in existence, only different states of mind which gives rise to another set of independent states of mind depending on the informational interactions of the states of mind or karma. We are not only creating the world but we are also creating ourselves, our ego, our self-consciousness and personality in a continuous manner. From moment to moment our bodies sensation conceptualization, ideas and beliefs work together to create an illusion of consciousness. Each of us is a being in different world will create out of our thought and perception. We create the world and create ourselves. There is no creator or creation; only the collective unconscious.

## **Cortical and Cerebellar Religions**

The religions of the world can be divided into cerebral cortical religions which impose a strict code of civil conduct. These are all organized religions with very little magic and spirituality in their functioning with examples of the Semitic religions of Islam and modern Christianity. Such religions are logical and civil religions and are capable of inhuman behavior in the form of crusades, inquisition, Islamic terrorism, the world wars and nuclear bomb. These religions impose a strict code of conduct and sexual conduct and thinking are taboo. The opposite is the cerebellar religions which include Hinduism, Zen-Buddhism, Sufism, Gnostic

Christianity and the Kaballah. These religions are reflections of archaeal and RNA viroidal transynaptic network and quantal perception of low level electromagnetic fields producing cerebral cortical atrophy and cerebellar dominance. This leads onto impulsive behaviour, magical experiences, extrasensory perceptions, out of the body experience, sexual transcendence and spiritual experiences. These are all religions that can be localized to lower areas of the brain the cerebellar cortex and are reflections of the cerebellar cognitive affective disorder. The parallel between spirituality and sexual instincts is reflected in the Yogic terminology of Kundalini where electric current from the chakras in the base of the cord rise upto the pineal gland producing a sense of transcendence. Thus there is not much difference between a spiritual experience and sexual experience. This is reflected in Hindu practices of Tantra. These cerebellar religions are humane religions where there is extrasensory quantal perception and feeling of the collective unconscious. The human senses are celebrated and humanity triumphs. Thus the human spiritual experience and culture and language have an underlying basis in human sexual experience and the Freudian sexual psychology forms the basis of Jungian mysticism. Life is indicated by replicators; and replicators means sexual conduct and sexual conduct leads to transcendence, spirituality, language evolution and evolution of culture.

## **Archaeal Symbiosis and Induced Evolution**

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.

## **Archaeal RNA Viroidal Quasi-Species Consortia and Identity**

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 Villareal 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 nonself 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/nonself 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 colonisation, 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 had 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 is 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.

## **Archaeal Symbiosis, Dietary Modulation and Species Change**

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 hyperreactivity 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.

## References

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