

The real physical world and the virtual mental world

Abstract

Development of a functional systems within the body, which enables differentiation and recognition of signals received by specialized body organs, and development of signals for identification and differential expressions of the signals and their various sources of origin, creation and maintenance of these signals and the associated meanings in verbal and nonverbal modes of expression, and their internal as well as external utilization, verbally as thoughts and symbols or sensory imageries, helped generation of a functional system, which we have been calling the 'mind'. Mind becomes the method of verbalization and accounting for the principles of temporal and spatial relationships detected either personally by the body or using specially designed external objects or sources received over space and time within the universe, and within the body as experiences. Each person could create a mental account of the sensory-motor experiences and their expected or anticipated effects, and verbally and symbolically encode an account of the relationships within. Additionally, the mind learns special ability to present the tonal quality of their expressions in a manner, which came to be identified as musical expressions, and which have become vocally and instrumentally played musical notes. Mind is the method developed within the system for the expressions of the verbally as well as materially created expressions, which need to be internally developed, as well as externally created and assembled methods, representing the real as well as imaginary world, where the virtual world, mentally created for representing the real relationships, as experienced by the body and internally represented or encoded by using various expressive methods, which are often more complex than the real world they had earlier contacted and acquired through their encoding.

Keywords: human brain, human body and the Universe, sensory-motor contacts, brain functions and formation of mind, recognition, remembrance, drive and emotional arousal, virtual world - a creation of mind

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The body and the mind

Human beings are living beings, each possessing a body and a functional system called the mind, by which he or she could differentially identify the signals received within the body, which serve as specific information about the physical world, and the varied responses of the body to the physical world, which may represent varied functioning as self-experienced and interpreted by the organs and the external systems used by the individual. A knowledge base about the physical realities is created by the brain, also using methods and signal detection systems which detect and measure the signals, all of which are combined and integrated within the brain, which help to create specific meanings to the signals and their direct and indirect meanings and personal significance achieved through their external and internal processing, all of which are self-identified as mental processes, and the measuring and the processing methods of creating specific meanings, are identified as mental process. The most powerful concepts, mentally created, have been about the material realities in the universe, and their varied responses. An additional mental creation has been that of a super force of the universe, which is believed responsible for the creation and maintenance of the diverse functions, including all forms of life, in the universe, and the universe itself. Every living creature including man lives only for some specific period of time, determined by the physical and functional and biological capabilities available and maintained in each system. All living systems thrive for some specific periods, as determined by their physical characteristics and capabilities, created and maintained and supported within each system. Most individuals have mentally created, as well as have learnt to believe in a super power, responsible for the creation, maintenance, and recreation of the life systems, within a living space and time, supporting the biological

needs of the body and life. Life forms appear in several formats, with diverse living capabilities, decided by the bodily mechanisms and their diverse functional capabilities.

Drive-a mentally originated force for using the body-brain

Man has attached supernatural powers to the universal force, which they believe control all the living beings and non-living systems in the universe. These controls are assigned as per the infinite and uncontrolled power wished to be present and created by the human mind, and assigned by it (the human mind) to selected supernatural forces of the universe. Every living body perishes because of diseases, caused or inflicted, or by becoming weak and non-functional through aging. However, mind has created a survival state, which will not be affected by any natural physical conditions. Life appears as a drive in the system, which is made use of by the individual's biological system for engaging in cognitive processing and providing various sensory-motor responses, constituting actions in life. Man accepted drive as the strength of the brain-body without which voluntarily acting, positive thinking for taking risks in life, etc. is never possible.¹⁻³ Drive serve as the basic force of emotional arousal as well as emotional support and responses. Molding of emotional arousal occurs with cognitive processing, and one could learn to mold own emotional arousal through cognitive control.^{4,5} Religiously, man accepted these capabilities as the result of presence of a powerful soul within each person. Man learnt to believe that their soul survived the natural death, though the body cannot thrive or be alive without the drive or the soul. Man believes that the soul continues its existence with the almighty universal force, providing happiness and other various good effects in life to the needy. The strength of the drive takes one to any type of

struggle and actions in life, with the efforts leading to results, whether they are socially and legally acceptable, or even actions, which are only personally valuable, even if the results may hurt the interests of others and psychosocially not acceptable. Actions carried out by one may not succeed and the related efforts may fail, if they are executed without adequate drive by the concerned person. It is the strength of the drive that facilitates maintenance of the efforts continuously in any type of course of action, whether the results of the action may positively serve the interests of the persons involved in the efforts, or may even produce negative results, or produce results which may work opposite to the noble decisions, which one may consider are the part of the disciplines one considers or believes are set up by the almighty—a universal force or a formulated strength, that the person has been believing. Some may frequently consider or believe that they have to carry out such actions for supporting or protecting some causes they believe in, even if it may not achieve good to all individuals. This mental capability of human beings has been always very strong; as always believed in the past, when man employed the capabilities with immense personal faith, they believed that they could almost attain the supernatural powers. They could then induce mental ideations of the beliefs related to supernatural presence of the force and the related events, which they believe they could experience, and work on them, others and the reality around. The experience that they believe, that they have come to possess is believed to support the presence of events around, and the reality, even though all these could have been purely mental experiences. In the later years, the entire method became a scientifically understood method of hypnotic suggestions and related experiences. Filling own mind with the emotional arousal and thoughts of the spiritual force induces immense experience induced by the emotional effects and thoughts, and related mental strength, which otherwise, one may not be able self-create.

Scientific approaches

Working of the drive as the internal life force serves as the basic principle and energy utilized for the creation and maintenance of emotional arousal, and also causes various emotionally motivated actions and responses, all of which formulate and compose the complex human behaviour. Scientific understanding of the physical systems with multiple functions is indeed extremely complex process, though complex, enlightening and useful to man. However, this understanding was what came to be known in a complex spiritual mode, to start with, as a complex divine force, which could function beyond all known normal scientific principles. Scientifically speaking there is indeed no presence of any specific target or motivated idea, inducing man search for a stream of changes beyond what is scientifically possible. Human spiritual pursuits are the results of strong psychological practices in cognitive and emotional areas, where focused psychological – cognitive and emotional practices create a state of transcendence, gradually producing mental and physical effects in the person, these are parts of meditation and psychophysiological practices achieved through ‘yoga’ and similar practices, which are developed as regular spiritual practice for each individual. Practice of emotional regulation could facilitate immense emotion controls and its further physiological effects and outcome. Practice of effective controls of emotional needs of self and physiological self-regulations help to shape all mental activities or the mind itself in a positive manner. Such processes and the necessary controls developed in each person, which came to be called the mental activity, involving thinking using encoding process and emoting and its controls of actions in life became major mental activities in each individual. Understanding that physical relationships in the universe always follow specific ways in a rigid manner, became the source

and base of scientific knowledge of the universe, which could be developed by the brain of human beings over time, and the knowledge thereby developed became the basic dictum of the universe, in which the matter in the universe reacted, which we called the scientific principles. The control processes of the mind could shape the purpose and goals of life, which are to be mentally searched and identified, and these specific processing methods shaped the mental processes for determining goals and purposes for various scientific processes detected in the universe. as well as self-assessment of what one achieves in life. The concepts of purpose and goal of actions or changes that take place in the universe are developed by the human mind. There is no evidence to consider that another source has developed these concepts and organized the various changes and reactions in the universe. However, the process has indeed helped the development of the human mind, and helped to develop a scientific knowledge base and controls in all areas they could work on, by which new functions and changes could be developed and utilized by the human mind. Mind could develop new physical relationships and functions, which could be utilized by the human beings for further developing their functional capabilities and create controls on the changes that occur in the universe. The best mental creation for such knowledge base and their controls has been the effort to accept that the universal functions and changes occur as they are decided and developed by a universal force, which they identified as the almighty force. All physical changes take place as per the universal regulations, which have been developed and identified by the mind, and the human mind considers that these are the regulations enforced by the same universal force and they cannot not be changed or altered for the benefit of any living being. However, such a universal force needs to be conceptualized, developed and utilized by the mind. This line of thinking, emoting and control of actions become core mental capabilities of an individual. The process of thinking needs consideration of purpose of life and the various functions that take place with the body-mind combination, and the goals achieved by their functional capabilities. Religion also attains immense importance for practicing love and affection to all fellow beings, as love for fellow beings could allow to overcome all interpersonal problems one may develop with other individuals. Love is indeed the most powerful personal capability that one could employ or invest on other individuals, even if they are hostile and wants to harm you. Love for others could help overcome all weaknesses that one may have in relationships with them. Love for others may become a strong force in life, affecting the aims and goals of life, as well as one’s own life style, that one may attempt to practice and achieve in life. The mentally formed presence of goals of life and associated practices could indeed shape a person’s behaviour formations and the stream of life. Nevertheless, the need for presence of love and desire for specific responses from others, and rewards in life add to the strengths of living. The associated thoughts and desires may add equivalent effects in the behaviour and performances of such persons. The encoded details of related items and their presence may add to the reality effects of the world one lives.

Spectrum of life

Though man believed in the past as well as even now, that life was a segment of spectrum of activity-happenings present on the earth, as well as in the spiritual world, there was never even a single case where the living being did not reach its death. Even those whom man considered equivalent to spiritual force reached the end of their span of life. But man believed in and accepted the mental presence of living, present beyond death, as several of the spiritual characters have been considered present beyond their space and time, which is mentioned in their related experiences and actions carried out in the past. These

encoded details may affect and influence the minds of people who are alive. All living beings are capable of creating sensory images of the objects and persons in the external world inside their brains. Human beings could not only merely generate a sensory image of the external world, but also create a mental world with them and employ them as part of their virtual world. The virtual world components that man creates may often be immensely enriched or unrealistic, unless they take special care to create the virtual world as real as per the physically verified realities, or remembrance of personally verified information, or recoded details of verified information. There are mainly people who prefer to live only in their virtual world by taking realistic supports of the brain for maintaining the mind and the mental world. The human mind may occupy the details of the real world or create a model from the details of a virtual world, and every person may spend hours of his or her life-time creating and living in the virtual world, which may occupy the same themes even in their dreams during the sleep. One of the chief tasks of the human brain is to encode the real world, and create a virtual world inside the brain, which one could express verbally in writing, drawing, or symbolically in constructions. Encoding is considered a major mental task, as it helps to mentally create a virtual world. Symbolic representations help create ideas, which could be verbally described. Man spends hours together, every day, either thinking, writing or reading the encoded details - the virtual details of the real world, or reality yet to be established.^{6,7} Man may first mentally, and later write or print the ideas creating their virtual representation. The human brain is trained to carry out the encoding in the written format, and later print the extensive amount of information, drawn and composed from the real world.^{4,5,8-14} They express their emotions too through encoding, all of which could be then shared by other human beings, who have to mentally recreate the virtual world, from the encoded details written, printed or constructed. Expressions of the virtual world also allow emotional arousal and responses, which help provide greater sense of reality to the virtual world, as the virtual world have all sensory and motor components, using which one could recreate the virtual reality and also experience the emotional effects. Man learns to live in the virtual world almost as effectively as in the real world, within which they also carry on reacting emotionally, at experiential as well as expressive levels. Man continued his or her life, forever, in the mentally created world which served as a heaven or hell to each. The higher spiritual force, though present only mentally, controls human behaviour, directs man to respond as well as carry out various actions, as per the rules created, as belonging to the rules of the spiritual force and world. The rules created for the spiritual world could control each man, if he wishes so, to behave as per the dictums of the mentally present spiritual force and rules. This is the control level as well as controlling methods of most of human beings and their behaviour.

Sequential and parallel changes

There are only two ways, such as sequential and parallel processing methods for connecting more than one signal or set of signals, present in the universe.^{12,13-24} The cortical participation in encoding has been first demonstrated in several earlier studies.¹ Religious thought with regard to generation of the universe was indeed created by man for explaining the creation of the format of the world by the universal super power, and how the human being was created by the same power. Additionally, a strong need and obligation to worship the super power and to live under the rules of that power has been accepted by many individuals and their organizations. Such relationships across signals are carried out in space and time, which accounts for the multiple occurrences or changes that occur in the world. Such

changes also account for the multiple behavioral changes that occur in every living being. Sequential processing of signals across time and space as recorded and measured by the brain, became the basis for creation and establishment of scientific relationships within the system, where specific changes are looked for uncovering the nature of associated laws. These specific relationships helped effective detection or creation of need as well as methods for generating the physical and social environment and the associated laws of nature. We employ this knowledge base and further create new temporal and spatial relationships for explaining new scientific relationships, which may further help explain their regulatory presence across multiple realities over extensive space and time. This further helped, and has always been helping in establishing multiple functional systems, including new rules of associations and interactions, created by man always existed in the universe, as the controlling principles, and knowing these rules helped man realize the presence of many new realities in the universe, and encode them all, so that they could share the knowledge across space and time.

Cognitive processing

Cognitive processing is the method employed in the brain for comparisons of spatial-temporal events and for accepting unfamiliar models of brain response as new pieces of information and for their comparisons with known models obtained in the past experiences, the processing has resulted in enabling the brain look for a purpose for every action and need for definition of a specific purpose. Set of responses need also to be decided and may have to be carried out for serving the expected, newly defined purpose, and to conglomerate them for differential purposes in life. Response may also need to be automatically carried out, or to be newly designed and execute. These differences and the methods involved in neuroscience, may also need consideration from psychological and social points of view. What needs further understanding is the development of rationale and methods for deciding purposes for life, and various actions that could be developed in life for achieving these results. Developing a spiritual foundation in life has helped human beings to search for a purpose, for each life, and also the needs to develop the faculties at the neuroscientific and psychosocial levels. The highly focused developments of such multiple faculties with the brain as the executive system have supported man to develop functions at the psychological and social domains in meaningful manner. Religious beliefs and practices easily served as the psychosocial aids for the easy and practical development of brain faculties to give directions of spiritual purposes for life in each individual. The religious doctrines serve as strong foundation and facilitating methods in every growing child to convincingly learn to develop and practice such methods which facilitates one to understand and accept spiritual purpose in life and work hard for the related achievements after death. Religious beliefs help man practice positive and loving methods of living, which would help not only oneself, but others in the family and the society. Such living and working practices under the support of personalized belief system would help most individuals develop the various cognitive methods efficiently in the brain as every action is executed with purpose and using accepted methods. Growing up under such practices would further facilitate development of objective methods of searching for purposes of life and learn any of the accepted working methods in life. Working under such principles with maximum utilization of personal faculties and with strong motivating principles help develop dedicated working methods in each person. Continuously working hard for achieving highly significant results is a quality and capability that one would develop, when one could execute hard

work for achieving the highly acclaimed end results. Higher levels of religious thoughts have helped each individual develop oneself into a highly potent and capable work force, as the spiritual power under one may grow and support all the self-developments. Religions which were developed over long periods by many stalwarts could develop such ideas which helped individuals to carry out hard work, which helped to take them to high levels of achievements, helping some type of integration of oneself with the spiritual force. Each human being could engage in self-development under a mentally created spiritual force and the related principles, and grow into an esteemed being, where one could consider oneself becoming part of the higher force. Human life becomes sweet and loving endeavor, and a powerful, brilliant, and loving force, finding its highest expression within the human body.

Mental genesis of actions

Development of specific purpose for every action and response is the unique phase of the development of cognitive processing skills. While learning new skills, man learns the related role of a set of actions that are being planned, and the purpose that will be served by the set of actions and by carrying out the specific actions. The skills for achieving the specific goals in life are learnt by each person. Several of the human purposes of actions decided by individuals are by repeating the same format for psychosocial development of individuals, which is accepted and supported by the facilities available in the society. The religion practiced by individuals in the society to which one belongs, plays a major role in supporting the acquisition of skills and the knowledge base, and different endeavors and practicing methods for skill development of each individual. Individuals generally accept what have been recognized and accepted by the social group to which each person growing up, may belong to. This journey in life is to acquire personal or professional skills, the practice of which will take each individual to comfortable socioeconomic responsibilities and rewards in life. There may be none or only a few individuals in each society, who may not individually want to take up these decisions on the purpose of life. Such attempts leading individuals to complex endeavors at intellectual and emotional levels would occur, only when one could become convinced about the scope and purposes, and succeeds in those complex conflicting personal endeavors in life. However, only a few children and young persons may take up such challenges, requiring conflicting solutions and efforts with immense personal involvement. They may gradually learn to individually take up such responsibilities with own life, needing them execution of own living process, successfully employing complex and difficult self-involvement with hard work and personal involvement. Development of the need for acquisition of such personal skills and employment of personal efforts to meet the challenging needs, play major roles in the acquisition of skills to build and change self and the social institutions by growing-up individuals in the society. These are generally differentiated from the larger spiritual skills and the related functional roles that one may decide to play in life, which may not have any related and specific material results. With regard to normal psychosocial needs of the society, one may have to invest heavily by a group of individuals, working hard for achieving specific results, which may help fetch another related results at a temporal and spatial distance, which may be experienced by another group of individuals. Purpose for which actions executed, therefore may not always yield any specific material result immediately. Several of the actions carried out by man yield results at a distance and it may benefit another group of individuals. The only component that provides the release of drive needed for the actions and the associated expenditure may only be

acceptance of an idea or method to start with, before the result yielded. Man, alone has the capacity to work in this mode for achieving distant results and it is indeed a functional asset of the human brain.

As already mentioned, there is not even a single case known, in the history of human beings, when a person could stay away from death or a dead person could become alive and start living. However, from a spiritual point of view, we believe that life after death is a normal phenomenon for a human being, when the person would be reborn or the dead person would live in the heavens or hell. In the early years, human beings always believed in such continuation of life after death. In a healthy human society, it is often the practice that all younger persons are trained for developing the same capabilities as already developed and possessed by the elder persons. They are also trained in the same life style, which the elderly had already mastered, so that the younger ones could also master the same life style and continue with the same life practices, all of which would result in continuous entertaining of the related ideas, over generations, without ever questioning their veracity. Practicing the same religious and other social practices helped them to continue with an accepted life style, and also learn to become similarly emotional and continue experiencing and exhibiting the same emotional responses in life, as that of other successful elderly or those who lived in the past. This facilitated their already strong religious interests and associated mental capabilities, evolved from such beliefs, and the ability to practice the same mental exercises with regard to thinking and emoting. This religion induced practices helped individuals learn to remain focused during meditation and control mental states and physical responses, during emotional arousal. as well as carry on with various mental exercises with mental focus, and practice applications of the cognitive processing methods. Meditation based mental practices helped many, who had taken the related practices seriously, and they were believed to have learned to control not only mental functions but also bodily functions. Several of the religious practices facilitated mental functions. Learning mental controls had always helped many persons believe that they had attained superior levels of mental capabilities.

Presence of scientific relationships between two events could be known and established as they occurred relatively in different time and space, which could be predicted as well as identified and quantified. Within the defined time and space, two related events could take place, and knowing one set of features often help to predict and look for the other set of features or the changes that may occur when the time-space changes, as already known and predicted. The consistency in the change across the two consecutive points, help us to predict one set from the other, and the same change may always occur in the same manner, as long as there is no change in the components contributing to the events, which form the foundation for science, and for the prediction of changes, whenever and wherever they occur. The changes are always related in quality and quantity of changes that could occur, and hence the two features become consistently related natural facts, which came to be addressed as scientifically related. These changes across the predefined time and space always occur in the same consistent manner, as long as they are not influenced by a third factor. Such scientific facts or pieces of information are immensely extensive and these pieces of knowledge have always helped to scientifically predict even complex changes within the body and also anywhere else in the universe. Ability of the human brain to search, identify and quantify all such changes within and outside the human body, over hundreds of years have helped man to create extensive knowledge base and use that for creation of new realities or change their features, in their world. These successful efforts changed

as well as strengthened not only their knowledge base, but also added capabilities for the creation of new technical facilities, which provided man with a technically different world, and means and scope for further research. Presently, we have no knowledge of what this world may be like, after another ten - twenty thousand years. Human beings have immense capability for knowing what the present features are, and even predict changes that may occur. The knowledge base helped to create newer methods of establishing relationship between facts in space and time, between human beings, and facilities for changing their world around, wherever they lived.

Developing objective methods of searching for purposes of life, developing the wish-lists for development, and maintenance of the methods of working for understanding and maintaining/serving the purposes in life, for each individual, have contributed for the unique achievement of methods of knowing and technical utilization of the various effects in the nature. These are known as the development and utilization of various pieces of scientific knowledge. The enormous amount of works at the level of discoveries, and maintenance of superior levels of functioning using the scientific discoveries have completely changed the spectrum of human life. Use of appropriate scientific methods changed the whole pattern of living, and the total credit could be assigned for such marvellous and revolutionary achievements, to natural research and testing, which could occur because of development of mental capabilities at the intellectual levels. Religion may be considered the most prominent and the earliest predictive method, which became the foundation for progress and development of human culture, and their living methods. One of the most complex achievements has been that of self-identification as the supreme spiritual power and capability. Development of methods for such self-identification and self-reformation, changed the scope and methods utilized for living. As death or stoppage of the functioning of human body is imperative, man developed methods for handing over the knowledge basis, that each man developed through genetic transmission, as well as cognitive skill training to the new generation of human beings. They could continue working in the same path, and progress with the development of new ideas and methods, and even work to find answers to the miracle of the presence of the universe and life, whether it is appropriate to even think of finding an answer to their presence. This has given a unique role to each individual as he or she must progress and continue working with own life, when they may also use the life style of others, who have expired after completing their own life-period. Only human beings are capable of such enquiries and discoveries, who could continue with maintenance and progress of their presence in the world, unless there are other living beings hitherto unknown to human beings, present elsewhere in the universe, who may also share the same capabilities. Every human being must learn and grow to a level of competency for understanding the need for executing self-controls, and as they could develop such competency in them, they could accept the responsibilities for developing self-control and self-growth.²⁵⁻³⁴

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