Cybernetics and Human Cognition

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Abstract—*Human cognition is central to decision making. Here brain is the central part which receives information from various sources through the various senses. If we have a fundamental understanding of the process of cognition and inherent weaknesses in the process, we will be better able to compensate for weaknesses in this process and arrive at better decisions in the long run. Cybernetics is known as the art and science of understanding, which is the science related with the intellect, where the basic principle is regulations through control and feedback using communications in living beings and machines. It is also an interdisciplinary and multidisciplinary subject that is working as a coordinating subject for which it is also known as the science of government. As we all know the basic difference between human beings and animals are with respect to thinking, where humans are more endowed with divine qualities and powers. Through this paper human cognition processes are discussed and how teaching, learning and evaluation processes are to be designed. Here the concepts in cybernetics with respect to positive thinking also are introduced explaining thinking skills that we should develop and practice to achieve optimum results in the process of teaching, learning and evaluation by introducing a new branch of science known as Noology, which is the systematic study and organization of everything dealing with knowing and knowledge as a science of the intellect and intellectual phenomena. This paper also explains why science is defined as an imperfect method to know the truth and how to solve it.*

Keywords: *Cognition; noology; cognitive psychology; cybernetics; neurolinguistics;learning; Machine-Learning;*

1. INTRODUCTION

Cybernetics is originally developed as control and communication in living beings and machines and the term coined by Norbert Wiener [46][3]. An educational theorist Gordon Pask defined cybernetics as the art of manipulating defensible metaphors, showing how they may be constructed and what can be inferred as a result of their existence. The latest research in cybernetics known as *Computing with Words* is trying to do this process on computers [39]. According to Herbert Brun cybernetics is to cure all temporary truth of eternal triteness, because of its uncanny ability to describe complex systems with simplicity, without being simplistic. We envisage it as more than a science, art, philosophy or multidisciplinary subject, which is going to reign and rein the world through rain and fire with a rational God [58].

The human brain is the most complex system on earth, yet it is too often used in schools primarily as a simple device for storage and retrieval of information [1] [54]. It is now known from the research that the human brain can change structurally and functionally as a result of learning and experience, for better or for worse. New neural connections that make it possible for us to learn and remember and problem-solve and create can continue to form throughout life, particularly when human beings are in environments that are positive, nurturing, stimulating and that encourage action and interaction [26].

The paper first describes the origin of cybernetics and its central tenets of circularity, feedback and communication, which suggest that learning is fundamentally about living.. This also looks in to possibilities of absolute theories in place of circularity [29]. We also explain how cybernetics is working as a science of government, which uses the basic principle of cybernetics where regulations are made through control and feedback. This paper also introduces the cybernetic ways of thinking, which are purely rational, and are organized in a logical order without any missing links, for which it is also known as the science of effective organization. The living system learns as it fits with the environment in an integrated spirit/body/environment learning system, where we have to value heart and mind too, and should know what these spirit, body, heart and mind are? We are also explaining how this can be analogized with a computer system for an easy understanding.

It was once thought that the teaching of thinking skills was not a possibility, since they were believed to be innate. As these tools were developed they were then believed to be appropriate mostly for more intelligent or more advanced learners. Now we understand that the skills of problem solving, analysis, synthesis, creativity, teaching, evaluation, learning and other higher order thinking processes can be taught and learned, even by those considered being less able than their peers. Most of these tools can be embedded into the teaching of any subject, and many can be facilitated through specific software programs [20]. As students use computers as tools to learn, they also exercise their thinking by learning how to ask the right questions, pursue research on the Internet, and evaluate their sources of information. We also introduce the mechanism of thought based on the two beats on a human

life, the brain beats and the heartbeats that can be measured as MEG and ECG signals. Latest research showed that brainwaves could be detected using SQUID (Super conducting Quantum Interference Device), which is very helpful to make non-invasive thought-controlled devices, which is one of the hot subjects in Cybernetics [57].

This paper is giving an idea about a branch of science known as Noology, where the word is derived from the Greek words *νοῦς* meaning "mind" and *λόγος* meaning "logos" [21]. Noology outlines a systematic study and organization of everything dealing with knowing and knowledge, i.e. cognitive neuroscience. It is also used to describe the science of intellect and intellectual phenomena. It is the study of images of thought, their emergence, their genealogy, and their creation. Logic, ideally the science of reasoning, which is derived from the word Logos in Greek, is more concerned with the processes and products of reasoning. Moreover, the course of its development from Aristotle to the present day has been more idiosyncratic and specialized than what the concept of a science of reason would suggest. This paper is also revealing the two sides of the information superhighway known as Cyberspace. They are INTERNET (which is the visible, tangible side) and SKYNET or S-NET (which is the invisible, intangible side). Noology is the science dealing with SKYNET, which is the biological networking of human beings [56][58]. This paper also explains why science is defined as an imperfect method to know the truth and how to solve it.

In this paper, the author presents the real concepts involved in the thought process in an integrated environment of body and spirit proving that thought is not simply a passive "reflection" of an external "reality", but also something active in an integrated environment of body and spirit, which can exist even without body, but it has to enter in to a suitable body for execution [63][51][23]. Through this information this paper is trying to give an idea about how the teachers have to teach, the children have to learn, and how the evaluation has to be made. In teaching, learning and evaluation, the emphasis is to keep holiness in spirit.

2.   MATERIALS AND METHODS

The human brain is the most complex system on earth, yet it is too often used in schools primarily as a simple device for storage and retrieval of information. It is now known from the research that the human brain can change structurally and functionally as a result of learning and experience, for better or for worse. New neural connections that make it possible for us to learn and remember and problem-solve and create can continue to form throughout life, particularly when human beings are in environments that are positive, nurturing, stimulating and that encourage action and interaction [26][54].

3.   HUMAN VS COMPUTER

The real secret about the creation of a human being is revealed now. According to this a human has four components in the tangible and intangible world. A physical body, spiritual body, heart and mind [64]. Life is that power which enlightens a human being. This can be analogized with a computer (Figure 1). The computer hardware is the physical body, software is the spiritual body, and the electric power fed to a computer is the life of a human being, which is a light from a light source known as God, which burns the human body. Read Isaiah 30:33 in the Bible, which says, "The breath of the Lord, like a stream of brimstone, doth kindle it". The heart is hidden in the physical heart of human and the heart can be considered as an environment where we were created through which the physical heart is pumping at a constant rate, making a cardiac cycle. If filth, in the physical flesh and the spiritual heart, accumulates in the heart, the heart gets damages. The heart is more than just a pump. It beats for the cellular symphony that is the very essence of our being and holds the secrets that link body, brain and spirit [26]. This heart should be closely attached to the Lord, without any loopholes, where nothing is hidden from the Lord. Also read Proverbs 21:2, where it says, "the Lord ponders or organizes the hearts". What is mind? In the Bible, the heart is shown to have three capacities: to think (or believe), to choose, and to feel. Read the prayer of David in Psalms 51:10, asking God to clean the heart and renew a right spirit. So we can understand that mind is an entity that is closely working with heart, where each decision is made. This can be compared with the existence of binaural beats when you go for a brainwave entrainment process, with two sinusoidal sound waves with slightly different frequencies. So we can consider mind, as a place where all the inputs from all senses and feedbacks are processed through a technique of Computing with Words producing an intangible result and a decision may be made to control and achieve something producing required regulations. Read the Bible verse in Proverbs 19:21 where it says, "Many are the plans in a man's heart, but it is the Lord's purpose that prevails". So this clearly proves that, the heart involves a number of thoughts from different sources including sensory inputs of an individual, where the decision has to be made according to the will of God to get life. God gave freedom for a human to choose among the different thoughts raise in the heart, which occurs in the mind. A curse by the Lord creates a hallucinative mind where all inputs in the mind will be impaired by false information, where all rational processes fail. The Bible describes about such a situation as "the betrayed mind betrays you".

With the introduction of this human physiology, we can understand that life is not just a physical phenomenon, but which works in a tangible world and intangible world for a purpose [50]. Here we should know what is human spirit. Spirit can be analogized with the computer software, which animates a human body. It does exist in an intangible world

and originating from the Lord, where we must understand what a thought process is. The spiritual body is constructed out of two main components, Word of God and Water of life. In Zechariah 12:1, we can see the Lord who forms the spirit of man within him. Also understand the words of Jesus Christ in Matthew 4:4, Man does not live by bread alone, but by every word that comes from the mouth of God, which also told by Moses in Deuteronomy 8:3. Words of Jesus Christ in John 6:63 - It is the Spirit that gives life; the flesh is of no avail. The words that I have spoken to you are spirit and life - also gives us an understanding about the relationship between body and spirit. Being the spirit is constructed using words of God; the slips in the word of God make man faulty, first at the spiritual body. A house is built up of walls and beams, where a home is built up on love and dreams. This relationship also exists with respect to body and spirit. A body is built up on flesh and skeleton, where a spirit is built up on love and dreams. This love and dreams are originated from God. We are attached to God through love, where computing with words of God generates dreams and visions through an internal communication process, where each individual work as organs of God [64]. Love is working in three realms of feeling, thought and deed.

Figure 1 Human vs Computer

4.   CYBERNETICS AND COGNITION

Cybernetics is originally developed as control and communication in living beings and machines and the term coined by Norbert Wiener (Figure 2) [46]. An educational theorist Gordon Pask defined cybernetics as the art of manipulating defensible metaphors, showing how they may be constructed and what can be inferred as a result of their existence. The latest research in cybernetics known as *Computing with Words* is trying to do this process on computers [39]. According to Herbert Brun cybernetics is to cure all temporary truth of eternal triteness, because of its uncanny ability to describe complex systems with simplicity, without being simplistic. We envisage it as more than a science, art, philosophy or multidisciplinary subject, which is

going to reign and rein the world through rain and fire with a rational God.

Modern Cybernetics is usually considered to date from the work of Norbert Wiener. While designing control systems, Wiener considered how a human would reach for an object - continually adjusting his hand until he reached the object. He formulated this behavior mathematically and realized that he could use the same equations to describe how a man reaches for a cup and for a missile reaching a target. Wiener used Cybernetics to describe this approach to problems; by comparing how Man (nowadays, "animals" is the term usually used) solves problems with how to solve them mechanically. The principle technique of cybernetics is regulations through control and feedback. To take an extreme example, consider trying to land a space probe (an unmanned spacecraft designed to explore the solar system and transmit data back to earth) on a particular site on Mars. This is achieved to within a few kilometers on an object millions of kilometers away - an astonishing level of accuracy - like hitting a pinhead from a hundred miles away. At first look, this might seem impossible, but the probe is measuring the difference between where it is and where it wants to be (the error) and correcting for it (feeding back the error). This principle can be applied in any science, art or philosophy for which it became a multidisciplinary subject. This principle is also used in administration and research for which it is known as the science of government, and the science of the intellect [46][44].
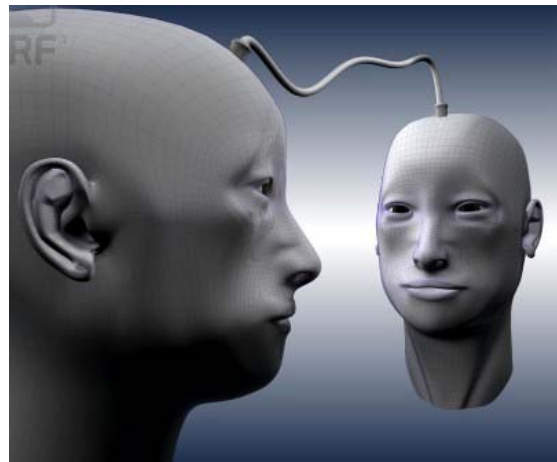

Figure 2 Biological Networking of Humans

The word cybernetics was first used in the context of "the study of self-governance" by Plato in The Laws to signify the governance of people. The words 'govern' and 'governor' are related to the same Greek root through the Latin cognates gubernare and gubernator. The word 'cybernétique' was also used in 1834 by the physicist André-Marie Ampère (1775–1836) to denote the sciences of government in his classification system of human knowledge. For philosopher Warren McCulloch, cybernetics was an experimental

epistemology concerned with the communication within an observer and between the observer and his environment. Stafford Beer, a management consultant, defined cybernetics as the science of effective organization. Anthropologist Gregory Bateson noted that whereas previous sciences dealt with matter and energy, the new science of cybernetics focuses on form and pattern.

Cybernetics takes as its domain the design or discovery and application of principles of regulation and communication. Cybernetics treats not things but ways of behaving. It does not ask "what is this thing?" but "what does it do?" and "what can it do?" Because numerous systems in the living, social and technological world may be understood in this way, cybernetics cuts across many traditional disciplinary boundaries [3]. The concepts which cyberneticians develop thus form a metadisciplinary language by which we may better understand and modify our world [58].

Several traditions in cybernetics have existed side by side since its beginning. One is concerned with circular causality, manifest in technological developments--notably in the design of computers and automata--and finds its intellectual expression in theories of computation, regulation and control [29]. Another tradition, which emerged from human and social concerns, emphasizes epistemology--how we come to know-- and explores theories of self-reference to understand such phenomena as autonomy, identity, and purpose. Some cyberneticians seek to create a more humane world, while others seek merely to understand how people and their environment have co-evolved. Some are interested in systems as we observe them, others in systems that do the observing. Some seek to develop methods for modeling the relationships among measurable variables. Others aim to understand the dialogue that occurs between models or theories and social systems. Early work sought to define and apply principles by which systems may be controlled. More recent work has attempted to understand how systems describe themselves, control them, and organize them. Despite its short history, cybernetics has developed a concern with a wide range of processes involving people as active organizers, as sharing communicators, and as autonomous, responsible individuals.

In the top down design of the creation process, the creation started from God, when we are starting from a prototype, which is under a Lord, to create a replica. This can be verified through the verses in the Bible in Ecclesiastes 3:15, which says, "that which is has been already and that which will be has already been, for God seeks what has passed by". This can be the definition of the word Research, which clearly indicates that God re-search a past event [64]. The Bible said that we are descendents of Adam and Eve who were in heaven. But as we mentioned earlier due to the slips in the word of God made them faulty and brought them under the sun to get death. God definitely had a rationale behind all creation. We need to find that rationale and create accordingly is the only one way to maintain what we created. Just like what we do in the Object

Oriented Programming in Computers, any Object should be exactly how the Class is designed, which means the Earth should be exactly how the heaven is designed, where there will be a Lord above our head. In the book, God and Golem, Inc., Norbert Wiener describes such a rational God, where God is defined in Genesis 1:1 and Golem is defined in Psalms 139:16 [45]. Any discrepancy between heaven and earth will be a security threat in all aspects on earth, where the evil forces may enter and destruct everything on earth, which is the ultimate technology we develop to avoid any security threat including passwords anywhere including Internet. In Cyberspace, Skynet and Internet should work together like a class and object where all Intellectual Property Rights (IPR) will be kept at the genuine sources, without any security problem, which can be considered as a Knowledge Tree [24][64]. This Knowledge Tree will be attached to a Life Tree, from which pure Water of Life streams are generated. This is the situation the Bible says during the end times in Zechariah 14:4-11, where there will be Lord God. These streams generates stream of words. Also read Genesis 2:8-10. Whoever wanted to live can eat the fruit of that Life Tree, but do not eat the fruit of the Tree of the knowledge of Good an Evil is the law Lord God gave in heaven (Read Genesis 2:16-17), as fruits of the Tree of the knowledge of Good and Evil will give us death, which happened at the Eden Garden (Read Genesis 2:1-24) [64]. The concepts of value education should come keeping these facts in mind.

5. THINKING SKILLS

When we start with thinking skills, we should know what thinking means. **Thoughts** are forms created in the mind, rather than the forms perceived through the five senses. **Thought** and **thinking** are the processes by which these imaginary sense perceptions arise and are manipulated. Thinking allows beings to model the world and to represent it according to their objectives, plans, ends and desires. Similar concepts and processes include cognition, sentience, consciousness, ideas, and imagination [23][53][55]. Psychologists have concentrated on thinking as an intellectual exertion aimed at finding an answer to a question or the solution of a practical problem. Cognitive psychology is a branch of psychology that investigates internal mental processes such as problem solving, memory, and language.
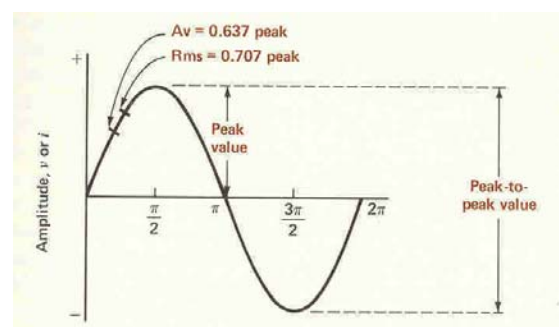

Figure 3 Oscillations in thinking

We can consider the thinking process as an oscillation between left and right in the brain, which is producing a sinusoidal wave (See figure 3). Left side asks questions and right side gives answers and vice versa. This is the thought process, which should continue like a sinusoidal wave, without any quarrel, fluently and spontaneously. During the positive half-cycle the right side talks and left side is silently listening. During the negative half-cycle the left side talks and the right side is silently listening. This sinusoidal wave is creating a circular causality in the brain, which is the thought process. This is directly related with Cardiac cycle. Any difficulty is rising on the earth, when this spontaneous flow of thought (Word of God) is affected, when it becomes just Word, not of God. We also introduce a logical symbol of **Word** in this paper as shown in figure 4, created from a sinusoidal Lissajous pattern with a=1, b=2 for signals x=A sin (at+δ), y= B sin (bt), where A=B and δ=0 [57][58][25]. Here we introduce a Brain-Wave Machine with the circular causality in Cybernetics to control everything. Here Word has a link with Logos.
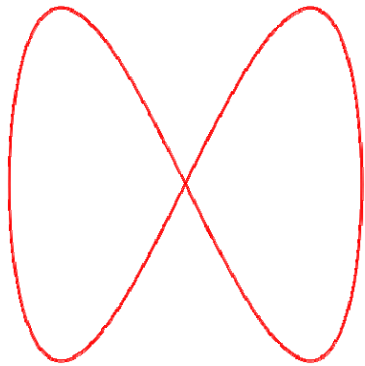

Figure 4 Symbol of Word

The biological function of thought process is explained as follows. A neuron (also known as a neurone or nerve cell) is an excitable cell in the nervous system that processes and transmits information by electrochemical signalling. Neurons are the core components of the brain, the vertebrate spinal cord, the invertebrate ventral nerve cord, and the peripheral nerves. A number of specialized types of neurons exist: sensory neurons respond to touch, sound, light and numerous other stimuli affecting cells of the sensory organs that then send signals to the spinal cord and brain. Motor neurons receive signals from the brain and spinal cord and cause muscle contractions and affect glands. Interneurons connect neurons to other neurons within the brain and spinal cord. Neurons respond to stimuli, and communicate the presence of stimuli to the central nervous system, which processes that information and sends responses to other parts of the body for action [2][4][27][51][55]. All body cells are connected through an invisible spirit through which communication also is made. Actually all sensations are available to our Lord through this communication process, which is attached to

God. This is the importance of the electrochemical signalling, where chemical process is the body, the electrical process is combined with body of God through Lord, where there is a possibility of curing deseases through Word of God. Read Isaiah 30:33, where it says the breath of the Lord, like a stream of sulfur, kindles it [64].

Thinking skills are playing a major role in Teaching, Learning and Evaluation though the present day activities in educational institutions are giving least consideration for this. Teachers and students should get enough training to get rid of this shortfall. Some students identified as "gifted" are reluctant to take risks; they lack flexibility, are poor listeners, prefer to work in solitude and are quick to jump to conclusions. Some students deemed "slow" however, are often insightful, venturesome, entrepreneurial, kind, humorous, visionary and exploratory. Neither labels, genetics, test scores nor numbers of right answers can adequately define intelligence. Rather, it is being in the habit of applying skillful thinking to perplexing problem situations [20][15][6].

Theories of Thinking Skills

Here we introduce three basic theories that has to be taught to the young children when they starts their education which are very essential for their spiritual, intellectual, emotional and physical development throughout their life. We should know that the actual thought process involves a journey of the spirit through the heaven. The direction of the journey depends on our thought, where the words of Jesus Christ in John 14:6 is so important "I am the way, and the truth, and the life; and no one comes to the Father except through me". It clearly means that Jesus Christ is a gateway towards life, where the words of Jesus are more important for which Jesus Christ is known as Word of God and Jesus Christ is known as a perfect teacher where none of His words were imperfect, valid forever and all words were from God. Jesus Christ was not a religious leader, but informed a truth in the world, from God, who installed a church. During this journey, truth, justice and loyalty to Lord are so important, where if we are faulty at any point, which are known as sins, lots of powers and spirits diffuse in our spirit, enter inside our body, enslave, torture and kill us, which means a denial from heaven, for which we teach a Defensive Life Style, where each have to keep the law of God, irrespective of others thoughts or deeds. This also explains the basic problems of paranoid schizophrenia. So here we can tell that assimilation to God is salvation, for which we need to execute the will of God. Also there is only one heaven where there is Lord God, about which the Bible also explains.

Theory of Genesis

This theory This theory states that Without Reason Nothing Happens or Without Cause no Effect, and for Everything the Cause is God. Initially it may be similar to the causality theory, but it is different in the sense that this is an absolute theory based on an absolute existence, God, which is alpha and omega, without which nothing is created. The causality

theory most often is used as circular causality as it was used in cybernetics through which we reached at the absolute existence of the world known as alpha and omega God. What this theory explains is for everything there is a reason behind it and the cause of everything is God, with whom only we can solve any issues or problems. God creates and owns everything that is visible and invisible. Everybody is working in the hands of God, even if they do not recognize it. To see and hear God we need a pure heart. What the Bible says is true in Proverbs 9:10 "The fear of the God is the beginning of knowledge: and knowledge of the holy is wisdom". This theory also is going to define what is normal and what causes madness.

Theory of Hallucination

This theory states that Yes be yes and No be no. This is actually developed from the statements of Jesus Christ in Matthew 5:37 where Jesus taught "Let your message be 'Yes' for 'Yes' and 'No' for 'No'. Anything more than that comes from the evil one". This theory points to the quality of the character that we should possess and the thought that should guide us. If we say Yes, it should be Yes and if we say No, it should be No. If we start to believe, think and work what really exist as not existing and what really not existing as existing, we will go to a state of hallucination. i.e. we should be hundred percent faithful to our heart. Not above or below hundred percent. Otherwise we will be always in a state of confusion and hallucination. This is the only way towards a pure heart. The truth cannot be adjusted. Being the world went away from the truth, we were in a state of hallucination. i.e. nobody was in the normal state so that the darkness ruled us. God is the only absolute truth from which everything is created and maintained. What Jesus Christ taught us in the holy Bible in Matthew 5:8 "Blessed are the pure in heart: For they shall see God", is absolutely true, which is the mandatory requirement to see and work with God. So we could prove that God created a digital world, where God is the source of pure light, where everything is visible to God and Black Hole is the source of pure darkness, where everything is invisible and the final place of all evil, and the latest research papers proved that Black Hole is a recycling center, where body and spirit destructed, which is the deep subterranean fire in the Bible in Revelation 20:14, a place of second death, where the spirit also get death [64].

Theory of Continuum

This theory states that Without Today No Tomorrow. This statement can be redefined in the microscopic level as "Now or Never". This theory points to the continuing nature of the creation. It shows the continuing nature of life. If it breaks at some point life will stop functioning there. This is an essential thinking skill we need to develop for a pure thought without any blemish or missing links, which also forms an unblemished spirit in an individual, towards eternity, which can be a part of God. This theory also points to the quality of

character, thought and deed that we need to achieve something in our life. i.e. if we have a desire to achieve something, it should burn continuously in our mind until it is achieved. This is the motivation that is provided by Jesus Christ. If our desire is according to the rules and will of God, God supports it to achieve it.

Please note that God is such an existence, which is not ruled by above three theories. Education in the right direction will give pleasure to the mind and health to the body. Read Proverbs 16:24 - Well-ordered words are as a honeycomb: sweet to the soul, and health to the bones - Education is also a process of developing a spirit in the body, which have to co-exist for comfortable living. This spirit is like computer software, which animates the physical body [55].

6. NOOLOGY

The science of Noology was developed to introduce the intellectual phenomena [21][65]. Noology or what is currently termed cognitive science is ideally the science treating all the possible forms and laws of intelligence. It is essentially concerned with modeling human and other minds and with fashioning a valid, fundamental, and universal theory of mind and cognitive phenomena. It is to be distinguished from psychology, the science of all actual and possible psyches and psychological phenomena, and the laws and behavioral manifestations thereof.

The related field of artificial intelligence is the branch of computer science that endeavors to invest machines with mind and reason, or, ideally, that would create all possible types and degrees of intelligence. One of the natural sub fields of Noology should be modeling ideation, and of artificial intelligence the automation of ideation, but for some mysterious reason mere traces of these sub fields are all that can so far be found in those disciplines.

Cognitive psychologists use psychophysical and experimental approaches to understand, diagnose, and solve problems, concerning themselves with the mental processes which mediate between stimulus and response. They study various aspects of thinking, including the psychology of reasoning, and how people make decisions and choices, solve problems, as well as engage in creative discovery and imaginative thought. Cognitive theory contends that solutions to problems take the form of algorithms—rules that are not necessarily understood but promise a solution, or heuristics—rules that are understood but that do not always guarantee solutions. Cognitive science differs from cognitive psychology in that algorithms that are intended to simulate human behavior are implemented or implementable on a computer. Computing with Words (CW) is the latest research topic in Cybernetics related with this. In other instances, solutions may be found through insight, a sudden awareness of relationships. The ultimate is when we see visions and dreams at a sublimed level of thought.

Some of the associated terms of noology are nookleptia (which is the obsession that one's thoughts are being stolen by others), nooklopia (Thought withdrawal or thought interruption by some outside person or force), noogenesis (The emergence of intelligent forms of life or evolution of the mind), noologist (Someone who is versed or who specializes in noology), noometry (Measurement of the mind or mind-measurement), nooscopy (An examination of the mind), noosteresis (Dementia), noopsyche (Mental or reasoning processes consisting of two separate psychic factors: (1) The *noopsyche*, comprising all purely intellectual processes and (2) The *thymopsyche*, made up of affective processes.

Noosphere is a term in Cybernetics modeled after biosphere signifying   (a) the space occupied by the totality of information and human knowledge collectively available to man, which is also known as SKYNET (S-NET) and (b) The processes operating in this space, e.g., combinatorial mating, classification, reproduction, simplification, and selective decay [50]. The two sides of the information superhighway known as Cyberspace are INTERNET (which is the visible, tangible side) and SKYNET or S-NET (which is the invisible, intangible side). Noology is the science dealing with SKYNET, which is the biological networking of human beings. The noosphere can be seen as the "sphere of human thought" was being derived from the Greek νους (*nous*) meaning, "mind" in the style of "biosphere". In the original theory of Vernadsky, the noosphere is the third in a succession of phases of development of the Earth, after the geosphere (inanimate matter) and the biosphere (biological life). Vladimir Ivanovich Vernadsky (1863-1945) was a Russian, Ukrainian mineralogist and geochemist whose ideas of *noosphere* were an important contribution to the Russian cosmism. He was a founding father of several new disciplines, including geochemistry, biogeochemistry, and radio geology. Just as the emergence of life fundamentally transformed the geosphere, the emergence of human cognition fundamentally transformed the biosphere, in contrast to the conceptions of the Gaia, (*Gaea*, meaning "earth" or "land") theorists, or the promoters of Cyberspace. They hypothesized that the living matter of the planet functioned like a single organism and named this self-regulating living system after the Greek goddess Gaia.

7.   RESULTS AND DISCUSSIONS

Vernadsky's noosphere is not something that is just now coming into being, or will emerge in the future; it arrived with the birth of the first cognitive human being, and is manifested throughout the geosphere and biosphere in the form of human intervention, which principally takes the form of physical economic development of the planet. Noosphere is also sometimes used to refer to a transhuman consciousness emerging from the interactions of human minds. This is the view proposed by the Christian mystic and theologian Pierre Teilhard de Chardin (French Jesuit priest trained as a paleontologist and a philosopher; 1881-1955), who added that

the noosphere is evolving towards an ever-greater integration, culminating in the Omega Point—which he saw as the ultimate goal of history, which we achieved in these times [50][57][58]. The term Cyber war is also associated with the war that is going on in the Noosphere [24]. We introduced this topic in this paper so that to bring an attention about this among teachers and students so that teaching, learning and evaluation will be more simplified. Sirach (Ecclesiasticus) 39:15-16 verses in the Bible said "while he remains, he leaves behind a name greater than a thousand, and when he will rest, it will be to his benefit. I will meditate further, so that I may explain, in silence, for I have been filled with a passion". This clearly explains about a process, which happens in the noosphere, during the intellectual process, in the Bible [Daniel 12:3]. Teachers should recognize themselves about a mental labor in which they are engaged, as a teacher or writer, for which the teachers have to keep their holiness in spirit especially as role models to the society.

Before we start to study anything, first we need to know about the system, about which we are going to study. For example, when we study about drawing pictures, we should know that we are going to draw a picture on a two-dimensional space. Sometimes we may be drawing pictures of an object in a three dimensional space on a two dimensional paper, where we need to know that we are mapping a three dimensional world in to a two dimensional paper, and the necessary techniques for that has to be developed, where we should have an understanding about a two dimensional system and a three dimensional system. If we wanted to understand the Theory of Relativity of Albert Einstein, we should have an understanding about a four dimensional system. Willard Gibbs defined a system as any portion of the material universe which we choose to separate in thought from the rest of the universe for the purpose of considering and discussing the various changes which may occur within it under various conditions.

So in any scientific study we are working on a system, as defined by Willard Gibbs. All scientific studies are working on a cybernetic loop of regulations through control and feedback, which are motivated through the questions of what?, why? and how? [3]. This is done through gustatory, olfactory, tactile, kinesthetic, auditory and visual information processing. Most linguistic, cultural, and physical learning is derived from the environment by observing or taking in through the senses. To know a wine it must be drunk; to know a role it must be acted; to know a game it must be played; to know a dance it must be moved; to know a goal it must be envisioned. But even if all these are processes are done using the visible sensory information, this process also uses invisible sensory information that is deriving from God, where a decision is made in the mind, which is part of God, where heart is acting as a source of various inputs to the mind. Being the art and science Cybernetics is involved in this process it can also be called as the science of the intellect, where it works on a system of two worlds, a visible, tangible world and an

invisible, intangible world. The science Noology explains how this happens in the intellectual world [50].

To know the truth we need an environment, where truth and justice reigns, which is derived from God. We should know that the earth - which is tangible and visible - is installed in a sky – which is intangible and invisible – according to the physical senses of a human. But humans also perceive information through a sixth sense [56]. But under a heaven cursed by the Lord this information contains lots of hallucinations, where the betrayed mind betrays us, where the only one way to get rid of trouble is to be in truth, justice and realities always - in thoughts and deeds, in spirit and body - and believe the words in Psalm 1:6, For the LORD watches over the way of the righteous, but the way of the wicked will perish, where only pure water of life flows.

The present science is concerned only about a tangible world, where the physical senses only are used to determine facts, and we got no training to get introduced in to the intangible world, where the importance of the thinking skills we need to develop, comes in to picture. Though we are familiarized with the word intuition, we never got any training to understand it, which has to be solved. We also need to get acquainted with the terms assimilation and apperception. Assimilation and apperception are the process involved in the formation of the spirit, which is the software of a human. If the spirit is formed in a logical order then only it is going to lead to eternity and everlasting life. These spirits are going to reign and rein the world, which is controlled through Water of Life and fire by God.

Science is organized knowledge and systematized inquiry. Cybernetics is also the science of effective organization. When we organize anything from basics and in a logical order we may find certain missing links. The science itself is trying to find it. But do we know where it fails? This led to a number of new findings in the world. The ultimate is the invention of God itself. Science also is the rigorous separation of truth from speculation, the methodical distillation of massive appearances and possibilities into the least and simplest realities. Science also is the ability to make reliable and accurate predictions about things in general, where we define a professorship as when a professor is able to make prophecies, when knowledge and experience gathers together in their spirit, when their disciples realizes it.

8. CONCLUSION

To give freedom to the science, we submit this paper to give freedom for the thought, introducing the technology behind the cognition process exhorting to bring new methods in the teaching, learning and evaluation process. Keep in mind that our slavery starts in the thought level, when curse occurs on us by the Lord, darkness start to flow through our thought, which enslaves, torture and kill us, from which the earth is getting a redemption now. As Cybernetics is the science that deals with these areas, we gave an idea about teaching, learning and

evaluation through the eye of Cybernetics, as a science of government too. Also read the words in Sirach (Ecclesiasticus) chapter 51, which is part of apocrypha bible, especially the following words (22-38). "I found much wisdom within myself, and I benefited greatly by her. I will give glory to Him who gives wisdom to me. For I have decided that I should act according to wisdom. I have been zealous for what is good, and so I will not be confounded. My soul has struggled for wisdom, and in doing so, I have been confirmed. I extended my hands on high, and I mourned my ignorance of her. I directed my soul toward her, and I found her within knowledge. From the beginning, I held my heart to wisdom. Because of this, I will not be forsaken. My stomach was stirred up while seeking her. Because of her, I will hold a good possession. The Lord has given me a tongue as my reward, and I will praise Him with it. Draw near to me, you who are untaught, and gather yourselves into the house of discipline. Why are you reluctant? And what do you have to say about these things? Your souls are exceedingly thirsty! I have opened my mouth, and I have spoken. Buy wisdom for yourselves without silver, and subject your neck to her yoke, and let your soul accept her discipline. For she is close enough to be found. See with your own eyes how I have labored only a little, and have found much rest for myself. Take up discipline, as if it were a great sum of money, and possess an abundance of gold in her. Let your soul rejoice in His mercy. For you will not be confounded by His praise. Accomplish your work before the time. And He will give you your reward in His time." [64].

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