

AS CONDUCTED ON THE VAISAKHI DAY IN 1699 CE GURU GOBIND SINGH'S UNIQUE TYPE OF EXPERIMENT USHERED THE UNIVERSALLY MEANINGFUL ERA OF BEHAVIORAL SCIENCE

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ABSTRACT

In a nutshell, the thesis enshrined in the present research based paper hinges around the theoretically, as well as, philosophically and epistemologically sound postulate. Its main stress is that Sikhism ... both as unique way of life, as well as, as a novel method of giving moral, ethical, religious or spiritual education ... was engineered, designed and triggered to be a scientifically sound, universally employable, modern and dynamic 'System of Pedagogics'. In reality, it was needed to enlighten the gullible, fear-threatened and perfectly credulous masses, groping in the dark since the times immemorial. Nevertheless, sheerly due to the bad luck of the human species, as a whole, the thus designed system could not take off along the runway, envisioned by its inventors, explorers, originators, creative thinkers and discoverers. But why? A perfectly plausible and valid answer to this question will become clear towards the end of the present study.

INTRODUCTION

All the sincere, honest, and unbiased students of the history of the world, pertaining to the development of the 'Science of the Pedagogics', know very well, at least, the following five primary factual truths:

Firstly, that before the advent of Sikhism, ten well organized religions, or systems of spiritual education, namely, Vedic (or Sanatan) Dharma, Buddhism, Jainism, Judaism, Christianity, Zoroastrianism, Islam, Confucianism, Taoism, and Shinto had already got established all over the then known regions of our world. Out of the galaxy of these ten religions, four are founded on the theoretical assumption that there is no God and that character building is the ultimate goal of spiritual, as well as of secular or of professional education. Vedic Dharma, as the oldest religion in the world, hails the multi-god theory; and the number of gods and goddesses goes up to three hundred thirty millions (330,000,000). And all these forces are said to influence human behavior from outside. The remaining six systems of religious education are the true copies of the Vedic religion, in the sense that they all believe in multi-god theory called polytheism and treat their gods, goddesses, prophets, holy ghosts, jinns, hells, heavens, etc. as omnipotent, external forces which

discipline human beings.

Secondly, that Guru Nanak as a perfectly revolutionary and deviant thinker dared to found a unique type of religion, **Sikhism**, in which there is no place for God as an external, dreadful, cruel, hard-hearted agency maintaining all sorts of armies of prophets, jinns, holy ghosts and hells. Not only that, Guru Nanak, ventured to propound "**One-God Theory**", **Monotheism**. He also dared to challenge the institutions of church-hood, prophet-hood, clergy-hood and all sorts of ritualism. Actually, he advises to take living human beings (irrespective of caste, creed, sex, skin color) in the image of "God Himself" and made human psyche (or human mind) as the real abode of God. His humanistically sound religious philosophy has been incorporated in the Aad Guru Granth Sahib (AGGS) [1]. Another point of uniqueness in Guru Nanak's theology lies in seeing the point that like Buddha, Jaina, Zoroaster, Confucius, Laotzu, and Hazart Muhammad he (Guru Nanak) did not run his religion in his own name; nor like Hinduism, he did associate the name of his system with any piece of geophysical-earth. An eternally true system of spiritual education must not be associated with the name of a mortal human being. Moreover, the nomenclature for the religion, which aspires to establish universal brotherhood and peace, must be

independent of both time as well as of place. By definition, **Sikhism** is (or has the capacity to be) the religion of all and sundry, among the members of the human species as a whole, who are throbbing with the urges to learn or who are ready to be called as "sincere students". The **Sikh** means student, nay! a sincere student.

Obviously, it was Guru Nanak, who, as the most modern educationist, teacher, and scientist par excellence, dared to proclaim with the beat of drum, that nature provides human-psyche with that neuro-biological and physiological equipment, which is potential and malleable enough to get developed all those god-like personality characteristics which make him or her in the image of God himself. In short, Sikhism aims at making human beings perfectly disciplined and sane. So, Guru's (teacher's) job is to ignite and nurture that type of potential for becoming God-like human being. Today, all the teachers working in the faculty of pedagogic science admit that human beings become disciplined from within and not due to the presence of external dreadful god. But nobody gives credit to Guru Nanak for that discovery and invention. In this context, Guru Nanak proclaimed:

"O my mind! Thou art the embodiment of the Divine Light, so know thyself." [2]

Thirdly, that the real role of Gurbani (Guru's words) is to ignite the Spark of Divine Light, enshrined by nature in all human minds. And, thereby, to transform all the human beings, as the raw biochemical, physiological and bio-neurological individuals into the real embodiments of truth, of courage, of purity, of altruism, of optimism, of dynamism, of integrity, of mercy, of sensitivity, of industriousness, of considerateness, of goodness, of beauty pertaining to human behavior.

Fourthly, that "Teaching ' and 'Testing' both are inseparably welded together. Meaning thereby that a teacher who is authorized to teach is also having the 'royal prerogative' to test his/her disciples. The single most purpose of giving a test to one's students/disciples is to adjudge as to whether they have become true, loyal, wise, contented and sane followers of their Guru's Mission

Fifthly, that Sikhism and Educationism, as very highly

technical and scientific concepts, are perfectly synonymous, similar in their implied meanings. Nay! they are perfectly interchangeable terms. Historically, anthropologically, epistemologically, as well as, etymologically speaking, it is impossible to adjudge as to how old are these two concepts. Dryden and Vos [5, p 40] says that the human being, called *Homo habilis*, happened to see the Light of World around two million (2,000,000) years ago. So, whether two human beings would use, in their social interactions, the bodily signs, facial expressions, and/or the wordy- or verbal-tools is not the pertinent question. Here, the question of questions is that the processes of telling, of listening, of mutual dialogue, of teaching-cum-learning are also around two million years old.

Etymologically, the term '*Sikh*' has its origin in the word '*Sish*', which is available in the Vedas, which are regarded as the hoariest written-treatise, all over the world. According to Dryden and Vos [5, p 40] the art of writing got developed around six thousand (6,000) years ago. Obviously, the written form of the term 'Guru' is also as old as is the written word 'Sish'.

Now mathematically, hence, logically speaking, if the age of human beings, as *Homo habilis*, is two million

(2,000,000) years and if the age of the 'Art of Writing' goes up to six thousand (6,000) years, then it may safely be deduced that the concepts of 'Guru' and 'Sikh' (or of teacher and learner) remained as the oral-toy, in the hands of living human beings, for around one million, nine hundred ninety four thousand (1,994,000) years. Here, it may just be imagined as to in what way these two concepts are eternal.

On the other hand, the concept of education, as a noun, has its etymological roots in the English verb 'educer'. And 'educer' means to bring to surface, to stimulate, to activate, to energize, to help in getting actualized that some thing which stands internally, covertly, un-perceivably, and implicitly encapsulated and intermingled in the gray matter of human brain. But what is that something, which ought to get actualized or realized?

The Sikh Gurus have named that something the 'Spark of Divine Light', which makes human child educable,

teachable, malleable, transformable and changeable into a sane and civilized person. Precisely, this is the basic theoretico-philosophical assumption, on which the 'Sikh Way of Life' (Sikhism) stands founded. A duly and fully qualified 'educator' (teacher in layman's parlance) may ignite that 'Spark of Divine Light' and thereby, make his disciple/student God-wards (*Gurmukh*), or spiritually oriented person, or true follower of Sikhism (*Sikhi*). Before taking up the question: What is the valid method of testing as to whether someone has become a true Sikh? It is appropriate to talk about the real sources of stimulation for preparation of this research-based paper, being published as a serial.

SOURCES OF STIMULATION

Though a bit lengthy and somewhat technically worded, there is nothing odd in the affirmative statement used to caption and to entitle the present research-based article. In reality, this form of the title is indicative of a perfectly valid, objective, reliable and verifiable historical truth; and it demonstrates the fact that this paper encompasses that very highly complex 'Method of Research' which is, technically called 'Interdisciplinary Approach'. Roughly speaking, it embraces seven disciplines of human-knowledge, namely, philosophy, psychology, education, religion, literature and arts, life- and behavioral sciences, and history, as well as, psycho-history.

Albert Einstein [6], the noble laureate in Physics, professes that literature, arts, religion, social sciences, history, ect., all are the branches of the same tree of human-knowledge. And according to him, "*Science without religion is lame, religion without science is blind*" [12, p 615]. Here, the question arises as to why the contemporary universities, as the expert custodians of human knowledge, and we, as laymen; intend to put human knowledge into watertight compartments called faculties?

In short, the analytical approach (being traditionally and popularly employed in understanding and explaining of the proper - improper functioning of human-psyche) has gone a long way in reinforcing that ill-conceived and perfectly irrational supposition (or notion) which says that human-mind comprises different faculties. And, secondly, that the such-like faculties are triggered to operate, absolutely, independently. However, with the passage of time, especially in the light of the discoveries reached in the areas of life sciences, today's knowledge stresses that human brain functions as a unified unit comprising billions of neurons. Consequently, the branch of

'Faculty-Psychology' has receded into the background. Actually, modern Psychology has started to give due recognition to the synthetical and Inter-disciplinary Approach, for creation and for understanding of human -knowledge.

However, the sorry state of affairs lies in recognizing the truth that even towards the end of the 20th century, we have not been able to appreciate the truth that the ultimate goal of the researchers working as the men of theology, of theosophy, of epistemology, of philosophy, of science, of 'philosophy-of-science', of literature, of arts, of history, of sociology, etc., is to, firstly, understand and then, to explain the processes of evolution and creation. So, analytically speaking, if life sciences, that is, biochemistry, biophysics, etc. tell us how human body functions, then psychology in the light of the thus produced knowledge tries to explain, synthetically how human-psyche functions and works. Precisely, the term micro-universe refers to human psyche (mind); whereas, the concept of macro-universe happens to cover all the planets and suns of our galaxy and that of all the galaxies in the universe.

Though in an indirect fashion, this paper condemns and censures that Marxian view, which presupposes and theorizes that religion, all over the world, was designed to play an absolutely undesirable and negative role in human life; and that it serves only the purpose of 'opiumizing' the gullible masses. Contrarily, the thesis presented in this paper seeks inspiration from that theoretically and humanistically sound postulate which stresses that "Religion is the integral component of human culture." And that the ultimate goal of religious, spiritual, moral and ethical education is to make the society of human beings perfectly sane and wise. In this context, a thorough scanning, analysis and synthesis of Eric Fromm's books [7-10] is very much instructive.

In the areas of psychology, philosophy, history, as well as of psycho-history, the present thesis accepts the most recent advices of Brown [4], and Arnold Toynbee and Oswald Spengler [11], who (as the 20th century, world renowned interpreters of human civilization and human culture both) suggest that in a study of history (psycho-history), the startling or the focal point ought to be a particular level of civilization or of human culture. And according to them, the findings based on perusals of the so-called national, regional, provincial and personal or biographical histories are downright misleading, illusive, delusional, and that the such-like historical findings are not capable and potent enough to yield universally or globally meaningful lessons.

Obviously, if we are interested in making the Sikh brethren to understand the role played by the Sikh Gurus in the development of Sikhism (Sikhi), and in defining, both theoretically and philosophically, as well as, operationally, pragmatically and practically, the concepts of 'Sikh', of 'Sikhi', of Sikhism, then we must have the courage to come out of the narrow grooves of our visions. Psychologically, development of human-vision in all walks of life is directly contingent upon narrowing or upon expanding of the content-coverage of the curricula and syllabi. In fact scanning of communal, provincial and national histories shrinks our minds and it is not possible to understand Sikhism, which embraces human species, as a whole.

Actually without putting the historical epoch traversed by the Sikh Gurus, from 1469 to 1708 CE, into that total historical perspective which has been covered by the human species, as a whole, on this earth, it will never, ever be possible

to make valid and reliable judgement about the role played by the Sikh Gurus. Here, it hardly needs to stress that Sikh Gurus were interested in making the whole of mankind sane, wise, patriotic, disciplined, educated, optimistic, cooperative, sensitive, productive, courageous, independent, freedom loving, free from the fear of God, as a dreadful external agency, etc. etc.

Most importantly, this paper hails Brown's [4] psychologically and historically meaningful observation. That observation asserts, in unequivocal terms, that the processes of development of human culture and human thinking, etc. have primarily, their roots in magic (that is affective, emotional and irrational part of human mind); then, these psychic-processes, as the abodes of human soul, got their nourishment from religion and religious and spiritual education; and that, presently, since the end of 15th and 16th centuries of the Christian era, they are, mostly, being fed by Zeitgeist (the spirit) of science and in future, after millenniums, all these three processes, namely, human culture, human cognition and human thinking will get their nourishment from the purely spiritually-oriented science.

According to Brown's [4] historically, empirically and psychologically sound theory, the rope of development of human culture, human cognition and human

thinking happens to represent the traces of 'Magic' through a black thread, those of 'Religion' through a red thread, and those of 'Science' through a white thread. And he professes that, with the omnipresent and eternally and unidirectionally moving passage of time, the intensities (forces) of these three types of colors of the thread, representing Magic, Religion, and Science, go on gaining or losing, their intensities proportionately, in accordance with their relevance and irrelevance.

Terms Defined: By definition, 'Magic' remains satisfied with illogical, emotional, irrational, absurd, unreasonable explanations of the inexplicable phenomena, occurring around us. Whereas, 'Religion' depends upon mythical solutions, involving supernatural, unperceivable and fanciful persons born to human imagination, cleverness, concoction, fabrication planned and designed by the deceivers, untruthful and mercenary human beings, who are mentally superior to the normal human beings.

However, Science puts up experimentally sound and publically demonstrable evidence to explain the cause and effect relationship between the independent and the dependent variables; and science also takes the responsibility for explaining the role/s played by the placebo/s and/or by the controlled conditions, if any.

EXPLANATION OF THE DESIGN OF GURU GOBIND RAI'S EXPERIMENT

In a nutshell, by definition, the concept of '*experiment*' in all the natural sciences, namely, chemistry, physics, biology as well as in social and behavioral sciences, means controlled observation, aimed at determining 'Cause and Effect Relationship' between the independent and the dependent variables. Guru's experiment was ideal in its design. Why? That was so, because on the Vaisakhi day of 1699, the Guru varied one, and only one condition in the design of his experiment.

Similarly, when Guru Nanak happened to originate his experiments during the 15th century, he also, as a teacher, researcher, and scientist par excellence, brought in (or varied) one condition. His varied condition was 'Education ---- No Education'. Guru Nanak's hypothesis, which he put to verification through the experiment initiated by him was that after having received the doses of his guidance and

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counselling, pertaining to religious, spiritual, moral, and ethical education, the people, all over the world, would become sane, wise, contented, brave, courageous, truthful, and would learn the art of dying for his (Guru's) mission. As original writer, Guru Nanak's mission was self-explanatory. Hence, no further elaboration is required. Of course, the literary and the verbal form of the hypothesis regarding the highly effective influence of education on man's behavior, reads as follows:

"If thou yearnest to play the game of love, step on to my path, with thy head placed on the palm of thy hand. And once thou settest thy feet on this path, then lay down thou thy head; and mind not public opinion." [3]. Obviously, the Guru as a theorist and original writer was expected to provide verbal hunches and messages; whereas a pragmatically oriented Guru ventured to verify the same hunch experimentally also.

In the experiment conducted by Guru Gobind Rai, on the Vaisakhi day of 1699 CE, the simple-most purpose was to verify practically, as to whether the system of education originated by Guru Nanak had succeeded in bringing its fruits. Since the thus initiated system of education was well planned, well organized, well designed and perfectly systematic, dynamic, very fairly decentralized, scientifically sound, philosophically well grounded and absolutely commensurate with the needs of the pluralistic society of those days, as well as, fairly sizeable in terms of time, covering 230 years, it was genuinely reasonable and appropriate to put up publicly demonstrable evidence about its effectiveness and fruitfulness. The ten generations of teachers, researchers, scientists of par excellence, as well as martyrs, were fully justified to see if their disciples had become, en masse, courageous, brave, loyal, fearless (*nirbhao*) enough for defending their independence, freedom and integrity.

In the thus designed experiment, the independent variable, which the Guru himself was free to vary (change) was the piercingly sharp and shining sword, drawn at his own disciples. At the beginning of the experiment, the thus drawn sword was having bloodless white luster. But at the second, third, fourth, and fifth calls, the sword became more and more thickly blood-stained, hence, more and more dreadful, fear threatening, terrorizing and frightful; and the dependent variable was the show of bravery, courage, fearlessness, taking to heels, getting scared away, etc. The historically recorded evidence about the varied condition will be discussed in the beginning of the 2nd installment.

Inside the tent what did happen to the disciples, who had dared, hesitatingly or unhesitatingly, to rise up and to respond to the clarion-call demanding a sacrifice of one's head, remained as the absolutely tightly guarded and perfectly controlled condition in Guru Gobind Rai's experiment. Obviously, had the secret about the thus, absolutely, tightly controlled condition become public before appearing of the naked sword then, the experiment itself would have ended in a fiasco. Had there been no secret (placebo) then all the spectators would have raised their hands at the very first call of the Guru showing hundred per cent results from the process started by Guru Nanak.

Here, it will suffice to, specifically, underline two inferential truths: (i) That in behavioral and life sciences, even today, the experimentally sound research design as employed by Guru Gobind Singh, as far back as 1699 CE, happens to be very popularly used. (ii) That the perfectly and absolutely controlled situation which took place inside the tent, is known as '**placebo**', a very respectable concept among today's scientists. We promise to put up very highly pertinent examples of the present day placebos and of the controlled situations which we, as scientists, happen to use in our experiments, in the Modern Era of Science.

Here, I take liberty to close the first instalment and postpone our discussion about the role played by the Sikh Gurus in making Sikhism as the most important component of the present day pedagogic science.

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3. AGGS, M 1, P 1412: ਜਉ ਤਉ ਪ੍ਰੇਮ ਖੋਲਣ ਕਾ ਚਾਉ ॥ ਸਿਰੁ ਧਰਿ ਤਲੀ ਗਲੀ ਮੇਰੀ ਆਉ ॥ ਇਤੁ ਮਾਰਗਿ ਪੈਰੁ ਧਰੀਜੈ ॥ ਸਿਰੁ ਦੀਜੈ ਕਾਣਿ ਨ ਕੀਜੈ ॥ B
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of the Guru. If we accept that the Sehjdhari Sikhs were those who continued to follow the old practice of initiation through charan pahul after the Vaisakhi of 1699 then who was doing it. Dr Lal in his paper has asserted that the Masands who were doing it before 1699 on behalf the Guru, were stopped to do so at the orders of Guru Gobind Singh after the institution of initiation ceremony by administering *Khande dee Pahul*. This is the moot point which needs attention of all Sikh religion has followed a policy of allowing everyone to enter its premises with a few conditions such as cover up your head, be bare footed and without any tobacco product on your person. Most of the religions allow other people to enter only after initiation of the person into its fold. Most likely this open door policy has something to do with some, if not all, of the problems Sikh religion faces today and is likely to face in the future.

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It has been addressed above.

Response by Dr Lal