

PHILOSOPHY OF GURU NANAK IN THE EYES OF A SCIENTIST

ARTICLE

Prof Devinder Singh Chahal, PhD
Institute for Understanding Sikhism
Laval, Quebec, H7W 5L9
Email: sikhism@iuscanada.com

INTRODUCTION

Guru Nanak (1469-1539) laid the foundation of Sikhi (Sikhism) in South Asia. This period (1469-1539) is the same as that of the Period of Renaissance covering, spanning between the 14th and 17th centuries and marking the transition from the Middle Ages to Modernity in Europe. During this time scientists were challenging the medieval teachings and authority of the Church in Europe, and Guru Nanak was busy challenging the ancient mythology and rituals in which the peoples of South Asia were shackled to for centuries. However, after five centuries, if we examine the effect of the teachings of Guru Nanak on humanity in general and on the Sikhs in particular, it will not be difficult to come to the conclusion that what the Sikhs are doing today is exactly contrary to his philosophy. Sikhi founded by Guru Nanak has been interpolated, misinterpreted, and misrepresented stealthily and steadily after Guru Nanak (1539). Why is it so? This was done by some writers under the influence of Vedic and Vedanta philosophies or innocently by others due to lack of proper understanding of his bani. The word “bani” (Words) is used as singular as well as plural.

Many writers say that Nanak is a social reformer, a revolutionary against rituals and superstitions, creator of syncretism (combing the philosophies of Hinduism and Islam); some consider him as member of Bhagati Movement while others consider him as a follower of Bhagat Kabir. Some devout Sikhs consider him as a Prophet or even the Image of God. Nevertheless, the next four Sikh Gurus, who succeeded to the House of Nanak, have accept Nanak as their Guru. [1]

It is also well established in the psyche of the Sikhs that bani was revealed (called *Dhur ki Bani*) to Nanak when he

ABSTRACT

*The Philosophy of Guru Nanak embodied in his bani and incorporated in the Aad Guru Granth Sahib is quite different in the eyes a scientist than the traditional philosophy being taught and found in Sikh literature. His philosophy has been termed as “Nanakian Philosophy” by the author. The author has used the word, “a scientist” in the title to be restricted to the author since many Sikh scientists may or may not agree with his logical and scientific explanation of bani of Guru Nanak since they may not yet have come out of the influence of ancient philosophies. This article will discuss only the definitions of Sikhi and a Sikh, concept of God, *ਕੁਰਮ* - hukm (the Laws of Nature/ Universe), and the *ਸਬਦ* – babd as a part of philosophy of Guru Nanak from his bani. This is the “sabd” which enabled Guru Nanak to develop great vision to promulgate original and unique philosophy during the period of Renaissance.*

disappeared in Vein rivulet for three days. Chahal et al [1] and Karminder Singh [2] have refuted this episode about revelation to Nanak during three days. On the other hand Cunningham ([3] note # 2, p 35) reported from a Persian manuscript, *Siar ul Mutakharin*, that “Nanak was carefully educated by Saiyid Hasan and he also studied the most approved writings of Muhammadans and learned all the **earthly sciences** from Khizar, i.e. the prophet Elias. **This indicates that Nanak had a great vision right from the beginning and refused to accept various rituals and religious rules being practiced at his time. He started to discover the truth through dialogue with his primary school teachers and later took long voyages to have intellectual discussions with heads of various religious centers and institutes.**

The term, “Philosophy”, is rarely used for explaining the bani of Guru Nanak. In fact, the term “**philosophy**” is derived from a combination of the Greek words ‘*philos*’ meaning love and ‘*sophia*’ meaning wisdom. Although it may be difficult to define

***The paper presented at the International Conference, A Journey of 550 years: Sikh Studies in Academia, held at Wolverhampton University, Wolverhampton, UK on September 3-5, 2019. It was presented via Skype on September 3, 2019.**

“philosophy”, there still are a few definitions available in different Dictionaries and Web sites, which are worth for deriving a fairly acceptable definition as follows:

The branch of knowledge or academic study devoted to the systematic examination of basic concepts such as truth, existence, reality, causality, and freedom.

Love of, or the search for, wisdom or knowledge.

Theory or logical analysis of the principles underlying conduct, thought, knowledge, and the nature of the universe: included in philosophy are ethics, aesthetics, logic, epistemology, metaphysics, etc. (Based on definitions of “philosophy” found in various Dictionaries and Web sites.)

Philosophy embodied in the bani of Guru Nanak has been studied mostly by theologians that too under the influence of Vedic and Vedanta philosophies and by a few scientists still believing that creation and every action and reaction in this Universe is done by God. Nevertheless, the critical study of the bani of Guru Nanak done by the author [4] clearly indicates that the philosophy embodied in his bani includes all the characteristics of “philosophy”, especially, *Theory or logical analysis of the principles underlying conduct, thought, knowledge, and the nature of the universe: included in philosophy are ethics, aesthetics, logic, epistemology, metaphysics, etc.* Philosophy of Nanak has been termed, NANAKIAN PHILOSOPHY by Chahal. ([4]; Chapter 4)

On the other hand, in the eyes of a scientist, Devinder Singh Chahal, Nanak is the best “Natural Philosopher” among the Natural Philosophers of ancient time and that of the Period of Renaissance since his study about the Nature and the physical Universe is very much comparable with modern science. “Natural Philosophy” is defined as: *The study of nature and the physical universe before the advent of modern science.* [5]

From the mid-19th century, it became increasingly unusual for scientists to contribute to both physics and chemistry as “natural philosophy”. It was in the 19th century that the concept of “**science**” received its modern shape with new titles emerging such as “biology” and “biologist”, “physics” and “physicist” among other technical fields. In general, chairs of Natural Philosophy established long ago at the oldest universities are nowadays occupied mainly by physics professors. Isaac Newton's book, *Philosophiae Naturalis Principia Mathematica* (1687) (“Mathematical Principles of Natural Philosophy”) reflects the then-current use of the words “natural philosophy”, akin to “systematic study of nature”. Even in the 19th century, a treatise by Lord Kelvin and Peter Guthrie Tait, which helped define much of modern physics, was titled *Treatise on Natural Philosophy* (1867). (https://en.wikipedia.org/wiki/Natural_philosophy)

Therefore, in this paper only study of Nature and the physical Universe embodied in the bani of Nanak will be discussed in details. For example, Concept of ONE GOD in **ੴ**, which has been considered as “Singularity” as well as “Nothingness” (**ਸੁਨੰ - SUNN**), Origin of Universe, Laws of Nature/Universe (**ਹੁਕਮੁ - hukm**) and **sabd** (**ਸਬਦ**) will be discussed.

Note: Here sometime ‘Nanak’ has been used without any adjective since in this discussion it is not known which one is most suitable.

DISCUSSION

Some Thoughts of Guru Nanak

During his life time Guru Nanak observed that there will be rare enlighten-oriented persons who will deliberate his bani:

ਬਾਣੀ ਬਿਰਲਉ ਬੀਚਾਰਸੀ

ਜੇਕੇ ਗੁਰਮੁਖਿ ਹੋਇ ॥

ਇਹ ਬਾਣੀ ਮਹਾ ਪੁਰਖ ਕੀ

ਨਿਜ ਘਰਿ ਵਾਸਾ ਹੋਇ ॥੪੦॥

Baṅī birla=ō bīchārsī je ko gurmukh ho=e.

Ih baṅī mahā purakh kī nij ghar vāsā ho=e. ||40||

AGGS, M 1, p 935 (*Oankaar Bani*)

Only rare persons, who are Guru-oriented (oriented towards enlightenment), will contemplate the Word (bani/sabd).

This Word (bani/sabd) is of the pre-eminent preceptor, which is imbibed only in particular/special receptive minds.

He also noticed that truth is also rarely accepted by masses:

ਖੇਟੇ ਕਉ ਖਰਾ ਕਰੈ ਖਰੇ ਸਾਰ ਨ ਜਾਣੈ ॥

ਅੰਧੇ ਕਾ ਨਾਉ ਪਾਰਖੂ ਕਲੀ ਕਾਲ ਵਿਡਾਣੈ ॥੩॥

Kḥote ka=ō kharā kahai khare sār na jāṇai. Anḍhe kā nā=ō pārkḥū kalī kāl vidāṇai. ||3||

AGGS, M 1, p 229.

In general people are unable to distinguish between right and wrong.

They call the ignorant people as the appraiser, who determines the authenticity in this Dark Age (Age of Ignorance), which is so strange.

Guru Arjun repeats the above principle of Guru Nanak as follows:

ਝੂਠੁ ¹ਬਾਤ ²ਸਾ ਸਚੁ ³ਕਰਿ ਜਾਤੀ ⁴॥

Jḥūṭḥ bāt sā sach kar jāṭī.

ਸਤਿ ⁵ਹੋਵਨੁ ਮਨਿ ⁶ਲਗੈ ਨ ਰਾਤੀ ⁷॥੨॥

Sat hovan man lagai na rāṭī. ||2||

ਬਾਵੈ ⁸ਮਾਰਗੁ ⁹ਟੇਢਾ ¹⁰ਚਲਨਾ ॥

Bāvai mārag tedḥā chalnā.

ਸੀਧਾ ¹¹ਛੇਡਿ ਅਪ੍ਰਠਾ ¹²ਬੁਨਨਾ ¹³॥੩॥

Sīdhā chḥod apūṭḥā bunnā. ||3||

ਦੁਹਾ ਸਿਰਿਆ ¹⁴ਕਾ ਖਸਮੁ ¹⁵ਪ੍ਰਭੁ ¹⁶ਸੇਈ ॥

Duhā siri=ā kā kḥasam parabh so=ī.

ਜਿਸੁ ਮੇਲੇ ¹⁷ਨਾਨਕ ਸੇ ਮੁਕਤਾ ¹⁸ਹੋਈ ॥੪॥੨੯॥੯

੯॥

Jis mele Nānak so muktā ho=ī. ||4||29||98||

ਅਗਰਾਸ ਮ: 5 ਪੰਨਾ 185.

One takes⁴ it to be true³ what is false^{1,2},

But the truth⁴ is not ⁷imbibed in one's mind⁶.

One (usually) takes the forbidden⁸ and crooked¹⁰ path⁹.

One abandons the right¹¹ method but weaves¹³ the wrong¹² pattern.

Nanak Says:

Although the both ways¹⁴ (right and wrong) are happening under the Laws of Nature^{15,16}.

Only those who are introduced¹⁷ to the right path are liberated¹⁸.

AGGS, M 5, p 185.

Western Philosophers

The Western philosophers also think the same way as Guru Nanak thought.

“The public will believe anything, so long as it is not founded on truth.”

Edith Sitwell (1887 - 1964) -

A British Poet

“A lie can travel half way around the world while the truth is putting on its shoes.”

— Mark Twain

All truth passes through three stages. First, it is ridiculed. Second, it is violently opposed. Third, it is accepted as being self-evident.

Arthur Schopenhauer (1788 – 1860)

Moreover, the priestly class invented the crime called **blasphemy** to punish who spoke the truth:

*“This crime called **blasphemy** was invented by priests for the purpose of defending doctrines not able to take care of themselves.”*

Robert Green Ingersoll (1833-1899)

“All great truths begin as blasphemies.”

- George Bernard Shaw (1856-1950)

Many scientists have been punished under this crime, **blasphemy**, in the West. The same principle is being followed by the *Jathedar* of Akal Takht to punish many Sikh scholars, who tried to speak truth to preach Sikhi in its real perspective, by excommunicating them from Sikhi. Nevertheless, there is no indication in bani of Guru Nanak if anybody has any right to excommunicate any Sikh from Sikhi since Sikhi is inclusive. Even then many Sikh scholars feel that Draconian Sword is always hanging on their head. Some scholars have dared to

refuse to accept the excommunication. However, Guru Nanak emphasizes that finally TRUTH will prevail.

ਕੂੜ ਨਿਖੁਟੇ ਨਾਨਕਾ ਓੜਕਿ ਸਚਿ ਰਹੀ ॥੨॥

Kūr nikhute nānkā oṛak sach rahī. ||2||

AGGS, M 1, p 953.

Nanak says that falsehood cannot stand long finally the truth will prevail.

How was Guru Nanak considered during his time?

Guru Nanak was declared demon when he started to preach his philosophy which was against the most of religious concepts. Guru Nanak himself admits it as follows:

ਕੋਈ ਆਖੈ ਭੂਤਨਾ ਕੇ ਕਹੈ ਬੋਤਾਲਾ ॥

ਕੋਈ ਆਖੈ ਆਦਮੀ ਨਾਨਕੁ ਵੇਚਾਰਾ ॥੧॥

Koī ākhai bhūṭnā ko kahai boṭālā.

Koī ākhai ādmī Nānak vechārā. ||1||

Some call him (Nanak) a ghost / demon and call him without any rhythm.

However, some call him that Nanak is a humble man.

ਭਇਆ ਦਿਵਾਨਾ ਸਾਹ ਕਾ ਨਾਨਕੁ ਬਉਰਾਨਾ ॥

ਰਉ ਹਰਿ ਬਿਨੁ ਅਵਰੁ ਨ ਜਾਨਾ ॥੧॥

ਰਹਾਉ ॥

Bhāiā dīvanā sāh kā Nānak avurānā.

Har bin avar na jānā. ||1|| rahāo.

Crazy Nanak has gone insane to understand the King (the God).

I know of none other than Har(i) – the God. ||1||Pause||

AGGS, M 1, p 991.

Note: **ਸਾਹ** (*Sah* - King - God) in Persian in Islam. And **ਹਰਿ** (*Har* or *Hari*) God in Hinduism. Guru Nanak has not assigned any descriptive/specific name to the Internal Entity (God) but refer God by already common names of God accepted in various religions.

CONCEPT OF GOD IN MAJOR RELIGIONS

The concept of God varies in different religions. For example,

Buddhism

Buddhists do not worship any god or the God. People outside of Buddhism often think that Buddhists worship the

Buddha. However, the Buddha (Siddhartha Gautama) never claimed to be divine, but rather he is viewed by Buddhists as having attained what they are also striving to attain, which is spiritual enlightenment and, with it, freedom from the continuous cycle of life and death. [6]

Jainism

Jainism does not support belief in a creator deity (the God). According to Jain doctrine, the universe and its constituents—soul, matter, space, time, and principles of motion—have always existed. All the constituents and actions are governed by universal natural laws. It is not possible to create matter out of nothing and hence the sum total of matter in the universe remains the same (similar to law of conservation of mass). Jain text claims that the universe consists of *Jiva* (life force or souls) and *Ajiva* (lifeless objects). Similarly, the soul of each living being is unique and uncreated and has existed since beginningless time. [7]

Judaism

In traditional Jewish thought, God is understood as the absolute one, indivisible, and incomparable being who is the ultimate cause of all existence. Traditional interpretations of Judaism generally emphasize that God is personal yet also transcendent, while some modern interpretations of Judaism emphasize that God is a force or ideal. Traditionally, Judaism holds that YHWH (*Jehovah*, is the name of the God of the Israelites), whose name was revealed to Moses. Moses gave them the *Law of Moses* at biblical Mount Sinai as described in the *Torah*. [7]

Hinduism

The concept of the God spans from absolute monism to henotheism, monotheism and polytheism. In Vedic period monotheistic god concept culminated in the semi abstract semi personified form of creative soul dwelling in all gods such as Vishvakarman, Pursha, and Prajapathy. Most Hindus worship one Being of ultimate oneness (Brahman)

through infinite representations of gods and goddesses. [7] Most of Hindus consider the God as Om or Aum which represents Trinity: Brahma, Vishnu, and Shiva. Vishnu appears in form of various gods from time to time.

Islam

There is the one almighty God, named *Allah*, who is infinitely superior to and transcendent from humankind. Allah is the creator of the universe and the source of all good and all evil. Everything that happens is Allah's will. Though the Muslims honors several prophets, Muhammad is considered the last prophet and there will be no other prophet after Mohammad. [6]

Christianity

Christians believe in one eternal God who is creator of all that is. He is viewed as a loving God who offers everyone a personal relationship with himself now in this life. In his life on Earth, Jesus Christ did not identify himself as a prophet pointing to God or as a teacher of enlightenment. Rather, Jesus claimed to be God in human form. (Some believe him as son of God.) He performed miracles, forgave people of their sin and said that anyone who believed in him would have eternal life. They regard the Bible as God's written message to humankind. [6]

Sikhism

The God in Sikhism is *Vahiguru*. However, Nanak describes God as *Nirankar* (from the Sanskrit *Nirākārā*, meaning "formless"), *Akal* (meaning "eternal") and *Alakh* (from the Sanskrit *alakṣya*, meaning "invisible" or "unobserved"). Sikhism's principal scripture, the *Guru Granth Sahib*, starts with the figure "1" signifying the Unity of God. Nanak's interpretation of God is that of a single, personal and transcendental creator with whom the devotee must develop a most intimate faith and relationship to achieve salvation. Sikhism advocates the belief in one God who is Omnipresent (*sarav viapak*), whose qualities are infinite and who is without gender, a nature represented by the term

Ik Oankar. [7]

WHAT IS THE GOD OF GURU NANAK IN THE EYES OF A SCIENTIST?

The God defined in general as above in Sikhism [7] is very much same as is accepted in the Sikh world. However, neither Guru Nanak nor any other Sikh Guru has used *Vahiguru* as the name of God in their bani, incorporated in the AGGS. Guru Nanak has not assigned any descriptive/specific name to the God since no name could be assigned to the God. However, he has used the names of God as is commonly used in Hinduism but mostly *ਹਰਿ* (*Har/Hari*). And he has used the ALLAH as is in Islam. The God in *Sikhi* has been designed as a logo, *ੴ*, by Guru Nanak, which has been interpolated, misinterpreted and misrepresented as *ਏਕੁ ਓਅੰਕਾਰੁ* (*Ek Oankaar*) or *ਏਕੁ ਓਮਕਾਰੁ* (*Ek Aumkaar*) by many theologians. It was Bhai Gurdas, the most respected scholar in the Sikh world, who interpolated, misinterpreted and misrepresented *ੴ* in *Pauri* 15 of *Vaar* 3 as follows: [8]

ਮੂਲ ਮੰਤ੍ਰ ਦਾ ਗੁਹੜ ਭੇਦ

Mool mantar da guhjh Baed.

The Deep Secret of Mool Mantra

ਏਕਾ¹ ਏਕੰਕਾਰੁ² ਲਿਖਿ³ ਦੇਖਾਲਿਆ⁴।

Aykaa Aykankaaru Likhi Daykhaaliaa.

ਊੜਾ⁵ ਓਅੰਕਾਰੁ⁶ ਪਾਸਿ⁷ ਬਹਾਲਿਆ⁸। 15।

ਵਾਰ।3।

Oorhaa Aoankaaru Paasi Bahaaliaa.

The heading of this *Pauri* indicates that the 'Commencing Verse' (*ਅਰੰਭਿਕ ਵਾਕ - arambic vaak*) has been declared as '*Mool Mantra*' by Bhai Gurdas according to Vedic philosophy. Parma Nand [9] has endorsed that the 'Commencing Verse' is called '*Mool Mantra*' according to the rules of Vedas for declaring a word or sentence as Mantra, Beej Mantra, or Mool Mantra. Mantra, according to Vedas, is a word or sentence chanted repeatedly under certain conditions that forces the deity or deities to perform miraculous work to fulfill the

desires of the performers (devotees). Under this influence, the 'Commencing Verse' is recommended by many Sikh preachers to be chanted repeatedly to fulfill their wishes.

Bhai Gurdas has pronounced *ਏਕਾ*¹ (one) as *ਏਕੰਕਾਰੁ*² (*Ekankaar*) and *ਊੜਾ*⁵ (*Oora*⁵) as *ਓਅੰਕਾਰੁ*⁶ (*Oankaar*⁶). Therefore, *ੴ* should be pronounced as *ਏਕੰਕਾਰੁ ਓਅੰਕਾਰੁ* (*Ekankaar Oankaar*) according to Bhai Gurdas' interpretation. However, *ੴ*, is being pronounced as *ਏਕੁ ਓਅੰਕਾਰੁ* (*Ek Oankaar*) in general by the Sikhs at large. Nevertheless, it becomes clear that Bhai Gurdas was the first scholar, who declared open *Oara*⁵ (*ੳ*) as *ਓਅੰਕਾਰੁ*⁶ (*Oankaar*⁶).

After Bhai Gurdas the *Teeka*, a classical exegesis of the AGGS in '*Braj Bhasha*' by a team of scholars of *Nirmala* Sect came out during 1883. This *Teeka* is known as the "*Faridkoti Teeka*" or "*Faridkot Vala Teeka*." For all future attempts on interpretation of the AGGS, it became an ideal *Prototype Teeka* [10]. In this *Teeka* the *Oora* in *ੴ* has been equated with *ੳ* (*Aum/Om*), the **Trinity of God**, which is a compound word formed with A (*Akaar*), AU (*Aukaar*), and M (*Makaar*). It is mentioned in this *Teeka* that Bhai Gurdas has pronounced *Open Oora* (*ੳ*) as *ਓਅੰਕਾਰੁ* (*Oankaar*), which means *Aum* or *Om* and represents Trinity of God [11]. Nevertheless, Guru Nanak is against the concept of **Trinity of God** [12].

Thereafter, Prof Sahib Singh [13] (pp 44-46, Vol 1) also follows *Faridkot Vala Teeka* that Open *Oora* (*ੳ*) in *ੴ* is *Aum/Om* and further explains *ੴ* as *ਇਕ + ਓ* or *ਓਅੰ or ਓ* (*Aum or Om*) + *ਕਾਰ* (*extended end of Oora*) and pronounces *ੴ* as *ਏਕ ਓਅੰਕਾਰੁ* (*Ek Oankaar*) or *ਏਕੁ ਓਮਕਾਰੁ* (*Ek Omkaar*). Prof Sahib Singh [13] (p 630, Vol 3) in '*Asa Di Vaar*' says that *Oankaar* has been taken from the Sanskrit word, AUM/OM. This has been first used

WHAT ACTUALLY IS ੴ ?

The God in the eyes of a scientist, Devinder Singh Chahal, is the same as described by Guru Nanak in the form of a logo, ੴ, designed by Guru Nanak in his bani. The following description of God is based upon the previous study by Chahal ([16], Chapter III):

The ੴ is the logo of Sikhi, which appears at the top of Commencing Verse (ਅਰੰਭਿਕ ਵਾਕ - *arambic vaak*) in the *Kartarpuri Bir* as shown in Fig. 2.

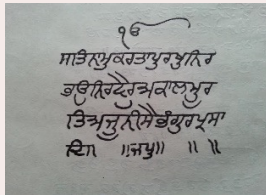


Figure 2: Place of ੴ in Kartarpuri Bir.

However, in the printed volume of the AGGS ੴ appears without any distinction instead made as a part of the whole Commencing World as shown in Fig. 3.

Chahal has described this logo, ੴ, many times for over 20 years, but nobody has tried to understand it. However, there are some who have already accept ੴ as 'EK OH' but miss the importance of the extended end () of ੴ (Open Oora) as ਬੇਅੰਤ (*beant* - Infinite). Chahal's latest explanation of this logo, ੴ, is given in detail in the e-book, *JAP: The Essence of Nanakian Philosophy*, in Chapter III. [16] It is also briefly explained as ਨਿਗੁਣ (*nirgun* as 'Nothingness'/'Singularity') and ਸਰਗੁਣ (*sargun* as Universe). [17, 18]:

The logo, ੴ, has been dissembled for explanation as follows:

$$ੴ = ੴ + ੴ + \text{extended end}$$

'ੴ' (*Ek - One*) represents Oneness (Singularity) – the ਨਿਗੁਣ (*nirgun*) state of the Eternal Entity (God).

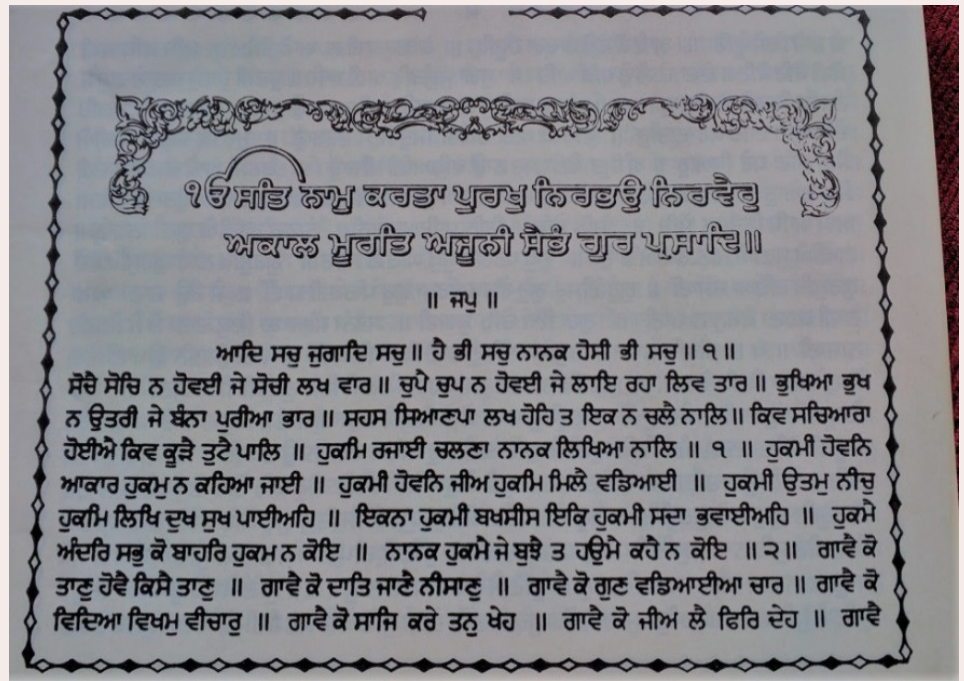


Figure 3: Place of ੴ in Aad Guru Granth Sahib.

ੴ (open oora) represents 'ਉਹ' (*Oh* - That) for ੴ (One) since there is no descriptive/specific name for ੴ the ੴ (One).

(Extended end of the open oora - 'ੴ') represents infinity (ਬੇਅੰਤ - *beant*) for ੴ (That), i.e. for the ੴ (One).

If it is so, then we can infer that the 'ੴ' (*Ek - One*) in ੴ, is That (ਉਹ - *Oh*), where matter/Energy - space/time is in an infinitely small unit (Singularity), which looks like Nothingness, ਸੁੰਨ (*Sunn*), but sprang into the Universe after the Big Bang. The above analysis clearly indicates that the logo ੴ designed by Guru Nanak, can be pronounced as 'ਇਕੁ ਓ ਬੇਅੰਤ (*Ek Oh Beant*)' in Punjabi. It can be pronounced as 'The One and Only That is Infinite' in English. This is based on the following explanation by Guru Nanak:

ੴ (One) in ੴ :

The one in ੴ represents the 'One and Only' according to Guru Nanak:

ਸਾਹਿਬੁ ¹ਮੇਰਾ ਏਕੇ ^੨ਹੈ ॥

ਏਕੇ ^੩ਹੈ ਭਾਈ ਏਕੇ ^੪ਹੈ ॥੧॥ ਰਹਾਉ ॥

Sāhib merā eko hai. Ēko hai bhāī eko hai. ||1|| rahāo.
My Eternal Entity¹ is One and Only^{2,3,4}, Hey brother!
AGGS, M 1, p 350.

ਏਕ ¹ ਮਹਿ ਸਰਬ ² ਸਰਬ ² ਮਹਿ

ਏਕਾ ³ ਏਹ ਸਤਿ ⁴ਗੁਰਿ ⁵ ਦੇਖਿ ⁶ ਦਿਖਾਈ ⁷
॥੫॥

Ēk meh sarab sarab meh ekā eh satgur dekḥ dikhāī. ||5||
The True⁴ Enlightenment⁵ has given⁷ (me) the vision⁶ that the One¹ is in everything² and everything² is in that One³.
AGGS, M 1, p 907.

The above, description resembles the Singularity of today's science where matter/Energy - space/time (everything) is in an infinitely small unit, which looks like Nothingness in science, ਸੁੰਨ (*Sunn*) and ਨਿਗੁਣ (*nirgun*) in the bani of Guru Nanak, but sprang into the Universe

(again everything) in science and **ਸਰਗੁਣ** (*sargun*) in the bani of Guru Nanak according to the Big Bang Theory of scientists.


ੳ (Open oora) in **ੳੳ**: According to *Mahan Kosh* of Bhai Kahn Singh [19], the letter **ੳ** (open oora) means **ੳਹ** (Oh - That):

ਨਾ ਓਹੁ ਮਰੈ ਨ ਹੋਵੈ ਸੋਗੁ ॥

Nā oh marai na hovai sog
Oh (That - One) does not die; thus there is no reason to mourn.

AGGS, M 1, p 9.

Note: Here **ੳ** (ੳਹੁ - Oh) stands for 'One' since Guru Nanak does not like to use any descriptive or specific names for God.

() **The extended End of Open Oora**
ੳ in **ੳੳ** represents the infinity of the One (Eternal Entity):

ਗੁਰਮੁਖਿ ੱਬੇਅੰਤੁ ੲਧਿਆਈਐ ੳਅੰਤੁ ੴਨ ਪਾਰਾਵਾਰੁ ੵ॥੪੬॥

Gurmukhḥ be=antḥ dḥi=ā=ī=ai antḥ na pā-rāvār. ||46||

The one, who is oriented towards enlightenment,¹ contemplates³ the Infinite², Who has no limit⁴ or end⁵.

AGGS, M 1, p 936.

ਤਾ ੱਕੇ ਅੰਤ ੲਨ ਪਾਏ ੳਜਾਹਿ ॥

ਏਹੁ ਅੰਤੁ ੴਨ ਜਾਣੈ ੵਕੋਇ ੶॥

Fā ke antḥ na pā=ē jāhi. Éhu antḥ na jāḥai ko=e.

The infiniteness² of that One¹ cannot be comprehended³.


(In fact) Nobody⁶ knows⁵ Its infiniteness⁴.

AGGS, Jap 24, p 5.

If we examine the above phrases, it becomes clear that in Nanakian Philosophy, the Eternal Entity (God) has been addressed as **ੳੳ**, which represents the modern concept of the '**ੱ**' (*Ek* – One) in **ੳੳ** as 'Singularity' or as **ਸੁੰਨੁ** (*Sunn*) or **ਨਿਗੁਣ** (*nirgun* as '**Nothingness**') which sprang into the **Universe** or **ਸਰਗੁਣ** (*sargun*) state. However, this *nirgun* state

and *sargun* state are quite different than those that are understood in Vedic and Vedanta philosophies.

WHAT IS NOTHINGNESS OR SINGULARITY?

To comprehend **ੱ**(One) used in **ੳੳ**, it is necessary to understand 'Nothingness' or 'Singularity'. Their understanding would further strengthen our thesis that  is an original and unique logo designed by Guru Nanak to represent the Eternal Entity – commonly called God in English and with many other names in other religions.

Singularity

According to the standard theory [26], our Universe sprang into existence from "singularity" around 13.7 billion years ago. Singularities are zones which defy our current understanding of physics. They are thought to exist at the core of "black holes." Black holes are areas of intense gravitational pressure. The pressure is thought to be so intense that finite matter is actually squished into infinite density (a mathematical concept which truly boggles the mind). These zones of infinite density are called "singularities." Our universe is thought to have begun as an infinitesimally small, infinitely hot, infinitely dense, something - a singularity.

Nothingness

Nothingness has been defined by Kaup [27] as follows:

"Nothingness Theory defines nonexistence as being the absence of existence, the absence of nothingness, and the absence of absence. It is what is not being referred-to under any circumstances. Nonexistence by definition is that which cannot be referred-to, named, or defined. So referring to it in any way violates its strict definition. Nevertheless, this fundamental paradox is at the basis of Nothingness Theory and must be referred-to anyway. Despite it is not being absolute nonexistence exerts a detectable force. We have proven

through simple logic that the universe has and always will exist. Therefore, the universe must have existed before the "Big Bang" and will exist forever. This also means that the state of nothingness from which the Universe burst into existence must have existed relative to absolute nonexistence given that absolute nonexistence is not achievable. So energy/matter and space/time can attain relative nonexistence by collapsing into infinite density, which is a uniform state of static equilibrium. Examples of this state of relative nonexistence can be seen throughout the universe in the form of 'black holes.'" A black hole is the pinnacle of perfectly symmetrical uniformity of energy, matter, space, and time.

Therefore, 'Nothingness' does not mean 'without anything'. However, it is in such a small volume that it appears to be 'Nothingness'. According to the 'Big Bang Theory', the energy was in such a small volume that has been termed as 'Nothingness' by some and as 'Singularity' by others. The 'Nothingness' and 'Singularity' are termed as **ਸੁੰਨੁ** (*SUNN*) and *Ek* (One), respectively by Guru Nanak. It is also termed as 'Jyot' (highly condensed energy) by Guru Nanak


Is **ੱ** (Ek-One) in **ੳੳ** 'Singularity' in Gurbani?

Will it be out of place to call '**ੱ**(One) placed before **ੳੳ** the 'Singularity', from which everything originated, the state of the Universe after Big Bang?

Still another question:

Is not this 'One' of Guru Nanak the 'Singularity' of scientists in which energy/matter - space/time has attained relative nonexistence by collapsing into infinite density, which is a uniform state of static equilibrium?

This equilibrium is represented by Guru Nanak in the form of a logo as follows:

ੳੳ = **ੱ** + **ੳ** + 

ੳੳ = Singularity + That + Infinite.

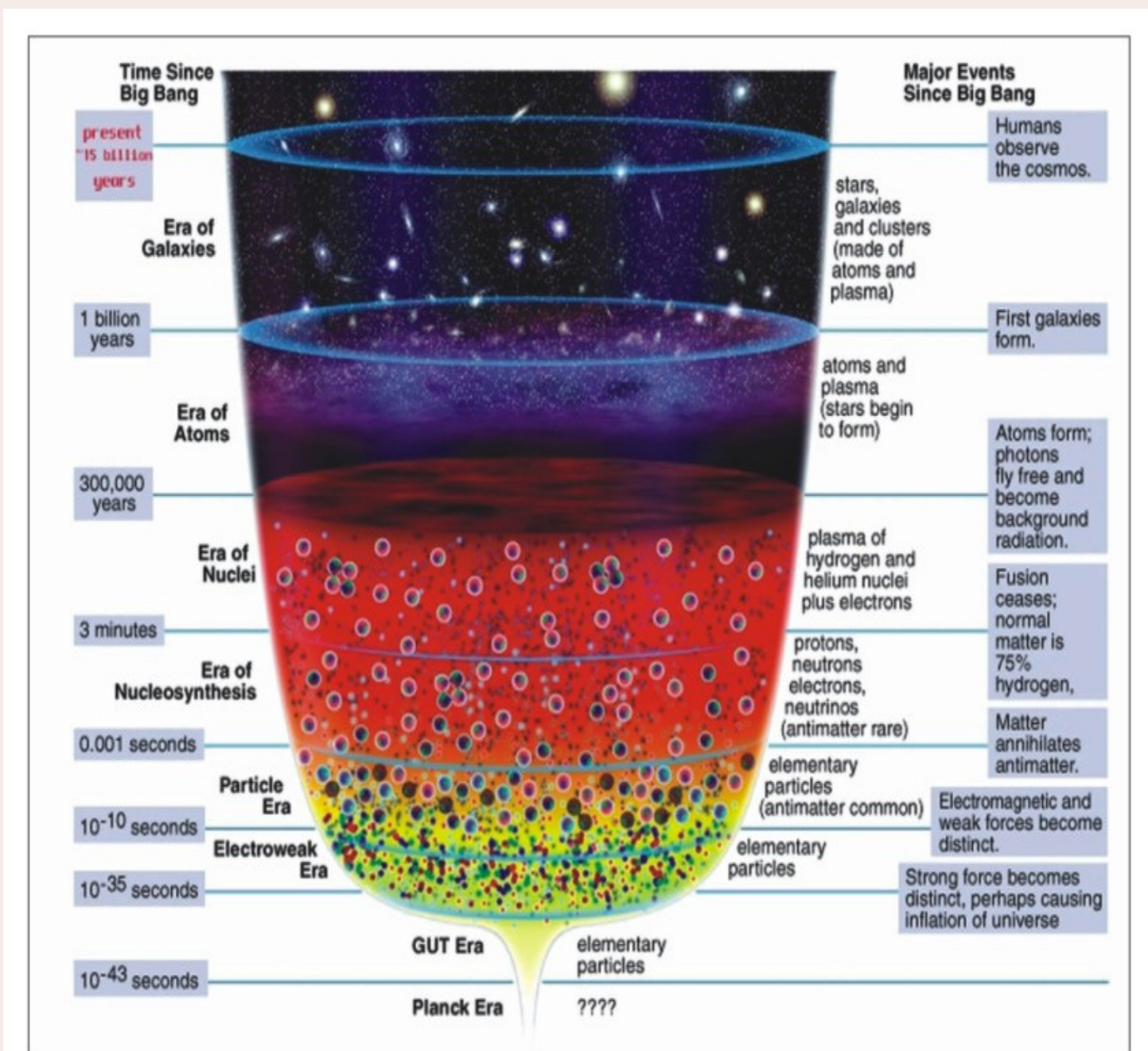


Fig. 4: Source of Big Bang Picture and Description. Copyrights: Addison Wesley.

(http://www.physicsoftheuniverse.com/photo.html?images/bigbang_timeline.jpg&Timeline%20and%20major%20events%20since%20the%20Big%20Bang)

Could we now infer from the above dismantled **ੴ** that the 'One' ('Singularity' = energy/matter - space/time) is 'That' (Entity), which is 'Infinite' from which the whole Universe appeared after the Big Bang.

The "big bang" theory is equivalent to Guru Nanak's view in simple language of

that time as follows:

ਕੀਤਾ ਪਸਾਉ¹ ਏਕੇ ਕਵਾਉ² ॥

Kītā pasāo eko kavāo.

ਤਿਸ ਤੇ ਹੋਏ ਲਖ ਦਰੀਆਉ³ ॥

Fis te ho-e lakh dārīāo.

ਅਗਰਾਸ, ਜਪੁ, 16 ਪੰਨਾ.3

It is literally translated my most of the writers as follows: [11]

You created the vast expanse of the Universe with One Word/Voice!

Hundreds of thousands of rivers began to flow.

AGGS, Jap 16, p 3.

Using present day science and the methodology of Guru Nanak, remembering that he would express his philosophy allegorically, metaphorically and symbolically, then my interpretation

will be quite different from that of all other writers. My interpretation is as follows:

The Universe exploded from one source of energy (singularity)² and started to expand¹, hereafter appeared many³ things.

Scientifically “Many things” of Guru Nanak can be explained as follows in Fig. 4:

- Up to 10^{-43} seconds nothing appeared.
- After 10^{-35} seconds elementary particles started to appear.
- After 0.001 seconds protons, neutrons, electrons and neutrinos started to appear.
- After 3 minutes the first element, Hydrogen, started to appear.
- After 300,000 years other elements started to appear.
- After 1 billion years stars and galaxies started to appear.
- Our Solar system and Earth with other planets appeared after about 4.6 billion years.

It is evident from the above discussion that **ੴ** has been interpolated, misinterpreted and misrepresented right from the time of Bhai Gurudas and continued till the 550th Birth of Guru Nanak by the contemporary Sikh scientists, theologians and writers as Ek Oankaar or Ek Omkaar placing it deeply rooted in Vedic and Vedanta philosophies. Consequently, they confirm that Guru Nanak has no originality and uniqueness in his philosophy rather he was preaching Vedic and Vedanta philosophy.

However, in the eyes of this scientist, Devinder Singh Chahal, **ੴ** is original and unique logo to represent the Eternal Entity (God) in SIKHI founded by Guru Nanak. The logo, **ੴ**, represents the modern scientific concept that the ‘1’ (*Ek* – One) in **ੴ** as ‘Singularity’ or as **ਸੁੰਨੁ** (*Sunn*) or **ਨਿਗੁਣ** (*nirgun* as ‘Nothingness’) which sprang into the **Universe** as **ਸਰਗੁਣ** (*sargun*) state. However, this *nirgun* state

and *sargun* state are quite different than those are understood in Vedic and Vedanta philosophies.

It is time for the Sikh intelligentsia to decide which way to go.

HUKM (ਹੁਕਮ) LAWS OF NATURE/ UNIVERSE

The word ‘HUKM’ (ਹੁਕਮ - the basic word as spelled in *Gurmukhi Lipi*) has been used very extensively in the Gurbani, incorporated in the Aad Guru Granth Sahib (AGGS). [20] ‘Hukm’ is an Arabic word [21], which means *command, edict, allow/permission*. According to Punjabi-English Dictionary [22], Bhai Kahn Singh [19], and Dr Gurbachan Singh [23] ‘Hukm’ means *order, command, decree, judgment, decision, sanction, God’s Will, and Divine Law*. And ‘Hukmi’ (ਹੁਕਮੀ) is also an Arabic word [21], which means *the one who orders*. In Punjabi [19, 22, 23] it also means *the one in authority to issue ‘Hukm’ (order) and allows permission*.

Beside this there is another word, **ਰਜਾਈ**, (*Rajayi*) very similar to ‘Hukm’.

According to Bhai Kahn Singh [19] and Dr Gurbachan Singh [23] it means: *God, Will of God, One in authority to issue orders, satisfied, contented, furlough, and quilt*.

Robert Nola [24] says that: “The idea that there are **scientific laws** might have originated along the lines of the model of God giving us moral rules. God, it is said, also gave nature its ‘*natural laws*’ to obey. But the model is not adequate since **even though people can break moral and legal laws, it is not open to nature to break the laws of nature. There seems to be a kind of necessity to the laws of nature that prevents nature from breaking its own laws**. The basic idea of a scientific laws of nature is that of a perfectly regular sequence of kinds of happenings that occur without exception. The observed natural world might itself appear to us to be highly irregular and even somewhat chaotic

(think of the weather!). But it is commonly assumed in science that underneath all the appearance of irregularity there are some quite simple and quite general laws governing what happens.”

For example, Tsunami is a series of huge waves that happen after an undersea earthquake or volcano eruption. The water waves travel in all directions from the area of disturbance. The waves may travel in the open sea as fast as 450 miles per hour. They can be as high as 100 feet and can cause a lot of destruction on the shore. Tectonic earthquakes are a particular kind of earthquakes that are associated with the earth’s crustal deformation; when these earthquakes occur beneath the sea, the water above the deformed area is displaced from its equilibrium position. Tsunami is not caused because God is angry rather it is caused by earthquakes which happen due to normal movement of Tectonic plates, and by volcano eruptions, which happens because of pressure of lava from the center of the Earth entirely according to the *Laws of Nature*.

WHAT IS ‘HUKM’ IN NANAKIAN PHILOSOPHY?

This word, **ਹੁਕਮ** (*Hukm*) starts appearing on the very first page of the Aad Guru Granth Sahib (AGGS) [20] in the first stanza of JAP bani and it continues to appear again and again throughout the AGGS. It appears on the first page of the AGGS as follows:

ਕਿਵ ਸਚਿਆਰਾ¹ ਹੋਈਐ
ਕਿਵ ਕੂੜੈ ਤੁਟੈ ਪਾਲਿ² ॥
Kiv sachī=ārā ho=ī=ai
kiv kūṛhai tūtai pāl.
ਹੁਕਮਿ³ ਰਜਾਈ⁴ ਚਲਣਾ
ਨਾਨਕ ਲਿਖਿਆ ਨਾਲਿ ॥੧॥
Hukam rajā=ī chālṇā
Nānak likhī=ā nāl. ||1||
ਅਗਗਸ, ਜਪੁ 1, ਪੰਨਾ 1.

In the first two phrases questions have been posed by Guru Nanak:

1. How to become Truthful (ਸਚਿਆਰਾ¹)? And
2. How to break the line (series) of

lies² (ਕੂੜੇ ਤੁਟੈ ਪਾਲਿ)?

The answer to these questions has been given in the next phrase:

ਹੁਕਮਿ ਰਜਾਈ ਚਲਣਾ

ਨਾਨਕ ਲਿਖਿਆ ਨਾਲਿ ॥੧॥

Hukam rajāī chālṇā
Nānak likhīā nāl. ||1||

The above phrases have been interpreted by Principal Teja Singh [25] as follows:

ਫਿਰ ਸੱਚ ਵਾਲਾ ਕਿਵੇਂ ਹੋਈਏ ਅਤੇ ਸਾਡੇ ਅਤੇ ਰੱਬ ਦੇ ਵਿਚਕਾਰ ਜੋ ਝੂਠ ਦੀ ਕੰਧ ਹੈ, ਉਹ ਕਿਵੇਂ ਟੁੱਟੇ? ਇਸਦਾ ਸਾਧਨ ਕੇਵਲ ਇਹ ਹੈ: ਉਸ ਰਜਾ ਦੇ ਸਾਈਂ ਦੇ ਹੁਕਮ ਉਤੇ ਟੁਰਨਾ। ਹੇ ਨਾਨਕ! ਹੁਕਮ ਸਾਡੇ ਨਾਲ ਹੀ ਲਿਖਿਆ ਹੋਇਆ ਹੈ।

Its literal translation in English is as follows:

“Then how can (we) be truthful and how can the wall of falsehood between us and God be broken? The method for this is only as follows: To walk on (follow) the Will of God. Hay Nanak! That order is written with us.”

Almost the same interpretation is found in many other translations (Sodhi Meharbaan, Dr Mohan Singh, Bhai Jodh Singh, Pandit Kartar Singh Dakha, Bhai Gulshan Rai, Giani Harbans Singh, and Vinoba Bhave) as reported by Dr Joginder Singh [26]. The word ਸਚਿਆਰਾ (*sachiara*) has been translated by them including Dr Joginder Singh as ‘truthful’ and ਕੂੜੇ ਤੁਟੈ ਪਾਲਿ (*kiv kuray tutay pal*) has been translated as ‘how to break the wall of falsehood between God and a person’.

If we look into this phrase carefully there is no mention of ‘wall’; there is no mention of ‘between a person and God’; and there is no mention that ‘the order is written with us or on us’.

However, Prof Sahib Singh [13] interpreted it differently by keeping in view the critical analysis of the first phrase of this stanza where ਸੋਚੈ (*sochay*) has been interpreted as ‘cleansing of body’ to receive the order of God. Nevertheless, many scholars have

interpreted ‘*sochay*’ as ‘thinking’ which does not connect to the reply to that question posed by Guru Nanak. Since ‘*sochay*’ means cleansing of body. Prof Sahib Singh interpreted the above phrase as follows:

(ਤਾਂ ਫਿਰ) ਅਕਾਲ ਪੁਰਖ ਦਾ ਪਰਕਾਸ਼ ਹੋਣ ਲਈ ਯੋਗ ਕਿਵੇਂ ਬਣ ਸਕੀਦਾ ਹੈ (ਅਤੇ ਸਾਡੇ ਅੰਦਰ ਦਾ) ਕੂੜ ਦਾ ਪਰਦਾ ਕਿਵੇਂ ਟੁੱਟ ਸਕਦਾ ਹੈ? ਰਜਾ ਦੇ ਮਾਲਕ ਅਕਾਲ ਪੁਰਖ ਦੇ ਹੁਕਮ ਵਿਚ ਤੁਰਨਾ-(ਇਹੀ ਇਕ ਵਿਧੀ ਹੈ)। ਹੇ ਨਾਨਕ! (ਇਹ ਵਿਧੀ) ਧੁਰ ਤੋਂ ਹੀ ਜਦ ਤੋਂ ਜਗਤ ਬਣਿਆ ਹੈ, ਲਿਖੀ ਚਲੀ ਆ ਰਹੀ ਹੈ ॥੧॥

It is translated into English as follows:

(Then how) can one cleanse one’s body to receive the enlightenment of God? And how can (our inside veil) of lies/falsehood can be broken (removed). To follow Order according to the Will of God is the only procedure. Hay Nanak! (This procedure) has been written right from the beginning when the Universe was created.

The above interpretation of Prof Sahib Singh is quite different from that of Principal Teja Singh and others. Then what is the right interpretation? Most appropriate interpretation can be achieved only if we can interpret the following phrase of stanza # 1 correctly:

ਸੋਚੈ 'ਸੋਚਿ' ਨ ਹੋਵਈ ਜੇ ਸੋਚੀ ਲਖ ਵਾਰ ॥

Sochāi soch na hovaī je sochī lakh vār.

The word (*sochay*) has been interpreted as ‘Thinking’ by many scholars [25-29]. One has to be very careful to interpret this word, ‘*sochay*’ because this word has its direct bearing on the word ‘*sachiara*’. If ‘*sochay*’ is taken as ‘thinking’ then ‘*sachiara*’ has no connection with the first part of stanza # 1 whether ‘*sachiara*’ means ‘truthful’ or ‘purification of body/mind’. In this phrase ‘*sochay*’ has been taken as ‘purifying oneself or one’s mind’:

ਸੋਚੈ 'ਸੋਚਿ' ਨ ਹੋਵਈ ਜੇ ਸੋਚੀ ਲਖ ਵਾਰ ॥

Sochāi soch na hovaī je sochī lakh vār.

One cannot purify oneself or one’s mind or attain peace of mind by physical cleansing of body or by performing various rituals even if one cleans the body for hundreds of thousands of times.

Linking the above theme, therefore, I have interpreted the last part of stanza # 1 as follows:

ਕਿਵ ਸਚਿਆਰਾ ਹੋਈਐ

ਕਿਵ ਕੂੜੇ ਤੁਟੈ ਪਾਲਿ ॥

Kiv sachīārā hoīai kiv kūrhai tūtai pāl.

ਹੁਕਮਿ ਰਜਾਈ ਚਲਣਾ

ਨਾਨਕ ਲਿਖਿਆ ਨਾਲਿ ॥੧॥

Hukam rajāī chālṇā Nānak likhīā nāl. ||1||

ਅਗਰਾਸ, ਜਪੁ 1, ਪੰਨਾ 1.

Question:

How can one achieve purification of body and of mind (achieve peace of mind)? And how can one break through the line (series) of lies (the vicious circle)?

Nanak answers:

Purification and peace of mind can be achieved and vicious circle can be broken by understanding and following the Laws of Nature, ordained right in the beginning of Universe.

AGGS, Jap 1, p 1.

Note: Here ‘*Hukm*’ has been interpreted as ‘order’ and order is also a ‘law’. Law has also been defined as “Laws of Nature/Universe”.

In the first stanza of JAP bani Guru Nanak is talking about the purification of mind, which is full of illusions and delusions built up by a series (line - ਪਾਲ) of lie after lie. Once one understands the *Hukm* (Laws of Nature/Universe) then one can find the way to break the vicious circle (of illusions and delusions) built on lie after lie. This is the method, which has been recommended by Guru Nanak to achieve purification of mind and to attain peace of mind.

Hukm as Laws of Nature/Universe

The word ‘*hukm*’ used in the first Stanza of JAP has further been explained as Laws

of Nature/Universe by Guru Nanak in the second stanza of JAP as follows:

ਹੁਕਮੀ¹ ਹੋਵਨਿ ਆਕਾਰ² ਹੁਕਮੁ ਨ ਕਹਿਆ ਜਾਈ
॥

Hukmī hovan ākār hukam na kahiṁā jāṁī.

ਹੁਕਮੀ ਹੋਵਨਿ ਜੀਅ³ ਹੁਕਮਿ ਮਿਲੈ ਵਡਿਆਈ⁴ ॥

Hukmī hovan jīṁa hukam milai vadiṁāṁī.

ਹੁਕਮੀ ਉਤਮੁ ਨੀਚੁ ਹੁਕਮਿ ਲਿਖਿ ਦੁਖ ਸੁਖ
ਪਾਈਅਹਿ ॥

Hukmī utam nīch hukam likh dukh sukh
pāṁīṁah.

ਇਕਨਾ ਹੁਕਮੀ ਬਖਸੀਸ ਇਕਿ ਹੁਕਮੀ ਸਦਾ
ਭਵਾਈਅਹਿ ॥

Ikna hukmī bakhśīs ik hukmī sadā
bhavāṁīṁah.

ਹੁਕਮੈ⁵ ਅੰਦਰਿ ਸਭੁ ਕੇ ਬਾਹਰਿ ਹੁਕਮ⁶ ਨ ਕੋਇ ॥

Hukmai andar sabh ko bāhar hukam na
koṁe.

ਨਾਨਕ ਹੁਕਮੈ⁵ ਜੇ ਬੁਝੈ⁷ ਤ ਹੁਕਮੈ⁸ ਕਰੈ ਨ ਕੋਇ
॥੨॥

Nānak hukmai je bujhai ta haṁumai kahai
na koṁe. ||2||

ਅਗਸਤ, ਜਪੁ 2, ਪੰਨਾ 1.

*Everything is created² according to the
Laws of Nature/Universe¹, which cannot
be said, how.*

*The life³ is created according to these
laws and one gets respects (one's
inherited characters)⁴ according to these
laws.*

*According to one's inherited
characteristics one becomes a good or
evil person; and pains (problems) and
pleasures are happening according to
these laws.*

*According to these laws one is free from
troubles with one's good actions; and one
is entrapped into the vicious circle with
one's wrong actions.*

Nanak says:

*Everything is happening under the Laws
of Nature/Universe⁵,*

*Nothing can happen outside the laws of
Nature/Universe⁶.*

*If one can realize⁷ the above fact of Laws
of Nature⁵,*

Then one can get rid of egoism⁸/egotism.

AGGS, Jap 2, p 1.

1. ਹੁਕਮੀ (Hukmi): has been interpreted
as law by Gurbachan Singh [23] and it
also means 'who has the authority to
issue order'. But here it means 'Laws of
Nature/Universe'.

2 ਹੁਕਮੈ (Hukmay) also means 'Laws of
Nature/Universe'.

In this stanza of JAP Guru Nanak has
confirmed that 'Hukm' is the order/law
(Laws of Nature/Universe). He further
emphasizes that every action and
reaction (process) or anything that is
happening in this Universe and in all the
living beings are governed under the
Laws of Nature/Universe. Consequently,
nothing can happen outside of these
laws.

It is generally accepted that our
Universe came into existence according
to the Big Bang theory. Immediately
after the Big Bang the laws of Nature/
Universe were created. Now every
action and reaction in the whole
Universe and living beings is going on
under these laws. Guru Nanak has
explained ਭੈ (which is generally
interpreted as 'fear'), in fact, it also
represents the 'Hukm' – the Laws of
Nature/Universe explained as follows:

ਭੈ¹ ਵਿਚਿ ਪਵਣੁ² ਵਹੈ³ ਸਦਵਾਉ⁴ ॥

Bhai vich pavan vahai sadvāṁo.

ਭੈ ਵਿਚਿ ਚਲਹਿ ਲਖ⁵ ਦਰਿਆਉ⁶ ॥

Bhai vich chalhē lakh darīṁāṁo.

ਭੈ ਵਿਚਿ ਅਗਨਿ⁷ ਕਢੈ ਵੇਗਾਰਿ⁸ ॥

Bhai vich agan kadhai vegār.

ਭੈ ਵਿਚਿ ਧਰਤੀ ਦਬੀ ਭਾਰਿ ॥

Bhai vich dhartī dabī bhār.

ਭੈ ਵਿਚਿ ਇੰਦੁ ਫਿਰੈ ਸਿਰ ਭਾਰਿ ॥

Bhai vich ind firai sir bhār.

ਭੈ ਵਿਚਿ ਰਾਜਾ ਧਰਮ⁹ ਦੁਆਰੁ⁹ ॥

Bhai vich rājā dharam duṁār.

ਭੈ ਵਿਚਿ ਸੂਰਜੁ ਭੈ ਵਿਚਿ ਚੰਦੁ ॥

Bhai vich sūraj bhai vich chand.

ਕੋਹ ਕਰੋੜੀ ਚਲਤ ਨ ਅੰਤੁ ॥

Koh karoṛī chalaṭ na ant.

ਭੈ ਵਿਚਿ ਸਿਧ ਬੁਧ ਸੁਰ ਨਾਥ ॥

Bhai vich sidh budh sur nāth.

ਭੈ ਵਿਚਿ ਆਡਾਣੇ ਆਕਾਸ ॥

Bhai vich āḍāṁe ākās.

ਭੈ ਵਿਚਿ ਜੋਧ ਮਹਾਬਲ ਸੂਰ ॥

Bhai vich jodh mahābal sūr.

ਭੈ ਵਿਚਿ ਆਵਹਿ¹⁰ ਜਾਵਹਿ¹¹ ਪੂਰ¹² ॥

Bhai vich āvahi jāveh pūr.

ਸਗਲਿਆ¹³ ਭਉ¹⁴ ਲਿਖਿਆ ਸਿਰਿ ਲੇਖੁ¹⁵ ॥

Sagliṁā bhāṁo likhiṁā sir lekḥ.

ਨਾਨਕ ਨਿਰਭਉ¹⁶ ਨਿਰੰਕਾਰੁ¹⁷ ਸਚੁ¹⁸ ਏਕੁ¹⁹ ॥੧॥

Nānak nirbhāṁo nirankār sach ek. ||1||

ਅਗਸਤ, ਮ: 1, ਪੰਨਾ 464.

Note:

'ਭੈ ਵਿਚਿ' (Bhai vich) has been interpreted
as 'in fear of God' by the following
prominent theologians:

Dr Sant Singh Khalsa: in the fear of God...

Dr Manmohan Singh: in Lord's fear...

Dr Gopal Singh: in (Lord's Fear)...

Talib: in fear of the Lord...

Faridkoti Teeka = in Fear of Akal Purakh..

Prof Sahib Singh = in fear of Rabb...

Giani Harbans Singh = in fear of Akal
Purakh...

If we keep in view the main theme of this
verse and the previous verse then ਭੈ ਵਿਚਿ
(Bhai vich) should be interpreted as the
metaphor for 'Laws of Nature/Universe'
as follows.

*"Under the Laws of Nature/Universe¹, air²
always⁴ blows³; hundreds of thousands⁵
of rivers⁵ flow; the energy⁷ performs
different works⁸; Earth moves; clouds
move; and the so-called Dharm Raaj⁹
(birth and death) is under the laws; Sun
and Moon (planets) are moving tens of
millions of miles; Sid, Budh, Sur, Naath;
the sky; the soldiers and strongest
warriors; groups¹²; appear¹⁰ and
disappear¹¹.*

*Everybody and everything (the whole
world)¹³ is under the Laws of Nature/
Universe^{14, 15}."*

Nanak says:

*The "One and Only¹⁹, That (Eternal Entity)
is without any form¹⁷, is not under any
law 16 and exists forever¹⁸.*

AGGS, M 1, p 464.

In the following verse Guru Amardas
summarizes the origin of Universe
according to Nanakian Philosophy under
the Laws of Nature/ Universe as follows:

ਹੁਕਮੀ¹ ਸਹਜੇ² ਸ੍ਰਿਸਟਿ³ ਉਪਾਈ⁴ ॥

Hukmī sēhje sarisat upāṁ.
ਕਰਿ ਕਰਿ ਵੇਖੈ ਅਪਣੀ ਵਡਿਆਈ⁵ ॥

Kar kar vekḥai apṇī vadiṁāṁ.

ਆਪੇ ਕਰੇ ਕਰਾਏ ਆਪੇ ਹੁਕਮੇ ਰਹਿਆ ਸਮਾਈ
ਹੇ ॥੧॥

Āpe kare karāṁe āpe hukme rahiṁā samāṁ
he. ||1||

ਅਗਸਤ, ਮ: 3, ਪੰਨਾ 1043.

The Universe³ came² into existence⁴ according to the Laws of the Nature/ Universe¹.

It creates and then watches its Own power of creation⁵.

It works by itself and makes the others to work under these laws,

And it pervades in its own laws⁶ (Laws of Nature/Universe).

AGGS, M 3, p 1043.

The most important message of Guru Nanak, to be noted in the above discussion, is that whatever is going on in this Universe is being done under these Laws of Nature/Universe. Therefore, there is no chance of performance of any miracle by anybody on this Earth since what has to be done is to be under these laws. In this connection, I would like to bring to the notice of readers the realization of Robert Nola [24] as pointed out earlier:

“...even though people can break moral and legal laws, it is not open to nature to break the laws of nature. There seems to be a kind of necessity to the laws of nature that prevents nature from breaking its own laws.”

Carl Sagan has put it well:

“... if by ‘God’ one means the set of physical laws that govern the Universe, then clearly there is such God. This God is emotionally unsatisfying... it does not make much sense to pray the law of gravity.”

(Dawkins, Richard. 2006. The God Delusion. Houghton Mifflin Company, New York, p 19.)

It means even the Nature (the God) cannot break its laws. In this respect, Walter Isaacson [30] reported the views of Einstein that science could not accept

a deity who could meddle at whim in the events of his creation. Einstein says:

“The main source of the present-day conflict between the spheres of religion and of science lies in this concept of a personal God.”

Isaacson [30] further reported that:

“For some people, miracles serve as the evidence of God’s existence. For Einstein it was absence of miracle that reflected divine providence. The fact that the world was comprehensible, that it followed laws, was worthy of awe.”

Einstein writes about scientists [30]:

“Scientists aim to uncover the immutable laws that govern reality, and in doing so they must reject the notion that divine will, or for that matter human will, plays a role that would violate this cosmic causality.”

I would ask readers to visualize the above discussion. Is it not that what Einstein (1879-1955) and other scientists are saying that has been said by Guru Nanak (1469-1539) about 410 years before Einstein? The irony is that it is difficult for some Sikh scientists and theologians, who are under heavy burden of Vedic and Vedanta philosophies and constrained by its parameters, to accept this fact that the nature cannot break its own laws to perform miracles for any god or deity or spiritual person. Any so-called miracle is the delusion of the mind, i.e. ignorance fostered by dust of accumulated falsehood, distorting reality.

ਨਾਨਕ ਆਪਿ ਕਰਾਏ ਕਰੇ ਆਪਿ

ਹੁਕਮਿ¹ ਸਵਾਰਣਹਾਰਾ² ॥੧॥

Nānak āp karāṁe kare āp hukam savāraṇhārā. ||7||

ਅਗਸਤ, ਮ: 1, ਪੰਨਾ 141.

Nanak Says:

God (of Guru Nanak) itself acts, and causes others to act according to these Laws of Nature¹ to improve oneself to be exalted².

AGGS, M 1, p 141.

SABD (ਸਬਦੁ): THE GURU OF NANAK

Two words, ਸਬਦੁ (sabd) and ਗੁਰੂ (guru) and their combination as ‘sabd guru’ have been extensively used in the Aad Guru Granth Sahib (AGGS). It is usually understood that the word ‘sabd’ is derived from Sanskrit and is spelled as ‘sabda’ in English, however, in this paper it will be spelled as ‘sabd’ as spelled in the AGGS. In Hinduism, every person or spiritual leader must have a Guru. For example, in the Bhagavad Gita, Arjun, a Kshatriya prince, accepted Krishna as his Guru on the battlefield. The Siddhas had Gurakh Nath as their Guru and Bhagat Kabir had Ramanand as his Guru. Many Hindu families have their own personal Gurus. In the same sense, the Siddhas wanted to know the Guru of Nanak during a discourse between Nanak and Siddhas. Nanak replied that his ‘guru’ is ‘sabd’ (sabda). Chahal [31] has discussed the intrinsic meanings of ‘guru’ and ‘sabd’ (sabda) in detail as follows:

During discussion between Guru Nanak and Siddhas (*Siddh Gost*), the Siddhas questioned Guru Nanak:

Who is your Guru?

ਕਵਣ ਮੂਲੁ¹ ਕਵਣ ਮਤਿ² ਵੇਲਾ³ ॥

ਤੇਰਾ ਕਵਣੁ ਗੁਰੂ ਜਿਸ ਕਾ ਤੂ ਚੇਲਾ ॥

Kavaṇ mūl kavaṇ maṭ velā.

Ṭerā kavaṇ gurū jis kā tū chelā.

AGGS, M 1, p 943. [20]

What is the source of beginning¹ and which type of philosophy² is of this Age³? Who is that ‘guru’ of whom you are his disciple?

Guru Nanak answers about his ‘guru’ as follows:

ਪਵਨ¹ ਅਰੰਭੁ² ਸਤਿ³ ਗੁਰ⁴ ਮਤਿ⁵ ਵੇਲਾ⁶ ॥

ਸਬਦੁ⁷ ਗੁਰੂ⁸ ਸੁਰਤਿ⁹ ਧੁਨਿ¹⁰ ਚੇਲਾ¹¹ ॥

Pavan arambḥ saṭgur maṭ velā.

Sabad gurū suraṭ ḍḥun chelā.

The air¹ is the beginning² of every life and this is the Age⁶ of Enlightenment⁵ through the True³ Guru⁴.

Who is the true guru?

It is explained in the second sentence:

The sabd⁷ is the guru⁸ (enlightener) and my keen¹⁰ conscience⁹ is its disciple¹¹.

Now the question is:

Which ‘Sabd’ is the ‘Guru’ of Nanak?

That 'sabd' has been described by Guru Nanak himself in stanza #38 of JAP bani as follows:

ਜਤੁ¹ ਪਾਰਾਰਾ² ਧੀਰਜੁ³ ਸੁਨਿਆਰੁ⁴ ॥

ਅਹਰਣਿ⁵ ਮਤਿ⁶ ਵੇਦੁ⁷ ਹਥੀਆਰੁ⁸ ॥

Jaṭ pāhārā dhīraj suni=ār.

Ahraṇ maṭ veḍ hathī=ār.

Self-control¹ should be the furnace², and patience³ of the goldsmith⁴.

Wisdom⁶ should be the anvil⁵ and knowledge⁷ should be the tools⁸.

ਭਉ⁹ ਖਲ¹⁰ ਅਗਨਿ¹¹ ਤਪ ਤਾਉ ॥

ਭਾਂਡਾ¹² ਭਾਉ¹³ ਅੰਮ੍ਰਿਤੁ¹⁴ ਤਿਤੁ¹⁵ ਢਾਲਿ¹⁶ ॥

ਘੜੀਐ¹⁷ ਸਬਦੁ¹⁸ ਸਚੀ ਟਕਸਾਲ¹⁹ ॥

Bhā=ō khalā agan ṭap ṭā=ō.

Bhāṅḍā bhā=ō amṛiṭ ṭiṭ dhāl.

Ghāṛī=ai sabaḍ sachī taksāl.

Love⁹ for the Eternal Entity (God) should be the bellows¹⁰ to blow air into fire¹¹ to make it super-hot.

The body (mind), full of love¹³, is the melting pot¹² where the above-mentioned self-control, patience, wisdom and knowledge as matter¹⁵ to be melted¹⁶ together to coin¹⁷ the sabd (idea/philosophy)¹⁸ as an Amrit (elixir)¹⁴ in the mint¹⁹ of truth.

ਜਿਨ ਕਉ ਨਦਰਿ²⁰ ਕਰਮੁ²¹ ਤਿਨ ਕਾਰ²² ॥

ਨਾਨਕ ਨਦਰੀ²³ ਨਦਰਿ²⁴ ਨਿਹਾਲ²⁵ ॥੩੮॥

Jin ka=ō naḍar karam ṭin kār.

Nānak naḍrī naḍar nihāl. ||38||

Such type of work²² to coin sabd (idea/philosophy) can only be done by those who have the capability²¹ of vision²⁰.

That Eternal Entity (God) is happy²⁵ for such people who have this type of vision²³.

AGGS, Jap # 38, p 8.

This stanza # 38 of JAP bani clearly indicates that the word, 'sabd', means the 'idea' or 'philosophy', which has been realized by having self-control and the use of patience, knowledge and wisdom as explained in JAP Stanza # 38. This 'sabd' enlightens a person to discover the right path of life. Therefore, 'sabd' is interpreted as 'enlightening idea/philosophy'.

Guru Nanak further explains humans

inherit four characteristics: seeing, hearing, sensation, and thinking/analysing the data collected. I would interpret the following stanza by keeping in view the involvement of various sciences - biology, neurosciences, physiology, physics, chemistry, etc.:

ਚਾਰਿ¹ ਪਦਾਰਥ² ਲੈ ਜਗਿ³ ਆਇਆ⁴ ॥

ਸਿਵ ਸਕਤੀ⁵ ਘਰਿ⁶ ਵਾਸਾ⁷ ਪਾਇਆ ॥

ਏਕੁ⁸ ਵਿਸਾਰੇ⁹ ਤਾ ਪਿੜਾ¹⁰ ਰਾਰੇ¹¹ ਅੰਧੁਲੈ¹² ਨਾਮੁ¹³

੩ ਵਿਸਾਰਾ¹⁴ ਰੇ ॥੬॥

Chār paḍārath lai jag ā=i=ā.

Siv saktī ghar vāsā pā=i=ā.

Ēk visāre ṭā piṛ hāre anḍhulai nām visārā he. ||6||

AGGS, M 1, p 1027.

Man was born⁴ into this world³ with four¹ characteristics²:

(Seeing, hearing, sensation and thinking/capability to analyse the data collected.)

In fact, all these characteristics of humans⁶ are based⁷ on Universal Energy⁵.

If one forgets⁹ about these four characteristics⁸, then that innocent (human)¹² loses¹¹ all his study/capability¹⁰ and also forgets¹⁴ to use the Laws of Nature/Universe¹³ for the betterment of one's life.

In the above stanza, Guru Nanak explains how a 'sabd' (idea/philosophy) is coined (formulated) as the Amrit (life-giving elixir) or way of living, which will mould a person to be highly moral and progressive. Guru Amardas explained the Amrit (idea/philosophy) is already present in the body (mind), but one has to be awakened to that Amrit (in AGGS at page 644). However, Guru Nanak continues to explain further that body and mind have the four faculties: seeing, hearing, sensation, and thinking/capability to analyse the data collected. In spite of the above teachings of Guru Nanak, the Sikhs continue to follow Eastern philosophy that a personal human guru is necessary to guide a person to achieve a moral life, to meet God, and to achieve mukati (salvation).

That is why many sants/babas have appeared in Punjab who are brainwashing their followers to be dependent upon their advice rather than to use their own intellect to coin the sabd taught by Guru Nanak. Of course, some people may need a guru (teacher) to teach those qualities to coin the 'sabd' and to develop the four qualities discussed earlier to resolve their problems, and to cross the so-called dreadful sea of life.

During the discourse (Siddh Gost), the Siddhas continued questioning Guru Nanak:

What is your philosophy?

ਕਵਣ ਕਥਾ¹ ਲੇ ਰਹਹੁ ਨਿਰਾਲੇ⁵ ॥

ਬੋਲੈ ਨਾਨਕੁ ਸੁਣਹੁ ਤੁਮ ਬਾਲੇ⁶ ॥

Kavaṇ kathā le rahhu nirāle.

Bolai Nānak suṇhu ṭum bāle.

Question 42 b:

What type of unique⁵ philosophy⁴ do you have?

Speak out, O child⁶ Nanak, we are ready to listen to you.

And

What is the sabd, which can help us cross the dreadful sea of life?

ਏਸੁ ਕਥਾ⁷ ਕਾ ਦੇਇ ਬੀਚਾਰੁ⁸ ॥

ਭਵਜਲੁ⁹ ਸਬਦਿ¹⁰ ਲੰਘਾਵਣਾਰੁ¹¹ ॥੪੩॥

Ēs kathā kā de=e bīchār.

Bhāvjal sabaḍ langhāvāṇhār. ||43||

Question 42c:

Could you, please, deliberate⁸ on your unique philosophy⁷?

What is that Sabd¹⁰ (your idea/philosophy) which could help¹¹ us to cross the dreadful⁹ sea of life?

Guru Nanak answers as follows:

ਸੁਰਤਿ¹ ਸਬਦਿ² ਭਵ³ ਸਾਗਰੁ⁴ ਤਰੀਐ⁵ ਨਾਨਕ

ਨਾਮੁ⁶ ਵਖਾਣੈ ॥

Suraṭ sabaḍ bhāv sāgar ṭarī=ai Nānak nām vakhāṇe.

Nanak explains⁷ that understanding the Laws of Nature/Universe⁶ and turning one's conscience¹ towards such Sabd² (as described in JAP Stanza # 38 above) will help to cross⁵ the dreadful³ sea of life⁴.

AGGS, M 1, p 938.

Guru Nanak continues to explain that the 'sabd', as explained in Stanza # 38 of JAP bani, is the answer to various problems of life:

ਗਿਆਨ¹ ਵਿਹੁਣੀ² ਭਵੈ³ ਸਬਾਈ⁴ ॥

ਸਾਰਾ⁵ ਰਵਿ⁶ ਰਹਿਆ ਲਿਵ⁷ ਲਾਈ ॥

ਨਿਰਭਉ⁸ ਸਬਦੁ⁹ ਗੁਰੂ¹⁰ ਸਚੁ¹¹

ਜਾਤਾ¹² ਜੇਤੀ ਜੇਤੀ¹³ ਮਿਲਾਇਦਾ¹⁴ ॥੮॥

Gi=ān vihūṇī bhavai sabāi.

Sāchā rav rahi=ā liv lāi.

Nirbhā=ō sabaḍ gurū sach jāṭā joṭī joṭ milā=iḍā. ||8||

A person, without² using intellect¹, is wandering³ all around⁴ to understand the Eternal Entity (God).

That person could not understand that the Eternal Entity⁵ is prevailing⁶ everywhere as if imbibed⁷ in everything.

A person, who is not afraid⁸ of anybody/anything, can understand¹² the Eternal Entity (God)¹¹ through the enlightening¹⁰ philosophy⁹ (sabd⁹ guru¹⁰).

AGGS, M 1, p 1034.

Many of the writers translate 'sabd' as 'sabd' and 'guru' as 'guru'. But nobody tries to explain the meaning of 'guru' and of 'sabd' as explained above.

Guru Nanak further explains that the 'sabd' is the real 'guru' in life:

ਘਘੈ ਘਾਲ¹ ਸੇਵਕੁ² ਜੇ ਘਾਲੈ³ ਸਬਦਿ⁴ ਗੁਰੂ⁵ ਕੈ ਲਾਗਿ⁶ ਰਹੈ ॥

ਬੁਰਾ⁷ ਭਲਾ⁸ ਜੇ ਸਮ⁹ ਕਰਿ ਜਾਣੈ¹⁰ ਇਨ ਬਿਧਿ¹¹

ਸਾਹਿਬੁ¹² ਰਮਤੁ¹³ ਰਹੈ ॥੮॥

Ghaghai ghāl sevak je ghālai sabaḍ gurū kai lāg rahai.

Burā bhālā je sam kar jāṇai in bidh sāhib ramat rahai. ||8||

If a dedicated¹ devotee² remains devoted^{3,6} to the concept of enlightening⁵ sabd⁴ and considers¹⁰ bad⁷ and good days equally⁹ as a part of life, that person understands the Eternal Entity¹² through this method¹¹ and remains attached¹³ to the Eternal Entity.

AGGS, M 1, p 432.

Guru Nanak continues to advise the use of 'sabd' in life:

ਅਮਲੁ¹ ਕਰਿ ਧਰਤੀ² ਬੀਜੁ³ ਸਬਦੇ⁴ ਕਰਿ ਸਚ⁵ ਕੀ ਆਬ⁶ ਨਿਤ⁷ ਦੇਰਿ ਪਾਈ⁸ ॥

ਰੋਇ ਕਿਰਸਾਣੁ⁹ ਈਮਾਨੁ¹⁰ ਜੰਮਾਇ¹¹ ਲੈ ਭਿਸਤੁ¹²

ਦੇਜਕੁ¹³ ਮੂੜੇ¹⁴ ਏਵ ਜਾਈ ॥੧॥

Amal kar ḍhartī bīj sabḍo kar sach kī āb niṭ ḍēh pāī.

Ho=e kirsāṇ īmān jammā=e lai bhisaṭ ḍojak mūre ev jāī. ||1||

Make good deed¹ as the soil² to sow the seed³ of the sabd⁴ (idea/philosophy realized) and always⁷ water that seed with the water⁸ of habit⁶ of speaking truth⁵.

Be such a type of farmer.

If one accepts¹⁰ to be such type of farmer⁹, then it will become¹¹ clear to that ignorant/innocent one¹⁴, what does heaven¹² and hell¹³ mean.

AGGS, M 1, p 24. (Note 4)

Guru Arjun has also used 'sabd guru' in the same sense as used by Guru Nanak but involves God (Hari) as follows:

ਹਰਿ ਹਮਰਾ ਹਮ ਹਰਿ ਕੇ ਦਾਸੇ ਨਾਨਕ ਸਬਦੁ

ਗੁਰੂ ਸਚੁ ਦੀਨਾ ਜੀਉ ॥੪॥੧੪॥੨੧॥

Har hamrā ham har ke dāse Nānak sabaḍ gurū sach ḍīnā jī=ō. ||4||14||21||

Guru Arjun as Nanak claims that Har(i) (God) belongs to him and he is the servant of that Har(i) (God). This has happened through the sabd as the guru.

AGGS, M 5, p 100.

Finally, Guru Nanak sums up that 'sabd', as explained in Stanza 38 of JAP Bani, helps one to become an enlightened person:

ਏਕੁ¹ ਸਬਦੁ² ਜਿਤੁ ਕਥਾ³ ਵੀਚਾਰੀ⁴ ॥

ਗੁਰਮੁਖਿ⁵ ਹਉਮੈ⁶ ਅਗਨਿ⁷ ਨਿਵਾਰੀ⁸ ॥੪੪॥

Ēk sabaḍ jīṭ kathā vīchārī.

Gurmukh ha=umai agan nivārī. ||44||

The one, who deliberates^{3,4} on that one¹ sabd² (Enlightening Idea/philosophy), can eliminate⁸ fire-like⁷ ego⁶, to become an enlightened person⁵.

AGGS, M 1, p 943.

IS MEANING OF "SABD" AS "GURU" BEING LOST TODAY?

The answer is YES.

This is a lengthy discussion and

interested readers can look into the article: *Sabd – The Guru of Nanak*. [31]


CONCLUSIONS

Philosophy of Guru Nanak as observed by a scientist is concluded as follows:



Guru Nanak observed that only rare, who are oriented toward enlightenment will deliberate bani in its real perspective.

He also observed that the people accept *khota* (false) as *khara* (true) and truth is not accepted easily.

The concept of God is different in different religions but the God is Eternal Entity for Guru Nanak which is quite unique than the God of all other religions.

The logo, , which has been designed by Guru Nanak to represent the Eternal Entity (God) and as the logo of Sikhi founded by him.

It has been interpolated, misinterpreted and misrepresented as *Ek Oankaar*. *Oankar* in Upanishads represents Aum/Om which represent God as Trinity. Guru Nanak is against the Trinity of God.

The right pronunciation of  is "Ek Oh Beant" in Punjabi and "One and Only That Infinite". Moreover, the *Ek* (One) in  represents Singularity, Nothingness, *Sunn* and *Nirgun* state of the Eternal Entity (God). When it bursts into Universe is called *sargun* state of the Eternal Entity (God).

The word "hukm" for Guru Nanak is the Laws of Nature/Universe and no action and reaction happens in this Universe and living beings without the "hukm". But many Sikh scientists and theologians still believe it as "Will of God".

The Guru of Nanak is "sabd" which has been coined by the use of self-control, patient, knowledge and wisdom.

This is the "sabd" which enabled Guru Nanak to develop great vision to promulgate original and unique

philosophy during the period of Renaissance.

This “sabd” is idea/philosophy which helps people to raise their morality and to cross the dreadful sea of life successfully.

ACKNOWLEDGMENTS

The author is grateful to Dr Kulbir Singh Thind for permitting me to reproduce gurbani in *Gurmukhi Lipi* and its transliteration in Roman alphabet from his web site: www.srigranth.org. Interpretation of gurbani is by the author in case the interpreter is different that has been mentioned in the text. The author is also thankful to Dr. Sheena Sidhu, Entomologist, USDA, California for editing the manuscript.

REFERENCES

1. CHAHAL, D. S., THIND, K. S, DHAILWAL, A. .S. AND SCHELL, J (2015) Nanak: The Guru - The Founder of Sikhism (Laval, Quebec, Canada, Institute for Understanding Sikhism). http://www.iuscanada.com/books/2015/ebook_Nanak_The%20Guru_The_Founder_of_Sikhism.pdf
2. DHILLON, K. S. (2018) IS GURU NANAK’S PARKASH DAY DIFFERENT FROM GURU NANAK’S BIRTH DAY? NO, IT ISN’T, *The Sikh Bulletin* (11 and 12), p 27.
3. CUNNINGHAM, J. D. ((1849) 1981) *A History of the Punjab* (New Delhi, S. Chand & Company Ltd.).
4. CHAHAL, D. S. (2008) *Nanakian Philosophy Basics for Humanity* (Laval, QC, Canada, Institute for Understanding Sikhism).
5. Natural Philosophy *Wikipedia*. http://en.wikipedia.org/wiki/Natural_philosophy
6. ADAMSON, M. Connecting with the Divine. <https://www.everystudent.com/features/connecting.html>
7. Conceptions of God *Wikipedia*. https://en.wikipedia.org/wiki/Conceptions_of_God
8. SINGH, V. (1984) *Vaaran Bhai Gurdas Steek (Punjabi)* (Hall Bazar, Amritsar, Khalsa Samachar).
9. NAND, P. (1985) Ek - Aumkar, in: Singh, P. (Ed.) *Sikh Concept of Divine* p. 32 (Amritsar, Guru Nanak Dev University Press).
10. SINGH, B. (1883) Faridkot Wala Teeka. https://searchgurbani.com/faridkot_wala_teeka
11. THIND, K. S. Sri Granth. <http://www.srigranth.org/servlet/gurbani.gurbani?S=y>
12. CHAHAL, D. S. (2002) A Unique Concept of God in Nanakian Philosophy, *Understanding Sikhism Res. J.*, 4 (2), p 5.
13. SINGH, S. (1972) *Sri Guru Granth Sahib Darpan (Punjabi)*. Vols 10 (Jalandhar, India, Raj Publishers).
14. SINGH, P. E. (1985) *Sikh Concept of Divine* (Amritsar, Guru Nanak Dev University Press).
15. SINGH, P. (1985) The Introduction of Mul Mantra, in: Singh, P. (Ed.) *Sikh Concept of Divine* (Amritsar, Guru Nanak Dev University).
16. CHAHAL, D. S. (2018 (Revised Version)) JAP: The Essence of Nanakian Philosophy (a scientific and Logical Interpretation) <http://iuscanada.com/books/2018/JAP-2018-%20Final-filtered.html>
17. CHAHAL, D. S. (2018) Cosmology according to Guru Nanak I, *The Sikh Review* 65 (12), p 16.
18. CHAHAL, D. S. (2019) Cosmology According to Guru Nanak II, *The Sikh Review*, 66 (2), p 10.
19. SINGH, K. (1981) *Mahan Kosh* (Patiala, India, Bhasha Vibagh Punjab).
20. AGGS (1983) *Aad Guru Granth Sahib* (Amritsar, Punjab, India, Shiromani Gurdwara Parbandhak Committee). (M = Mahla, i.e., succession number of the Sikh Gurus to the House of Nanak, M is replaced with the name of Bhagat/Bhatt for their Bani, p = Page of the AGGS).
21. FIROZUDDIN, M. (2000) Urdu to Urdu Dictionary *Firozul-Lughat Jadeed (Urdu to Urdu Dictionary)* (New Delhi, Educational Publishing House).
22. JOSHI, S. S., GILL, MUKHTIAR SINGH (1994) *Punjabi-English Dictionary* (Patiala, India, Punjabi University).
23. SINGH, G. S. (2000) Sri Guru Granth Kosh: Gurmukhi taon Gurmukhi (Punjbi) *Sri Guru Granth Kosh: Gurmukhi taon Gurmukhi (Punjbi)* (Patiala, Prof Sahib Singh Gurmat Trust (Reg.)). <https://archive.org/stream/SriGuruGranthKosh-GurmukhiTounGurmukhi#page/n21/mode/2upS>
24. NOLA, R. Laws of Nature <http://www.eequalsmcsquared.auckland.ac.nz/sites/emc2/tl/philosophy/laws-of-nature.cfm>
25. SINGH, T. *Japji Steek (Punjabi)* (Amritsar, Dharam Parchar Committee (SGPC)).
26. SINGH, J. (1981) *Japji de Teeke: Smikhyatmak Adhyan (In Punjabi)* (Patiala, India, 24 Green View).
27. SINGH, G. (1960) *Sri Guru Granth Sahib (English Version)* (New Delhi, London, New York, World Sikh Center Inc).
28. SINGH, H. (1988) *Aad Sri Guru Granth Sahib (Punjabi)*. Vols. 14 (Patiala, India, Gurmat Seva Parkashan).
29. SINGH, T. S., BHAI JODH; SINGH, KAPUR; SINGH, BAWA HARKRISHAN; SINGH, KHUSHWANT. (1973) *The Sacred Writings of the Sikhs* (New York, Samuel Weiser, Inc).
30. ISAACSON, W. (2007) Einstein and Faith (An excerpt from new biography), *Timre*, 169 (16), p 32.
31. CHAHAL, D. S. (2015) Sabd (ਸਬਦ): The Guru of Nanak, *Understanding Sikhism Res. J.* , 17 (1), p 37. <http://www.iuscanada.com/journal/archives/2015/j1701p37.pdf>.