

Glimpses of a Scientific Vision in Guru Granth Sahib

Hardev Singh Virk*

* Professor Emeritus, Indian Institute of Science & Religion, Pune.

Address: # 360, Sector 71, SAS Nagar (Mohali)-160071.

Guru Granth Sahib (GGS), the holy book of the Sikhs, is a unique creation in the history of world religions as it contains the sacred writings of Sikh Gurus and more than 30 saints and bards belonging to different religious and cultural traditions of India, including Bhagat Namdev from the Maharashtra region. It is highly desirable to bring into focus both the secular and scientific characteristics of GGS during the fourth centennial celebrations of its compilation by Guru Arjun Dev, the fifth Guru of the Sikhs. An attempt has been made to present some glimpses of a scientific vision in GGS in this paper.

The Sikh religion, founded by Guru Nanak during fifteen century in India, has some parallelism with Renaissance and reformation movements in Europe. Guru Nanak challenged the orthodox ideas of Indian society based on Hinduism, Buddhism, Jainism and Islam. The Sikh philosophy as expounded in GGS is unique in its epistemology. It rejects myths, rituals and dogma; as a consequence it has a universal appeal for humankind irrespective of its religious and cultural affiliations. In the holistic vision of GGS, God, nature and man are integrally bound to each other. According to Rev. H L Bradshaw, "**Sikh religion is a universal world faith, a message for all men. The religion preached by Guru Nanak is the faith of the New Age. The other religions contain the truth but the Sikh religion contains the fullness of truth.**"

Cosmos:

The spiritual/mystical vision in GGS is compatible with modern science in its approach to cosmology, nature of reality, relation of microcosm to macrocosm and consciousness. GGS advocates dual nature of reality, both transcendental and immanent at the same time. God himself transforms into creation, changing his *nirguna* form (energetic state) to *sarguna* form (material state). Space and time were created at the epoch of Big-Bang and creation process has occurred several times. The universe was created out of *shunya* phase (cosmic void) billions of years ago. There are millions and billions of stars, solar systems and galaxies in the universe and it is almost impossible and beyond human reason to account for the whole system.

Concept of Reality

The concept of ultimate reality propounded by Guru Nanak in the GGS is incredibly scientific; as a consequence, it is also dynamic and precise. Reality is one and non-dual. Hence the GGS *Manglacharan*¹ commences with the numeral 1 before '*Open Oora*', which represents Existence or Being. It is followed by *Sat Naam* which means the supreme reality is True and it is manifested in Truth, Existence and Being. The other features of reality are its transcendence and immanence, creator person, without fear or hatred, beyond time and space, self-existent, transcendental cosmic spirit made manifest by grace of the Guru. Thus Guru Nanak projects the nature, potentialities and characteristics of supreme reality or God of his vision. **This concept of reality is unique, scientific and revolutionary and it differs in its connotation from the Vedantic concept.**

Transcendental:

Reality or God was in existence before the commencement of creation and time (*yugas*) during the epoch of cosmic void. God existed at the beginning of this universe, i.e., creation of space and time. God exists now and will also exist in the future (even when the universe

is annihilated). The Sikh philosophy dialectically unites the ideas of God and the world. Transcendence shows that God is prior to and distinct from the world. Immanence of God represents God's connection with the world. Guru Angad defines the transcendental nature of reality (2): *"In this realm, one sees but without the eyes; one listens but without the ears, one walks but without the feet; one works but without the hands; one speaks but without the tongue; thus attaining life in death. O Nanak, one meets the God after realization of the divine law."*

Guru Nanak discards the Vedantic concept of reality which considers this universe as an illusion or *Maya*. His view-point expressed in GGS is³: *"Real are Thy Continents; Real is the Universe; Real are these forms and material objects; Thy doings are real, O Lord."* Truth is considered supreme in all religions but the GGS lays more stress on truthful living than on truth⁴: *"Truth is high but higher still is truthful living"*. Hence the Sikh religion does not dismiss the worldly life as *maya* (illusion). Reality is perceived in a holistic mode in both microcosm and macrocosm.

Guru Nanak has identified the manifest reality with nature⁵: *"Nanak, the beneficent Lord alone is true, and He is revealed through His Nature"*. The description of Nature by Guru Nanak in *Asa-di-Var*⁶ is a new dimension in the history of religious thought. In a way, scientific study of Nature is sanctioned in GGS: *"All that is visible is His Nature; All that is heard too is His Nature.... In the nether regions and skies is the manifestation of His Nature; Of His Nature are all the manifestations"*.

To sum up the concept of supreme reality as presented in GGS is unique, scientific and revolutionary. It is not a mere abstraction. Its realization is possible through the practice of *Sabd* and *Naam*. Guru Nanak was blessed with the vision of God or Reality in Nature⁷: *"The Guru hath revealed the Lord's presence to Nanak in the three worlds; in the woods, waters and over the earth"*.

Concept of Shunya

We find an echo of Sunyata philosophy of Buddhism in GGS. Guru Nanak's dialogue with Siddhas is recorded in GGS as *Siddh-Goshti* which is in the form of a religious debate concerning the origin of cosmos, *sūnya*, liberation (*mukti*) and various other issues. Guru Nanak rejected the Hatha-Yoga cult of Siddhas and condemned the path of renunciation of the world followed by them. He advocated adoption of house-holder's life in this world and preached Sahaj-Yoga or Nam-Yoga, the Sikh way of life.

The term Sunya occurs in *Siddh-Goshti*⁸ when Siddhas pose a question to Guru Nanak:

Q: - What about the pre-cosmos state? Prior to it where the Lord of void abide?

A: - The very thought of the pre-cosmos state lands one in a state of wonder. In the profound stillness of the Sunya, the formless one pervaded in continuum then.

Various interpretations of *Sūnya* doctrine exist in GGS. *Sūnya* is not equated with void or emptiness in GGS. Rather, it represents the state of equipoise where Absolute Lord exists in primordial trance called *sūnya samaadhi*⁹:

The Yogi, the Primal Lord sat within the celestial sphere of deepest trance (*samaadhi*).

In AGGS, Absolute Reality or God is both immanent and transcendental¹⁰. It is formless, attributeless and hence beyond description:

He possesses all qualities, He transcends all qualities;

He is the formless Lord; He Himself is in Primal trance (*samaadhi*).

In consonance with the Buddhist philosophy of sunyata, subject-object differentiation or concept of duality does not exist in the sunya state as enunciated by saint Kabir in GGS¹¹:

No life or death, no pain or pleasure is felt there.

There is only the primal trance of *samaadhi*, and hence no duality.

Guru Arjun, the fifth Nanak, describes the primordial trance of God before the creation process starts as a manifestation of God¹²:

For countless days, He remained invisible.
For countless days, He remained absorbed in Sünya
For countless days, there was utter darkness, and
Then the Creator revealed Himself.

However, the most beautiful elaboration of Sunya doctrine is given by Guru Nanak in his composition *Maru Solhe* in GGS¹³. Sünya is compared to a primal void where God exists in its full effulgence. The creation appears when God wills out of this sünya phase. All the seventeen stanzas of seventeenth *Solhe* give us a vivid description of sünya and there is no parallel in Indian religious literature to the spiritual vision of Guru Nanak. We may quote only a few reflections from this vision:

In the Sünya (Primal void), the infinite Lord assumed his Power.
He Himself is unattached, infinite and incomparable.
From the Sünya, He created air and water.
He created universe and the man in the fortress of body.
From this Sünya, Brahma, Vishnu and Shiva issued forth.
From this Sünya, the moon, the sun and the earth were created.
They were created from Sünya, and they will merge into the sünya.
From the Sünya, the five elements became manifest.

When Siddhas ask Guru Nanak: “Who are they, who are attuned to this Absolute Sünya”? Guru Nanak answers: “They are the Gurmukhs (Guru-oriented), like the God, from whom they originated.” While Sünya doctrine was used to promote renunciation and monasticism by its Buddhist advocates known as *sunyavadins*, Guru Nanak decried it and advocated the life style of a Gurmukh, the house-holder who faces the challenges of worldly life. Thus theoretical implications of Sünya doctrine may be identical in both Buddhism and Sikhism but empirical meanings are different in the two systems.

Cosmological Ideas

Cosmological ideas as enunciated in GGS have been found to be incredibly scientific and compatible with the modern cosmological theories of science. In *Japuji*, Guru Nanak sums up his ideas about creation of the Universe, which he elaborates further in the most precise and scientific manner in the *Raga Maru Solhe* in GGS. The creation hypothesis is summed up as follows by Guru Nanak¹⁴:

‘God created the Universe by uttering a word.’

Thus the problem of ‘singularity’ faced by the Big-Bang model of the Universe is solved by the Guru by bringing in God as the creator of the Universe. Once this riddle is solved, the sequence of creation, its epoch and extant is described in GGS in a most rational manner. Guru Nanak poses the next question in

*Japuji*¹⁵:

‘What was the time and the moment
The day and the month,
When the world was created?

In the next stanza, Guru Nanak provides the answer¹⁶:

‘Neither the Pundit can find this date
By looking through the Purana texts,
Nor can the Qazi tell from the Koran,
Neither the Yogi nor any one else knows
The day, week, season and month of creation,

The creator who creates the World
He alone knows the time'

Guru Nanak does not want to formulate any hypothesis based on shaky assumptions and leaves this question open. The creation process is started under the command of God, the creator of the universe. The Guru envisages the creation of the Universe out of 'Sunya' which is devoid of matter but not of energy. Hence, a beautiful analogy with quantum concept of creation out of nothing, as a vacuum fluctuation, is established in *Raga Maru Solhe*¹⁷:

'The creator was all alone,
He created the air, water, earth and sky;
Even the sun and moon, from this Sunya.'

This wonderful drama of creation is elucidated further by Guru Nanak in his mystic reverie. **Surprisingly, there is a perfect correspondence between the epoch of 'Big-Bang' and the creation out of Sunya phase as enunciated in Maru Solhe, the most beautiful hymn on Sikh cosmology**¹⁸:

"For billions of years, there was nothing but utter darkness. There was neither day nor night, nor moon, nor sun, but the Lord alone sat in profound trance. Neither there was creation, nor air, nor water. There were no continents, nor underworlds, nor seven oceans nor rivers, or the flowing water. There was neither death, nor time. There was no Brahma, nor Vishnu or Shiva.

When He so willed, He created the world and supported the firmament without support. He created Brahma, Vishnu and Shiva and extended the love of mammon. He founded the continents, solar systems and underworlds, and from the Absolute self, He became manifest."

Guru Arjun Dev describes in *Sukhmani* the myriad forms of creation ¹⁹:

There are millions and millions of galaxies and solar systems in the universe. The phenomenon of creation has occurred so many times. But the one Lord remains for ever and ever."

The riddle of creation of the universe will remain an enigma for cosmologists and there is no final word yet in cosmology. About the present theories and models, we may conclude with a quotation from *Benti Chaupai* in *Dasam Granth*²⁰:

"Everyone explains the creation process according to his intellect,
But no one can tell, O Lord,
How you first created the universe"

□

References

1. Aad Guru Granth Sahib (AGGS), Published by Golden Temple Press, SGPC, Amritsar. *Manglacharan/Commencing verse*, M1, p.1(M1,2 etc. denotes the order of Sikh Gurus of house of Nanak and p. refers to the page of AGGS standard text of 1430 pages). *ੴ ਸਤਿ ਨਾਮੁ ਕਰਤਾ ਪੁਰਖੁ ਨਿਰਭਉ ਨਿਰਵੈਰੁ ਅਕਾਲ ਮੂਰਤਿ ਅਜੂਨੀ ਸੈਭੰ ਗੁਰ ਪ੍ਰਸਾਦਿ ॥*
2. AGGS, M 2, p. 139
ਅਖੀ ਬਾਝਹੁ ਵੇਖਣਾ ਵਿਣੁ ਕੰਨਾ ਸੁਨਣਾ ॥
ਪੈਰਾ ਬਾਝਹੁ ਚਲਣਾ ਵਿਣੁ ਹਥਾ ਕਰਣਾ ॥
ਜੀਭੈ ਬਾਝਹੁ ਬੋਲਣਾ ਇਉ ਜੀਵਤ ਮਰਣਾ ॥
ਨਾਨਕ ਹੁਕਮੁ ਪਛਾਣਿ ਕੈ ਤਉ ਖਸਮੈ ਮਿਲਣਾ ॥੧॥
3. AGGS, M1,p. 463

ਸਚੇ ਤੇਰੇ ਖੰਡ ਸਚੇ ਬ੍ਰਹਮੰਡ ॥

ਸਚੇ ਤੇਰੇ ਲੋਅ ਸਚੇ ਆਕਾਰ ॥

4. AGGS, M1, p. 62.

ਸਚੁ ਓਰੈ ਸਭੁ ਕੇ ਉਪਰਿ ਸਚੁ ਆਚਾਰੁ ॥

5. AGGS, M.1, p. 141.

ਨਾਨਕ ਸਚ ਦਾਤਾਰੁ ਸਿਨਾਖਤੁ ਕੁਦਰਤੀ

6. AGGS, M.1, p. 464.

ਕੁਦਰਤਿ ਦਿਸੈ ਕੁਦਰਤਿ ਸੁਣੀਐ ਕੁਦਰਤਿ ਭਉ ਸੁਖ ਸਾਰੁ ॥

7. AGGS, M. 5, p. 617.

ਗੁਰ ਨਾਨਕ ਕਉ ਪ੍ਰਭੁ ਦਿਖਾਇਆ ਜਲਿ ਥਲਿ ਤ੍ਰਿਭਵਣਿ ਰੁਖੀ ॥

8. AGGS, M 1, p. 940.

ਆਦਿ ਕਉ ਕਵਨੁ ਬੀਚਾਰੁ ਕਥੀਅਲੇ ਸੁੰਨ ਕਹਾ ਘਰ ਵਾਸੋ ॥

9. AGGS, M 1, p. 685.

ਸੁੰਨ ਮੰਡਲ ਇਕੁ ਜੋਗੀ ਬੈਸੇ ॥

10. AGGS, M 5, p. 290.

ਸਰਗੁਨ ਨਿਰਗੁਨ ਨਿਰੰਕਾਰ ਸੁੰਨ ਸਮਾਧੀ ਆਪਿ ॥

ਆਪਨ ਕੀਆ ਨਾਨਕਾ ਆਪੇ ਹੀ ਫਿਰਿ ਜਾਪਿ ॥੧॥

11. AGGS, Kabir, p. 333.

ਜੀਵਨ ਮਿਰਤੁ ਨ ਦੁਖੁ ਸੁਖੁ ਬਿਆਪੈ ਸੁੰਨ ਸਮਾਧਿ ਦੋਊ ਤਹ ਨਾਹੀ ॥

12. AGGS, M. 5, p. 1081.

ਕੇਤੜਿਆ ਦਿਨ ਗੁਪਤੁ ਕਹਾਇਆ ॥

ਕੇਤੜਿਆ ਦਿਨ ਸੁੰਨਿ ਸਮਾਇਆ ॥

ਕੇਤੜਿਆ ਦਿਨ ਧੁੰਧੂਕਾਰਾ ਆਪੇ ਕਰਤਾ ਪਰਗਟੜਾ ॥

13. AGGS, M1, p. 1037-1038.

ਸੁੰਨ ਕਲਾ ਅਪਰੰਪਰਿ ਧਾਰੀ ॥

ਆਪਿ ਨਿਰਾਲਮੁ ਅਪਰ ਅਪਾਰੀ ॥

ਆਪੇ ਕੁਦਰਤਿ ਕਰਿ ਕਰਿ ਦੇਖੈ ਸੁੰਨਹੁ ਸੁੰਨ ਉਪਾਇਦਾ ॥੧॥

ਪਉਣੁ ਪਾਣੀ ਸੁੰਨੈ ਤੇ ਸਾਜੇ ॥

ਸਿਸਟਿ ਉਪਾਇ ਕਾਇਆ ਗੜ ਰਾਜੇ ॥

ਸੁੰਨਹੁ ਬ੍ਰਹਮਾ ਬਿਸਨੁ ਮਹੇਸੁ ਉਪਾਏ ॥

ਸੁੰਨੇ ਵਰਤੇ ਜੁਗ ਸਬਾਏ ॥

ਸੁੰਨਹੁ ਚੰਦ ਸੂਰਜੁ ਗੈਣਾਰੇ ॥

ਤਿਸ ਕੀ ਜੋਤਿ ਤ੍ਰਿਭਵਣ ਸਾਰੇ ॥

ਸੁੰਨੇ ਅਲਖ ਅਪਾਰ ਨਿਰਾਲਮੁ ਸੁੰਨੇ ਤਾੜੀ ਲਾਇਦਾ ॥

14. AGGS, M1, p.3.

ਕੀਤਾ ਪਸਾਉ ਏਕੋ ਕਵਾਉ ॥

15. AGGS, M1, p. 4.

ਕਵਣੁ ਸੁ ਵੇਲਾ ਵਖਤੁ ਕਵਣੁ ਕਵਣੁ ਬਿਤਿ ਕਵਣੁ ਵਾਰੁ ॥

ਕਵਣਿ ਸਿ ਰੁਤੀ ਮਾਹੁ ਕਵਣੁ ਜਿਤੁ ਹੋਆ ਆਕਾਰੁ ॥

16. AGGS, M1, p. 4.

ਵਖਤੁ ਨ ਪਾਇਓ ਕਾਦੀਆ ਜਿ ਲਿਖਨਿ ਲੇਖੁ ਕਰਾਣੁ ॥

ਬਿਭਿ ਵਾਰੁ ਨਾ ਜੋਗੀ ਜਾਣੈ ਰੁਤਿ ਮਾਹੁ ਨਾ ਕੋਈ ॥

ਜਾ ਕਰਤਾ ਸਿਰਠੀ ਕਉ ਸਾਜੇ ਆਪੇ ਜਾਣੈ ਸੋਈ ॥

17. AGGS, M1, p.1037.

ਪਉਣੁ ਪਾਣੀ ਸੁੰਨੈ ਤੇ ਸਾਜੇ ॥

ਸੁੰਨਹੁ ਚੰਦੁ ਸੂਰਜੁ ਗੈਣਾਰੇ ॥

18. AGGS, M1, p.1035.

ਅਰਬਦ ਨਰਬਦ ਧੁੰਧੂਕਾਰਾ ॥

ਧਰਣਿ ਨ ਗਗਨਾ ਹੁਕਮੁ ਅਪਾਰਾ ॥

ਨਾ ਦਿਨੁ ਰੈਨਿ ਨ ਚੰਦੁ ਨ ਸੂਰਜੁ ਸੁੰਨ ਸਮਾਧਿ ਲਗਾਇਦਾ ॥੧॥

ਖਾਣੀ ਨ ਬਾਣੀ ਪਉਣੁ ਨ ਪਾਣੀ ॥

ਓਪਤਿ ਖਪਤਿ ਨ ਆਵਣੁ ਜਾਣੀ ॥

ਖੰਡ ਪਤਾਲ ਸਪਤ ਨਹੀ ਸਾਗਰ ਨਦੀ ਨ ਨੀਰੁ ਵਹਾਇਦਾ ॥੨॥

ਬ੍ਰਹਮਾ ਬਿਸਨੁ ਮਹੇਸੁ ਉਪਾਏ ਮਾਇਆ ਮੋਹੁ ਵਧਾਇਦਾ ॥੧੩॥

ਵਿਰਲੇ ਕਉ ਗੁਰਿ ਸਬਦੁ ਸੁਣਾਇਆ ॥

ਕਰਿ ਕਰਿ ਦੇਖੈ ਹੁਕਮੁ ਸਬਾਇਆ ॥

ਖੰਡ ਬ੍ਰਹਮੰਡ ਪਾਤਾਲ ਅਰਿਭੇ ਗੁਪਤਹੁ ਪਰਗਟੀ ਆਇਦਾ ॥੧੫॥

19. AGGS, M5, p.276.

ਕਈ ਕੋਟਿ ਖਾਣੀ ਅਰੁ ਖੰਡ ॥

ਕਈ ਕੋਟਿ ਅਕਾਸ ਬ੍ਰਹਮੰਡ ॥

ਕਈ ਕੋਟਿ ਹੋਏ ਅਵਤਾਰ ॥

ਕਈ ਜੁਗਤਿ ਕੀਨੋ ਬਿਸਥਾਰ ॥

ਕਈ ਬਾਰ ਪਸਰਿਓ ਪਾਸਾਰ ॥

ਸਦਾ ਸਦਾ ਇਕੁ ਏਕੰਕਾਰ ॥

20. Dasam Granth, Bhai Chatar Singh-Jiwan Singh, Amritsar, 1902, p.1387.