

ORIGIN OF UNIVERSE IN SIKHISM

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ABSTRACT

The origin of universe in Sikhism is based on the vision of Guru Nanak recorded in his Bani incorporated in the Aad Guru Granth Sahib. The theories or concepts of origin of universe in other religions have not been compared to show uniqueness of Sikhism. However, it is evident that the vision of Guru Nanak is very similar to the current theory of 'Big Bang' and demands reverence and awe from scientists and theologians of other faiths. Carl Sagan could not realize that such a religion had already emerged during the 15th century. It was due to the fact that the custodians of Sikhism failed to represent Sikhism in its real perspective to the humanity of the Modern Science Age. I have tried to explain uniqueness of ੴ coined by Guru Nanak that ੴ originated from Nothingness after the Big Bang. However, this Nothingness is not Nothingness since the universe originated from it.

INTRODUCTION

I would like to discuss the following statement of Carl Sagan before describing origin of universe according to Nanakian philosophy:

A religion old or new, that stressed the magnificence of the universe as revealed by modern science, might be able to draw forth reserves of reverence and awe hardly tapped by the conventional faiths. Sooner or later, such a religion will emerge.

Carl Sagan, *Pale Blue Dot* (1994)

I was wonder-struck when I came across the above statement of Carl Sagan. I immediately went back to the 15th century, when the science was just emerging as a powerful tool to find the truth; Guru Nanak was describing the origin of universe scientifically and logically. And he laid the foundation of a new religion being envisioned by Carl Sagan as above. However, it is a pity that Sikh preachers failed to portray the origin of universe as visualized by Guru Nanak.

Scientific and logical interpretation of Nanakian philosophy embodied in Gurbani remained ignored by the Sikh scholars till the beginning of the 20th century. It was Prof Puran Singh [16], a Chemist, who first started to represent Gurbani scientifically and logically. Then Dr Hardev Singh Virk [22-25], a Physicist, and Chahal [2, 3], a Microbiologist, followed Prof Puran Singh and started to interpret Gurbani scientifically and logically. Later many Sikh scholars, even not being scientists, started to interpret the origin of universe scientifically but have failed to do full justification to the vision of Guru Nanak about the origin of universe.

SCIENCE AND NANAKIAN PHILOSOPHY

Science and Nanakian philosophy are closely intertwined

with each other. Therefore, to understand Nanakian philosophy it is important to have the latest scientific information and a discriminating intellect (ਬੁਧਿ ਬਿਬੇਕ). Moreover, it is also important to understand the methodology used by Guru Nanak to explain his philosophy [4]. In most of the cases Guru Nanak quotes simple science and logic and sometime cites ancient mythological works and rituals, commonly accepted by the masses and thereafter he explains his philosophy. He also uses many allegoric expressions to make it easy for the readers to understand his philosophy. Another method used by him is that he poses question first and then answers it with his philosophy [17, 20]. The scholars, who would interpret his philosophy, have to be very diligent and need discriminating intellect to distinguish his philosophy from the ancient mythological works, allegoric expressions, and questions cited in his philosophy [4].

Therefore, in this article the 'Origin of Universe in Sikhism' has been discussed entirely on the bases of Nanakian philosophy embodied in Gurbani, which is incorporated in the Aad Guru Granth Sahib (AGGS) [1]. No attempt has been made to compare it with concepts of any other religion except to the theories accepted in the present Science Age.

ORIGIN OF UNIVERSE

Scientists use physical and chemical methods to discover the secrets of universe/nature while the Prophets use divine intuition to reveal these secrets. All their conclusions may not coincide but their objective remains the same to explore the secret of Laws of Universe/Nature for the benefit of the humanity so that humanity can live peacefully on this tiny planet, the earth.

The most important question discussed by the Prophets and scientists is the origin of the universe. The question has been answered in two different ways. One line of thought is that the universe came into existence itself. The other line of thought is that there are signs of designing and planning in the universe (Intelligent Design); therefore, it must have been created by a superpower.

There are a large number of theories about the creation of the universe but so far 'Big Bang Theory' is widely accepted by many scientists. However, with every new scientific discovery the theory may under go a drastic change in the future. One must keep in mind that theories are based on some scientific information and use of logic and it will change as soon as more facts are discovered. Many theologians emphasize that theories propounded by scientists change with the time, therefore, the science is not a stable field. On the other hand they say that the God has revealed the theology to the deities, prophets, Gurus, Bhagats, therefore, it cannot change. But one should also not forget that God has also revealed principles of science, Laws of Universe, to the scientists. Therefore, science and theology cannot contradict each other since both have been revealed by God.

1. Big Bang Theory (Big Bang Model)

The **Big Bang Model** is a broadly accepted theory for the origin and evolution of the universe. The Big Bang theory is an effort to explain what happened at the very beginning of our universe. Discoveries in astronomy and physics have shown beyond a reasonable doubt that our universe did in fact have a beginning. Prior to that moment there was nothing; during and after that moment there was something: our universe. The big bang theory is an effort to explain what happened during and after that moment

According to the standard theory, our universe sprang into existence as "singularity" around 13.7 billion years ago (some say about 15 billions). What is a "singularity" and where does it come from? Well, to be honest, we don't know for sure. 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. Where did it come from? We don't know. Why did it appear? We don't know.

Scientist Stephen Hawking of Cambridge also believes

that the universe emerged as a result of an explosion of energy [6]. In 1964 Arno Penzia and Robert Wilson discovered very high frequency radio microwaves coming from all directions of the sky. They believed that these microwaves were the remnants of the "echo" of the Big Bang, which is still pulsating and reverberating through the universe [21].

This theory rests on the expansion of matter into space. There is no information as to how big be our universe and how big is the space in which the matter expanded? If space has any limit, then what is beyond that limit except more and more space? What will the exploded matter eventually expand into and when will this expansion cease?

2. Nanakian Philosophy

I will not discuss the origin or creation of universe in other religions since I am not an expert in those religions and will not be able to do full justification to their thoughts/concepts. In this article I will be confining myself on the origin and evolution of universe strictly according to Nanakian philosophy embodied in the Gurbani, incorporated in the Aad Guru Granth Sahib (AGGS) [1].

i) Big Bang

Guru Nanak has very clearly mentioned that universe came into existence with one big bang as follows:

ਕੀਤਾ ਪਸਾਉ^੧ ਏਕੋ ਕਵਾਉ^੨ ॥ ਤਿਸ ਤੇ ਹੋਏ ਲਖ ਦਰੀਆਉ^੩ ॥

ਅਗਗਸ, ਜਪੁ ੩, ਪ-੩.

This phrase has been interpreted very literally by many scholars as follows:

Dr Sant Singh Khalsa [10]

You created the vast expanse¹ of the Universe with One Word²!

Hundreds of thousands of rivers³ began to flow.

Dr Gopal Singh [12]

One word² and the whole universe¹ throbbed into being. And myriads of rivers³ (of life) came gushing.

Talib [19]

All the endless expanse¹ of creation¹ arose out of one Note², giving rise to millions of streams³.

Manmohan Singh [15]

With one word² Thou didst affect the world expansion¹ and whereby lacs of rivers³ began to flow.

Dr Sahib Singh [18]

God created the universe¹ with one order². God also created thousands of rivers³ with that order.

Giani Harbans Singh [13]

With one (sentence/word)² God created the universe¹, with this sentence/word many thousands of rivers³ came into existence.

But if we keep in view the present day science and the methodology of Guru Nanak [4] used by him to express his philosophy allegorically, metaphorically and symbolically then its interpretation would be as follows:

The universe exploded with one sound² (big bang) and started to expand¹, hereafter appeared many things³.
AGGS, Jap 16, p 3.

Note:

1. ਪਸਾਉ (*Pasao*) means to expand.
2. ਕਵਾਉ (*Kavao*) means sound
3. ਦਰੀਆਉ (*Daryao*) has been literally interpreted as rivers by many scholars as above. Keeping in view the methodology [4] used by Guru Nanak to express his philosophy ‘ਦਰੀਆਉ’ has been used as a metaphor for things. What are those things? Scientifically what appeared after the ‘Big Bang’ was a large number of galaxies each composed of a large number of stars (suns) and their planets? The ‘ਲਖ ਦਰੀਆਉ’ represent many things because of limited vocabulary available at that time. No water was formed after the big bang. It took billions of years to form water on the earth. Therefore, ‘ਦਰੀਆਉ’ (rivers) is a metaphoric expression of many ‘things’.

This concept has further been strengthened and explained by Guru Arjan in which the ‘*Daryao*’ has been described as ‘everything’ so that the metaphor, ‘*Daryao*’, may not be mistaken as ‘Rivers’ in the above phrase of Guru Nanak:
ਏਕ ਕਵਾਵੇ ਤੇ ਸਭਿ ਹੋਆ ॥

ਅਗਗਸ, ਮ ਪ, ਪ-੫੪.

With one sound (bang) everything was created.
AGGS, M 5, p 54.

It means Guru Nanak’s concept of origin of universe of 15th century is the same which has been theorized by scientists of the 20th century.

From above discussion one can easily compare that how much scientific and logical interpretations of above phrases can be different from that of the above theologians. Therefore, the readers will note that my interpretations of Gurbani in this article and others are usually different than that of most theologians.

ii) Infiniteness of Universe

The universe is still expanding since the Big Bang occurred. And no limit has been established according to the present day knowledge of science. Guru Nanak explains infiniteness of universe as follows:

ਪਾਤਾਲਾ ਪਾਤਾਲ ਲਖ ਆਗਾਸਾ ਆਗਾਸ ॥

ਓੜਕ ਓੜਕ ਭਾਲਿ ਥਕੇ ਵੇਦ ਕਹਿਨਿ ਇਕ ਵਾਤ ॥
ਸਗਸ ਅਠਾਰਹ ਕਹਿਨਿ ਕਤੋਬਾ ਅਸੁਲੁ ਇਕੁ ਧਾਤੁ ॥
ਲੇਖਾ ਹੋਇ ਤ ਲਿਖੀਐ ਲੇਖੈ ਹੋਇ ਵਿਣਾਸੁ ॥
ਨਾਨਕ ਵਡਾ ਆਖੀਐ ਆਪੇ ਜਾਣੈ ਆਪੁ ॥ ੨੨ ॥
ਅਗਗਸ, ਜਪੁ ੨੨, ਪ-੫.

*There are hundreds of thousands of nether worlds, and hundreds of thousands of skies.
After great research the Vedas have said it definitely!
The Semitic books say that there are eighteen thousand worlds and that is the fact.*

However, Nanak says:

It cannot be possible to count (number of the celestial bodies in the universe) because the accounting person may reach the end of his life during counting, it will still be incomplete.

*He further says that (the God) is the Great who knows the account (of the celestial bodies in the universe). 22. [4]
AGGS, Jap 22, p 5.*

In this stanza Guru Nanak is referring to that the Vedas say that there are hundreds of thousands of *Patal* (nether worlds) and hundreds of thousands of skies and on the other hand Semitic books say that there are 18,000 worlds. This is the information of Vedas and Semitic books not the views of Guru Nanak. However, some scholars and preachers erroneously interpret that it is Guru Nanak who says that there are *lacs* (hundreds of thousands) of *Patal* (nether worlds) and *lacs* of skies.

Scientifically there is no nether world. It is an ancient myth. Similarly, there is no sky. The blue color we see is the color due to the depth of the air through which the sunlight passes before coming to us. In fact it is a void or space.

After quoting the information available or the accepted concept at that time, Guru Nanak gives his observations. He says that the cosmos (universe) contains countless number of celestial bodies. The real number would be known only to the God.

According to the present scientific information available there are billions of galaxies and each galaxy is composed of billions of stars and their planets and moons. Our sun, having nine planets revolving around it, is one of the billions of stars of our galaxy, Milky Way.

iii) Time of Origin

What is the time of origin of the universe? As already discussed, the time of origin of universe is approximately 15 million years. But Guru Nanak says that it is difficult to estimate the time of origin of universe in his following stanza:

ਕਵਣੁ ਸੁ ਵੇਲਾ ਵਖਤੁ ਕਵਣੁ ਕਵਣੁ ਬਿਤਿ ਕਵਣੁ ਵਾਰੁ ॥
ਕਵਣਿ ਸਿ ਰੁਤੀ ਮਾਹੁ ਕਵਣੁ ਜਿਤੁ ਹੋਆ ਆਕਾਰੁ ॥
ਅਗਗਸ, ਜਪੁ ੨੧, ੫-੫.

Guru Nanak first poses a question:
What was that time, and what was that moment?
What was that day, and what was that date?
What was that season, and what was that month, when
the universe was created? [4]
AGGS, Jap 21, p 5.

Then he answers as follows:
ਵੇਲ ਨ ਪਾਈਆ ਪੰਡਤੀ ਜਿ ਹੋਵੈ ਲੇਖੁ ਪੁਰਾਣੁ ॥
ਵਖਤੁ ਨ ਪਾਇਓ ਕਾਦੀਆ ਜਿ ਲਿਖਨਿ ਲੇਖੁ ਕੁਰਾਣੁ ॥
ਬਿਤਿ ਵਾਰੁ ਨਾ ਜੋਗੀ ਜਾਣੈ ਰੁਤਿ ਮਾਹੁ ਨਾ ਕੋਈ ॥
ਅਗਗਸ, ਜਪੁ ੨੧, ੫-੫.

The Pundits could not find that time, even if it were
written in the Puranas.
That time is not known to the Qazis either if it were
written in the Koran, nor the month or the season is
known to the Yogis. [4]
AGGS, Jap 21, p 5.

Then his next question is: Who knows this?
Guru Nanak answers it as follows:
ਜਾ ਕਰਤਾ ਸਿਰਠੀ ਕਉ ਸਾਜੇ ਆਪੇ ਜਾਣੈ ਸੋਈ ॥
ਅਗਗਸ, ਜਪੁ ੨੧, ੫-੫.

Only the Creator, Who created, knows it (the time of*
*creation**). [4]*

- AGGS, Jap 21, p 5.
*Creator = One who creates; The Creator = The God
** Creation = All created things; The Creation = The
God's act of creating universe.
The above discussion indicates that the the Creator is God
and the Creation is origin and/or evolution in Nanakian
philosophy.

iv) Origin of Our Solar System

The origin of universe was not known to Pundits, Kazis,
Jogis. Guru Nanak says it is only known to God.
However, in the following verse Guru Nanak explains
the formation of our solar system, and the date of
formation goes as back as more than a billion years ago.
Guru Nanak describes the primordial stage of our solar
system from a portion of gases in our galaxy:
ਅਰਬਦ ਨਰਬਦੀ ਪ੍ਰਧੂਕਾਰਾ^੨ ॥

ਧਰਣਿ ਨ ਗਗਨਾ ਹੁਕਮੁ^੩ ਅਪਾਰਾ^੪ ॥
ਨਾ ਦਿਨੁ ਰੈਨਿ ਨ ਚੰਦੁ ਸੁਰਜੁ ਸੁੰਨ^੫ ਸਮਾਧਿ ਲਗਾਇਦਾ ॥
ਅਗਗਸ, ਮ ੧, ੫-੧੦੩੫.

More than a billion years ago¹,
There was only a mass of gases².
There was no earth or sky,
But only the laws³ of the Infinite⁴ (God).
There were no day, no night, no moon, no sun,
But Nothingness⁵ by itself.

AGGS, M 1, p 1035

The above verse is erroneously interpreted by some
theologians to explain the origin of universe

Note: ਅਰਬਦ ਨਰਬਦੀ^੧ (*Arbad narbad*): 'Arbad' means one
billion and 'Narbad' means which cannot be counted in 'Arbad',
therefore, *Arbad narbad*, means more than one billion, may be a
period in tens of billions of years [25]. The present estimation of
origin of universe is 15 billion years and for origin of solar
system is about 4.6 billion years.

3. Guru Nanak calls the Laws of Universe as Laws of the
Almighty (ਹੁਕਮੁ ਅਪਾਰਾ).

5. ਸੁੰਨ (Sunn) has been interpreted as 'Nothingness', which has
been explained as follows.

v) Sunn (ਸੁੰਨ) – Is It Nothingness?

'Sunn' is generally considered as 'Nothingness' by
rationalists and scientists. On the other hand many
theologians consider *Sunn* equivalent to God. Dhaliwal
[5] says that 'Sunn' is the state of equipoise where
Absolute Entity exists in Primordial Trance along with the
creation. There, the essence of Enlightenment and the
Ultimate Reality are hidden and inscrutable in the realm of
celestial peace and bliss. However, Dr Virk [25] describes
that: "*Sunya* (ਸੁੰਨ) is not equated with void or emptiness in
Guru Granth Sahib. Rather, it represents the entire state of
equipoise where Absolute Lord exists in primordial trance
called *sunya Samadhi*." He further states: "*Sunya* is
compared to a primordial void where God exists in His
full effulgence." According to the Punjabi-English
Dictionary [8] ਸੁੰਨ (*Sunn*) means Nothingness, non-
existence, emptiness, absolute silence, without thought
and feeling. And ਸੁੰਨ ਮਸੁੰਨ (*Sunn masunn*) means dismal,
desolate (solitary, lonely), deserted, uninhabited, eerie
(causing a feeling of mystery). But I think that ਸੁੰਨ ਮਸੁੰਨ
(*Sunn masunn*) is as 'Nothingness but nothing only or
highest state of 'Nothingness'. According to Bhai Kahn
Singh [14] ਸੁੰਨ (*Sunn*) means empty, void, without
consciousness; and explains Nothingness as follows:
ਸੁੰਨਹੀ ਧਰਤੀ^੨ ਅਕਾਸ^੩ ਉਪਾਏ^੪ ॥

ਅਗਗਸ, ਮ ੧, ੫-੧੦੩੭.

World² and space³ originated⁴ from nothingness¹.
AGGS, M 1, p 1037.

ਸੁੰਨ^੧ ਵਰਤੋ^੨ ਜਗ^੩ ਸਬਾਏ^੪ ॥

ਅਗਗਸ, ਮ ੧, ੫-੧੦੩੭.

Nothingness¹ prevailed² everywhere (in the whole world³.
AGGS, M 1, p 1037.

ਅਨਹਤ ਸੁੰਨ ਕਹਾ ਤੇ ਹੋਈ ॥

ਅਗਗਸ, ਮ ੧, ੫-੯੪੩.

How did Infinite² Nothingness¹ originated³?

LaFee [11] says: “The meaning of nothingness is a persistent philosophical conundrum, but it is also a matter of intense, if somewhat unrequited, scientific inquiry on both the largest and smallest of scales.” He further says: “More than 99 percent of atoms are empty space. The vast majority of the universe appears to consist of something best described as nothing. It is space containing absolutely no recognizable matter: nothing solid, liquid or gas. Yet numerous astronomical studies indicate that something is out there, something unseen that exerts force and influence on a cosmic and quantum scale, binding both atoms and galaxies together.”

It is also important to define ‘universe’ before discussing the state of ‘Nothingness’. Kaup [9] defines ‘universe’ as follows:

“The universe is anything that has been, or ever will be detectable by humans. It is the manifestation of temporal existence – composed of matter, energy, space, and time, and is the macro-system of which all natural systems are a sub-set.”

Kaup [9] also defines ‘Nothingness’ 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. But this fundamental paradox is at the basis of Nothingness Theory and must be referred-to anyway. Despite its 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 space/time – matter/energy 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 created when matter and space become concentrated so that there is no differentiation between them. To apprehend the full meaning of existence, nonexistence, energy, matter and force, one must embrace the paradox embodied in a black hole. The essence of a black hole is that it isn't there, but it has a location relative to existing systems upon which it exerts the most powerful cosmic force. It is an area of nonexistence that has no area. The so called super-massive black holes, apparently at the center of every galaxy, swallow up entire solar systems and yet contain

nothing inside of them because they have no inside to fill up. A black hole is the pinnacle of perfectly symmetrical uniformity of matter, space, energy and time. With no detectable separation between matter and itself, it ceases temporal existence.

Recently a theory has been developed called, Nothingness Theory [9]. According to this theory there is no thing, which can be called ‘Nothing’ or ‘Nothingness’. Since there is no ‘cold’ it is absence of ‘heat’. When we say a thing is colder than the other that means it has relatively less heat than the other. In fact it is not absence of heat. Therefore, ‘Nothingness’ does not mean ‘without anything’. Therefore, this ‘Nothingness’ is in fact the pinnacle of perfectly symmetrical uniformity of matter, space, energy and time. In fact the thing is there but it is in a so 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. This ‘Nothingness’ as described by Kaup [9] actually is the pinnacle of perfectly symmetrical uniformity of matter, space, energy and time. This ‘Nothingness’ was already termed as ਸੁੰਨ (sunn) by Guru Nanak. It is also termed as ‘Joyt’ (highly condensed energy) by Guru Nanak.** The following discussion will further strengthen it.

vi) ਸੁੰਨ (sunn) in Nanakian philosophy

During the discourse between Guru Nanak and the Sidhs, the Sidhs posed a number of questions to Guru Nanak (for details consult Sidh Ghost in AGGS pp938-938). A few questions posed by the Sidhs to Guru Nanak about ਸੁੰਨ (sunn) are as follows:

ਆਦਿ ਕਉ ਕਵਨੁ ਬੀਚਾਰੁ ਕਥੀਅਲੇ ਸੁੰਨ ਕਹਾ ਘਰ ਵਾਸੇ॥
ਅਗਗਸ, ਮ ੧, ਪ-੯੪੦.

The Sidhs posed the question about ਆਦਿ (Aad – before the beginning of the time and space) and ਸੁੰਨ (Sunn - Nothingness) to Guru Nanak as follows:

What do you think² and say³ about the period before the beginning¹ of time and space and where does the nothingness⁴ exist⁵?

AGGS, M 1, p 940.

Guru Nanak replied as follows:

ਆਦਿ ਕਉ ਬਿਸਮਾਦੁ ਬੀਚਾਰੁ ਕਥੀਅਲੇ ਸੁੰਨ ਨਿਰੰਤਰਿ ਵਾਸੁ ਲੀਆ ॥

ਅਗਗਸ, ਮ ੧, ਪ-੯੪੦.

One can think³ and talk⁴ only in term of wonders² about the period before the beginning¹ of time and space, the Nothingness⁵ was continuously⁶ dwelling⁷ in Nothingness.

AGGS, M 1, p 940

In the following verse it appears that Guru Nanak is talking about the 'Sunn' as 'Nothingness' or empty space. However, this 'Sunn' is 'Everything' (the pinnacle of perfectly symmetrical uniformity of matter, space, energy and time as now has been described by Kaup), which is addressed as 'Jyot' and/or 'Oh' (God) by Guru Nanak:

ਅੰਤਰਿ ਸੁੰਨੀ ਬਾਹਰਿ ਸੁੰਨੀ ਤ੍ਰਿਭਵਣਾ ਸੁੰਨ ਮਸੁੰਨੀ ॥
ਚਉਥੇ ਸੁੰਨੈ ਜੇ ਨਰੁ ਜਾਣੈ ਤਾ ਕਉ ਪਾਪੁ ਨ ਪੁੰਨਿ ॥
ਘਟਿਓ ਘਟਿ ਸੁੰਨ ਕਾ ਜਾਣੈ ਭੇਉਯੁ ॥
ਆਦਿ ਪੁਰਖੁ ਨਿਰੰਜਨੈ ਦੇਉ ॥
ਜੇ ਜਨੁ ਨਾਮ ਨਿਰੰਜਨ ਰਾਤਾ ॥
ਨਾਨਕ ਸੋਈ ਪੁਰਖੁ ਬਿਧਾਤਾ ॥੫੧॥
ਅਗਗਸ, ਮ ੧, ੫-੯੪੩.

The Nothingness¹ is within and outside (means everywhere) and everywhere throughout the so-called three worlds² (Means everywhere); in short there is Nothingness but only Nothingness³.

One, who knows the fourth dimension of Nothingness, is not subject to virtue or vice.

Everybody⁴ who understands the laws⁵ of Nothingness, understands that that Nothingness is without flaws. Those who have understood that the Nothingness is the Name of the One Who is without flaws is the Bounteous (God).

AGGS, M 1, p 943.

{1. Even in an atom there is lot of empty space (nothingness)}.

And

ਸੁੰਨੀ ਸੁੰਨੁ ਕਹੈ ਸਭੁ ਕੋਈ ॥
ਅਨਹਤਾ ਸੁੰਨੀ ਕਹਾ ਤੇ ਹੋਈ ॥
ਅਨਹਤਾ ਸੁੰਨਿ ਰਤੇ ਸੇ ਕੈਸੇ ॥
ਜਿਸ ਤੇ ਉਪਜੇ ਤਿਸ ਹੀ ਜੈਸੇ ॥
ਓਇ ਜਨਮਿ ਨ ਮਰਹਿ ਨ ਆਵਹਿ ਜਾਹਿ ॥
ਨਾਨਕ ਗੁਰਮੁਖਿ ਮਨੁ ਸਮਝਾਹਿ ॥੫੨॥
ਅਗਗਸ, ਮ ੧, ੫-੯੪੩.

"Everyone speaks about the Nothingness¹.

How did Infinite² Nothingness¹ originated³?

How can one understand⁴ the Infinite² Nothingness?

That (One) originated from Nothingness and becomes Nothingness again.

That (One) neither takes birth nor dies nor come into cycle of lives

Nanak says:

Oh Guru-oriented! Make your mind to understand the above fact.⁵

AGGS, M 1, p 943.

Guru Nanak further explains that the universe originated from 'Nothingness (Jyot, Oh/God) as follows:

ਸੁੰਨ ਕਲਾ ਅਪਰੰਪਰ ਧਾਰੀ॥

ਆਪਿ ਨਿਰਾਲਮੁ ਅਪਰ ਅਪਾਰੀ॥

ਆਪੇ ਕੁਦਰਤਿ ਕਰਿ ਕਰਿ ਦੇਖੈ ਸੁੰਨ ਉਪਾਇਦਾ॥

ਅਘਘਸ਼.ਮ ੧, ੫-੧੦੩੭.

The Nothingness (God) is the state beyond which there is nothing.

The Nothingness (God)¹ is flawless and beyond which there is nothing.

From this Nothingness¹ God/Jyot) originated the whole nature/ universe.

AGGS, M 1, p 1037.

Guru Nanak further explains the above phenomena to indicate that God (Jyot) originated by Itself:

ਆਪੀਨੈ ਆਪੁ ਸਾਜਿਓ ਆਪੀਨੈ ਰਚਿਓ ਨਾਉ॥

ਦੁਯੀ ਕੁਦਰਤਿ ਸਾਜੀਐ ਕਰਿ ਆਸਣੁ ਡਿਠੋ ਚਾਉ॥

ਦਾਤਾ ਕਰਤਾ ਆਪਿ ਤੂ ਤੁਸਿ ਦੇਵਹਿ ਕਰਹਿ ਪਸਾਉ॥

ਅਗਗਸ, ਮ ੧, ੫-੪੬੩.

God came into existence Itself (from Nothingness). And assumed own attributes by Itself.

Secondly, God created nature (universe) and assumed Its position right in it..

Oh God! You Yourself are responsible for expansion and You are the Bounteous (Giver).

AGGS, M 1, p 463.

This phrase also explain the meanings of ਸੇਭੰ (swebhang) used by Guru Nanak to explain an attribute of God in the Commencing Verse of the AGGS.

Guru Arjan has further strengthened the above philosophy of Guru Nanak that from Nothingness to universe to Nothingness again as follows:

ਕਈ ਬਾਰ ਪਸਰਿਉ ਪਾਸਾਰ॥ ਸਦਾ ਸਦਾ ਇਕੁ ਏਕੰਕਾਰ॥

ਅਗਗਸ, ਮ ੫, ੫-੨੭੬.

The universe came into existence many times but the God remained One and Only One all the times.

AGGS, M 5, p 276.

Finally, the existence of God before the beginning of time and space and thereafter is explained as follows:

ਆਦਿ ਸਚੁ ਜੁਗਾਦਿ ਸਚੁ ਹੈ ਭੀ ਸਚੁ ਨਾਨਕ ਹੋਸੀ ਭੀ ਸਚੁ॥ ੧॥

AGGS, Jap, p 1; AGGS, M5, p 285.

Existed before the beginning of time and space;

Existed throughout the Various Ages (in the past);

Exists in the present; and

Will exist forever in the future. [4]

According to the above discussion on ਸੁੰਨ (Sunn) it is evident that the Sunn described by Guru Nanak is the same which has now been described by Kaup [9]. It also explains that the God, as described by Guru Nanak in the Commencing Verse as ਸੇਭੰ (sebhang), means originated by Itself from that Nothingness since It was already there in Nothingness as indicated in the above verse, ਆਦਿ ਸਚੁ, ਜੁਗਾਦਿ ਸਚੁ

vii) Origin of ੴ

The above discussion on ਸੁੰਨ (*sun*) and origin of God and universe from this *sun* led Guru Nanak to coin an original and unique logo for this state as ੴ (Pronounced as ਇਕ ਓ ਬੇਅੰਤ – One and Only, Oh, Infinite).

The logo, ੴ, which is the first word of the Commencing Verse of the Aad Guru Granth Sahib, was coined from:

ੴ + ੴ + Extended end of ੴ = ੴ .

ੴ represents 'One and Only' and nothing else.

ੴ represents 'Oh' since open ੴ in Punjabi means ਉਹ (Oh means That).

Extended end of ੴ means Infinite (ਬੇਅੰਤ). Here 'Infiniteness' represents infiniteness whether it is for 'Nothingness' or for that 'Nothingness' which is in fact highly concentrated form of 'Energy' (*Jyot*) from which everything appeared after 'Big Bang'. This 'Energy' (*Jyot*) is very similar to the 'Nothingness' as described by Kaup [9], which is in fact the pinnacle of perfectly symmetrical uniformity of matter, space, energy and time.

Dr Virk [22, p-126] says that 'Matter' and 'Energy' is one and the same thing since 'Matter' originates from 'Energy'. Therefore, ੴ is the 'One Source of Energy' from which every thing, 'Matter' (Universe), appeared .

Therefore, the ੴ is an original and unique logo coined by Guru Nanak to describe the characteristics of God. The above description of ੴ is further addition to my earlier work on this topic [4].

The Laws of Universe

Certain laws called the basic Laws of Universe govern every action and reaction in the universe, including every living organism. These laws were also originated at the time of Big Bang according the present day knowledge of science. Although all the laws have not been discovered, Stephen Hawking [6] is of the view that during the next 100 years or even in the next 20, we may discover a complete theory of basic Laws of the Universe. With this discovery there will be no limit to complexity of the biological or electronic systems we can build under these laws.

It was Guru Nanak who explained during the 15th century that every action and reaction in this universe and living organism is being carried on under the Laws of Universe. These laws are also called as 'Laws of Nature'; therefore, the terms 'Laws of Universe' and 'Laws of Nature' are interchangeable. These laws have been explained as ਹੁਕਮ (*Hukm*) in Nanakian philosophy as follows:

ਹੁਕਮੀ ਹੋਵਨਿ ਆਕਾਰ ਹੁਕਮ ਨ ਕਹਿਆ ਜਾਈ ॥

ਹੁਕਮੀ ਹੋਵਨਿ ਜੀਅ ਹੁਕਮਿ ਮਿਲੈ ਵਡਿਆਈ ॥

ਹੁਕਮੀ ਉਤਮੁ ਨੀਚੁ ਹੁਕਮਿ ਲਿਖਿ ਦੁਖ ਸੁਖ ਪਾਈਅਹਿ ॥

ਇਕਨਾ ਹੁਕਮੀ ਬਖਸੀਸ ਇਕਿ ਹੁਕਮੀ ਸਦਾ ਭਵਾਈਅਹਿ ॥

ਹੁਕਮੈ ਅੰਦਰਿ ਸਭੁ ਕੋ ਬਾਹਰਿ ਹੁਕਮ ਨ ਕੋਇ ॥

ਨਾਨਕ ਹੁਕਮੈ ਜੇ ਬੁਝੈ ਤ ਹਉਮੈ ਕਹੈ ਨ ਕੋਇ ॥ ੨ ॥

ਅਗਗਸ, ਜਪੁ ੨, ਪ-੧.

Everything is created according to the Laws of Universe¹; and

It is very difficult to describe these Laws of Universe².

The life is created according to these laws and one begets honor also according to these laws.

These laws (circumstances) make one an evil person while the other gets honor; pleasures or pains are received in one's life also under these laws.

Some are blessed while the others remain in vicious cycle forever. 2.

Nanak says:

If one can understand the Laws of Universe then one will not boast about one's pride because every action and reaction is under these laws and nothing is out of these laws. [4]

AGGS, Jap 2, p 1.

In the following verse Guru Nanak uses ਭੈ (*Bhae*) for Laws of Universe instead of *Hukm* under which every action and reaction (process) or anything are happening in this universe and in all living organisms. Consequently, there is no chance of performance of any miracle by anybody without the use of these laws:

ਭੈ ਵਿਚਿ ਪਵਣੁ ਵਹੈ ਸਦਵਾਉ ॥ ਭੈ ਵਿਚਿ ਚਲਹਿ ਲਖ ਦਰੀਆਉ ॥

ਭੈ ਵਿਚਿ ਅਗਨਿ ਕਵੈ ਵੇਗਾਰਿ ॥ ਭੈ ਵਿਚਿ ਧਰਤੀ ਦਬੀ ਭਾਰਿ ॥

ਭੈ ਵਿਚਿ ਇੰਦੁ ਫਿਰੈ ਸਿਰ ਭਾਰਿ ॥ ਭੈ ਵਿਚਿ ਰਾਜਾ ਧਰਮੁ ਦੁਆਰੁ ॥

ਭੈ ਵਿਚਿ ਸੂਰਜੁ ਭੈ ਵਿਚਿ ਚੰਦੁ ॥ ਕੋਹ ਕਰੋਤੀ ਚਲਤ ਨ ਅੰਤੁ ॥

ਭੈ ਵਿਚਿ ਸਿਧ ਬੁਧ ਸੁਰ ਨਾਥ ॥ ਭੈ ਵਿਚਿ ਆਡਾਣੇ ਆਕਾਸੁ ॥

ਭੈ ਵਿਚਿ ਜੋਧ ਮਹਾਬਲ ਸੂਰ ॥ ਭੈ ਵਿਚਿ ਆਵਹਿ ਜਾਵਹਿ ਪੂਰ ॥

ਸਗਲਿਆ ਭਉ ਲਿਖਿਆ ਸਿਰਿ ਲੇਖੁ ॥

ਨਾਨਕ ਨਿਰਭਉ ਨਿਰੰਕਾਰੁ ਸਚੁ ਏਕੁ ॥ ੧ ॥

ਅਗਗਸ, ਮ ੧, ਪ-੪੬੪.

Air² always⁴ blows³; hundreds of thousands⁵ rivers⁶ flow; the energy⁷ performs different works⁸; earth moves; clouds move; and the so-called Dharm Raaj⁹ (birth and death) is under the Laws of the Universe¹; sun and moon (means sun and its planets) are moving tens of millions of miles; Sid, Budh, Sur Naath; the sky; the soldiers and strongest warriors; all (everything)¹²; appear¹⁰ and disappear¹¹ under the Laws of Universe.

Nanak says:

Everybody (the whole world)¹³ is under the laws of the universe^{14,15}. Only the One¹⁹, That is without any form¹⁷, is not under any law¹⁶ and exists forever¹⁸. [4]

AGGS, M 1, p 464.

(Continued from page 52)

In the following verse Guru Amardas summarizes the origin of universe according to Nanakian philosophy under the Laws of the Universe as follows:

ਹੁਕਮੀਂ ਸਹਜੇ ਸ੍ਰਿਸਟਿ ਉਪਾਈ ॥

ਕਰਿ ਕਰਿ ਵੇਖੇ ਆਪਣੀ ਵਡਿਆਈ ੨॥

ਅਪੇ ਕਰੇ ਕਰਾਏ ਆਪੇ ਹੁਕਮੇਂ ਰਹਿਆ ਸਮਾਈ ਹੇ ॥੧॥

ਅਗਗਸ, ਮ ੩, ਪ ੧੦੪੩.

It¹ (the Creator of the laws) created easily the universe according to Its laws¹ (Laws of the Universe).


It creates and then watches Its Own power of creation².

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

And It pervades in Its Own laws³ (Laws of the universe).

AGGS, M 3, p 1043.

SUMMARY

- The origin of universe described by Guru Nanak during the 15 century is very similar to that accepted as the Big Bang Theory (Big Bang Model) of the 19th century.
- Sikhism is unique in this respect since it stresses the magnificence of the universe as revealed by modern science; therefore, it has the right to draw reverence and awe hardly tapped by the other conventional faiths as pointed out by Carl Sagan.
- Coining of unique logo, , the first word in the Commencing Verse by Guru Nanak is based on the above discussion on ਸੁੰਨ (Sunn) in his Bani and the present day knowledge of science about 'Nothingness'.

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