

AN INQUIRY INTO THE COSMIC ORIGINS OF THE HUMAN LIFE AND INTERPRETATION OF THE FIRST SEVEN AYAHS OF HOLY QURAN'S CHAPTER "AT-TARIQ" IN THIS CONTEXT

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SUMMARY: This research article briefly reviews the current literature and ideas from the sciences of Astronomy, Astrobiology and Astrochemistry, regarding the synthesis of the Basic Chemical Elements. The elements heavier than He are synthesized in the large stars and these elements are ejected into space, to far distances, through Supernovae explosions. These stars are the factories of the "Stardust" which provide the materials necessary for the creation of Life and hence us Humans! Although these concepts have taken concrete shape very recently due to the advent of ultramodern theories, equipment, and discoveries, it is proposed here that the Holy Quran has pointed to the same phenomena, about one and a half millennia ago.

Key Word: Origin of life.

Cosmic Origin of the Human Body

This article is a humble quest in providing references to the evidences that the material constituents of man were created in the stars that completed their lives in distant past. The most amazing thing the reader will come across is that a book, which is about 1400 years old (Holy Quran) clearly hinted about these facts, in agreement with the most modern knowledge.

The Origin of Life

Biologists, Biochemists, Philosophers, Physicists and now; Astrobiologists and Astrochemists are just beginning to understand the manifestations, varieties and its origin of life. Life appears at innumerable levels of evolution, from the semi-alive matter (viruses) to most advance species "man"; but we will limit our discussion in this article to just the creation of the basic materials required for its emergence.

Human Body and its constituents

The complex life forms evolved from single cell life forms, which themselves emerged from pre-biotic complex molecules; constituted by the basic element of the periodic table.

Water is the basic ingredient of humans; about 70% of human body mass. Following are the top main constituents of the human body (1):

As it is evident from the above table, most of the human body weight constitutes of just four elements; i.e., Oxygen, Carbon, Hydrogen and Nitrogen.

Modern Views about the Origin of Life

Synthesis of the Heavier Elements

The stars having eight or more times the mass of Sun explode in to space at the end of their life via a phenomenon called "Supernova" explosion. Elements heavier than Fe are produced in Supernovae Explosion. These elements, which ultimately become life's con-

Element	% age of Body mass
Oxygen	61.43
Carbon	22.86
Hydrogen	10
Nitrogen	1.26
Calcium	0.7
Phosphorus	0.55
Potassium	0.1
Sulfur	0.1
Rest of the elements	3

stituents, are exploded out in to the galaxies at tremendous speeds to become interstellar dust (Figure 2 and Fig. 5). The remains of the supernovae become "neutron stars". Mostly the matter of the neutron stars consist of densely packed neutrons (2) having Iron crust (3).

Quran-A brief Introduction

This article asserts that the origin of the elements required for life has been hinted in the first few Ayahs of the Surah (Chapter of the Holy Quran) "At-Tariq".

For the purpose of this article, the Quranic text and the translations' texts of Pickthall, Yosuf Ali and Qaribullah have been taken from the Zekr Quranic Project software (4) .

Unlike many other religious books, Quran gives respect to good human intellect and places special emphasis on the use of this human faculty, in researching and analyzing facts:

3:190 إِنَّ فِي خَلْقِ السَّمَوَاتِ وَالْأَرْضِ
وَأَخْتِلَافِ اللَّيْلِ وَالنَّهَارِ
لَآيَاتٍ لِّأُولِي الْأَلْبَابِ

[pickthall] Lo! In the creation of the and the earth and (in) the difference of night and day are tokens (of His Sovereignty) for men of understanding,

[yusufali] Behold! in the creation of the heavens and the earth, and the alternation of night and day,- there are indeed Signs for men of understanding,-

[qaribullah] Surely, in the creation of the heavens and the earth, and in the alternation of night and day, there are signs for those with minds.

Quran predicts about the manifestations of God's signs, which will vindicate its (Quran's) truthfulness. Allah (SWT) says in Quran:

41:53 سَنُرِيهِمْ آيَاتِنَا فِي الْأَفَاقِ وَفِي أَنْفُسِهِمْ
حَتَّىٰ يَتَبَيَّنَ لَهُمْ أَنَّهُ الْحَقُّ أَوَلَمْ يَكْفِ،
بِرَبِّكَ أَنَّهُ عَلَىٰ كُلِّ شَيْءٍ شَهِيدٌ

[pickthall] We shall show them Our portents on the horizons and within themselves until it will be manifest unto them that it is the Truth. Doth not thy Lord suffice, since He is Witness over all things?

[yusufali] Soon will We show them our Signs in the (furthest) regions (of the earth), and in their own souls, until it becomes manifest to them that this is the Truth. Is it not enough that thy Lord doth witness all things?

[qaribullah] We will show them Our signs in all the horizons and in themselves, until it is clear to them that it is the truth. Is it not sufficient that your Lord is witness over everything?

One of the most attractive teaching of the Holy Quran for the modern thinker is that it is the only holy book which does not advocate blind faith; not even on itself! It requires belief on it by using the instruments of intellect. Look at the following Ayah:

25:73 وَالَّذِينَ إِذَا ذُكِّرُوا بِآيَاتِ رَبِّهِمْ
لَمْ يَخْرُوْا عَلَيْهَا سُومًا وَغَمًّا

[pickthall] And those who, when they are reminded of the revelations of their Lord, fall not deaf and blind thereat.

[qaribullah] and who when they are reminded of the verses of their Lord, they do not fall down deaf and blind.

[yusufali] Those who, when they are admonished with the Signs of their Lord, droop not down at them as if they were deaf or blind;

Now let us turn our attention to the Ayahs related to this article, and reflect upon how Quran instructs humans to contemplate on their material of construction and how it describes from which substance man is created.

Surah At-Tariq

It is 86th chapter of the holy Quran; its name At-

Tariq literally means "The Brightest Star" (5) , "The Night Comer", "Door Knocker" (6), Night Appearing Star, Morning Star (7) etc.

Classical Translations

The first seven ayahs of this Chapter (which relate to this article) are given below with the classical translations:

86:1 وَالسَّمَاءِ وَالطَّارِقِ

[pickthall] By the heaven and the Morning Star
 [qaribullah] By the sky, and by the nightly comer!
 [yusufali] By the Sky and the Night-Visitant (therein);-

86:2 وَمَا أَدْرَاكَ مَا الطَّارِقُ

[pickthall] - Ah, what will tell thee what the Morning Star is!
 [qaribullah] What could let you know what the nightly comer is!
 [yusufali] And what will explain to thee what the Night-Visitant is?-

86:3 النَّجْمُ الثَّاقِبُ

[pickthall] - The piercing Star!
 [qaribullah] (It is) the piercing star.
 [yusufali] (It is) the Star of piercing brightness;-

86:4 إِنَّ كُلُّ نَفْسٍ لَّمَّا عَلَيْهَا حَافِظٌ

[pickthall] No human soul but hath a guardian over it.
 [qaribullah] For every soul there is a watcher.
 [yusufali] There is no soul but has a protector over it.

86:5 فَلْيَنْظُرِ الْإِنْسَانُ مِمَّ خُلِقَ

[pickthall] So let man consider from what he is created.
 [qaribullah] Let the human reflect of what he is created.
 [yusufali] Now let man but think from what he is created!

86:6 خُلِقَ مِنْ مَّاءٍ دَافِقٍ

[pickthall] He is created from a gushing fluid
 [qaribullah] He was created from ejaculated water
 [yusufali] He is created from a drop emitted-

86:7 يَخْرُجُ مِنْ بَيْنِ الصُّلْبِ وَالتَّرَائِبِ

[pickthall] That issued from between the loins and ribs.
 [qaribullah] that issues from between the loins and the ribs.

[yusufali] Proceeding from between the backbone and the ribs.

Non-Muslims' views about the classical meanings of Surah At-Tariq

Many skeptics of Quran had been very critical of the meaning of the last three ayahs above (8). To the classical translators in ayah No. 6 above, it looked that seminal fluid is implied here, but the trouble arrives while translating the next ayah in which they tried to give the meaning of the origin of the seminal fluid from human body.

The modern science of human anatomy does not agree with these meanings and hence skeptics had a strong ground to validate their point against the authenticity of Quran. Even some very learned Muslim scholars of science and religion tried to explain these meaning through some far-fetched ideas (9).

Following are meanings of some key words of these Ayahs; from very authentic Arabic language resources.

Detailed explanation of some important words in these ayahs

طارِقُ

Its meaning given above.

ثَاقِبٌ

Its meaning hole (interestingly if the neutron star has more than a certain mass value it converts to "a black hole"), hole through the whole body, bright star, star which provides piercing light through darkness (9), The star shone brightly as though it pierced through the darkness or shone and glistened intensely (9).

مَاءٍ

Meanings of this are water, Fluid, to mix something with (10) , Lustre (9) etc.

دَافِقٌ

Means bursting forth (9), according to Ibn-e-Faris to push something forward with force (9), pouring forth or out with vehemence (9).

صُّلْبٌ

Very strong and hard, spine (9), steel (9), a rugged stony place (9), metallic.

تَرَائِبِ

Plural of Dust (8)

Interpretation of the above ayahs' meaning in the light of Modern Sciences

It is clear that classical translations could not relate to the theme of the ayahs. First a star is discussed and then suddenly the topic is switched (as per the classical translations) to human biology. According to Allamma G.A. Pervaiz, a scholar of Quran par excellence, that every verse in the Holy Quran has relation with its previous and the next verse (11). Therefore, while translating and interpreting any Quranic Ayahs, we must keep in view the theme of the Surah and must specially consider coherence and continuity of the subjects and the words used (12).

Let us interpret these ayahs keeping in view the theme, start, and continuity of the subject right from the start of the Surah:

86:1 وَالسَّمَاءِ وَالطَّارِقِ

Heights of the universe and the brightest star (supernova whose light shines more than even the whole galaxy and which may remain visible even in daylight) attest (to what is being said here).

86:2 وَمَا أَدْرَاكَ مَا الطَّارِقُ

And how you can know what is the brightest star?

86:3 النَّجْمِ الثَّاقِبِ

It is the star of piercing brightness (its brightness pierces through the darkness).

Figure 1: Layers in the supergiant star, the precursor of Supernova explosion.

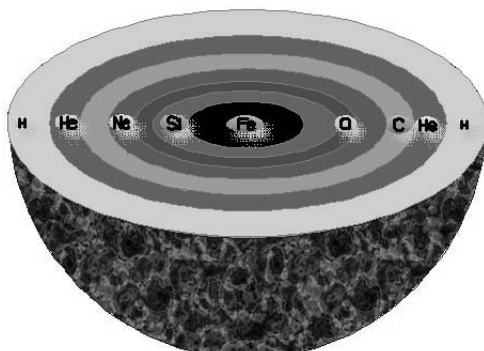
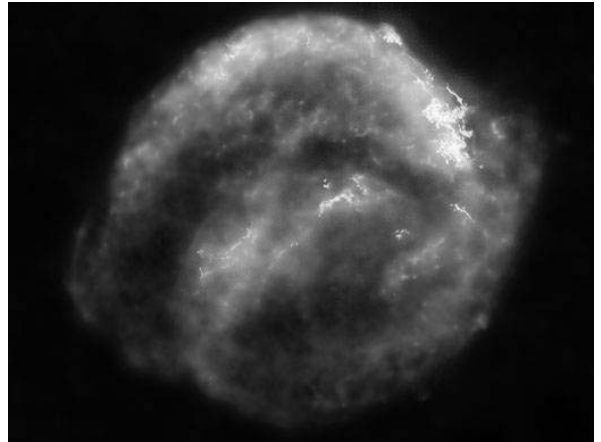


Figure 2: Expanding remains of Kepler's supernova. Photo Credit: NASA



86:4 إِنَّ كُلُّ نَفْسٍ لَّمَّا عَلَيْهَا حَافِظٌ

Deeds of every human being are being watched (and recorded).

86:5 فَلْيَنْظُرِ الْإِنْسَانُ مِمَّ خُلِقَ

Man must see from what (matter) he has been created.

86:6 خُلِقَ مِنْ مَّاءٍ دَافِقٍ

He has been created from the fluid gushing out with great force (material ejected out by supernova as it explodes into the outer space, and provides material for stardust).

86:7 يَخْرُجُ مِنْ بَيْنِ الصُّلْبِ وَالتَّرَائِبِ

This fluid issues from between the steel rock (neutron star's hard crust (6)) and Dusts (the outer layers of the star just before supernova or dusts of the interstellar dust clouds).

Conclusion

This article just gives a glimpse of what treasures Quran holds for the scientific community and for "the people who have intellect". Although science operates independently of religion, its beliefs and its scriptures but at the same time, pure scientific investigation should not reject any truth on these basis alone.

Figure (13) 3: Sequence of matter creation for our solar system.

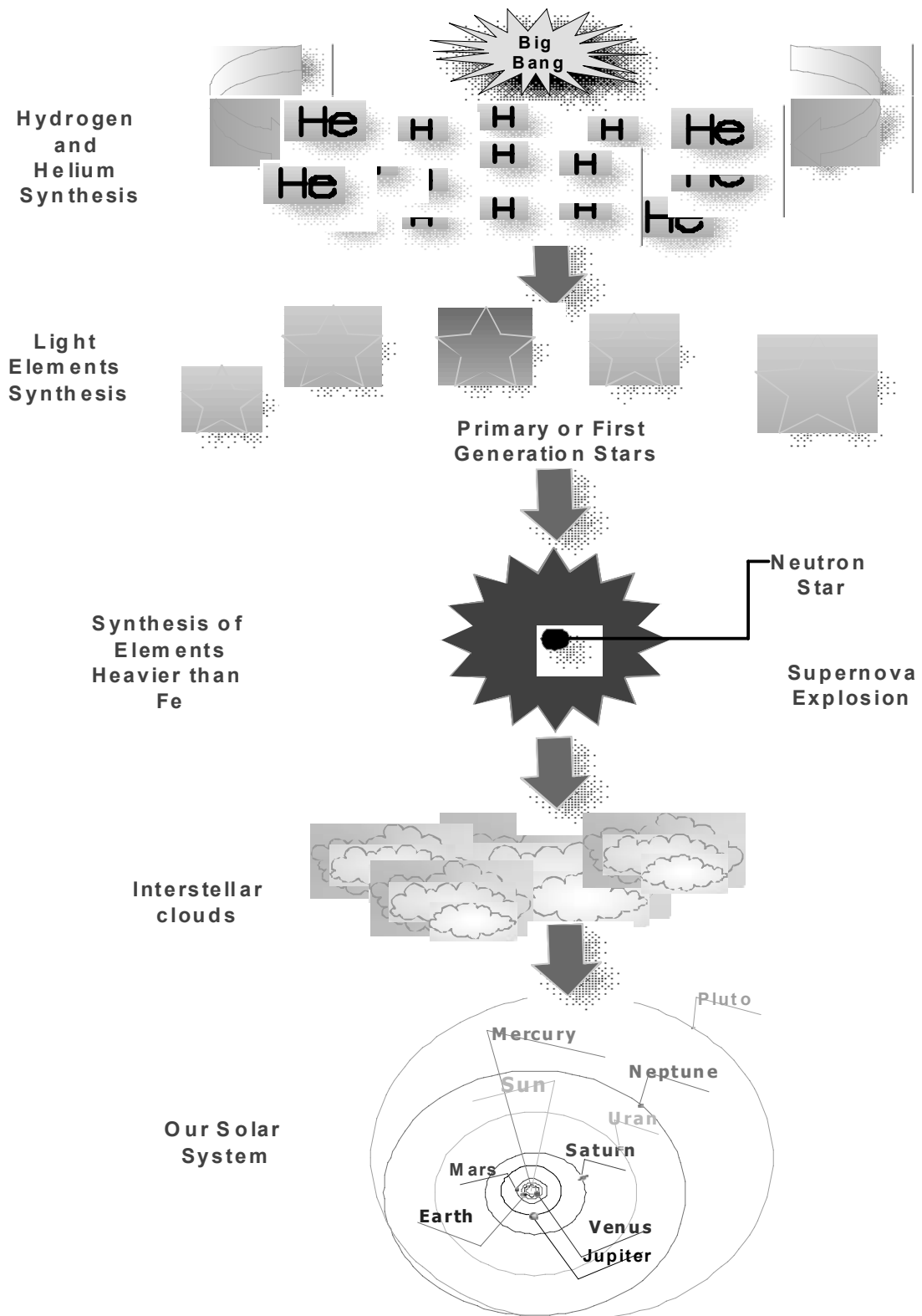


Figure 4: Pulsar sketch. Ref. NASA.

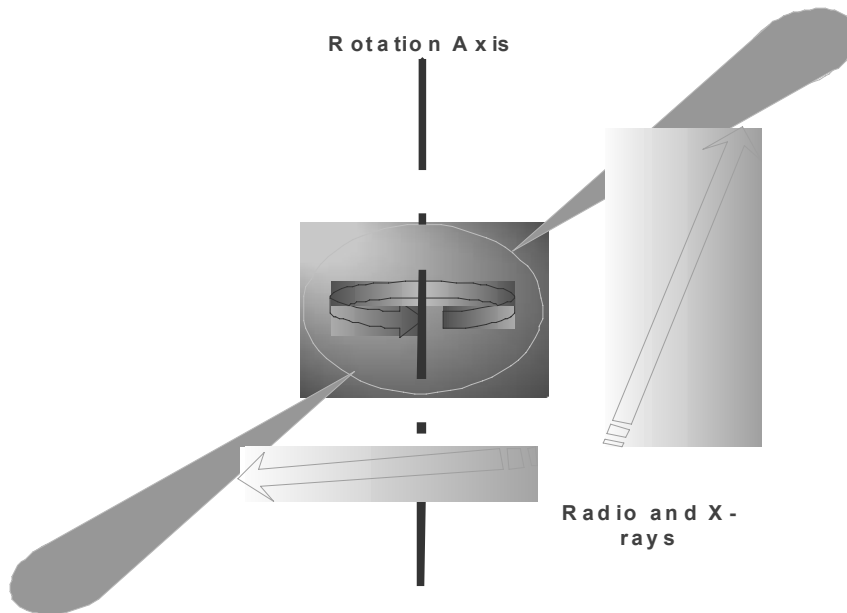
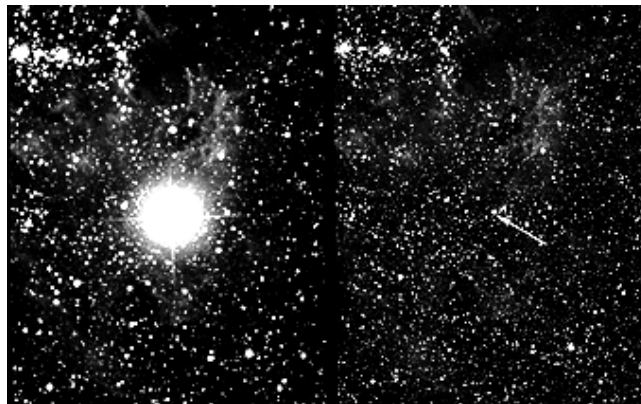


Figure 5: "After" and "Before" pictures of Supernova 1987A, Credit NASA.



REFERENCES

1. Ed Uthman, *Elemental Composition of the Human Body* http://web2.iadfw.net/uthman/elements_of_body.html
2. *Encyclopedia of Astronomy and Astrophysics.*
3. "neutron star." *Encyclopædia Britannica from Encyclopædia Britannica 2007 Ultimate Reference Suite, 2009.*
4. *Zekr.org*
5. Dr. Shabbir Ahmed, *The Qur'an As It Explains Itself, fourth edition, QXPiv June, 2007*
6. Ch. Ghulam Ahmad Pervaiz, *Lughat-ul-Quran*
7. William Edward Lane *An Arabic -English Lexicon*
8. <http://www.answering-islam.org/Quran/Science/semn-production.htm>
9. http://www.wikiislam.com/wiki/Qur%27an_and_Semen_Production
10. Hans Wehr, *A dictionary of modern written Arabic by*
11. Ch. Ghulam Ahmad Pervaiz, *Audio lecture.*
12. *Ibid.*
13. Garry McCracken and Peter Stott, *Fusion-The Energy of the Universe*

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