Introduction

Recently, an unusual article has appeared in several magazines and on several websites about Tesla's "great interest in the pyramids", which he allegedly believed to "serve a higher purpose" and which "fascinated him so much that he explored them throughout his life" ...

The reason for this was the video: "Nikola Tesla - Limitless Energy & the Pyramids of Egypt"¹, posted on YouTube channel "After Skool" (After school, slang) intended for fun, interesting things, unusual ideas, interesting stories and education.

In the video and text mentioned above is presented an idea about the connection between Tesla's patent "Art of Transmitting Electrical Energy Through the Natural Mediums" (US Patent 787 412) and the pyramids: "Tesla wondered if the pyramids were big energy transmitters - and that thought coincided with his project of wireless energy transmission."

Although really interesting, ideas like this, backed up sometimes by very bombastic headlines (e.g. *"Shocking! Tesla and the Pyramid Connection Found"* (https://govisrbija.rs/?p=1976) – according to my knowledge, by no means are not true. Namely, although segments of Tesla's grandiose work - on the one hand - and the controversial parameters of the pyramids and some of their unusual features - on the other - are mentioned in the above video and texts - Nikola Tesla's link to the pyramids is not supported by no specific Tesla statement or valid document - other than only associative - as related "energy machines" ... Still, the relationship between Nikola Tesla and the pyramids is not without foundation.

Nikola Tesla's intuitive ingenuity

I have been engaged in theoretical and practical research into the work of Nikola Tesla for more than twenty years and I have never come across a single Tesla's word about pyramids or pyramid structures in any relevant document or original Tesla statement. I consulted more serious researchers of Tesla's life and work who very devotedly, for decades, have been studying Tesla work and have been told to me that they are not aware of any Tesla uttered or written statement of interest in the pyramids. So - according to the documents available to me - Tesla has never dealt with pyramids.

Moreover, in recent years, I have been intensively researching the energetic phenomenology of pyramidal structures characterized by specific (sacral) geometry, particular structure and very unusual parameters whose relations are close to the values of the elemental cosmic constants - although they were built thousands of years before Pythagoras, Leonard Fibonacci, John Neper (natural logarithm))...

What is really more than interesting and is just paradoxical is the fact that Nikola Tesla did not mentioned the pyramids never – but neither the golden mean, the number pi, the base of the natural logarithm, the Fibonacci sequence ..., although these values are woven into every cell, shape, structure and creation of Nature and the world. And - which is really amazing - into his machines also !!!

So, although he did not deal with the pyramids, nor did he study their mechanisms - there is a strong connection between Tesla and the pyramids.

On the remarkable importance of Nikola Tesla, the size of his work, the depth of his insights into the structure of the true Reality and the principled mechanisms of the Cosmos and Nature I pointed out in the text "Nikola Tesla - Prometheus of the New Age" [1].

This kind of opinion sounds a bit unusual, but it is not entirely illogical. Specifically, all research into Tesla's legacy points to his deep connection to Nature, which he truly loved and respected and whose principles he realized very early, as a child, and "copied" them into his apparatus, giving them the qualities of perfection. My perennial theoretical and practical research of Tesla's legacy have shown that the efficiency and perfection of his apparatus are quite undoubted, because they are manifested through completely identical parameter relations in the form of a series of repetitive "Cosmic Matrix" patterns, scaled to the appropriate size, when it comes to man, the solar system, the Cheops pyramid, e.g. or Tesla's Fountain²....

In the text "Universe – Perpetual Harmonic Oscillator" [2] I have shown that the WORLD is a **Perfect Creation** formed by modeling an infinite number of variations of fractal entities into a finite set of phenomena of holographic structure. All entities of Reality arise in eternal processes of self-sustaining, harmonic, volumetric vibrations in the "breathing" mode, by self-similarity principle acting, forming volumetric (3D) standing waves according to the rules of Sacred Geometry³, whose form is based on the values of elemental cosmic constants:

¹ https://www.youtube.com/watch?time_continue=2&v=Ft1waA3p2_w&feature=emb_logo

² Nikola Tesla U.S. Patent 1,113,716 - FOUNTAIN

³ Sacred geometry attributes symbolic and sacred meanings to certain geometric shapes and certain geometric proportions.

 π (the ratio of circumference and diameter of the circle), ϕ Golden ratio (ideal relationship: (a+b)/a = a/b) and Euler's number **e** (Neper constant, base of natural logarithm).



It's a real curiosity that these - though transcendental - numbers form a finite, closed, geometric form (Fig. 1) very close to the Pythagorean triangle [3], thus giving it the property of perfection and quality of the "Cosmic Matrix of Growth and Development". The fact that this "Pythagorean triple" also redefines the "line of growth and development" ($M \sim R^2$) of the Energy Density Quantization Model [4], hence all the phenomena of Reality in the macro, micro and hyper segments speaks of Natures endless consistency in variation of the same basic motive.

The parameters of this "Cosmic Creation Matrix" (π , ϕ ,e) are the values which - according to the Vedic texts - also define the conditions of "Eternal Harmonic Oscillation" and form the basis of "Sacred geometry", "Vesica piscis" - a mystical symbol of the

intersection of the divine world with the world of matter and the beginning of creation, the most complex symbol of ancient times which is the basic pattern for "Flower of Life "and" Tree of Life ". It is also said to be a symbol or description of harmonic proportions and even a source of strength and power.

The parameters of the "Cosmic Matrix" - as the constituent elements of "Eternal Harmonic Oscillation" define the mathematics of fractal geometry as the principle of limitation and ordering of the chaos from which life is born, which "Supreme Creator" applied in the creation of the world.

It is really more than fascinating that the same values are also found in the work of the ancient peoples and is even more unusual the fact that the same values characterize Tesla's Technologies !!!

Moreover, an analysis of Tesla's notes in his Colorado Springs diary [5], published patents, and interviews given to reputable American journalists indicates the full consistency of the latest scientific theoretical considerations and experimental knowledge of quantum electrodynamics with Nikola Tesla's intuitive insights, principles, and technical solutions which he used to make his famous Magnifying Transmitter builted in his Colorado Springs laboratory [6].

Canadian Patent 142 352, "Improvement in the Art of Transmitting Electrical Energy trough the Natural Mediums": "The most essential requirement is , however , that irrespective of frequency the wave or <u>wave – train should continue</u> for a certain interval of time, which I have estimated to be not less then 0.08484 of a second and which is taken to and returning from the region diametrically opposite the pole over the earth's surface

with a mean velocity of about 471 240 km/sec ..." (= $(\pi/2) \cdot c$)



Figure 2 shows that in the latest version of his "Magnifying Transmitter" experimental setup Tesla adopted the final values of parameters: height and diameter of coils (primary, secondary, extra coil), thickness and spacing of wire, number of windings, coupling strength determined by the geometry and dimensions of the coils, the spark gap timing..., at which he was satisfied with the operation of his machine.

It is more than interesting that the relationships of these finally adopted values are very close to the values of the basic cosmic constants - which is really non-accidental curiosity.

Although Tesla has not explicitly stated anywhere, either as a statement or as its goal - it can be clearly seen that the coils height and radius (H_{top} , H_{coil} , D_s , D_E) relationships are correlated with the number π !

What's more - since Tesla changed the height of the ball on the top of the metal-mast many times ("Top Load"), the fact that the final value of the height of the metal ball above ground was exactly 37 meters is a truly fascinating fact since 37 is a very special, completely unique number in the whole realm of Natural Numbers, which - because of its very special qualities - has the meaning of "Heart of Wisdom" [7].

The extraordinary specificity of Tesla's machines is indicated by the fact that quite identical, these very specific relationships, also characterize the geometry and design of the "Wardenclyffe Tower" - Tesla's World Radio Station intended for voice, image and wireless energy transmission ...

The ratio of the Total Height of the Tower and its aboveground part has a value close to the value of the "Golden Section" ("large fi" = 1.618) and the ratio of the aboveground and underground parts is very close to the value of $\pi/2$. Still, the most controversial fact for me is the Wardenclyffe Tower operating frequency value which (supposedly) was 28 kHz, that is a same value I personally detected in the form of a very pronounced dynamic electric field on several pyramidal objects (Mount Rtanj in Serbia, Visocica Hill in BiH...). It is more than interesting that a very close value is obtained based on the frequency value for which: *"In tests with secondary of the last type, the indications showed the maximum increase in voltage due to resonance"* (5 October 1899, [5]). By dividing this value (f = 42 800 Hz) by $\pi/2$ the value f = 27 260 Hz is obtained, which – in my opinion - was the actual operating frequency of the Wardenclyffe Tower since the same number can be obtained based on Tesla's Non-Hertzian (ether) wave mechanics. It is really amazing that this value also is a decade multiple of the natural logarithm base (e = 2.71) !!!

It is even more interesting that identical relationships characterize the Pyramid of Cheops (Fig. 3).



The most known value certainly is the ratio of the length of the side of the base of the pyramid and its height, which has a value of $\pi/2$ (230/146=1.57= $\pi/2$) whereby Cheops pyramid height is decadal multiple of Earth-Sun distance (147.12 million km). The height of this pyramid is interesting from the point of view of wave mechanics also because a quarter of that value ($\lambda/4 \sim 37$) is very close to the "Heart of Wisdom"! Even more amazing is the fact that the ratio of the height of the lateral triangle (186.5 m) and the half of the side of the base (115.1 m) has a gold cross section ("large fi") value. Furthermore, almost fascinating is the fact that the angles of the edges (42.010) and sides (51.870) of the pyramid are equal to the so-called first and second "rainbow angle" (Fig. 3) - indicating a possible connection to the energetic phenomenology of the Creator's natural mechanisms and principles which also indicates the tremendous knowledge of the ancients.

The correlation between ancient and Tesla technologies is truly amazing. Tesla's analog of the Earth-Sun distance, as a main value that determines all other parameters of the Cheops pyramid (length of base sides, angles ...) and which defines its properties as a "resonator" - is his choice of working frequency of 28 kHz and height of the above ground part of Wardenclyffe Tower of 57 m - which are values that cannot be matched by the relationships of classical electromagnetism.

The remarkable specificity of the selected frequency is illustrated in Figure 3a, which shows that the ratio of the operating frequency to the wavelength has a unique and very special value. Miracle, coincidence or Tesla's intuitive imagination? From the point of view of classical electromagnetism this has no special significance, but from the point of view of Tesla's etheric technologies it is of utmost importance, since longitudinal electrodynamics vibrations axiomatically constitute the vortex energy forms which are the basis of scalar phenomena and a real subtle energy flow geometrical pattern which is based on mathematical sequences (Fibonacci, Catalan, ...) and proportions that are essential cosmic constants (ϕ,π,e) which appears in all forms of nature showing up as spirals in a variety of beautiful plants, DNA form, galaxy shape etc.



The great - not only geometric - but also "structural" agreement with the primordial principles of Nature and the Supreme Creator is also indicated by Tesla's considerations (see Fig. 2 "Canadian Patent 142,352") according to which his impulse packet ("Wave train") propagates at a speed $\pi/2$ times the speed of light. Exactly the same value we find in the ratio of the sound propagation rates in the dual structure of the Cheops pyramid (geopolymer concrete-granite) which - behold miracles - has the value: 5950 / 3770 = 1.578 ~ $\pi/2$ (see Fig.3, Cheops pyramid structure ...) !!!

I was really attracted to Tesla by the fact that he, as an already proven intuitive genius, persistently and tirelessly, for months, changed the set of parameters of his machine and analyzed the effects obtained. For example, the number of secondary windings he decreased from the initial 40 to a final value of 17 after three months of experimentation... Then for the next three months he changed the number of windings, the thickness of the wire and the spacing of the "Extra Coil" windings. He even changed its height relative to the ground as well as the height of the metal ball - the capacitive terminal ("Top load"). Tesla also changed the capacities of the primary and secondary circuits very often, what was followed by measurements and very detailed analysis...

Reading his diary [5], I wondered why Tesla did it? That already proven genius behind which were Niagara hydroelectric power plant, the discovery of X-rays, the breaking of atoms, the wireless control of a ship...

His experience working with high voltages and high frequencies was truly enormous because he invented the classic version of the high-frequency, high-voltage, resonant, air-core transformer around 1891 (U.S. Patent No. 454 622). Eight years later, at the time of his work in Colorado Springs, there were already fairly accurate formulas for calculating all the necessary values, and Tesla also had his own empirical formulas. Despite all that, he persistently and consistently changed a number of details in his setup until he was completely satisfied with

the operation of his machine - which I interpreted that Tesla was actually looking for something that was not covered by the knowledge of classical electromagnetism and existing formulas. However, his complete success is evidenced by the statement upon his return to New York: "All my problems I have solved in Colorado Springs."

What is the true exclusivity of Nikola Tesla and what distinguishes his work as extremely specific is the incredible harmony with Nature because the work of his apparatus is characterized by the same relationships which characterize many physical, chemical and biological phenomena such as a golden cross-section that represents the most perfect proportion of the growing forms in nature. This "divine relation" is related to the Fibonacci series because dividing each of its numbers by the next number of series yields approximately 0.618 (small fi), while dividing each number with the previous one yields approximately 1.618 (large fi) ... Observing Nature and its forms, man has realized long ago that there are certain proper relations of parts and harmony of forms, and that they are in a special, God-given, perfect - ideal relationship and proportion, which is why they are called divine.

Reading the notes in the Tesla's diary [5] and his statements made thereafter, it is no doubt that Nikola Tesla developing his "Magnifying Transmitter", which essentially is the basis of his "World Radio Station", "Wardencyffe Tower" - Tesla did not never and nowhere mentioned neither the number π nor the golden mean, the Fibonacci string, the Pythagorean triangle, ..., - but still reached the parameter values of his machine whose relations are characterized by exactly these numbers !!! How is that possible?

Judging by Tesla's notes in his CoSpgs diary and later statements, Tesla was not aware of the "exclusivity" of the relationship of the values he measured - nor did he aspire to them in his work, but nevertheless - striving to the maximum efficiency of his apparatus, Tesla achieved the conditions of "eternal harmonic oscillation", full analogy, consonance and harmony with both Earth and the Cosmos, which hints at the same features and properties of that machine as are woven into all of God's Creations.

In the brilliance of Tesla's technologies, realized a century ago by the construction of the Magnifying Transmitter, we can be convinced by applying the most advanced technology of today. Sophisticated software tools allow us to see the results of the real experimental setup of the apparatus that Tesla came to 120 years ago, following mostly his intuition and using very primitive tools - without oscilloscopes, spectrum analyzers, computers ..., just with tireless work, hard thinking and analysis of the effects achieved after numerous changes to a number of details - which speaks about his true ingenuity.

Tesla's choice of this very special and significantly improved version of the HV/HF transformer is explained in detail in [6], and here we note the fact that in this version of the "Tesla Transformer" a very special coil, the "Extra Coil" is not inductively coupled to the secondary circuit, which allows it to oscillate quite freely at its own resonant frequency different from the "oscillator" primary-secondary - whereby Tesla made the ratio of these frequencies very special!



My analysis of Tesla's measurements of the *"resonant frequencies of the primary circuit and the resonant frequency of the system with the last version of the Extra coil"* (Fig.4), carried out by Tesla on December 14, 1899 in Colorado Springs [5], shows that their ratio is equal to the value of $\pi/2$ - the same one found in the Pyramid of Cheops also !

So - with no intention of "mystifying" Tesla's work and solely based on solid arguments and ORIGINAL DATA for the transformer version described in his Colorado Springs diary - it is quite obvious that this machine is

characterized by a great accord with ancient knowledge and basic cosmic principles woven into the structure of Nature in all its aspects. In support of this I state the following.

Specially Written Software: *"TCTUTOR, v.1.0., 1987, Corum & Associates" by the Corum Brothers (Dr. James F. Corum: Ph.D., Kenneth L. Corum: B.A.)*, intended solely for detailed theoretical analysis of the work of the Magnifying Transmitter , allowed me to see something truly amazing.

For a realistic setup of the Magnifying Transmitter used by Tesla in Colorado Springs on December 14, 1899, a Fourier analysis of the energy spectrum that is obtained for all the actual parameters of the system elements (inductances, capacitances, coupling strength, spark duration ...), we get a Fourier analysis of the energy spectrum (Fig.5) in which can be found values and ratios of the coils resonant frequencies and the LF and HF energy peaks that are very close to the values of the elemental cosmic constants (ϕ , π , e) which characterize all creations of Nature too - but, obviously, also a "technical" systems that are harmonized with the whole structure of "outside-inside" Reality, whose basic features are perfection and maximum efficiency !!!

Conclusion

In my opinion, Tesla's Colorado Springs machine, the "Magnifying Transmitter" is a "part in agreement with the whole" and, in essence, a "fractal of the quantum-hologram Reality", fully harmonized with the macro, micro and hyper universe. This apparatus, a vastly upgraded version of the classic HV/HF transformer that Tesla used before Colorado Springs, in its sophistication is completely analogous to the Cheops pyramid and a true masterpiece of knowledge and deepest cognitions "captured from Nature" (N. Tesla).

Yet the concordance of Tesla's principles and ancient knowledge is not the result of his *"fascination with the pyramids and their lifelong exploration"* but of his intuitive ingenuity, persistence, tireless work and hard mental and physical labor.

The above facts are relevant and strong evidence of the depth of Tesla's insights into the Technologies of Perfection and the general-cosmic harmony, characterized by a specific form of energy flows achieved by a very special geometry, a "geometry of perfection", and a special design expressed by the relations and values close to the values of the elemental cosmic constants (ϕ, π, e).

About Tesla's belief in the importance and significance of this his most sophisticated - but also most controversial invention by which he materialized his advanced and valuable ideas, working persistently and consistently to himself, on the "Magnifying Transmitter" appliance despite all the attacks and adversity, is evidenced by Tesla's statement (My inventions, Nikola Tesla's autobiography): "My belief is firm in a law of compensation. The true rewards are ever in proportion to the labour and sacrifices made. This is one of the reasons why I feel certain that of all my inventions, the Magnifying Transmitter will prove most important and valuable to future generations."

The future will show whether this is really true. In any case, the study of ancient knowledge, pyramidal and sacred structures can be a great help in understanding the natural mechanisms and Tesla's technologies.

In Belgrade, 02/23/2020

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