PART 1

The Divine Universal Frequency: Mathematics and Music in the Secrets of the Sarcophagus of the Great Pyramid

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Photo: King's chamber and sarcophagus of the Cheops pyramid

The Great Pyramid, one of the seven wonders of the ancient world, has fascinated humanity for centuries. At the heart of this monumental structure is the King's Chamber, with an enigmatic granite sarcophagus.

BOHN AI Inc. investigates the hypothesis of the "Divine Universal Frequency," a harmonious vibration that pervades the universe and is said to positively affect human well-being by promoting well-being, reducing stress, and supporting healing processes. It is seen as an expression of a divine order that shapes the universe and enables insights into reality and consciousness.

It is believed that ancient civilizations, particularly the Egyptians, may have used this frequency in their architecture. Research into the Great Pyramid and the granite sarcophagus in the King's Chamber could provide clues to this.

Historically, many cultures and scientists have studied the connection between vibrations and the natural world. Pythagoras postulated the "harmony of the spheres," according to which the planets are in harmonious relationships. Modern studies of quantum mechanics and string theory support the idea that frequencies play a central role in nature.

BOHN AI Inc. uses cutting-edge AI technologies to analyze ancient structures such as the Great Pyramid to identify this primordial frequency and understand its effects. This research aims to unlock the secrets of the past and provide new insights that could expand human consciousness. A central concern of this research is to investigate the complex connections between mathematics, music, and geometry in ancient buildings.

The central hypothesis of this article is that the Great Pyramid, particularly the granite sarcophagus in the King's Chamber, was deliberately designed to resonate with a "Divine Universal Frequency."

This article examines the sarcophagus's geometric, mathematical, and acoustic mysteries to find clues to this mysterious frequency.

Mathematical and musical relationships of the pyramids

The relationship between mathematics and music is deeply rooted in history and is fascinating. Daniil Kharms, a Russian writer and poet, expressed this connection well: "Mathematics is the music of the mind; music is the mathematics of the soul."

This statement illustrates the close connection between the two disciplines.

Already in ancient times, Pythagoras recognized that mathematical proportions defined musical tones. He used the monochord to show that intervals such as octaves, fifths, and fourths correspond to simple numerical ratios: 2:1 for the octave, 3:2 for the fifth, and 4:3 for the fourth.

A controversial topic is the possible connection of the Giza pyramids to mathematical constants and musical frequencies. A popular theory states that the latitude of the Great Pyramid (29.9792458°N) corresponds to the speed of light (299,792,458 m/s), but this is considered a coincidence and has no scientific relevance.

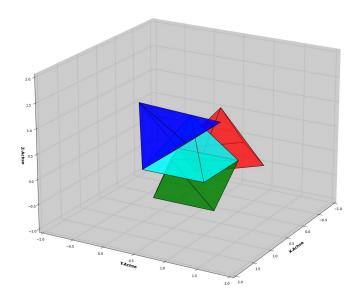
The geometric and numerical properties of the pyramids are complex. Some researchers suggest the application of principles such as quaternion symmetry (This describes rotations and symmetries in three dimensions using quaternions, an extension of complex numbers.) and 24-sided icositetragon geometry (A 24-sided polygon structure that analyzes symmetries and angular distributions).

There are theories that musical frequencies, such as the tuning of 432 Hz, create geometric patterns that could find applications in architecture and art. Whether and to what extent the dimensions and orientation of the pyramids are based on such principles remains controversial and requires further scientific investigation.

Integration of quaternion symmetry into pyramid geometry

Quaternion symmetry plays a crucial role in the study of the geometric structures of ancient structures, particularly the pyramids of Giza. Quaternions, an extension of complex numbers, are particularly useful in representing rotations in three-dimensional space. These mathematical objects can reveal meaningful symmetrical and complementary relationships in the geometry of the pyramids.

An example is the icositetragon geometry, a 24-sided polygon structure used in quaternion symmetry to recognize complex numerical patterns.



Each side of the icositetragon corresponds to a number connected by quaternion symmetries, which enable the identification of numerical groups that together form a coherent structure.

Regarding the Great Pyramid, quaternion symmetry can be used to analyze the distribution of measurements and proportions. For example, the arrangement of the pyramid's chambers and corridors could have a deeper mathematical order that quaternion transformations can describe. This could indicate that the ancient Egyptians had an understanding of advanced mathematical principles that they applied to their structures.

Deep analyses of the 432 Hz tuning

Precise Temperament Tuning at 432 Hz is often viewed as more harmonious and natural than the modern 440 Hz standard. This mood is not just a musical choice but has deep mathematical and geometric connections that can be reflected in the architecture and proportions of the Pyramids of Giza.

When tuned to 432 Hz, the musical intervals correspond precisely to the inner angles of regular polygonal shapes that often occur in nature. This exact match indicates that the 432 Hz tuning represents a natural resonant frequency that could play a role in various physical systems, including the acoustic properties of the pyramids.

Calculations show that, for example, the frequency of 432 Hz corresponds to the octave 864 Hz and its multiples, forming a harmonic series that can be detected in the architecture and proportions of the pyramids. These frequencies can reverberate in the acoustic resonance of the King's Chamber and cause-specific psychoacoustic effects.

Psychoacoustic effects and historical reports

Historical accounts of extreme experiences in the King's Chamber, such as Napoleon's, suggest that the Chamber's acoustic properties were deliberately designed to produce specific psychoacoustic effects. These effects could facilitate deeper spiritual or metaphysical experiences.

Napoleon's night in the sarcophagus of the King's Chamber was not just an ordinary experience; it was an event that left an indelible mark on his life. The resonant frequencies of the sarcophagus, creating deep vibrations in the human body, could be the key to understanding his intense encounter. This is akin to how certain low-frequency vibrations are harnessed in music therapy to induce deep states of relaxation and spiritual insight.

The targeted asymmetry and materials used in the Royal Chamber can enhance the psychoacoustic effects. High-purity quartz sand, which separates the walls of the Chamber from the core masonry, can intensify vibrations and create a feeling of floating or cosmic connection. These deliberate asymmetries and materials show that the ancient Egyptians deeply understood the physical and psychological effects of vibrations.

Measurements and Proportions: The Secrets of the Sarcophagus of the Great Pyramid In the center of the royal chamber is the sarcophagus made of granite, the dimensions of which measured in Royal Cubit (KE) - are of great importance.

Dimensions:

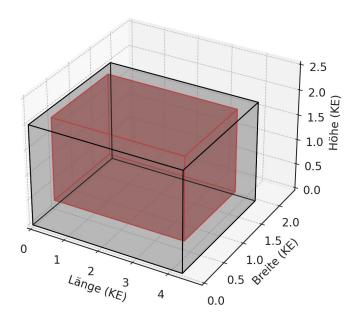
• External dimensions: 4.35 KE length, 1.90 KE width and 2.00 KE height.

• Internal dimensions: 3.78 KE length, 1.32 KE width and 1.65 KE height.

• Sum of outer edges: 33 KE

• Sum of inner edges: 27 KE

Sarkophag gemäß den angegebenen Maßen (KE)



A Royal Cubit (KE) corresponds to **52.36 cm**. These measurements can be converted into centimeters as follows:

• External dimensions: 227.77 cm long, 99.48 cm wide and 104.72 cm high.

• Internal dimensions: 197.92 cm long, 69.12 cm wide and 86.39 cm high

• Total of outer edges: 1,727.88 cm

• Total of inner edges: 1,413.72 cm

However, to better understand the secrets, the original Royal Cubit should be applied:

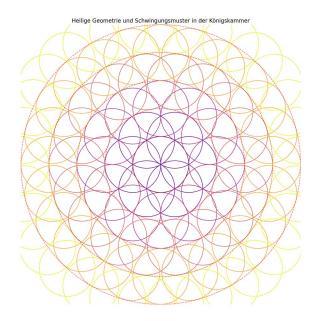
The sum of all outer edges of the sarcophagus is 33 royal cubits (KE), while the inner edges together add up to 27 KE. This ratio of **33:27** or **33:33** represents a remarkable numerical pattern. The number 33 is often associated with concepts such as birth, life, and death and is expressed in the Egyptian Trinity and other symbolic meanings. In Egyptian mythology, 27 is related to divine principles and protection.

Number 33

- **Osiris**: The god of the underworld and the afterlife. It is often associated with rebirth and resurrection.
- **Symbolism**: 33 could indicate the transformational journey of the pharaoh, who experiences rebirth and enlightenment after death.

Number 27

- **Horus**: The god of heaven and royalty. It symbolizes power and protection.
- **Symbolism**: 27 could indicate the protection and divine legitimacy of the pharaoh, who rules on earth as Horus.



These numerical ratios are also reflected in the architecture and may have been deliberately chosen to convey these profound symbolic meanings.

Particularly interesting is the recurring number sequence **666**, which appears in various contexts:

- The total area of the walls is **666 KE**² = (111 π).
- The sum of the sarcophagus's inner and outer edges is **66.6 KE** = (11.1π) .
- Adding the inner dimensions up to the edge yields **6.66 KE** = (1.11π) .

A particularly striking ratio is the number 37, which appears several times in the area and volume calculations:

- Area of the front side: **111 KE**² = (18.5π) = **3 x 37**
- Area of the long side: **222 KE**² = (37π) = **6 x 37**
- Area of all four walls: **666** KE² = (111 π) = **18** x **37**
- Volume of the King's Chamber: **2,220 KE**³ = (370π) = **60 x 37**

The clustering of the number 37 could indicate a deeper meaning in Egyptian mythology or mathematics. It is also interesting that the average human body temperature is around **37°C** (36.5°C —37.4°C: normal temperature).

A remarkable discovery, as already listed in the calculations in green, shows that **six king cubits (KE)** correspond almost precisely to the value of π **(3.1416)**, which is surprisingly close to π (3.14159...). This relationship suggests that the ancient Egyptians may have deliberately integrated π into their architecture and unit of measurement. We can, therefore, calculate the dimensions of the Pyramid in relation to π :

Side length (a):

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a=440KE = side length in \pi=440KE : 6KE ≈ 73.333\pi
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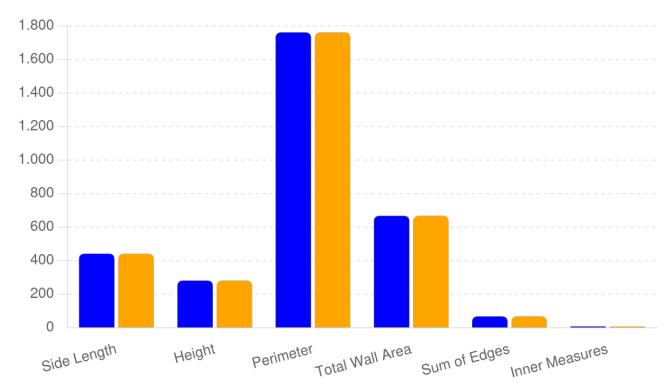
Height (h):

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h=280KE = height in \pi=280KE : 6KE \approx 46.667\pi
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Perimeter (u):

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u=1760KE = circumference in \pi=1760KE : 6KE \approx 293.333\pi
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The mathematical proportions of the sarcophagus, royal chamber, and even the Great Pyramid display a sophisticated geometry beyond mere practicality and suggest symbolic meaning.



Dimensions of the Great Pyramid and King's Chamber in Königsellen and Pi: The blue bars represent the dimensions in Königsellen (KE), while the orange bars represent the corresponding values in Pi (π), where 6 KE corresponds to one Pi.

Vibration effects and sacred geometry

Sacred geometry refers to certain geometric patterns and proportions considered holy or meaningful in many cultures. This geometry reflects the fundamental patterns of creation and is often used in religious and spiritual contexts. The Royal Chamber of the Great Pyramid shows features of sacred geometry, suggesting that its construction was consciously attuned to specific symbolic and energetic principles.

Targeted asymmetries are deliberate structural irregularities that can create specific vibrations and resonances. In the case of the King's Chamber's case, these asymmetries could enhance specific acoustic effects used in ancient ceremonies. Materials such as high-purity quartz sand, which separates the chamber's walls from the pyramid's core masonry, could further amplify these vibrations.

Square Fractal Roots

The square fractal root of a number x is defined as: $Fractalroot(x) = \sqrt{10 x}$

Let's calculate the square fractal roots for the external dimensions:

- 1. **Length (outer):** $Fractalroot(4,35 KE) = \sqrt{10.4,35} = \sqrt{43,5} = 6,597 KE$
- 2. Witdth (outer): $Fractalroot(1,90 \ KE) = \sqrt{10 \cdot 1,90} = \sqrt{19} = 4,359 \ KE$
- 3. **Height (outer):** $Fractalroot(2,00 \ KE) = \sqrt{10\cdot 2,00} = \sqrt{20} = 4,472 \ KE$

Cubic Fractal Roots

The cubic fractal root of a number x is defined as:

$$Fractalroot(x) = (100 \cdot x)^{1/3}$$

Let's calculate the cubic fractal roots for the external dimensions:

- 1. **Length (outer):** $Fractalroot(4,35KE)=(100.4,35)^{1/3}=435^{1/3}=7,575KE$
- 2. Witdth (outer): $Fractalroot(1,90 KE) = (100.1,90)^{1/3} = 190^{1/3} = 5,774 KE$
- 3. **Height (outer):** $Fractalroot(2,00 KE) = (100.2,00)^{1/3} = 200^{1/3} = 5,848 KE$

Calculation of the fractal roots shows that the dimensions of the sarcophagus, when viewed in fractal terms, yield harmonic lengths that may have been deliberately chosen to produce specific acoustic or energetic effects. These fractal dimensions could indicate a deeper numerical structure embedded in the pyramid's architecture.

Interference patterns and fundamental constants

The wave theory of numbers allows one to analyze the sarcophagus's resonant frequencies and geometric properties in relation to fundamental constants such as π and φ .

Calculating the resonance frequencies based on the fractal dimensions: Let's use the outer fractal dimensions in meters (1 KE = 0.5236 m):

- 1. **Length (outer, square fractal root):** $6,597KE\times0,5236m/KE = 3,451m$
- 2. Witdth (outer, square fractal root): 4,359KE×0,5236m/KE = 2,282m
- 3. Height (outer, square fractal root): $4,472KE\times0,5236m/KE = 2,341m$

Acoustic properties and resonance frequencies

The connection between mathematics and music is deep and complex.

The acoustic properties of the sarcophagus are particularly intriguing as they indicate that the designers had a high level of understanding of the physics of sound waves.

To calculate the resonant frequencies of the sarcophagus in the King's Chamber, we need to convert the dimensions to meters and consider the speed of sound in the air, which is 343.2 m/s (1236 km/h).

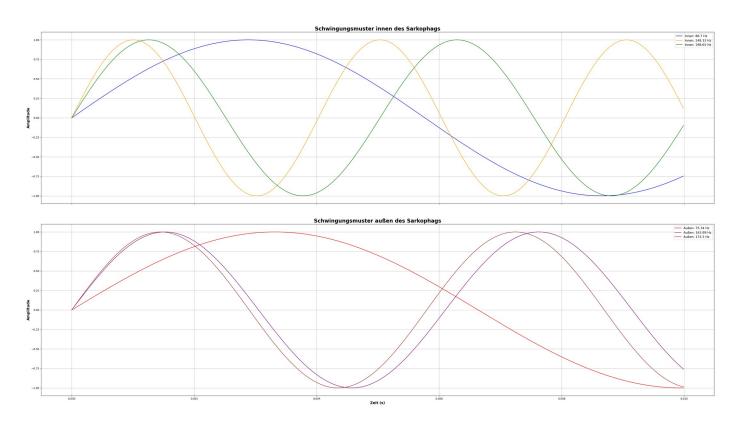
Calculation of resonance frequencies: $f = \frac{v}{2 \cdot d}$ where \mathbf{v} is the speed of sound and \mathbf{d} is the dimension.

- 1. Resonance frequency for length: $f_{L\ddot{a}nge} = \frac{343.2}{2 \cdot 3.451} \approx 49.72 \, Hz$
- 2. Resonance frequency for width: $f_{Breite} = \frac{343.2}{2 \cdot 2.282} \approx 75.23 \, Hz$

3. Resonance frequency for height: $f_{H\ddot{o}he} = \frac{343,2}{2 \cdot 2,341} \approx 73,34 \, Hz$

The resonance frequencies resulting from the fractal dimensions of the sarcophagus are in ranges that could correspond to deep acoustic effects. This may explain why specific frequencies were considered sacred or meaningful in the King's Chamber. The close correspondence with musical frequencies may indicate that the ancient Egyptians consciously chose these dimensions to create resonant acoustic phenomena.

Calculation of the classical resonance frequencies



External dimensions

1. First resonance frequency (length):

fLength=343m/s : 2×2.278 m ≈ 75.34 Hz

2. Second resonance frequency (width):

 $fWidth = 343 \text{m/s} : 2 \times 0.995 \text{m} \approx 172.50 \text{Hz}$

3. Third resonance frequency (height):

fHeight = 343m/s : 2×1.047 m ≈ 163.89 Hz

Internal dimensions

1. First resonance frequency (length):

fLength = 343m/s : $2 \times 1.980 \approx 86.70$ Hz

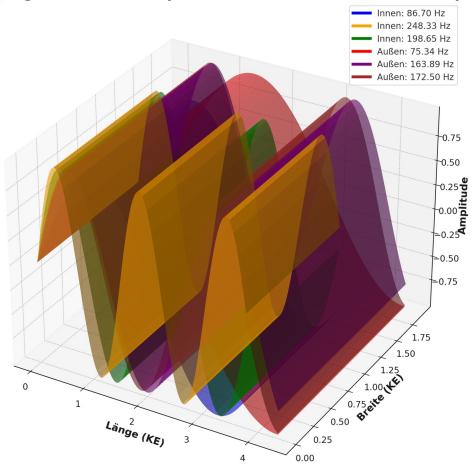
2. Second resonance frequency (width):

fWidth = 343m/s : 2×0.691 m ≈ 248.33 Hz

3. Third resonance frequency (height):

fHeight = 343m/s : 2×0.864 m ≈ 198.65 Hz

Schwingungsmuster der Frequenzen innen und außen des Sarkophags



In practice, the internal dimensions of the sarcophagus are probably crucial for the resonance frequencies, as they determine how the sound waves propagate and reflect within the room.

The calculations show that the external and internal dimensions have different resonance frequencies. This means the sarcophagus can vibrate differently depending on whether the vibration affects the external or internal dimensions.

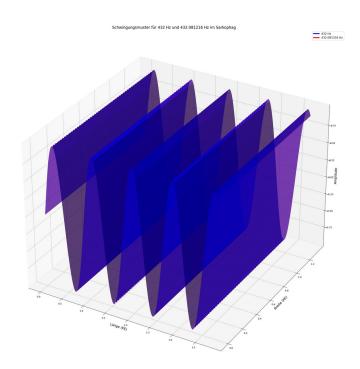
The specific frequencies at which the sarcophagus resonates may have been used to amplify certain acoustic effects. This may have been particularly important in religious or spiritual practice, as they may have been deliberately designed to amplify certain sounds that were considered sacred or

deeply meaningful, evoking a profound emotional response.

Musical interpretation of the dimensions of the sarcophagus with precise temperament tuning

A fascinating approach is the musical representation of the dimensions of the sarcophagus, based on the hypothesis that the architecture and dimensions have a practical and metaphysical meaning. The dimensions of the sarcophagus can be converted into musical frequencies by multiplying the royal cubits by a standard frequency, such as concert pitch A (A4) at **432 Hz**.

The frequency **432.081216 Hz** is based on Robert E. Grant's "Precise Temperament Tuning," a tuning model that integrates both the mathematical purity of Just Intonation and the flexibility of equal tuning. This interdisciplinary approach allows for a comprehensive understanding, which is of great value in both theory and practice.



Grant's work emphasizes the importance of the golden ratio and geometric principles in a musical mood. The frequency 432.081216 Hz represents an adaptation of the frequency 432 Hz, which is often considered harmonious and calming. Converting the dimensions of the sarcophagus into musical frequencies using this exact frequency shows that the architecture could have both practical, metaphysical, and musical significance.

The exact frequency 432.081216 Hz is used to convert the dimensions of the sarcophagus into musical frequencies as follows:

External dimensions:

- 1. Length: 432.081216Hz×4.35 = **1,878.55Hz** (between A#7 and B7)
- 2. Width: 432.081216Hz×1.90 = **820.95Hz** (between G5 and G#5)
- 3. Height: 432.081216Hz×2.00 = 864.16Hz (A5)

Internal dimensions:

- 1. Length: 432.081216Hz×3.78 = **1,633.27Hz** (between G#6 and A6)
- 2. Width: 432.081216Hz×1.32 = **570.35Hz** (C#5)
- 3. Height: 432.081216Hz×1.65 = 712.94Hz (F5)

The resulting frequencies and notes show that the dimensions of the sarcophagus represent a significant and consciously chosen harmony in both their acoustic properties and their musical interpretation.

Listing of the individual calculated frequencies and their possible meanings

The interpretations of frequencies and their effects on the human body, mind, and spirit are often based on a mix of scientific research, holistic health approaches, and traditional practices. Scientific studies can support some of the following effects, while others come more from empirical medicine and alternative healing methods:

49.72Hz:

- **Resonance frequency of body tissues**: Low-frequency vibrations can penetrate deep into body tissues and have potentially healing effects, such as promoting blood circulation and relieving pain.
- **Promote Cell Communication**: This frequency could improve cell communication, improving overall health and healing.
- **Brainwave effects**: Lower frequencies can stimulate theta and delta brainwaves associated with deep sleep and relaxation.

75.23Hz and 75.34Hz:

- **Harmonization of body functions**: These frequencies can help harmonize various body functions and promote balance.
- **Strengthening the immune system**: These frequencies could strengthen the immune system and increase disease resistance.

73.34Hz:

- **Harmonization of body functions**: Similar to 75.23 Hz and 75.34 Hz, this frequency can help harmonize various body functions.
- **Relaxing Effects**: This frequency could have deeply relaxing effects and help reduce stress and anxiety.

172.50Hz:

- Stimulation of cell regeneration: This frequency could promote cell repair and regeneration, essential in healing and growth.
- Effects on the autonomic nervous system: Frequencies in this range could have calming effects and activate the parasympathetic nervous system, leading to relaxation.
- Supporting Digestive Processes: This frequency could have a positive effect on the digestive system by facilitating digestion and relieving gastrointestinal discomfort.

163.89Hz:

- **Harmonization of body functions**: This frequency can help harmonize various body functions and promote balance.
- **Promote blood circulation**: This frequency could promote blood circulation and thus improve the supply of oxygen and nutrients to the body's cells.

86.70Hz:

- **Relaxing Effects**: This low frequency could have deeply relaxing effects and help reduce stress and anxiety.
- **Promote Healing**: Like other low-frequency vibrations, it could support the healing of injuries and inflammation.

248.33Hz:

- **Stimulating waking consciousness**: Higher frequencies can stimulate waking consciousness and cognitive function.
- **Chakra Effects**: This frequency may be associated with specific chakras in the body and influence their energy flow.
- **Improve creativity**: This frequency could promote creative thinking and support artistic activities.

198.65Hz:

- **Activation of brain activity**: Frequencies in this range could promote beta brain waves associated with active concentration and alertness.
 - **Promote well-being**: They could also positively affect general well-being and mood.
- **Mental Performance Support**: This frequency could improve cognitive function and mental acuity.

1,878.55Hz:

- High clarity and focus: This high frequency can promote clarity and focus in the mental state.
- Spirituality: Higher frequencies are often associated with spiritual and meditative states.
- Increase in intuitive abilities: This high frequency could strengthen intuition and make it easier to recognize subtle connections.

820.95Hz:

• **Emotional Stability**: This frequency could help balance emotional highs and lows and create a stable emotional environment.

864.16Hz:

- **Spirituality**: This frequency is often associated with spiritual and meditative states and could facilitate access to higher levels of consciousness and spiritual experiences.
- **Harmonization of body functions**: This frequency can help harmonize various body functions and promote balance in the body.

1,633.27Hz:

- **High clarity and focus**: This high frequency could promote clarity and focus in the mental state, support deeper meditative states, and intensify the meditation experience.
 - Spirituality: Higher frequencies are often associated with spiritual and meditative states.

570.35Hz:

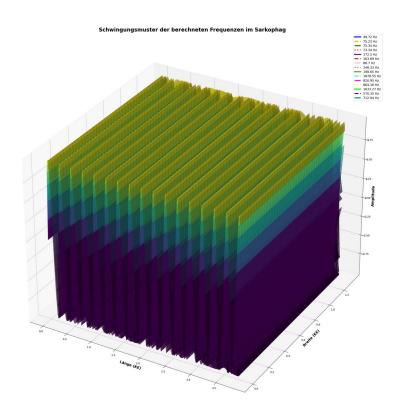
• **Emotional stability**: This frequency could strengthen the ability to better deal with emotional challenges and become more resilient.

712.94Hz:

- **Harmonization of body functions**: This frequency can help harmonize various body functions and promote balance.
- **Spirituality**: This frequency could strengthen connections to inner wisdom and intuitive insights.

The calculated frequencies can be interpreted as a whole in different ways. First, many of these frequencies, particularly in the low to mid-range, exhibit potentially healing and harmonizing effects on the body. They promote cell regeneration, improve blood circulation, and contribute to relaxation, suggesting therapeutic use. Additionally, these frequencies can support emotional stability and mental well-being. They promote clarity and focus and enable a deeper meditative connection, essential for mental and emotional balance.

The higher frequencies are often associated with spiritual and meditative states. This may indicate that the pyramid's designers had a deep understanding of the metaphysical implications of vibrations. Taken together, the frequencies suggest profound meaning, ranging from physical healing to spiritual enlightenment. The conscious use of these frequencies in the pyramid's architecture indicates that the ancient Egyptians had extensive knowledge of harmonic vibrations and their effects on the human body and mind.



Conclusion

The study of the Great Pyramid and the granite sarcophagus in the King's Chamber provides evidence of the conscious use of a "Divine Universal Frequency" by the ancient Egyptians. Our analysis of the geometric and acoustic properties shows that the pyramid's builders had a deep understanding of mathematical proportions and harmonic vibrations. These findings suggest that the pyramid is an engineering masterpiece and an expression of profound metaphysical principles. Historical reports of psychoacoustic effects and spiritual experiences in the King's Chamber support this hypothesis.

Our research suggests that the ancient Egyptians had a profound understanding of the interactions between mathematics, music, and well-being, which may have been used to enhance spiritual experiences and expand consciousness. The precise dimensions of the sarcophagus and the symbolic meanings of the numbers 33 and 27 underscore the importance of these structures as expressions of a harmonious and divine order.

The calculated frequencies suggest profound acoustic effects that could have healing and relaxing effects. For example, frequencies such as 49.72 Hz could penetrate deep into body tissues,

improving cellular communication and stimulating theta and delta brain waves, leading to deep sleep and relaxation. Frequencies such as 75.23 Hz and 75.34 Hz could help harmonize body functions and strengthen the immune system. 73.34 Hz could help reduce stress and anxiety, while 86.70 Hz could support relaxing effects and healing injuries and inflammation.

Frequencies such as 172.50 Hz and 248.33 Hz could stimulate consciousness and cognitive function, with 172.50 Hz supporting cell regeneration and the digestive system. 198.65 Hz could increase brain activity and promote overall well-being, while 1,878.55 Hz could enhance high clarity and focus, spiritual experiences, and intuitive abilities.

Frequencies such as 820.95 Hz and 864.16 Hz promote emotional stability and support spiritual states. 1,633.27 Hz could improve mental clarity and focus and promote deep meditative states. Finally, 570.35 Hz could strengthen emotional resilience, and 712.94 Hz could enhance the connection to inner wisdom and intuitive insights.

The hypothesis of a "Divine Universal Frequency" opens new perspectives on the spiritual and health benefits of harmonious vibrations.

In future research, we would like to decipher the exact nature of this frequency and examine its positive effects on health and consciousness in more detail. It should also be clarified which specific frequencies in ancient buildings could be identified as "Divine Universal Frequency."

BOHN AI Inc. strives to explore these ancient mysteries further. Our analysis could deepen our understanding of ancient Egyptian civilization and open up new avenues for improving human wellbeing. Future research will focus on deciphering the exact nature of the "Divine Universal Frequency" and exploring its possible positive effects on health and consciousness.

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