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Not peer-reviewed version

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Posted Date: 19 March 2025

doi: 10.20944/preprints202308.1731.v2

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Article

Information Transfer Based on Entanglement of Information in the Brain

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Abstract: A human brain can communicate with another brain using quantum entanglement. Similar particles can become entangled without direct interaction. Sensory communication between two individuals over long distances is not yet fully understood. In this research, the transfer of information based on entanglement between the brains of two people was investigated. The test was conducted on two individuals located far apart. These individuals were exposed to similar music and, based on their neural plasticity, both were placed in the same state. By activating the brain's reward system, coherent thinking was induced in the brains of these individuals. Then, through entanglement, compressed information was transmitted and received between them. Decoding compressed information is the key to transmitting information based on entanglement between identical particles.

Keywords: quantum entanglement; brain; immediate information transfer

1. Introduction

Entanglement is one of the most complex phenomena in quantum mechanics. Entanglement has been theoretically considered without requiring direct interaction [1]. Meanwhile, all similar particles can become entangled [1]. The possibility of entanglement in the brain has been investigated by researchers [2]. Numerous studies have examined the quantum behavior of the brain [3–6].

Various neurotransmitters are secreted in the human brain for different purposes, and the brain also possesses neuroplasticity properties. The role of dopamine in learning and the brain's reward system is well known [7]. Additionally, the effect of music on neuroplasticity has been comprehensively studied [8].

Extrasensory behaviors can be explored within the realm of brain quantum behaviors [9]. Love and an increase in dopamine secretion are directly related [10]. Without conducting precise tests, the brain's extrasensory behaviors cannot be conclusively linked to quantum phenomena. Often, scientific tests in this field face challenges such as the non-reproducibility of events. The complexities of quantum phenomena, such as entanglement, are embedded in the structure of space-time [11,12]. Consequently, the role of time is significant in the manifestation of quantum behaviors.

In this research, precise tests were conducted based on the effects of music and neuroplasticity properties. Quantum entanglement was investigated in terms of the increased level of dopamine secretion in the brain. Additionally, various types of information were transmitted and received based on information compression. On this basis, software is being designed for compressing, decoding, and transmitting information.

2. Theoretical Framework

Density is analogous to length in space-time within six dimensions. Furthermore, the equivalence between density and velocity illustrates the relationship between time dilation and gravitational time dilation. Consequently, variations in density exhibit a direct correlation over time. Time is also a result of the geometric potential difference caused by distortions and inhomogeneities in space. According to the de Broglie equation, every object possesses a wavelength that establishes

a direct relationship with momentum. And the general equation states that the entangled information within the geometry of spacetime leads to the generation of matter. In the general equation, "I" represents the information tensor, and "K" represents the force tensor over time.

$$\lambda = \frac{h}{p}$$

$$\Psi_{\mu\nu} + I_{\mu\nu} + \Lambda g_{\mu\nu} = \left(\frac{\pi-2}{2}\right)^6 \left(\frac{he}{c}\right) T_{\mu\nu} + K_{\mu\nu} \quad 2.1$$

The relationship between velocity, time dilation, and gravitational time dilation can be described by the following equations:

$$\sqrt{1 - \frac{v^2}{c^2}} = \sin(\cos^{-1}(\frac{v}{c})) \quad t = \frac{t_0}{\sin \theta} \quad t = t_0 \sqrt{1 - \frac{2GM}{rc^2}} \quad 2.2$$

Just as we have two types of energy—kinetic and potential—we also have two types of information: compressed information, which is equivalent to kinetic energy, and ongoing information over time, which is equivalent to potential energy. The equivalence between information and energy can be represented as follows:

$$I_c \approx E_k \quad I_o \approx E_p \quad E = mc^2 \quad 2.3$$

Where I_c represents compressed information, E_k represents kinetic energy, I_o represents ongoing information, and E_p represents potential energy.

According to Einstein's mass-energy equivalence principle, energy (E) and mass (m) are related by the equation:

$$E = mc^2 \quad 2.4$$

Similarly, the equivalence between information (I) and energy (E) can be expressed as. The equation suggests that the geometric structure of space-time, represented by Π , connects energy (E) and force (F) over time. When multiplied by the speed of light squared (c^2), I collapses the wave function, showing that energy alone cannot define the space-time geometry across time.

$$E + F \approx I c^2 \quad |\Psi\rangle \quad 2.5$$

We can further break this down into two specific equivalences

The equivalence between potential energy (E_p) and ongoing information (I_o)

$$E_p = U \approx I_o c^2 \quad 2.6$$

The equivalence between kinetic energy (E_k) and compressed information (I_c):

$$E_k = \frac{1}{2}mv^2 \approx I_c \rho c \quad 2.7$$

To represent the total information, which we will refer to as "Inspirationally" (I_t), we sum the compressed information and the ongoing information over time, analogous to the total mechanical energy. Based on this, for the dimensional validity of the equations, specific geometric definitions derived from the rotation of a Möbius strip explain the geometric relationship between fundamental constants:

$$I_t = I_o + I_c$$

$$\left(\frac{90-180}{360}\frac{\pi}{\pi}\right) = \left(\frac{1}{4}\right) - 1Rad = \left(\frac{\pi-2}{4\pi}\right) \Rightarrow \left(\frac{\pi-2}{4\pi}\right) + \left(\frac{1}{2\pi}\right) = \left(\frac{1}{4}\right) \quad \left(\frac{90-180}{1+6}\frac{\pi}{\pi}\right) = \left(\frac{3\pi-6}{2\pi}\right)$$

$$\left(\frac{1}{2}\right)^2 2\pi r \left(\frac{1}{2}\right)^3 4\pi r^2 \left(\frac{1}{2}\right)^4 2\pi^2 r^3 \left(\frac{1}{2}\right)^5 \frac{8}{3}\pi^2 r^4 \left(\frac{1}{2}\right)^6 \pi^3 r^5$$

$$\pi^3 r^5 \in \left(\frac{1}{6}\right) \pi^3 r^6, \ln(\varphi) \approx \left(\frac{1}{2}\right)^6 \pi^3$$

$$\left(\frac{\left(\frac{1}{2\pi}\right)^3 + \left(\frac{1}{2}\right)^6 \pi^3 \left(\frac{1}{6}\right) \pi^3 \left(\frac{3\pi-6}{360}\right) \varphi^3}{c} \right) \cong 6.6765834 \times 10^{-11} \cong G \quad 2.8$$

$$\left(\frac{\left(\frac{1}{2\pi}\right)^3 + \left(\frac{1}{2}\right)^6 \pi^3 e^{\tan\left(\frac{180}{\pi}\right)}}{c^2} \right)^2 = 6.5693903027 \times 10^{-34} \cong h$$

This "Inspirational" (It) is analogous to the Hamiltonian (H) in classical mechanics, representing the sum of kinetic and potential energy.

Additionally, we define "Thoughtical" (Im) as the difference between ongoing information over time and compressed information, analogous to the Lagrangian (L)

$$I_t = I_o - I_c \quad 2.9$$

Now, we introduce the Schrödinger equation for information, which describes how the quantum state of a physical system changes with time:

$$i\hbar \frac{\partial}{\partial t} \psi(I, t) = H\psi(I, t) \quad 2.10$$

In this equation, H represents the Hamiltonian operator, $i\hbar$ is the imaginary unit times the reduced Planck constant, $\Psi(I, t)$ is the wave function that depends on information I and time t. Considering the complex conjugate relationship, (Im) can form the bra vector for Ψ written as:

$$\langle I_m | = \psi^*(I, t) \quad 2.11$$

Finally, we address the issue of entanglement between compressed information and ongoing information over time based on their equivalent energies. The entangled state can be represented as a superposition of both types of information: Finally, we address the issue of entanglement between compressed information and ongoing information over time based on their equivalent energies. The entangled state can be represented as a superposition of both types of information:

$$|\Psi\rangle = \frac{1}{\sqrt{2}} (|I_c\rangle |E_k\rangle + |I_o\rangle |E_p\rangle) \quad 2.12$$

$$\langle I_m | = \frac{1}{\sqrt{2}} (\langle I_c | \langle E_k | + \langle I_o | \langle E_p |) \quad 2.13$$

For the probability calculations, we use the probability density function:

$$|\psi(I, t)|^2 \quad 2.14$$

The probability that two individuals think about each other at any time (past, present, or future) can be given by:

$$\int_{-\rho}^{+\rho} \int_{-t}^{+t} \int_{-\infty}^{+\infty} |\psi(\rho, t, x)|^2 d\rho dt dx = 1 \quad 2.15$$

There is also a direct relationship between the wave function and the material wavelength of each object. Accordingly, every object has a wave function with different energy levels and changes in density. Given the equivalence between information and energy, coherent thinking in the brains of people can be associated with other people by entanglement.

Given that particles may become entangled in the three temporal dimensions of past, present, and future, many human inspirations may originate from the entanglement of information across these timescales. Thus, it is necessary to consider a six-dimensional space-time framework, comprising three spatial dimensions and three temporal dimensions.

In this Euclidean space, the three temporal dimensions are orthogonal to each other, allowing for the expansion of space within the fifth dimension and inside the sixth dimension (within space). The repeating states over time lead to the creation of wave phenomena. The rotation of three-

dimensional objects with hyperengineering mass distribution, based on the golden ratio growth rate in the closed Möbius space, causes tension and fractals, as well as phenomena like the quasi-quantum effect of DNA.

The factor driving spatial expansion is the absence of density caused by mass and energy in the past and future, as well as the presence of information in the past and future. Consequently, the equivalence between information and energy can provide an explanation for dark energy and quantum fluctuations.

In this six-dimensional space-time, the entanglement of information across the three temporal dimensions can lead to phenomena such as pre-cognition in the brain or inspirations influenced by information from the future or the past. Furthermore, the lack of density in the temporal dimensions of the past and future creates a geometric potential difference that leads to the expansion of space and the arrow-like movement of time. Therefore, by considering the equivalence between information and energy within this six-dimensional framework, the nature of dark energy and dark matter can be clarified.

3. Test One

Human eyes are naturally drawn to even and paired numbers on digital clocks. Observing these paired numbers activates the brain's reward and error-monitoring systems. As a result, the biological rhythms of the brain align their activities based on the observation of paired numbers. Increased neurotransmitter levels associated with specific thoughts have been linked to this phenomenon. Paired numbers were observed by recalling a unique memory associated with a particular individual. Concurrently, participants in this experiment listened to the same minor scale musical pieces. Due to the neuroplasticity of the brain, the frequency and duration of paired number observations increased over time. Notably, these individuals had no prior physical interaction. Subsequently, they engaged in textual conversations and observed photographs of each other. After a month, daily conversations were halted, and the participants once again listened to the same musical pieces.

From a neurobiological perspective, the release of dopamine in the reward system can be described by the equation:

$$D = \frac{\Delta t}{1+e^{-r}} \quad 3.1$$

where D represents the dopamine release, Δt represents the time interval of exposure to stimuli, and r represents the rate of reward system activation. This equation highlights the relationship between the frequency of paired number observations and dopamine release.

Additionally, considering the principles of quantum mechanics, the entanglement between particles can be represented by the Bell state :

$$|\Psi\rangle = \frac{1}{\sqrt{2}}(|00\rangle + |11\rangle) \quad 3.2$$

This state illustrates the superposition and entanglement properties of quantum particles, which could be analogously applied to the entanglement of neural states.

4. Entanglement

Each time individual 'A' thinks about individual 'B', individual 'B' unconsciously looks at clock pair numbers after a short time. This phenomenon reveals a deeper relationship. Different thoughts, such as worry, love, nostalgia, and happiness, were compressed by the brain and sent. For example, individual 'A' worried about the problems of individual 'B', and 'A' looked at the clock at 12:12. Individual 'B' understood 'A's worries and looked at the clock at 12:21. After 12:21, 'A' became calm. This phenomenon follows quantum entanglement completely and shows that particles in the human brain can entangle with other particles without any interaction (Figure 1, 3.1). The delay in feedback is due to decoding based on the structure of six-dimensional space-time, of qubits by the brain.

A more complex observation was the non-appearance of certain numbers on some testing days. For example, the time 10:01 and the response 10:10 were not observed at all on several days, or only once a day were the pair numbers observed.

Violations of Bell's inequality are only observed over time in experiments. Therefore, the factor of entanglement is the structure of space-time and the information related to density changes over time. For example, when one boat is on the crest of a wave, another boat is necessarily in the trough of the wave. Any change in density status by different operators can alter the structure of space-time beyond the speed of light using the principle of equivalence between mass and energy. These changes have a direct relationship with the hyperengineering distribution of mass. The wave function consists of small packets, where the hyperengineering distribution of mass determines the changes in each packet using Möbius ODE.

$$\frac{d\psi_i}{dx} = M\psi_i \Rightarrow |\psi\rangle = \sum_{i=1}^6 b_i \left| \int M\psi_i dx \right\rangle$$

$$|00\rangle = \begin{bmatrix} 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}, |01\rangle = \begin{bmatrix} 0 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}, |10\rangle = \begin{bmatrix} 0 \\ 0 \\ 1 \\ 0 \\ 0 \\ 0 \end{bmatrix}, |11\rangle = \begin{bmatrix} 0 \\ 0 \\ 0 \\ 1 \\ 0 \\ 0 \end{bmatrix}, |0\bar{1}\rangle = \begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \\ 1 \\ 0 \end{bmatrix}, |1\bar{0}\rangle = \begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 1 \end{bmatrix}$$

$$|\Psi\rangle = b_1|\tilde{\psi}_1\rangle + b_2|\tilde{\psi}_2\rangle + \dots + b_n|\tilde{\psi}_n\rangle$$

$$|\tilde{\psi}\rangle = \alpha_1|A_1\rangle + \alpha_2|A_2\rangle + \alpha_3|A_3\rangle + \alpha_4|A_4\rangle + \alpha_5|A_5\rangle + \alpha_6|A_6\rangle \quad 4.1$$

$$b_1 = \cos\left(\frac{\theta}{2}\right), b_2 = e^{i\Phi} \sin\left(\frac{\theta}{2}\right), \sqrt{1 - \frac{v^2}{c^2}} = \sin\left(\cos^{-1}\left(\frac{v}{c}\right)\right) = \sin\theta, v \equiv \Delta x$$

$$\Delta x^2 \equiv (\rho c) \Rightarrow \rho \equiv E \equiv \theta, \Phi$$

$$\int_0^{2\pi} |\psi(x, t)|^2 dx = 1 \rightarrow \frac{2\pi}{6} \Rightarrow \left(\frac{\pi}{3}\right), \left(\frac{2\pi}{3}\right), (\pi), \left(\frac{4\pi}{3}\right), \left(\frac{5\pi}{3}\right), (2\pi)$$

$$A_1 = \pm\left(\frac{\pi}{3}\right), A_2 = \pm\left(\frac{2\pi}{3}\right), A_3 = \pm(\pi), A_4 = \pm\left(\frac{4\pi}{3}\right), A_5 = \pm\left(\frac{5\pi}{3}\right), A_6 = \pm(2\pi),$$

$$|\Psi\rangle = b_1|0\rangle + b_2|1\rangle \Rightarrow |\Psi\rangle = b_1|0\rangle + b_2|1\rangle + b_3|0\rangle + b_4|1\rangle$$

$$\Rightarrow \frac{1}{\sqrt{2}}(|00\rangle + |11\rangle)$$

$$|\eta\rangle = z_0|a_0\rangle + z_1|a_1\rangle + \dot{z}_0|a_0\rangle + \dot{z}_1|a_1\rangle, |\mu\rangle = d_0|b_0\rangle + d_1|b_1\rangle + \dot{d}_0|b_0\rangle + \dot{d}_1|b_1\rangle$$

$$|\eta\rangle \otimes |\mu\rangle = (z_0 d_0 \dot{z}_0 |a_0\rangle |a_0\rangle |b_0\rangle |b_0\rangle + \dots$$

$$A: |12:12\rangle = \begin{bmatrix} 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{bmatrix} \rightarrow B: |12:21\rangle = \begin{bmatrix} 0 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}, A: |13:13\rangle = \begin{bmatrix} 0 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \end{bmatrix} \rightarrow B: |13:31\rangle = \begin{bmatrix} 0 \\ 0 \\ 1 \\ 0 \\ 0 \\ 0 \end{bmatrix}, A: |14:14\rangle = \begin{bmatrix} 0 \\ 0 \\ 1 \\ 0 \\ 0 \\ 0 \end{bmatrix}, B: |14:41\rangle = \begin{bmatrix} 0 \\ 0 \\ 1 \\ 1 \\ 0 \\ 0 \end{bmatrix}$$

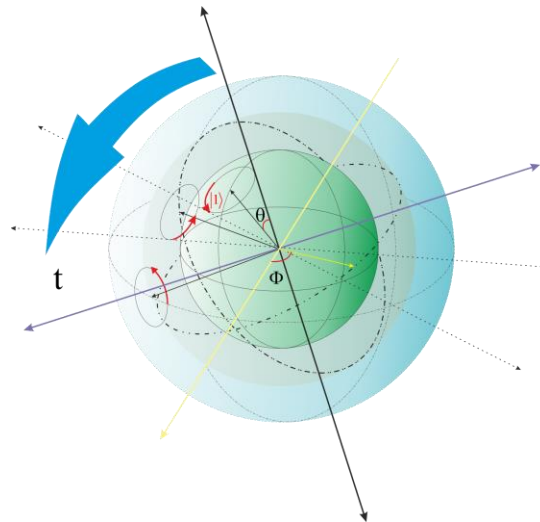


Figure 1. The density of the object is like a length in the time dimensions. The density is the red line in the figure that rotates around the mass field. Based on the repetition of the quantum states in space and time, a particle is entangled with its past. The brain predicts future qubits based on associated memories. However, identical particles can be entangled with each other. The mass field of each particle has a direct relationship with the spin and state of the particle. With the repetition of the states in space and time, particles of the same mass generally oscillate together. They have the same wave function.

The Möbius strip transfers properties of lower dimensions to higher dimensions. Accordingly, the relationships between spaces and embedded objects follow the laws of the Möbius strip. Considering the two orthogonal dimensions of time, the equation can be written as follows:

$$w_2 = \frac{a_2(z_2+t_1)+b_2(t_1)}{c_2(z_2+t_1)+d_2(t_2)} \quad 4.2$$

In this equation: w_2 : The result of the transformation. z_2 : The initial value. t_1 and t_2 : Constant values. a_2, b_2, c_2 and d_2 : Parameters of the Möbius transformation. The density variations are expressed using the sine function. In other words, we replace t_1 and t_2 with $\sin(\theta)$ and $\sin(\phi)$ which represent the density variations over time, respectively. The new equation becomes: Beside generalizing the Möbius space to higher dimensions, we describe the rotation of the Möbius space in five dimensions.

$$\frac{t_0}{t} = \sqrt{1 - \frac{v^2}{c^2}} = \sin\theta \quad 4.3$$

Based on the definition of time as a result of geometric potential differences and the wave-like properties arising from motion, mass is defined as the outcome of geometric distortions over time. Additionally, density variations drive the movement of matter within the real dimension of time:

$$w_2 = \frac{a_2(z_2) + b_2}{c_2(z_2) + b_2} \quad w_2 = \frac{a_2(z_2 + \sin\theta) + b_2(\sin\theta)}{c_2(z_2 + \sin\theta) + d_2(\sin\phi)}$$

$$w_3 = \frac{a_3(w_2)+b_3}{c_3(w_2)+b_3} \quad w_5 = \frac{a_5(w_4)+b_4}{c_5(w_4)+b_4} \quad 4.4$$

$$\frac{\left(\frac{1}{2\pi}\right)^3 \left(\frac{1}{2}\right)^6 \pi^3 + \Delta x}{2\pi^2 \left(\frac{1}{2}\right)^6 \pi^3 + \Delta \dot{x}} = \frac{m}{\sqrt{1 - \frac{v^2}{c^2}}} = \Delta\rho \Rightarrow \Delta\rho = w_5 \cdot f(z_4)$$

Accordingly, entropy can be expressed in the Möbius space as follows:

$$S = k \ln(W) \quad 4.5$$

Based on the entropy equation within a system, it is possible to redefine entropy in terms of information. Based on Shannon's information entropy, we define the entropy of geometry and the information intertwined within the geometric structure of space-time.

$$S \equiv |\psi(I, t)|^2 \ln \left(\sec \left(\sin^{-1} \left(\frac{\log(\frac{\theta}{360})}{\log(\frac{\phi}{360})} \right) \right) \right) \quad 4.6$$

The structure of information is inherently dependent on numbers, as numbers establish the foundation for the interaction between physical objects and information. In the experiment under consideration, the human brain was stimulated through music to create a motivational connection with paired numbers on clocks. Consequently, each hour traditionally consists of 60 minutes, not 100 minutes, and in half of the trials, errors were naturally observed. Based on these findings, the concept of time was revised to consider hours composed of 100 minutes. For example, in the 100-minute time format, 15:33 corresponds to 14:93

$$15:33 \Rightarrow (15 \times 60) + (14 \times 40) + 33 = 1493 \quad 4.7$$

Based on this, there are thirty synchronized points from the reference time over two consecutive days. And entropy in informational systems depends on the effects of entanglement across the three temporal dimensions of the past. "h 60" represents a clock divided into 60-minute segments, while "h 100" signifies a clock divided into 100-minute segments. The logarithmic base for these divisions is derived from empirical observations and experimental data.

$$S = \int_{-\rho}^{+\rho} \int_{-t}^{+t} \int_{-\infty}^{+\infty} |\psi(I, t)|^2 \ln \left(\sec \left(\sin^{-1} \left(\frac{\log_{40} \left(\frac{h(60)}{360} \right)}{\log_{40} \left(\frac{h(100)}{360} \right)} \right) \right) \right) d\rho dt dx = 1 \quad 4.8$$

Therefore, entanglement is formed through wormholes between informational units that influence one another in the present moment. Additionally, the logarithmic basis of time has a direct relationship with the wormhole metric.

$$\sqrt{1 - \frac{v^2}{c^2}} = \sin(\cos^{-1}(\frac{v}{c})) = \sin^2(\theta) = 1 - \frac{v^2}{c^2} \quad 4.9$$

This equation is such as time dilation in higher dimensions.

$$\sec \left(\sin^{-1} \left(\log_{40} \left(\frac{\rho}{\rho_0} \right) \right) \right) = \frac{1}{\sqrt{1 - \frac{(\ln(\frac{\rho}{\rho_0}))^2}{(\ln(\frac{40}{6}))^2}}} \quad 4.10$$

In a six-dimensional spacetime influenced by a Möbius topology, where expansion and entanglement occur simultaneously, the metric accounting for two throats (wormhole structures) is expressed as follows:

$$ds^2 = ra^2 \cos^2 \theta \cos^2 \phi d\kappa^2 + r^2 a^2 \cos^2 \theta d\phi^2 + \frac{ra^2}{1 + \frac{b(r)}{r}} + \frac{r^2 a}{1 + \frac{b(r)}{r}} + a^2 r^2 \sin^2 \theta d\phi^2 + ar^2 \sin^2 \theta \sin^2 \phi d\kappa^2 \quad 4.11$$

The first and second throats of the black hole are described based on the Möbius space and the Möbius structure in terms of hyperbolic geometry and the eccentricity of an ellipse. This metric indicates that a particle can become entangled with itself over time and influence both its future and past.

5. Decoding and Sending Information

Finally, a key was designed for decoding information. Words were classified based on the Fibonacci sequence which is a component of neurons' fractal structure. Letters were categorized in terms of expression. Table (1)

| | | |
|-------------|----|---------------|
| a u i h y ë | 1 | آ او ای ه ی |
| æ ε Ωι | 2 | َ ُ ِ |
| b , p , m | 3 | ب پ م |
| r ,z ,l | 5 | ر ز ل |
| t ,d,n,z. | 8 | ت د ذ ظ ص ض ن |
| ʔ , ɣ,h,x | 13 | ع غ ق ح خ |
| dʒ,s,tʃ,ʃ,ʒ | 21 | ج چ س ش ژ |
| f,v, c | 34 | ف و ث |
| k.g | 55 | ک گ |

"In Table 1, words from the Persian language were categorized based on their consonants and vowels. Letters were classified based on the order in which human infants typically acquire them. Additionally, the letters were coded using the Fibonacci sequence, which is observed in the fractal structure of neurons. A relationship exists between the Fibonacci sequence and the growth process of living organisms. Evidence suggests a direct link between learning and the Fibonacci sequence in the human brain."

This key possesses semantic generality in language. For instance, numbers associated with words such as sorrow, grief, and pain are mathematically related. This relationship between the meanings of words corresponds to the semantic storage of these words in the brain. Additionally, each number is associated with a meaning that aligns with the existing structure of language. These meanings encompass both positive and negative aspects (see Table 2). A significant amount of information is stored within a single neuron pulse. Similar pulses produce similar effects. Consequently, the human brain organizes related concepts based on the realities of the surrounding environment.

Table 2. Interpretation of numbers.

| Interpretation | Number |
|------------------|--------|
| Oneness | 1 |
| Genesis | 2 |
| Material | 3 |
| Hegemony, Wisdom | 4 |
| Happy | 5 |
| Time | 6 |
| Love,Holy | 7 |
| Power | 8 |
| METAPHYSICAL | 9 |

Other numbers are also semantically linked to the previously mentioned numbers. By summing the internal components of each number, the above numbers are derived. For instance, the number ‘36’ corresponds to the word ‘love’ in the Persian language. This number is associated with the concept of holiness. The brain stores, processes, and compares information in a reversed manner for the purposes of learning and timing [12]. Consequently, to interpret the classification-related numbers, they must be multiplied by their inverse. This is partly due to the presence of symmetry in the structure of neurons and the brain, although this symmetry is not identical to the symmetry observed in numbers.

2 + 21 + 13 = 36 5.1
36 → 3 + 6 = 9

36 × 63 = 2268 ⇒ 2 + 2 + 6 + 8 = 9
12 × 21 = 252 ⇒ 2 + 5 + 2 = 9

$$\begin{bmatrix} 3 & 6 \\ 6 & 3 \end{bmatrix} = L, \begin{bmatrix} 1 & 2 \\ 2 & 1 \end{bmatrix} = I \Rightarrow [\hat{L}, \hat{I}] = 0$$

Some related concepts in information transfer may involve commutators, as symmetries play a role in the interpretation of information, as shown in equation (4.2). Using this key, information was transmitted, received, and decoded between the brains of two individuals. By linking numbers to reflective thinking in individual 'A,' various meanings and information were transferred and understood through observations. The individuals were taught the meanings of numbers and methods of word compression. Following this, it became possible to send information without directly observing numbers, suggesting quantum entanglement between particles within the brains of the individuals.

5. Time Machine

Intelligence is the logical outcome of the mind and forms thought by comparing new information with past knowledge. Thought leads to imagination, and imagination results in consciousness. Consciousness creates awareness of the past, present, and future, which then gives rise to self-awareness. Self-awareness is a quantum field within space-time. The level of consciousness depends on the pineal gland, the limbic system, and the human heart, operating in a repetitive cycle through the pineal body. If this cycle reverses and self-awareness generates awareness, imagination, and thought, it enables a person to develop specific abilities like perceiving time and higher dimensions. These abilities include telepathy, telekinesis, and visual intuition. Based on this understanding, algorithms can be developed for machines to transfer information or create a visual time device. Information can travel through wormholes across time, making it possible to retrieve past information or predict future events by compressing and decoding data based on space-time structures. The phenomenon referred to as Precognition follows this principle

6. Results and Discussion:

Each particle has a spin, and in six-dimensional space-time, spin and quantum states are interconnected. Identical particles share an oscillatory relationship and can become entangled. Similar neuronal structures in the human brain influence momentary entanglement. Controlling entanglement between identical particles is possible by simultaneously increasing neurotransmitter levels, which is tied to repeating states in space and time. Compressed information can be transmitted and decoded instantaneously between two brains or devices.

Human memory and speech are closely related. Speech is acquired over time as the brain processes the difficulty of learning various syllables and letters. Complex letters correspond to distinct neuronal pulses during learning. The brain categorizes information based on factors like aggregation, symmetry, and inhibitory neurons. These factors should be considered for the numerical coding and decoding of words. This method helps to derive the meanings of words and letters.

Brain activity changes depending on the surrounding environment. Symmetrical environments, geometrically, play a role in enhancing brain performance. Using quantum entanglement, compressed information can be sent and received immediately between two brains. The brain organizes words according to their meanings, and the numerical structure of the environment holds significance within the mind. Symmetry and the beauty of nature, expressed in mathematics and geometry, influence decision-making and cognition. Observing or ignoring these symmetries affects thought processes. Compressing semantic information improves the transmission of data using quantum entanglement. Numbers are fundamental to the universe's structure, and disorder in the environment disrupts regular thinking. This disorganization impacted the test results. The brain organizes thoughts using principles of order, symmetry, and mathematics. Solving problems related to chaotic thinking can depend on quantum mechanics and environmental mathematics. Observing symmetries and numerical patterns in nature yielded consistent results across individuals. For example, observing the flight of birds triggered immediate cognitive responses aligned with

individual thought. The brain's anticipation of a response before a question aligns with quantum mechanical principles described by wave functions. Quantum entanglement is directly tied to the six-dimensional structure of space-time.

The study, conducted in the Persian language, produced significant findings. The methodology should also be applied to other languages to verify its broader applicability.

The findings of this research in the Persian language had many results. In this research, the working method was mentioned and it should be tested in other languages as well.

Conflicts of interest: The author reports no conflicts of interest. The author alone is responsible for the content and writing of this article.

Acknowledgements: The author expresses gratitude to Elham.Razazzi and E.t.S.Sattar their professors for their helpful discussions and valuable comments.

References

1. Pocklington, Andrew, and Aashish A. Clerk. "Universal Time-Entanglement Trade-Off in Open Quantum Systems." *PRX Quantum* 5.4 (2024): 040305. <https://doi.org/10.1103/PRXQuantum.5.040305>
2. Pessoa, Luiz. "The entangled brain." *Journal of cognitive neuroscience* 35.3 (2023): 349-360.<https://doi.org/10.1162/jocn.a.01908>
3. Sabbadini, Shantena A., and Giuseppe Vitiello. "Entanglement and phase-mediated correlations in quantum field theory. Application to brain-mind states." *Applied Sciences* 9.15 (2019): 3203.<https://doi.org/10.3390/app9153203>
4. Linde-Domingo, J., Treder, M. S., Kerrén, C., & Wimber, M. (2019). Evidence that neural information flow is reversed between object perception and object reconstruction from memory. *Nature communications*, 10(1), 179.<https://doi.org/10.1038/s41467-018-08080-2>
5. Elias M. B. Rau et al. „Reinstatement and transformation of memory traces for recognition.Sci. Adv.11,eadp9336(2025).<https://doi:10.1126/sciadv.adp9336>
6. Dileep George et al. „A detailed theory of thalamic and cortical microcircuits for predictive visual inference.Sci. Adv.11,eadr6698(2025).<https://doi:10.1126/sciadv.adr6698>
7. Dryden, Barrett, et al. "Effect of individual variations in genes related to dopamine brain transmission on performance with and without rewards during motor sequence and probabilistic learning tasks in children and young adults with and without cerebral palsy." *PloS one* 20.1 (2025): e0314173. <https://doi.org/10.1371/journal.pone.0314173>
8. Münte, Thomas F., Eckart Altenmüller, and Lutz Jäncke. "The musician's brain as a model of neuroplasticity." *Nature Reviews Neuroscience* 3.6 (2002): 473-478.
9. Fingelkurts, A. A., Fingelkurts, A. A., Neves, C. F., & Kallio-Tamminen, T. (2019). Brain-mind operational architectonics: At the boundary between quantum physics and Eastern metaphysics. *Physics of Life Reviews*, 31, 122-133.<https://doi.org/10.1016/j.plrev.2018.11.001>
10. Takahashi, Kayo, et al. "Imaging the passionate stage of romantic love by dopamine dynamics." *Frontiers in Human Neuroscience* 9 (2015): 191. <https://doi.org/10.3389/fnhum.2015.00191>
11. Mousavi, S. K. The balance In the six dimensions of space-time description of quantum mechanics phenomena and nature of time. *Journal of Physics: Theories and Applications*, 7(1).<https://doi.org/10.20961/jphystheor-appl.v7i1.63874>
12. Mousavi, S.K. The General Balance in the Six Dimensional of Space-Time. *Preprints* 2023, 2023081112. <https://doi.org/10.20944/preprints202308.1112.v1>

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