

Absolute Reality - a manifestation of the holographic principle of Sankhya.

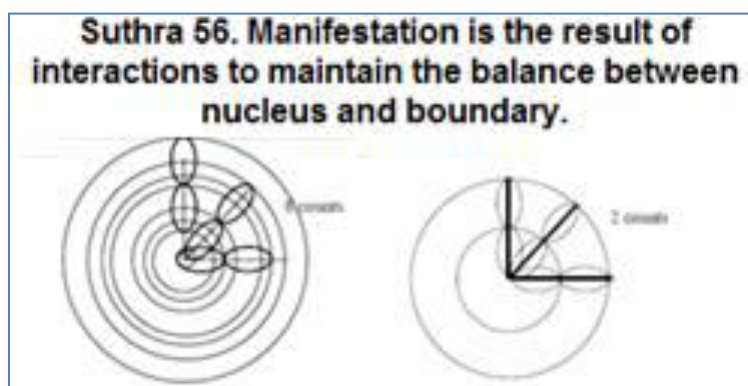
The motive for this text was my thoughts on esoteric interpretations of higher forms of existence described as Lokas, Heavens or Planes [1] where the ideas about the fundamental concepts of physics: space, time, energy..., are completely changed so that "there" instantaneous travel is possible along and across our Blue Planet, even to other galaxies, to "higher" and "lower" worlds and also through the centuries - forward or backward ...

Thoughts like this necessarily imposes the completely indisputable fact that e.g. "Yuga" cycles¹ that manifest "here" sequentially - as time intervals of a certain "duration" and corresponding "qualities" that periodically alternate (e.g. Kali Yuga, Dvapara Yuga, Treta Yuga, Satya Yuga) - "there" MUST BE simultaneous !!!

Thus, the basic principle and structural mechanism of Sankhya became the "key" for establishing deeper correlations between the phenomena of the material and the phenomena of the spiritual world - that is, the connection of science and spirituality.

Specifically, in this paper, we will point out - through universal symmetry as an elementary property of the holographic structure of Absolute Reality - the direct connection of electromagnetism as the best researched and measurable scientific phenomenon - with the metaphysical concepts of Vedic teachings.

Namely, according to the axiomatic principles of Sankhya [2] ALL processes, at ALL levels of existence, are the result of volumetric (3D) vibrations of the primordial substrate in the breathing mode (compression / expansion) and take place according to identical principles of the creation of three-dimensional stationary waves and their arrangement along the axes.



According to this extremely simple principle, on the basis of elementary mathematics, the values of all physical constants of modern physics have been defined, from Planck's constant, the speed of light, the impedance of free space,..., the gravitational constant - where not only their quantitative values are defined very precisely and accurately, but also the structural mechanism as the root cause and basis of these values. According to the same principle, the parameters of all objects of the macrocosm (planets, galaxies...) including the diameter and mass of the Universe,

as well as the microcosm (parameters of ALL elementary particles from protons to photons) but also the phenomena of higher forms of existence such as "Mulaprakriti" e.g. (primordial matter from which everything arises).

1. Basics of Samkhya Theory

Samkhya is one of the oldest philosophical systems of ancient India based on the Vedas, whose age is estimated at about 33,000 years. It was transmitted orally and written down in Sanskrit only some 3-5 thousand years ago. Combining science and religion, it encompasses two opposing concepts: materiality and spirituality, and its basic principles shape the understanding of the world, mind, and existence.

Samkhya is a unique field theory based on an eternal, harmonic, oscillatory state (Perpetual Harmonic Oscillator – in the Original: PHO – Perpetual Harmonic Oscillator [2]) that forms the dynamic basis for all events, manifested and unmanifested phenomena of Absolute Reality.

According to the concept of the brilliant Maharishi Kapila, a true intellectual colossus of the preglacial era - when in some coherent system two or more related parameters change simultaneously, then only one relationship (proportion) should characterize all modes of operation. Such a variable should be of invariable proportions, self-similar, and have an axiomatic relationship to the whole.

¹ Yuga cycle, https://en.wikipedia.org/wiki/Yuga_cycle

Kapila showed that expansive, compressive, and resonant states can be expressed by a single law, that is, that one variable describes the proportionality of all three types of force acting simultaneously. Mathematical analysis of the ratio of cyclical periods by triangulation provides a solution: this ratio must have the value of the golden mean (golden section).

Maharishi Kapila's crucial theorem expressed mathematically is very simple: $1 + x = 1 / x$, where x is the golden section, "little phi" = 0.618..., but its significance and importance for understanding the structure of the world in which we live - it is impossible to overemphasize. As an illustration - from the text that follows, we quote the following:

*The electromagnetic wave can be seen as a **physical reflection of what Sankhya describes metaphysically** – the relationship between **Prakriti** and **Purusha** expressed through **sequential** and **simultaneous**, **part** and **whole**, **flow** and **testimony**. Just as in the formula " $1 + x = 1 / x$ " part and whole are "mirrored" through the golden ratio, so **electricity and magnetism are inseparable** – one is a temporal-sequential aspect, and the other spatially - simultaneous !!!*

If we develop this structural matrix further – we can also connect it with wave-particle dualism in quantum physics where dualism is never "either-or", but simultaneous complementarity.

In this sense – just as $1 + x = 1 / x$ gives a harmonious balance (x = a little ϕ , golden ratio), so wave and particle exist as two aspects of one reality which irresistibly associates with Sankhya: Purusha and Prakriti are different, but inseparable – just like wave and particle

2. The Quantum Energy Density Model (QEDM) - summary

The QED Model [3,4] describes how the energy of a system is distributed in discrete, quantum values, and not as a continuous range. This means that any "Stable" system ("resonant" in the space-time-energy sense) cannot have any value of energy density, but only certain, "allowed" values – quantum levels (k) and not any arbitrary value. In other words, instead of being anything, this value is limited to certain, countable levels ("quantum levels" k), "like stairs" instead of a "sloping roof". So in the form of a stable object (in space and time) can exist permanently ("long enough") only those phenomena that form a harmonic series of discrete values of energy density, i.e. the ratio of mass (energy) and radius (actually the part of space) that this energy fills) or corresponding frequencies (wavelengths) – based on the Louis de Broglie relation.

The concept of quantization is key in modern (quantum) physics for understanding the behavior of atoms, molecules and other microscopic systems, but my (QEDM) generalization has shown it to be universal and completely identical for all forms of existence at all levels from the Multiverse (the lowest level of consciousness) – to the Supreme Spiritual Absolute (the highest level of consciousness) [5].

Key elements of the model:

Quantization: Energy is not continuous, but is divided into small, indivisible units – quanta.

Energy levels: Each system (in the terminology of the Model: "Stable object", of the quantization order " k ") can exist only at certain levels of energy density (" k ").

An identical mechanism redefines the structure of Absolute Reality at all levels both in the material (macro/micro; wave-particle) and in the spiritual aspect of reality.

In short, the QED model helps us to understand that energy at the microscopic level is "packaged", and not continuous (in fact, "boundaries" are formed by the collision of dimensional scales ...), which is fundamental for understanding the structure of matter and interactions, but the identical mechanism of "quantization" applies to all levels of existence - and even to "space-time-inverse phenomena (soul, spirit ...).

Namely, a large number of thinkers of the ancient world, but also many of our contemporaries, believed that the space-time structure has a spiral form, i.e. a structure similar to that of DNA molecules and such as, for example, the "Fractal super-symmetry of a two, four-dimensional, toroidal, spiral" by Daniel Srsa [6].

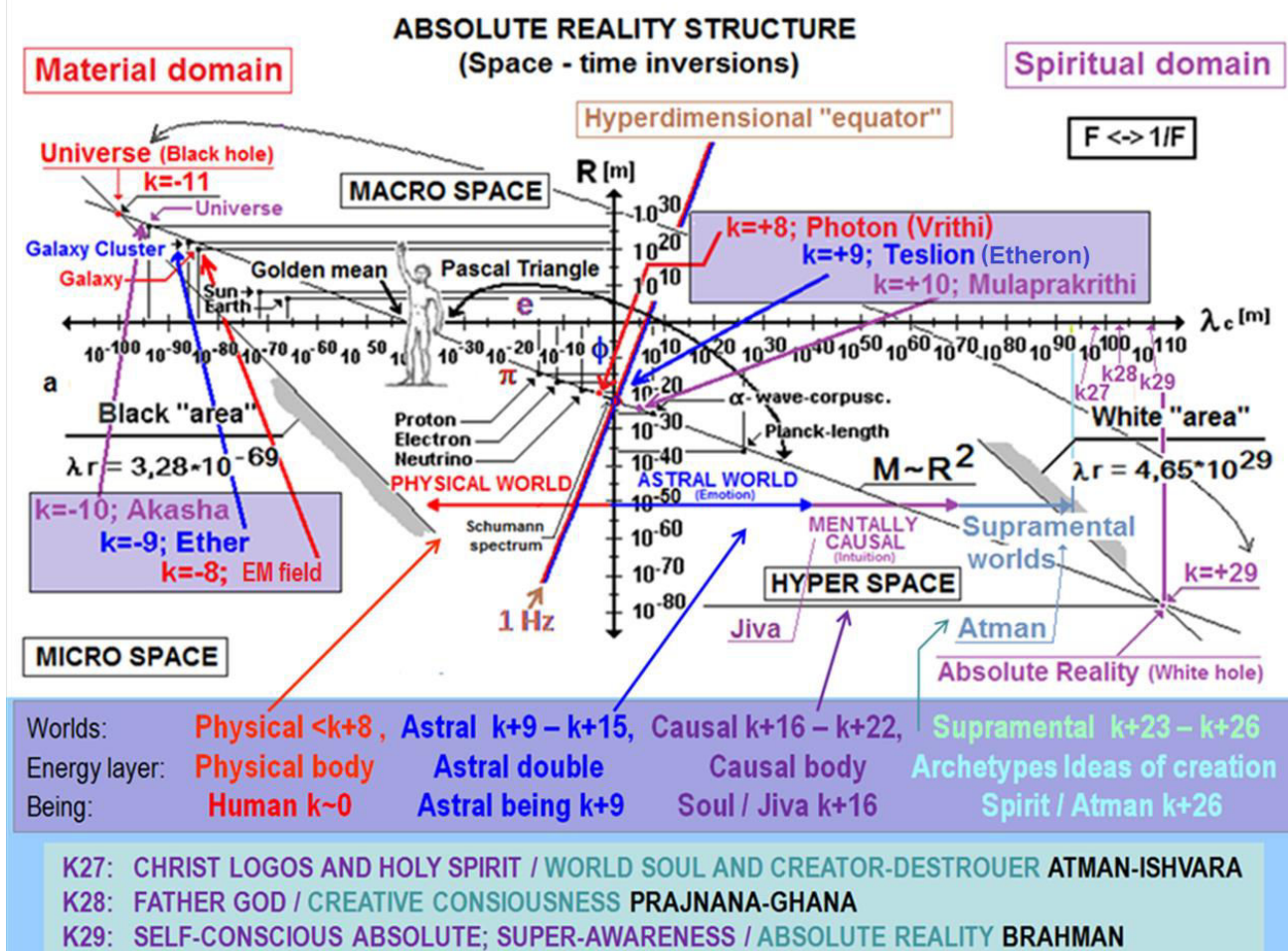
In the QED model, "time" is the inverse-opposite structure of "space", which automatically implies that "time" also has three dimensions as explained in [6], where - according to the interpretations of P.D. Ouspensky and G.I. Gurdjieff [7,8] - "existence" the first dimension of "time", classical time, movement from "before" to "after"; the second dimension is "existence in the eternal present of the moment" - movement from one available possibility to another and the third: "Duration of eternity" - transition to the next eternity of the moment, i.e. development of the higher and more perfect from the lower.

The basic postulate of quantum theory is Heisenberg's uncertainty principle which states that greater spatial uncertainty implies greater speed certainty (impulse-velocity) and the same relation applies to the energy-time pair. According to our model, "space" and "time" are inverse-opposite structures and for them must apply a completely analogous but "higher" form of Heisenberg's principle according to which the uncertainty of space in the atom corresponds to the uncertainty of time in the universe (of course the reverse is also true). A slightly different interpretation of the same relation can be expressed in such a way that a completely certain space of the universe corresponds to a completely certain time of the atom, i.e. – perfect symmetry in time implies complete chaos in space (and vice versa). In the same way, a certain time of atoms corresponds to the completely indefinite time of the universe, etc.

Although these relations may not be very clear to us - at first "glance" - our real world confirms them completely. Here is the explanation.

An atom (according to Bohr's model) is an object that consists of a nucleus composed of a certain number of protons and neutrons, around which electrons orbit at certain distances from the nucleus (the so-called electron shells). Moreover, they are not in the form of a particle orbiting the nucleus, whose position and speed are precisely determined at each point, as is usually imagined (and taught in school), but are somehow "smeared" over a wide area of their possible "positions". It can be said that at any moment (in some way) they are simultaneously located in all points of the corresponding area. In other words, the (electron) space in the atom is completely indefinite (uncertain) at any moment, so we can say that the atom (and the microcosm in general, i.e. the area of the III quadrant in our diagram) is part of the hyperspherical structure of space/time in which one moment (of the atom) corresponds to many (electronic) spaces (shells k, l, m, n) or – time is a simultaneous phenomenon and space is sequential. In the simplest terms, space is quantized in time.

In the macrocosm (the II quadrant of our diagram) it is quite the opposite. For example, the entire space of a galaxy cluster corresponds to any arbitrarily chosen area with a series of moments (growth and development of galaxies, for example), i.e. in the macrocosm, space is definite (determined) and time is completely uncertain, i.e. – one space (the area of a galaxy cluster, for example) corresponds to many times (moments) – so space is continuous and time is sequential, i.e. time is quantized in space.



According to Daniel Srsa: **"All the time of the Universe is contained in the atomic now"**. The previous sentence is not easy to understand, but several examples given in the next section can help us understand space-time equilibria.

3. COSMIC {multidimensional} PENDULUM

In the simplest terms – EVERYTHING that exists as a spatial phenomenon expressed in meters has its time equivalent expressed in seconds (and vice versa). We will illustrate this unusual but completely indisputable fact with several examples that confirm that reality is dual, where it is always made up of two opposing semi-realities and our thesis that space and time are equivalent opposites, i.e. two quantitatively equivalent but qualitatively inverse entities:

3.1. Earth is the object with the most harmonious space-time-matter relations, the greatest coherence, that is, it is the most "resonant" element of the solar system because it is the only planet in the system where the revolution time multiplied by the gravitational acceleration has a value equal to the speed of light.

$$T_{z,rev} * g = c [360 * 86400 * 9.8 = 3*10^8 \text{ m/s}]$$

3.2. The basic time quantum (1/4 orbital diameter) of 5184 years is: $5184 * 360 * 86400 = 1.61*10^{11}$ sec.

Basic spatial quantum, the radius of movement of the Earth around the Sun: $R_{z-s} = 1.49*10^{11}$ m.

3.3. Earth revolution time: $T_{z.rev} = 360 * 86400 = 3.1*10^7$ sec;

Circumference of the Earth (length of the equator), $O_z = 2*R_z*Pi = 4*10^7$ m.

3.4. Moon revolution time: $T_{m.rev} = 28.3 * 86400 = 2.45*10^6$ sec.

Time of rotation of the Sun [mean] around its axis, $T_{s.rot} = 28 \text{ days} = 2.4*10^6$ sec.

Circumference of the Moon: $O_m = 2*R_m*Pi = 10.8*10^6$ m

3.5. The diameter of the Moon is about 400 times smaller than the diameter of the Sun. by some wonderful miracle, the Moon is also about as many times closer to the Earth than to the Sun. This is why - seen from Earth - the apparent diameters of the Sun and the Moon almost match in size. These relations also give a number of extremely important (apparently quite non-accidental) occult values: $86400 / 400 = 216 (= 6*6*6)$; $400 - 40 = 360$; $360 * 1.111. = 400...$

4. The philosophy of Sankhya and the structure of Absolute Reality

In Srinivansan's interpretation of Sāṅkhya [2], mathematics serves as an analogy for the dynamics of Prakṛti (nature) and the relationships between the "gunas". In the Sankhya philosophical system, the term "guna" refers to the three fundamental qualities or attributes of nature: Sattva (purity, harmony, balance), Rajas (activity, passion, movement) and Tamas (inertia, darkness, ignorance). These gunas are the fundamental elements (components, ingredients) of the material world, or Prakṛiti, and their interaction determines all phenomena and experiences.

In Sankhya terms: the same basic proportions (the unit and its relation to the part) are realized simultaneously and sequentially — algebra shows that these "different" transformations are actually different faces of the same invariance (self-similarity) of the golden ratio in all three processes of creation (expansion, compression, resonance). The golden section (G. Srinivansan indicates a small ϕ with an x) is a number but essentially it is a scalar self-similar relation in which the ratio of part to whole repeats itself, which makes it ideal as a symbol of simultaneity and sequence - a small change gives the same proportion at higher levels.

Sankhya starts from pairs of opposites and their dynamic relationship: simultaneous (simultaneous presence of principles) and sequential (development over time). Any transformation (expansion, compression, resonance) is actually a mathematical relationship between two opposite tendencies.

4.1. Expansion

This process is defined by the relation: $1 + x = 1 / x$ and emphasizes the reciprocal balance: we add x and get the inverse scale. "1" is the whole, " x " is the part. By adding parts (expansion), the whole is maintained through reciprocity.

That is the dynamism of raja-guna (movement, expansion). Here "1" stands for the base unit (invariant) and "x" stands for addition, growth, projection. When the process is expanding, then the total state (1+x) must be "balanced" by the reciprocal of $1/x$.

Summary: expansion always "dilutes" the ratio - the more you add x, the smaller the reciprocal of $1/x$ becomes. Therefore, the expansion is expressed by the ratio of addition and inversion.

Expansion = addition and reciprocal balancing → "relationship between one and its reciprocal".

4.2. Compression:

Algebraically, it is expressed by the formula: $1 - x = x^2$ which shows that reduction (subtraction) produces a squared (compressed) version of the SAME proportion. Here we have "1 - x", which means reduction, pressure, constriction. The result is expressed through multiplication: x^2 which in Srinivansan's notation is not the mathematical number x^2 but the second member of the sequence of expansion-compression ratios. Subtracting the part from the whole leads to a "compacted", square structure. It is the dynamics of tamas-guna (limitation, inertness).

Summary: in compression, the difference (subtraction) generates a proportional "compressed form" expressed as a coefficient of the second plane of the process.

Compression = subtraction and proportional compression. → "the relationship between one and its product".

4.3. Resonance:

is a process described by the formula: $(1 - x) / (1 + x) = x - x^2 = x^3$ which shows that resonance is a Hatmonian combination of difference and sum and gives a third degree - a "third" level or a new quality created from the interaction of the first two. Resonance is the balance between expansion and compression. That is why the initial form is $(1 - x) / (1 + x)$ difference and sum in the same ratio → it is a typical resonant form (similar to oscillatory physics where $\omega_0^2 - \omega^2 / \omega_0^2 + \omega^2$ is used). When this balance is "developed", we get the sequential form: $x - x^2$ which means that the resonance combines expansion and compression, "takes" from both sides and gives the third power of x (expression x^3). It is sattva-guna (balance and harmony) because it harmonizes the first two processes.

Summary: resonance is the third transformation resulting from the first two: expansion → reciprocity; compression → proportionality.

Resonance = simultaneous action of both, which gives the third quality. → "the relation between the difference and the sum, which produces the third term of the sequence"

5. Why exactly like that? Philosophical commentary (Sankhya interpretation)

Sankhya is fundamentally a theory of relations, not of quantity. These relations are not simple algebraic equalities, but structural patterns. They describe how the basic unit ("1") changes through addition (expansion), subtraction (compression), and a combination of both (resonance), introducing the next members of the sequence (x^2 , x^3) as "new planes of reality."

So, in a philosophical key: the same number (golden section) allows three different processes (expansion, compression, resonance) to be expressed in the same proportion (Maharishi Kapilla), but at different degrees. This is exactly what is called simultaneity and sequentiality in Sankhya:

simultaneous → the same pattern appears on all levels,

sequential → each transformation leads to the next (square, cube, ...).

In other words: the golden ratio is a universal measure that connects all three basic dynamics of the cosmos. The golden section (ϕ , here x) is a scalar self-similar relation. Algebraically: it is a number where the ratio of part to whole repeats itself (continuous repetition). This makes it a symbol of simultaneity and sequentiality — a small change gives the same proportion at higher levels.

Expansion emphasizes reciprocal balance: addition leads to the inverse scale.

Compression shows that reduction (subtraction) produces a squared version of the same proportion.

Resonance is a harmonic combination of difference and sum and gives the third degree — a new level created by the interaction of the previous two processes.

In terms of Sankhya philosophy: the same basic proportions (the unit and its relation to the part) are realized simultaneously and sequentially. Algebra reveals that these "different" transformations are actually different faces of the same invariance (self-similarity) - the golden section. Every higher power of the number x can be reduced to a linear combination of x and 1, because the polynomial $x^2 + x - 1 = 0$ enables the reduction. That is why degrees of x always appear, but they are all interconnected.

This text combines rigorous algebra and philosophical interpretation—showing how the golden ratio functions both as a mathematical constant and a symbol of universal self-similarity within the Sankhya interpretation.

6. Sequentiality and simultaneity - the basic principle and structural mechanism of Sankhya

The key pattern of Sankhya is: $1 + x = 1 / x$, where x is the golden ratio, because it connects the basic concepts of elementary structural processes: sequentiality (process in time, succession) and simultaneity (simultaneity, whole). This extremely important insight of the genius Maharishi Kapila, which eludes modern science, is extremely important because it enables us to understand and explain simultaneous phenomena that are "non-detectable" (processes inside the nucleus of elementary particles, for example) in contrast to sequential processes (radiation of atoms) - based on defined laws and their unique connection - the golden section - a self-similar variable of unchanging proportion, which has an axiomatic relationship to the whole.

If we look at the expression: $1 + x = 1 / x$

The left side ($1 + x$) → represents a **sequential process**, because it shows **a unit to which another part (x) is added**, thus growth, accumulation, successive addition. It is the "time" aspect.

The right-hand side ($1 / x$) → represents **simultaneous**, because the **whole is divided into proportions in one step**. There is no addition through the series, but we immediately get a relationship in which the part and the whole stand in the same relationship. It is an "instant" insight into the whole ("at once").

So: Sequential = $1 + x$

Simultaneously = $1 / x$

As an illustration of the universal applicability of this universally valid relation, we can relate it to the way in which Sankhya describes the evolution (from subtle to gross) of **Prakriti** (nature, basic substance) and show how this pattern appears there.

6.1. The basic idea in Sankhya

Everything that exists emerges from **Prakriti** through sequential evolution:

Purusha (awareness) + **Prakriti** (nature) → **Buddhi** → **Ahamkara** → **Manas** → **sensory and motor organs** → **Tanmatras** → **elements** [4].

It is a **sequential sequence** - a successive, time-based process.

At the same time, at every moment the **whole is present in the part** because the part bears the proportion of the whole. It is simultaneous - everything is interconnected and present as a relationship, not as a linear sequence.

6.2. Connecting with the form $1 + x = 1 / x$

Sequentially ($1 + x$):

Here we see how the whole is "enlarged" by adding new levels: unit (1) → then addition (x) appears. This corresponds to the process of manifestation of prakriti: from the first differentiated principle (buddhi) onwards, each stage "adds" the next.

Simultaneously ($1/x$):

Here, part (x) immediately stands in relation to the whole (1). There is no addition, but the connection is simultaneous.

It reflects the idea that in every part of the universe (even the smallest segment) there already exists the proportion and structure of the whole — the holographic principle of Sankhya.

6.3. The golden ratio as a key principle

The solution to the equation $1 + x = 1 / x$ is the golden ratio (x), which is precisely the proportion in which the smaller part relates to the larger part as the larger part relates to the whole.

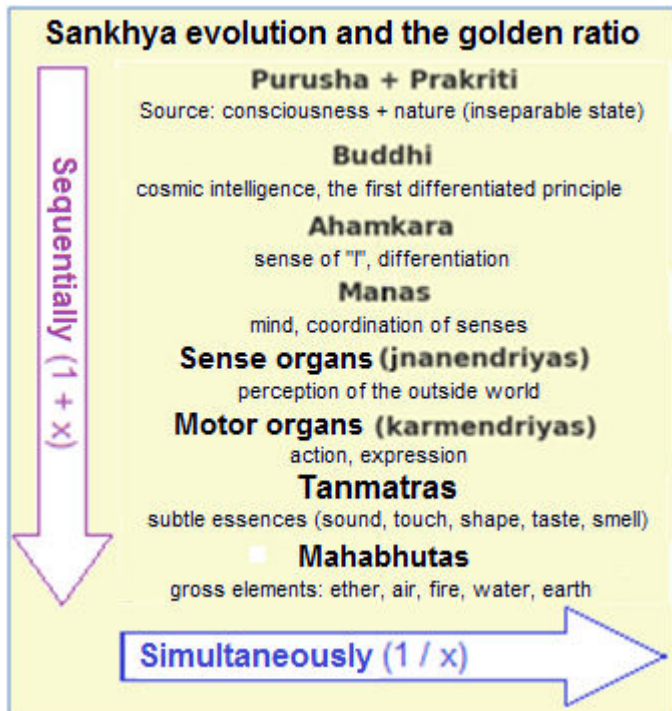
It is an ideal bridge between sequential (evolutionary) and simultaneous-harmonic (structural) processes.

In short:

1 + x (sequential) = describes how prakriti evolutionarily adds levels of reality in time.

1 / x (simultaneous) = shows how in each segment the whole is already reflected, outside of time.

On the diagram of Sankhya evolution one can see these golden ratio ratios:



the sequential process ($1 + x$) takes place successively by the development of (lower) levels from prakriti.

Each of the levels implies simultaneity ($1 / x$) because the whole is always present in each part - the relationships are preserved in proportion.

7. Connecting the relations ($1 + x = 1 / x$) with the concepts of electricity and magnetism

The concepts of electricity and magnetism and their connection are explained in today's science significantly differently than in the philosophy of Sankhya where all mechanisms, the structure of these phenomena and dynamic processes are related to the concept of "primordial substrate" whose elementary quantum is "Mulaprakriti" - the primordial matter from which everything arises ... [4]

Unlike scientific, structurally unclear and mostly "formal" definitions, ancient knowledge offers much clearer and more logical explanations.

If we look at the pattern $1 + x = 1 / x$ (sequential \leftrightarrow simultaneous) and try to translate it into the concepts of electricity and magnetism, we get the following insights:

7.1. Electricity – sequential ($1 + x$)

Electrical phenomena are **linear, accumulative, directed in time.**

Current is transmitted through a successive flow of charge (one electron displaces the next \rightarrow chain process).

This corresponds to the part $1 + x \rightarrow$ successive addition, flow through the sequence.

7.2. Magnetism – simultaneous ($1 / x$)

A magnetic field appears simultaneously around a conductor or particle carrying a current.

No "addition" in the sequence is necessary – the field exists immediately as a whole, proportional to the electrical process.

This corresponds to the part $1 / x \rightarrow$ the relationship is realized instantly, simultaneously, as a spatial-harmonic phenomenon.

7.3. Synthesis (golden section x)

Just as in the formula, part and whole are “mirrored” through the golden section, so electricity and magnetism are inseparable – one is a time-sequential aspect, and the other is spatial-simultaneous.

That is why in physics we always consider them unified through electromagnetism.

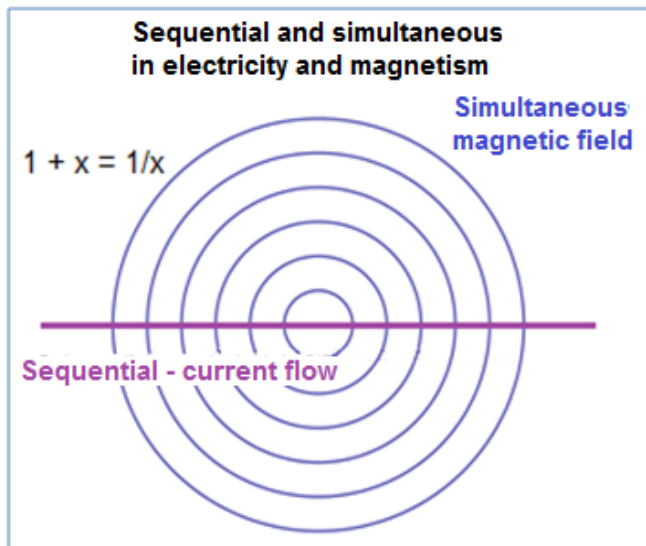
In short:

Sequential ($1 + x$) ~ electricity (flow in time, accumulation).

Simultaneous ($1 / x$) ~ magnetism (immediately present field, spatial harmony).

x (golden section) ~ the balance/bridge between these two aspects - the unity of electromagnetism.

In the diagram below, the electric current is shown as a "sequential line", and the magnetic field as a "simultaneous circular field" around it, with the formula $1 + x = 1 / x$:



The purple line shows the **sequential electric current ($1 + x$)** – directed movement through time.

The blue circles represent the **simultaneous magnetic field ($1 / x$)** – which occurs instantaneously, around the current.

The formula $1 + x = 1 / x$ stands as a **symbol of their inseparable connection**.

8. Connecting “Sankhya electromagnetism” with the Sankhya concepts of Purusha–Prakriti (consciousness–nature) as the original duality from which these fields arise

8.1. Purusha and Prakriti – the basic duality

Purusha = pure consciousness, the inactive observer.

Prakriti = nature, the potential for all manifestations (matter, energy, space, time).

Their “meeting” sets in motion the evolution of the universe.

8.2. Parallel to Electricity and Magnetism

Just as **Purusha and Prakriti** exist in interdependence, so the **electric and magnetic fields** do not exist without each other:

Electricity (sequential, $1 + x$) → analogy with **Prakriti** – constant change, flow in time, manifestation.

Magnetism (simultaneous, $1/x$) → analogy with **Purusha** – “suddenly present”, gives structure and testimony, but does not participate directly in change.

8.3. Electromagnetic wave as a cosmic dance

When the electric and magnetic fields oscillate at right angles, we get a wave of light – the purest form of energy that we can see both as the merging of Prakriti and Purusha and in play:

sequential and simultaneous, time and space, movement and testimony, part and whole.

8.4. The pattern $1 + x = 1/x$

$1 + x$ (sequential) ~ Prakriti ~ electric field.

$1 / x$ (simultaneous) ~ Purusha ~ magnetic field.

Their balance (x) ~ **harmony of consciousness and nature** → manifestation of the universe as an electromagnetic "dance": **Prakriti ↔ Purusha; Electricity ↔ Magnetism; Sequential ↔ Simultaneous.**

In short: The electromagnetic wave can be seen as a **physical reflection of what Sankhya describes metaphysically** - the relationship between **Prakriti** and **Purusha** expressed through **sequential** and **simultaneous**, **part** and **whole**, **flow** and **testimony**.

By further developing the concept of simultaneity / sequentiality, we can also connect it with **wave-particle dualism** in quantum physics.

9. The connection of the relation $1 + x = 1 / x$ with wave-particle dualism

9.1. Wave aspect - simultaneous ($1 / x$)

A wave is distributed, nonlinear, harmonic.

It exists simultaneously in space, is described by a probability (Ψ function).

This corresponds to the simultaneous part of the pattern $\rightarrow 1 / x$, because the wave already "contains the whole" and the relationships in each part.

Analogy: magnetism (spatial field, present at once) and Purusha (testimony).

9.2. Particle Aspect – Sequential ($1 + x$)

A particle is **localized, quantized, appears at a point in space/time**.

It **moves successively**, measurement gives a single event.

This corresponds to the **sequential part** of the pattern $\rightarrow 1 + x$, because reality is expressed step by step.

Analogy: electricity (charge flow) and Prakriti (process of manifestation).

9.3. Golden Ratio x – Unity of Wave and Particle

In quantum physics, dualism is never "either-or", but simultaneous complementarity.

Just as $1 + x = 1 / x$ gives a harmonious balance (x), so wave and particle exist as **two aspects of one reality**.

This is reminiscent of Sankhya: Purusha and Prakriti are different, but inseparable – just like wave and particle.

In short:

Simultaneous ($1/x$) = wave, field, probability, magnetism, Purusha.

Sequential ($1 + x$) = particle, event, flow in time, electricity, Prakriti.

x (golden ratio) = balance \rightarrow quantum reality in which both aspects coexist.

Based on the established correlations, we can now create a "map of analogies" **Simultaneous (wave)** and **Sequential (particle)** with a parallel to **electromagnetism and Sankhya**:

Particle – electricity – Prakriti - sequentially ($1 + x$).

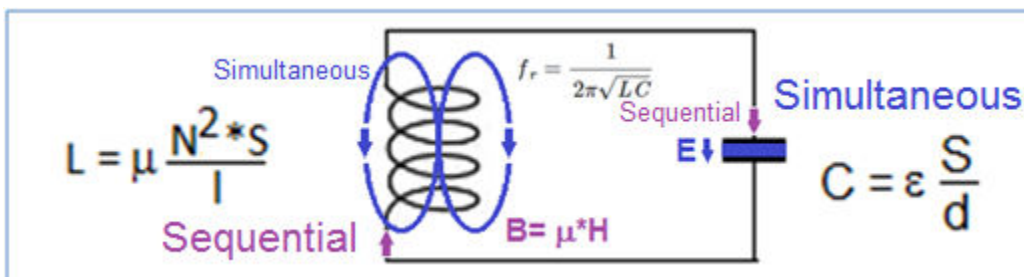
Wave – magnetism – Purusha - simultaneously ($1/x$).

Central balance, golden ratio x , unity in which both aspects coexist.

10. The play of space-time-energy in an oscillatory circuit

In section 8.3. we considered the electromagnetic wave as a cosmic dance - but - even more interesting is the "play" of space-time-energy in an oscillatory LC circuit that forms a parallel connection of a coil and a capacitor.

Due to the extraordinary richness and inspirational-associative power of the correlations that we will establish in this section, in the following section we provide definitions of all the key terms that we will consider.



L – coil inductance

μ – magnetic permeability

N – number of turns

S – coil cross-sectional area

l – coil length

C – capacitor capacitance

ϵ – electrical permittivity

S – capacitor plate area

d – plate spacing

10.1. Definitions

Magnetic field (scalar potential H)

It is a physical field that occurs around magnetized bodies, current-carrying conductors, or moving charged particles. It describes the space in which magnetic forces act on other moving charged particles or on magnets.

Magnetic induction (vector B)

It is a vector quantity that measures the strength and direction of the magnetic field at a given point.

Magnetic field (H) is a general term for a physical phenomenon.

Magnetic induction (B) is its mathematical and physical "measure" (like, for example, temperature - a measure of the thermal state).

The total energy of the magnetic field contained in the volume V is therefore:

$$U = \int_V \frac{1}{2} \cdot \frac{1}{\mu_0} \cdot B^2 dV$$

, where: U - magnetic field energy and dV - volume element.

Magnetic field energy in an inductance (e.g. coil)

If a current I passes through a coil, energy is stored in its magnetic field:

$$W = \frac{1}{2} L I^2$$

, where L is the inductance of the coil, I is the current strength.

Capacitor energy

The total charge energy in a capacitor is:

$$W = \frac{1}{2} C U^2$$

, where C is the capacitance of the capacitor, U is the voltage between the capacitor plates

Energy density in an electric field:

If we look at the space between the capacitor plates:

$$w = \frac{1}{2} \varepsilon E^2$$

, where ε is the dielectric constant, E is the electric field strength $E = U / d$; d is the plate spacing.

If we want the total energy, we need to integrate this density over the volume of the capacitor:

$$W = \int_V w dV = \frac{1}{2} \varepsilon E^2 \cdot V$$

, where V is the volume of the space between the plates.

Resonant frequency of an LC circuit:

$$f_r = \frac{1}{2\pi\sqrt{LC}}$$

, where L is the inductance of the coil, C is the capacitance of the capacitor.

10.2. Analysis of the operation of an LC oscillator circuit from the aspect of simultaneous-sequential processes

When electric current flows through a wire or coil, we can easily notice the "sequentiality" of electricity (charge flows, accumulates, builds up), while magnetism manifests itself as a field that is currently present — simultaneous spatial distribution.

In the case of a capacitor, the picture is a little different, but it shows this game "1 + x ~» 1 / x" even more clearly. Here's how:

10.2.1. Electricity in a capacitor = sequentiality

A capacitor is charged over time (over time) — electron by electron comes to the plate. An excess of charge accumulates on one plate, and a deficiency on the other — this is the accumulation process. In this process, the voltage difference U(t) grows sequentially in time, depending on $Q = C \cdot U$. This is the "1 + x" dynamics: step, accumulation, flow.

10.2.2. Field between plates = simultaneity

As soon as the slightest charge difference appears, an electric field $E = U/d$ immediately exists between the plates. This field does not "wait" for the capacitor to be fully charged — it is simultaneous with the

very act of accumulation. The field is present in the entire space between the plates, as a harmonic distribution. This corresponds to “1 / x” — simultaneous, spatial manifestation.

10.2.3. The golden ratio as balance

In a coil, the bridge between the sequential [current] and the simultaneous (magnetic field) is clear - the change in time generates spatial harmony.

In a capacitor:

sequential: the charge is charged in time (current -> accumulation).

simultaneous: the field immediately fills the entire space between the plates.

The balance of the system is the moment when the ratio of the accumulated charge and the instantaneous field becomes golden balanced - i.e. when the amount of energy in the plates (charge) and in space (field) are in harmony. Mathematically, this is seen in the expressions for energy where we have the same expression from two angles: time (charge / voltage) and space (field / volume):

$$W = \frac{1}{2}CU^2 = \frac{1}{2}\epsilon E^2 V$$

in which the unity $1 + x = 1 / X \rightarrow$ two descriptions of one and the same reality is clearly visible.

10.2.4. Summary:

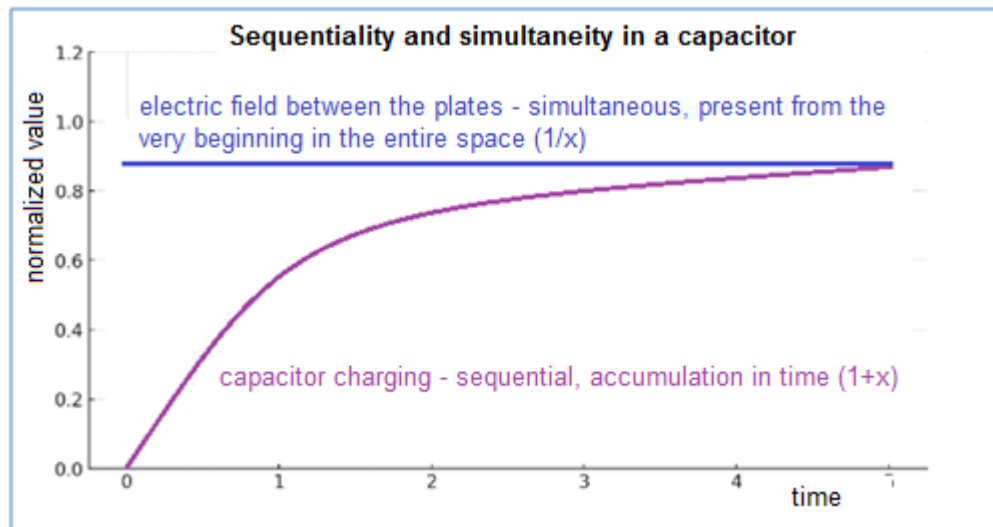
In a coil: current is a flow (sequence|no), the field is magnetic simultaneity.

In a capacitor: charge is a flow (sequence|no), the field is electrical simultaneity.

In both cases electricity = process and field = instantaneous presence.

The golden ratio ($1 + x = 1 / x$) can be seen as a point of balance between accumulation (flow) and presence — as if to say: no matter how long the charge “lasts”, the entire spatial harmony of the field exists at the same time.

The graphic below shows the charge of a capacitor (sequential voltage/current curve) versus the instantaneous existence of the field between the plates (simultaneous flat surface). This shows the balance: the charge lasts in time, but the field exists immediately and everywhere between the plates.

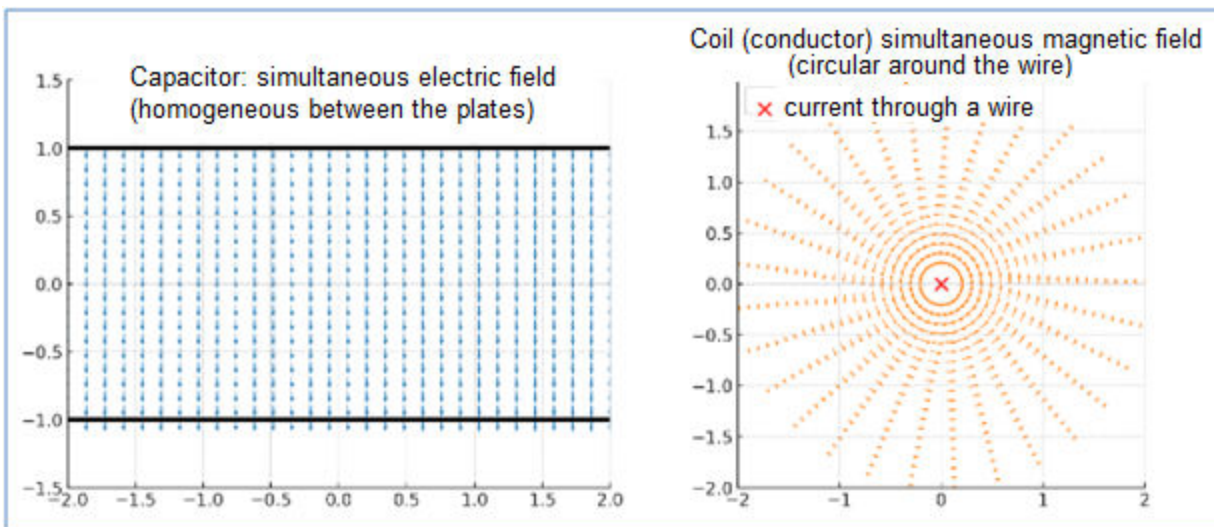


So, in a capacitor, the balance is even purer than in a coil: as soon as even a little charge appears, the energy in the field and in the accumulation are always in perfect harmony. The “bridge” $1 + x = 1 / x$ does not occur here only at one point, but is constantly present.

The following two graphs show the appearance of the space between the capacitor plates while the capacitor is being charged from the magnetic field of the coil:

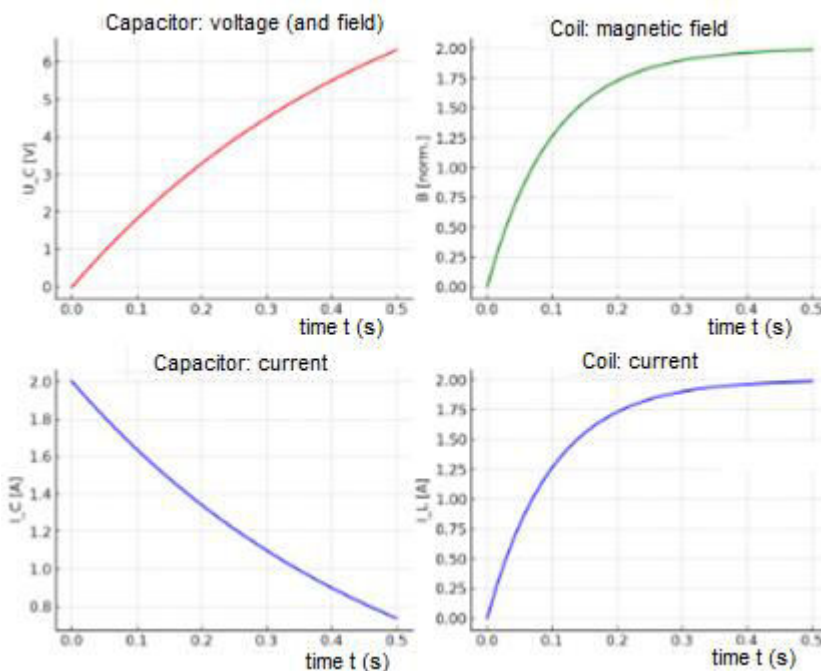
Picture on the left - the electric field between the plates is homogeneous and present immediately and everywhere (simultaneously, in a vast harmony):

Picture on the right - Coil (conductor): the magnetic field extends circularly around the wire, also immediately and everywhere (simultaneously in another domain).



In a capacitor, there is sequentiality in the accumulation of charge, and simultaneous is the electric field.
 In a coil, there is sequentiality in the flow of current, and simultaneous is the magnetic field.

What may create confusion is the fact that the magnetic field of the coil follows the current strength (I) through the coil, while in a capacitor, the field is proportional to the amount of charge (Q), where $Q = I \cdot t$. Here is a comparative view:



Capacitor (left):

The voltage (and electric field) increases exponentially to U . The current decreases exponentially to zero.

Coil (right):

The current increases exponentially to $I = U / R$. The magnetic field (proportional to the current) increases in the same way.

Here, complementarity is nicely demonstrated: in a capacitor, the field follows the voltage, and in a coil, the field follows the current.

In the diagrams is now clearly visible:

At the capacitor - as soon as you connect the voltage, the electric field between the plates exists immediately (because it arises as soon as there is a potential difference). But in order for the plates to actually be "charged" with charge (Q), a charging current (I) must flow, and it flows sequentially in time, until the capacitor reaches its final voltage (U).

So: **the electric field (E) is instantly present, but its strength increases as it is charged.**

At the coil - as soon as even a small current flows through the conductor (in the first moment after switching on), a magnetic field (H) immediately (instantly) appears around it. However, the strength of that field ($B = \mu \cdot H$) is proportional to the strength of the current at that moment: $B(t) \sim i(t)$. Since the current cannot instantly jump to the maximum (because the inductance "resists" it), the field cannot instantly jump to the maximum either. That is why the field strength "follows" the shape of the current increase - exponentially.

So: the magnetic field H is instantaneously present, but its strength follows the current intensity current.

The essence of the possible confusion in the terms sequential / simultaneous is in the understanding of the spatial / temporal relationships related to the very beginning of the appearance of the field:

At a capacitor - as soon as you have a voltage, you have an electric field, but the charge accumulates in time.

At a coil - as soon as you have a current (even an infinitesimally small one) you have a field, but the current grows in time.

If we now look at the graphs above again, we see that the field intensity is proportional to the amount of charge in the capacitor and/or the current strength in the coil. Therefore, the shape of the field growth coincides with the charge in the capacitor, or rather, the growth of the current in the coil.

And to conclude: the appearance of the field is simultaneous - the field appears immediately, and the field intensity is sequential - it grows according to the law of charging / discharging.

11. Application of the principle “sequential = simultaneous” in a resonant LC oscillator

The following considerations are a summary of everything said, where sequentiality and simultaneity alternate in perfect harmony. A resonant LC oscillator is actually an ideal “stage” where sequentiality alternates in perfect rhythm. and simultaneity, expansion and compression of the “primordial substrate”, electricity and magnetism.

Given the complexity of the processes that take place in an LC oscillator, we will break them down into segments:

11.1. Alternating charging and discharging

When a capacitor is charged, electrical energy is accumulated in it (sequential accumulation of charge, simultaneously present electric field).

Then the capacitor starts to discharge through the coil. Charge flow = current ($I = dQ/dt$), so a magnetic field is created in the coil (sequential flow, simultaneously present magnetic field),

11. 2. Oscillation

When the capacitor is completely discharged -> all the energy is now only in the magnetic field of the coil (section 10.2.3). Then the magnetic field “feeds” the energy back into the capacitor - the capacitor is charged again, but with the polarity reversed.

The process continues like a perfect pendulum: electric energy <-> magnetic energy, capacitor <-> coil, sequentiality <-> simultaneity.

11.3. Golden Harmony ($1 + x <-> 1 / x$)

In an LC oscillator we have:

Capacitor: sequentially (charge accumulates) <-> simultaneously (E-field fills space)

Coil: sequentially (current flows) <-> simultaneously (H-field encompasses space).

The bridge between these two domains is resonance: the system constantly transitions from one form to another, but the total energy remains the same.

This is a practical manifestation of the identity $1 + x = 1 / x$ -> the two sides are always one and the same.

11.4. Intuitive analogy

Let's imagine a stringed instrument: the string vibrates [oscillates sequentially], but around it there is a constant "dome" of sound (simultaneously, in space).

So does the LC oscillator: it alternately "plays" through the transformation of the electric into a magnetic field and vice versa, creating an electro-magnetic vibration of the "primordial" form in perfect balance.

The previous sentence can be understood exclusively from the aspect of ancient Sankhya knowledge and understanding the structure of Absolute Reality. The key difference is related to the phenomenon of “ether” that science has thrown out based on the Michelson-Morley experiment, while Sankhya interpretations are based on “*volumetric vibrations of the primal substrate (a medium made up of elementary quanta:*

"Mulaprakrithi") in the breathing mode (time) and the arrangement of stationary waves along the axes (3D space)" [2, 3, 4].

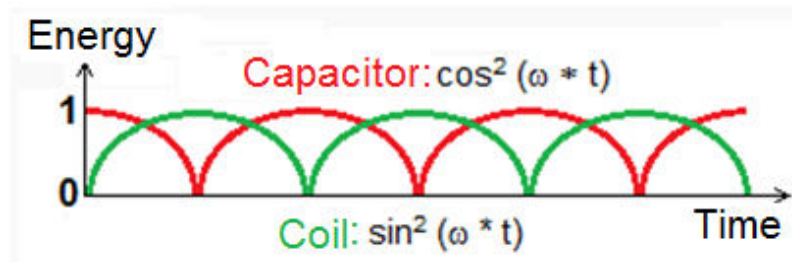
However, in further considerations we will stay on scientific interpretations and clarify the process of oscillations of the capacitor-coil energies over time, where this transformation of energy forms and their replacement irresistibly resembles the "breathing" of that system, which is completely analogous to the Sankhya interpretations.

Here is how this process takes place.

The energy in the capacitor follows the form $\cos^2(\omega * t)$ [$\omega = 2\pi * f$; f - frequency, t – time] and starts at a maximum, then oscillates towards zero as it passes into the coil.

The energy in the coil follows the form $\sin^2(\omega * t)$ and starts at zero and then increases as the capacitor discharges its energy.

When the energy in the capacitor is high, the energy in the coil is low, and vice versa. Their sum is always 1 (normalized) - which shows that the energy is just passing from one form to another. The process described graphically looks like this:



The top line (the wave starting from the maximum) is the energy in the capacitor (\cos^2 form).

The bottom line (the wave starting from the minimum) is = energy in the coil (\sin^2 form).

At each point the sum is constant (always = 1) because energy only "flows" passing from one form to another, changing form but never disappears, with a clearly expressed rhythm: when the capacitor has a maximum, the coil is at a minimum and vice versa.

The association with the pendulum is complete: electric field \leftrightarrow magnetic field, sequentially \leftrightarrow simultaneous, constantly in balance and perfect harmony.

So in the LC oscillator the electric and magnetic fields alternate like the breathing of Brahma, the universe..., - electric field inhalation, magnetic field exhalation - in a perfect rhythm.

The association with the Eternally Oscillating Universe (9) whose "mechanism" completely coincides with the ancient Vedic descriptions of the World is complete.

Namely, according to the eschatology of Hinduism, the creation of the universe is explained through the interaction of *Purusha* (pure, inactive consciousness) and *Prakriti* (primordial matter or creative energy). The very act of *Brahma's* creation is described as the initiation of a dualistic process, where *Purusha*, the conscious principle, meets *Prakriti*, the active force, resulting in the emergence of the cosmos through their interaction (section 6.3.). This unity generates a variety of phenomena of existence, from individual consciousness to the physical world - and vice versa, which is represented by the alternating cycles of "*Brahma's day and night*" and where this "play" of *Purusha* and *Prakriti* can be figuratively described as "*Brahma's breathing*".

Based on the observed associations, in the next step we can make a philosophical - mathematical analysis of how this model of **LC oscillator can be viewed as an archetype of the rhythm of nature - day/night, inhalation/exhalation, yin/yang ...**

12. Resonant LC oscillator in a broader, philosophical-mathematical framework.

12.1. Mathematical basis

In the LC oscillator, energy constantly oscillates: $W_C = \cos^2(\omega * t) \sim W_L = \sin^2(\omega * t)$

Their sum is always: $W_C + W_L = 1..$

This means that the total unity never disappears, but only the way of its manifestation changes.

This balance resembles the identity of the golden ratio $1 + x = 1 / x \rightarrow$ two faces of one reality.

12.2. Symbolic image

Condenser: accumulation, rest, potential \rightarrow symbolic yin (receptivity, silence).

Coil: flow, dynamics, radiation \rightarrow symbolic yang (action, movement).

Their constant alternation is like a day-night cycle, inhalation - exhalation, life - death - all these are natural rhythms of the universe.

12.3. Harmony in "breathing"

When the capacitor is charged -> the energy is latent, ready.

When it is discharged through the coil -> the energy becomes dynamic, the field expands.

Then the process reverses creating an eternal harmonic oscillation which is completely consistent with the text [3]. ("Universe - Eternal Harmonic Oscillator").

This is a universal principle: anything that pulsates (heart, breathing, day/night, seasons, waves) can be reduced to this pattern.

12.4. Golden Bridge

What the LC oscillator shows is not just a "technical resonance", but an archetypal image of balance:

Sequential <-> simultaneous

Electric <-> magnetic

Potential <-> flow

Yin <-> Yang

The golden ratio appears as a mathematical principle of balance between these opposites - as an internal proportion that ensures harmony.

13. Conclusion

We can understand the resonant LC oscillator not only as an electronic circuit, but also as a material manifestation the primordial primal matrix of creation - as a model of the universal rhythm of Absolute Reality: everything changes and shifts, but the overall whole always remains.

This eternal and universally valid Truth, known to ancient peoples, was systematized and mathematically formulated by the brilliant Maharishi Kapilla [2], but this and other ancient wisdoms, completely independent or inspired, for example, by Vedic scriptures, were also reached by other researchers, seekers of Truth, such as our Nikola Tesla, who in his reflections used not only rational, practical knowledge but also direct insights from the *Akash*², using Intuition as a "vehicle of the soul" for communication on the "Mental-causal level" (3rd Loka/Heaven/Plan). Nikola Tesla himself says: *"Intuition is something inexplicable, something with which we feel and sense the truth. Intuition is something that is beyond knowledge. I think that all great discoveries are works of intuition,"* said the genius.

Direct confirmation of these words is Tesla's understanding of nature and especially electromagnetism – structurally significantly different from classical-scientific interpretations but completely identical to Vedic interpretations:

"All perceptible matter comes from a primary substance, or tenuity beyond conception, filling all space, the Akasha or luminiferous ether, which is acted upon by the life giving Prana or creative force, calling into existence, in never ending cycles all things and phenomena. The primary substance, thrown into infinitesimal whirls of prodigious velocity, becomes gross matter; the force subsiding, the motion ceases and matter disappears, reverting to the primary substance."

Nikola Tesla, „Man's Greatest Achievement", New York American, Jul, 6. 1930

"Light cannot be anything else but a longitudinal disturbance in the ether, involving alternate compressions and rarefactions. In other words, light can be nothing else than a sound wave in the ether."

Tesla Sees Evidence Radio and Light Are Sound, New York Times, Sec. X, P. 9, c. 1, April 8, 1934

Based on all that has been said, I think that the initial idea of the sequentiality of the Yuga cycle "here" and simultaneity in "there" – is confirmed and can be generalized to the highest level, so that the Material

² The Akash is a concept from Hindu and other spiritual traditions that represents the "Book of Life" in which all events in the universe from its creation to the present are recorded. It is a field of infinite universal energy and light that gives life to everything, and is believed to contain the energetic record of the entire universe and all its versions.

aspect of Absolute Reality represents the sequential aspect of its Spiritual-simultaneous conception based on the identical matrix: $1 + x = 1 / x$!

At the very end, I will summarize everything that has been said in the form of a very short but imaginatively concise “meditative commentary”, a poetic—symbolic image, as a small aphorism - which was created by artificial intelligence (Chat Gpt) based on the presented text:

**At the heart of the oscillator, the cosmos breathes.
The capacitor preserves the silence of potential,
the coil spreads the song of movement.
One inhales, the other exhales -
and between them there is an infinite harmony,
a balance in which everything changes and nothing is lost ...**

14. Literature

1. „Science and Spirituality“, <http://users.beotel.net/~gmarjanovic/Synthesis.pdf>
2. “Secret Of Sankhya: Acme Of Scientific Unification, G. Shrinivansan”,
https://archive.org/details/secretofsankhyaacmeofscientificunificationbysrinivasang_202003_594_h
3. "UNIVERSE – Perpetual Harmonic Oscillator", http://users.beotel.net/~gmarjanovic/Univerzum_e.pdf
4. "The structure of Absolute Reality", http://users.beotel.net/~gmarjanovic/StrukturaRealnosti_e.pdf
5. "Unity of Matter and Spirit", http://users.beotel.net/~gmarjanovic/Jed_Materija_Duh_e.pdf
6. “Vreme” kao inverzno-opozitna struktura “prostora”, <http://users.beotel.net/~gmarjanovic/VrInvOpozStr.pdf>
7. Trodimenzionalno vreme, <http://users.beotel.net/~gmarjanovic/3dimVreme.pdf>
8. In Search Of The Miraculous : Ouspensky P,d, <https://www.gurdjieff.am/in-search/index.pdf>
9. "Energy Density Quantization model", <http://users.beotel.net/~gmarjanovic/objdens.html>

In Belgrade, 27.09.2025

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