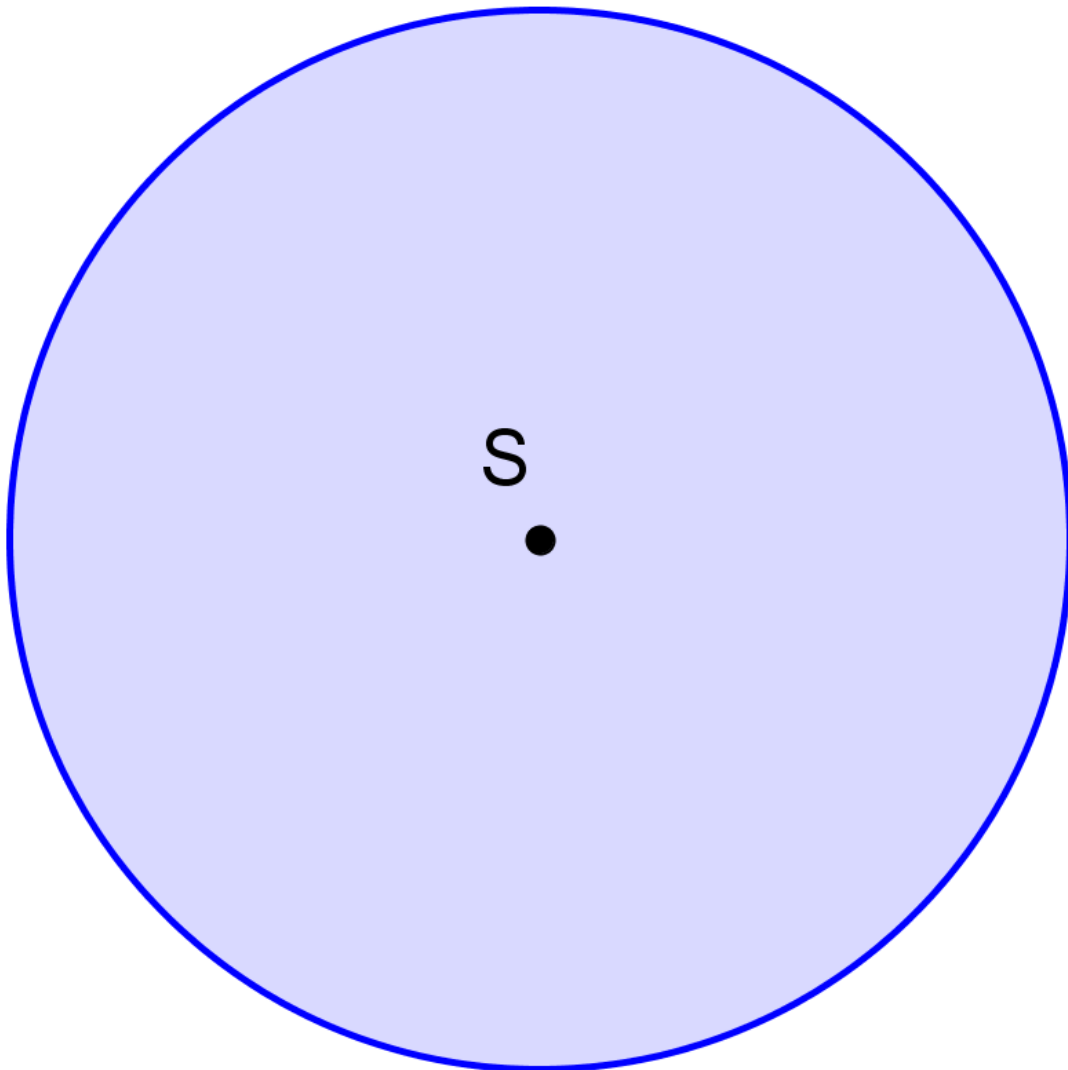


The Geometry of God (Transreal Version)

Walter Gomide (UFMT).

Excerpts from Massimo Melli's "La Geometria di Dio" translated into Transreal Numbers



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Let's consider the following part of "The Geometry of God" (Massimo Melli, 2018):

"The **Logon** is a geometric point endowed with existence. It has no size nor mass and can be defined as the resting dimension, the resting mass and the resting time of the Photon. The geometric point is something that has taken its essential property from the concept of position, that of being here rather than there. Every event that occurs in space-time has its origin in a Logon, which is nothing but a geometric point endowed with physical existence. If space-time is an infinite sphere, each Logon, being equidistant from its infinite circumference, is its center and is here, right here at the center of space-time. Of course, space-time is none other than Spinoza's Substance, who never said it was made up of infinite Logons, but this is the great discovery of the Kabbalist. "How is it possible that all Logons are all here instead that there? They are all superimposed on the same point, a "singularity" which is 1, that is, the infinite Unity of God, before Creation "(Melli, p.8)

The Logons are situated at the centre of spacetime (Spinoza's Substance). They are superposed (*sovrapposti*) at a singularity; and I call such a singularity as "a point at Nullity" $\Phi = 0/0$. Nullity could be seen as the superposition of all numbers, since it is the indeterminacy that results from dividing zero by zero. If one calls $\oplus\mathbb{R}$ the superposition of all real numbers, then

$$\Phi = 0/0 = \oplus\mathbb{R}.$$

In the same way, if we denote by Λ the set of all Logons, then $\oplus\Lambda$ is the *superposition* of all Logons; $\oplus\Lambda$ is at the centre of spacetime, a “metaphysical” spacetime: a spacetime that is situated in God’s Mind. We can define that the centre of such “metaphysical spacetime” that gives us the Unity of God’s Mind: all lies in God’s Mind in the state of such superposition. (It could be defined also: **The frightful sphere of Pascal.** According to Pascal: God is a (frightening) sphere whose center is everywhere and its circumference nowhere. But it was Cusano that made a fundamental discovery: in the infinite circle, in which center, diameter and circumference coincide, he saw an image of God, which at the same time is inside everything, penetrates it and embraces it.)

And then the creation begins: from the set $\oplus\Lambda$ the physical spacetime comes to existence. By moving at an infinite velocity in an interval of time equal with zero, the Logons are separate from each other and travels a distance equals with Φ , *the superposition of all possible infinitesimal paths between two neighbourhood logons*, since we have:

$$\infty \text{ multiplied by } 0 = \Phi$$

After a zero interval of time and being situated from the centre at Φ distance, a *metaphysical distance*, a *physical distance* between Logons emerges, and such a distance, according to General Theory of Relativity, is equals to the Riemann metric

$$ds^2 = g_{\mu\nu} dx^\mu dx^\nu$$

in which imaginary numbers are prevailing over real numbers; we are in the realm of superluminal particles, since the Logons achieve an infinite velocity after being separate from the superposition state $\oplus\Lambda$; **we are now in the realm of *Tachyons*, non-observable particles from which the observable Universe comes.**

If we call the imaginary metric of Riemann, where we can find *Tachyons*, with its imaginary time by $ds^2<i>$, then we can stress that the transformation:

$$\oplus\Lambda \rightarrow ds^2<i>$$

is the first state of the creation: the passage from God's Mind to the non-observable world of superluminal particles. The distance $ds^2<i>$ we can call also by \hbar (pronounced "h-bar"): According to Melli (p.8):

"And you will say: then how do they fill all the space-time? The answer is: when at the moment of creation the Logons have become quantized, the distance " \hbar " (pronounced "h-bar") has been inserted between each Logon and its neighbors, in order to create an infinite symmetrical spatial lattice, with hexagonal symmetry, this happened at infinite speed, because when all the Logons were gathered in the "singularity" the Time was stopped and a movement that occurs in zero time occurs at infinite speed. The quantized Logons, moving at infinite speed, became technically *Tachyons* (even if the *Tachyons* have never been found ... until now) to be able to move faster than light ". (Melli, p.9)

But now we must explain how the observable Universe emerges. According to Melli (Melli, p.9)

"The quantized Logons (***Tachyons***) then became ***Photons*** immediately, when God said: Let there be light! (1) After that, by becoming photons, they slowed down their speed and travelled at the speed of light, creating a finite Universe that expanded at the speed of light "

(1) The words of God introduced Time in the velocity equation, creating the speed of light and light emerged from the abyss of Φ ...

The multitude of existing Tachyons suffers a deceleration and, with this, the Tachyons cease to be *superluminary particles* and become photons; thus, begins the observable Universe with its Riemann metric predominantly based on the real numbers. In this way, the second transformation that goes from imaginary metric to real metric (from non-observable Universe to observable universe) takes place:

$$ds^2 \langle i \rangle \rightarrow ds^2 \langle r \rangle, \text{ in such way that } ds^2 \langle r \rangle \geq 0$$

Now a new question arises: how has probability entered the infinite substance, which is already considered in its expression of the Universe observable? The answer lies in demonic action:

"[...] God is the certainty of existence, and not the guarantee that events will end well. This means that God is probability 1, that is certainty, but this

is true for Him, not for me. His infinite certainty cannot guarantee that there is also no "cosmic bad luck", which is a negative probability equal to -1.

And that is the Devil, who has no substance, but only negative probability. The sum of the two probabilities of God and the Devil is therefore: $1 - 1 = 0$, and is represented by the Logons who, becoming photons, fill all the space-time. It takes very little to destabilize the zero of that probability, so it is not God who decides but the probability, whose symbol is Ψ , that is, the Greek letter Psi (which represents the Devil's pitchfork) "(Melli, p.9)

Around each of the logons, which now manifest themselves in the observable space in the form of infinite (2) photons, there is certainty of existence: the proof which ensures that each photon, originally, was in the form of an atom in the Mind of God. But this "offends" the Devil who, having no substance, perturbs every point of observable space in the form of a "dialectical tension" directed at the certainty of existence. The function $f^{(1-1)}$ introduces the probability Ψ at each point of the observable universe. Namely:

$$f^{(1-1)}(ds^2 \langle r \rangle; \alpha) = \Psi_\alpha$$

In the expression, above Ψ_α means the demoniac perturbation of the certainty of existence (God's Mind origin) at every point α in the observable Universe – *the probability in itself*.

(2) A slice of the infinite Substance of God, which according to Isaac Luria was used to create the World, contains infinite dimensionless logons, so

infinite photons were created even though the World was of finite dimensions. For Melli's Mathematics of God, an Infinite divided or multiplied a number of times N (different from Infinite), remains Infinite.

But what is the source or the ontological origin of the probability? According to Melli:

"What is the probability? It is not known, but it seems to have the characteristics of a very often unlucky potential energy that has its roots in space-time, so it is also part of the substance of Spinoza "(Melli, p. 9)

With the help of transreal numbers, we can speculate about the nature of probability. Each point of observable space-time, Spinoza's infinite Substance in the form of the physical Universe, arose from a tachyon that slowed down to become a **photon in the Universe**. In turn each tachyon arose from a logon that was amalgamated with other **logons** in the divine Logos: **photons** were **created (as soon as God created Time with an act of His will)**, out of time and space, and the energy needed to get them out of this initial state is infinite. Thus, each point in the observable Universe originated from a logon, and it took an infinite amount of energy to withdraw the logon from its initial superposition state to get it to the punctual expression of a photon in the observable Universe. Therefore, at each point α of the observable universe, there is the action of the potential energy U_α :

$$U_\alpha = \infty_\alpha - \infty_\alpha = \Phi_\alpha$$

which expresses the transformation of a superposed logon into a photon.

According to a possible **inter**-interpretation of Transreal arithmetic, nullity Φ can be seen as the superposition of all real numbers. Thus, by analogy, Φ_α admits being interpreted as the superposition of all points of the observable universe; a “degenerate” superposition, since it is a physical superposition: the “true” superposition is of metaphysical origin and it is found in the Mind of God, before creation, in the form of the aforementioned $\Theta\Lambda$ superposition of all the infinite logons. (3)

(3) And the numbers (the Logos) became Substance...

et Verbum Caro factum est.

In this way, we can speculate and affirm that potential energy $U_\alpha = \Phi_\alpha$, “degenerate superposition”, is the cause of the insertion of the probability Ψ_α into the point α of the observable Universe. Namely:

$$\Phi_\alpha \rightarrow \Psi_\alpha$$

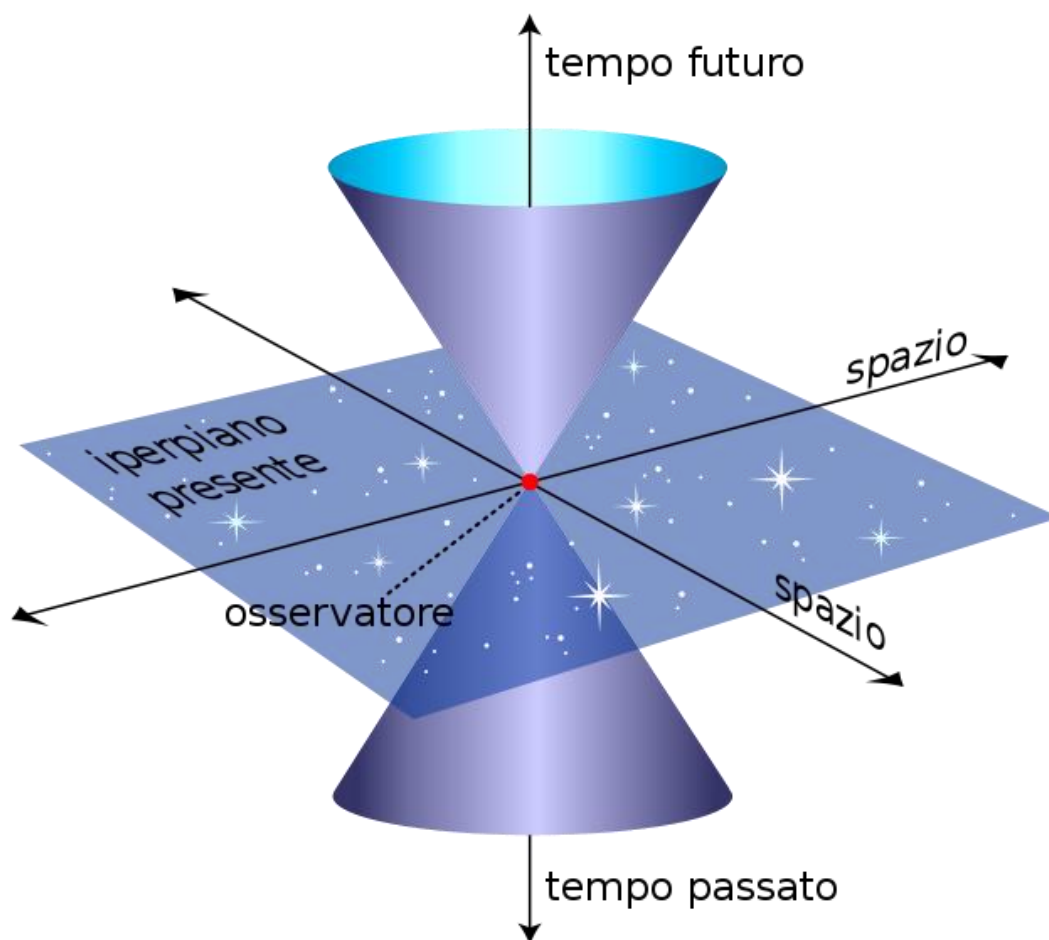
And what about the neighbourhood of the primordial point “zero” of the Observable universe? In other words, what about Φ_0 or Ψ_0 ?

In other words, what about **the potential energy of U_0** ?

For answering such a question, we must have in mind that at point “zero”, the entire Observable Universe was condensed in an atom very similar to

the metaphysical superposition of all logons, namely $\oplus\Lambda$. At point zero, the Observable Universe was surrounded by the certainty of God's Mind; at point zero, God's Mind enters into the Universe as the "God's Eye". According to Melli:

"The time of the future is still, until it becomes present. Before the Universe occurred from the past, the red dot represented the apex of the cone of certainty of the future Universe, which included the sum of all the infinite probabilities of the future events that could occur within the Universe. Also, in this case the sum was 1, that is certainty, in fact all the matter that will constitute the future Universe will be formed starting from that point of probability 1. That point also contained in itself the potential of the onset of life on Earth. Everything was there at that zero point, everything was there "*sicut erat in principio*" (Melli, p.18)



Let's introduce the relation $\delta_{\Lambda\alpha}$ that evaluates how the point α of Observable Universe is similar to the metaphysical point $\oplus\Lambda$. We can define that relation of similarity as:

$$\delta_{\Lambda\alpha} = \frac{1}{T},$$

in which T is the "absolute" time interval (introduced by God) between the point α and the "metaphysical point" $\oplus\Lambda$. In the same way, we can consider that potential energy U_α can be considered as directly proportional to $\delta_{\Lambda\alpha}$:

$$U_{\alpha} = k \delta_{\Lambda\alpha}.$$

If we consider the point at zero, the point that represents the “eye of God”, we can admit that such a point is absolutely “glued” to God’s Mind and His superposed logons $\Theta\Lambda$. **Thus, T is equals with “zero”.** Then, we have the following “Brahmagupta equation”:

$$\delta_{\Lambda 0} = \frac{1}{0} = \infty$$

Then,

$$U_0 = k\infty = \infty.$$

Thus, at point “zero”, the potential energy is infinite and it is not “degenerate” into “nullity”, and at zero **there is no “demoniac probability”** Ψ_0 : all is certainty at “zero”, since the initial zero reveals the “perceptual field” of God, the infinite Spinozian Substance.

For all points α at Observable Universe, $\alpha \neq 0$, we can expect that $T = \Phi$: the time interval (*a continuous path* in Observable Universe) between a physical event and the metaphysical situation $\Theta\Lambda$, an event that occurs before physical time has begun, cannot be measured by an unique real number and, thus, is indeterminate: all real numbers, in *superposition state*, could be the value of such time measurement.

Thus, as pointed **out** before:

$$U_{\alpha} = k\Phi = \Phi.$$

Then, at every point of the Observable universe different than the initial zero, there is a disturbing potential energy, and such a potential energy introduces the probability into the Physical Universe.

Now we can go further and start to speculate about the Nature of the Infinite Substance to that extent it is seen, at the same time, as being infinite in Extension as well as in Thought: God is infinite in Extension and His thought, also infinite, fills the entire space. According to Melli (p. 19)

"Spinoza's Substance is at the same time *Thought* and *Infinite Space-time Extension*. And the Substance for Spinoza is Everything in everything that exists, including thought [...]"

To understand how God can be infinite in Extension as well as in Thought, it is necessary to consider the sacred God's Mathematics based on 0, 1 and ∞ . In Melli's words (p. 19):

"Paul Davies in his book: the mind of God, expressed the concept: "I believe that the proposal of the existence of these" laws of initial conditions "strongly supports the Platonic idea that the laws are" out there "and transcend the physical Universe. Sometimes it has been argued that the laws of physics originated with the Universe; if that were the case, then such laws could not explain the origin of the Universe, because the laws would not have existed as long as the Universe had not existed".

It was clear that their thinking must now be analysed and explained using the methods of the Kabbalists, to define each definition in detail, to divide each concept into four parts, to analyse each hypothesis by explaining each letter of the alphabet. In other words, it was necessary to write the Kabbalah of the Talmud of Scicli.

However, there were problems that had to be overcome before proceeding.

Leon had told Jacob: "After spending years studying the Kabbalah, I have come to admit that I fully agree with the Borges analysis on the methods of the Kabbalists. They do exactly the same work that astrologers do when they interpret the movements of the stars to predict the human destiny. Given that the Torah represents revelation and was revealed to the Hebrews with the Hebrew alphabet, but to expect that every single letter of the alphabet and its permutations or numerical values have a meaning regardless of their position in the text, would be asking too much of the fundamental intentions of the Holy Spirit.

The Kabbalists, confusing the complicated question of deciphering the message of the Holy Spirit, ridicule themselves before an honest scientific truth. Therefore, in my explanations I will try to avoid the mistakes of the Kabbalists and I will try to give only the definitions necessary to explain my theories. "

Then Leon added: "To avoid falling into error I have simplified the traditional Kabbalah, avoiding using the usual 33 numbers (22 letters of the Hebrew alphabet, ten Sefirot and the Unity of God) to explain Creation. I limited myself to using the three sacred numbers of my Mathematics of God, that is: 0, 1 and infinity. Because their permutations explain both the Unity of God and the infinite Substance of God. These are the numbers of the famous equations of Brahmagupta:

$$1/\infty = 0 \text{ and}$$

$$\frac{1}{0} = \infty.$$

that Brahmagupta wrote in 628 A.D., without worrying about the philosophical implication of concepts like zero and infinity."

Now there arises the question: How **can** God manifest Himself in the Observable Universe as an Infinite Extension and an Infinite Thought by using only His Mathematics based on 0, 1 and ∞ ?

Let's us consider now that the triplet $\langle 0,1, \infty \rangle$ is the essential of Transreal Numbers, and that Transreal infinity ∞ can be related to any of Cantor's transfinite alephs:

$$\aleph_0, \aleph_1, \dots, \aleph_k, \dots$$

Let's now return to the set of Logons Λ whose infinite elements lie in superposed state in God's Mind before the creation, namely, the set Λ is **situated** in God's Mind before the creation as $\oplus\Lambda$.

Within the set $\oplus\Lambda$, let's consider a specific logon L . Such a logon has related to it an infinite set I of "God's instructions" whose cardinality is \aleph_0 (4) (i.e. instructions that can be counted). We can say that the set of "God's instructions" are all mathematical properties related *exclusively* to the logon L that must be actualized through physical-time. Thus, to each logon L , we can relate the set I .

(4) \aleph_0 is the only infinite set of Cantor that can be counted.

Each set I is "linked" to a unique logon L in God's Mind. Then, we can say that each logon has its conscience "I" in God's Mind, and these sets I are *dimensionless*, since the logons have no dimension.

In fact, according to the Measure Theory, the size of the logon L is zero, since L is a point, and I has a size equal with zero, since it is a denumerable set of instructions – according to Measure Theory, every denumerable set has measure equals with zero. Then, by calling the size of a generic logon L by $\mu(L)$, we can evaluate the measure or the size of the infinite set $\oplus\Lambda$, the set of all superposed logons– **in order to do such an evaluation, we are**

using the axiom of choice according to which we can index with a number (a finite or an transfinite) each logon in God's mind.

$$\mu (\Lambda \oplus) = \mu (L_1) + \mu (L_2) + \mu (L_3) + \dots + \mu (L_\omega) + \dots = 0 + 0 + 0 + \dots + 0 + \dots = \infty \cdot 0 = \Phi$$

(in the formula above, ω is the first transfinite ordinal number; we are presuming that there is, at least, \aleph_0 logons in God's Mind).

Thus, as it was to be expected, the size of the set Λ is equal with Φ . If we consider that each logon L_k has associated to it a set I_k of God's instructions whose cardinality is \aleph_0 , then we can derive the following identity:

$$\mu (\Lambda) = \mu (L_1) + \mu (L_2) + \mu (L_3) + \dots + \mu (L_\omega) + \dots = \mu (I_1) + \mu (I_2) + \mu (I_3) + \dots + \mu (I_\omega) + \dots = 0 + 0 + 0 + \dots + 0 + \dots = \infty \cdot 0 = \Phi$$

In other words, the equation above says that the set of the logons with their instructions is the same point of the set of the pure logons: in other words, each atom of space that forms the Universe is an atom of God's Thought: when God created the *continuum* of spacetime, He also created a *continuum* of Thoughts that rules over each logon, over each *Tachyon or Photon*.

Now a crucial problem occurs in that attempt to understand how God creates the world: how the continuum spacetime of the Universe, observable and non-observable, comes from the single atom $\oplus\Lambda$ that lies in God's Mind and have "nullity" as its measure? In other words: **how the entire and continuous Universe comes from such an "absolute discreteness"?**

According to Melli (p.28):

"One of the most complex" labyrinths "of human thought is the relationship between continuous and discontinuous space-time. Since ancient times Pythagoras had raised the problem of what space was, which is intuitively continuous, but we know that we can divide it into infinity because the result of division is always a dimension that, as such, can be further divided. The search for the fundamental particle to fill the space so as not to leave voids had continued for centuries, until Leibniz introduced the concept of "monad", a particle so small that it was not made up of parts and therefore it filled the space without leaving empty spaces. In my book: the Talmud of Scicli (which can be read on my blog in Google) I refined the concept (I wonder if I'm right) with the concept of "**logon**", a particle not only of zero size, but also of mass equal to zero, whose structure is only constituted by its existence as a point of space-time. The logon is only endowed with potential energy, when it is immobile, but manages to create kinetic energy, and therefore mass, when it moves.

A logon is therefore the mass at rest, the size at rest and the resting time of the photon.

The logons, being of size equal to zero could fill the whole space without leaving empty spaces forming a continuum. All this is obviously in conflict with the theory of quantum mechanics, whereby energy manifests itself only as "**quanta**" of energy, discontinuous and separated by the distance " \hbar " (pronounced "h-bar"). A second dilemma is how to balance gravity / inertia, which are properties of continuous space filled with logons, with quantum theory (which is made of discontinuous particles) which works remarkably well to explain physical reality "

We can try to elucidate such a mysterious passage from discrete to infinite continuous spacetime by considering the following train of thoughts: The set $\oplus\Lambda$ can be considered as an atom in which we can find \aleph_0 instructions of God “linked” to each logon. Then, in the set $\oplus\Lambda$, one can replace each logon L_k for its instructions I_k , and the following identity emerges:

$$\oplus\Lambda = \oplus L_k = \oplus I_k$$

The cardinality of the set $\oplus I_k$ is the addition of the cardinalities of each I_k . Since each cardinality of I_k is \aleph_0 , then the cardinality of $\oplus I_k$ is also \aleph_0 . Thus, we can affirm that

$$\text{Cardinality } \oplus\Lambda = \text{Cardinality } \oplus I_k = \aleph_0$$

So, we can postulate, from Cantor’s theory of sets, that the **continuous Universe**, named by M , has as its cardinality the cardinal number of all possible subsets that we can obtain in $\oplus\Lambda$. In other words:

$$\text{Cardinality } M = \text{Cardinality } 2^{\text{Cardinality } \oplus\Lambda} = \text{Cardinality } 2^{\aleph_0} = c$$

We can explain the equation above as following: all points of the Universe are made by combining logons (subsets of $\oplus\Lambda$), and such a combination of logons in the Universe (Tachyons or slowed down Tachyons -photons) are the points of the Universe M ; and the totality of these points has as its cardinal number c , the cardinal of the **continuum**. Then, by means of Cantor’s Transfinite Arithmetic, we can go from the atoms $\oplus\Lambda$ in God’s Mind to the entire continuous Universe M .

Let us consider each logon L related to a “metaphysical quadruplet”:

$$\langle 1, 0, \aleph_0, \Phi \rangle$$

Let's call such quadruplet by the "Reuleaux Quadruplet" or Tetrahedron of Reuleaux* (see definition below). Each component of that quadruplet has a metaphysical meaning:

- a) **1 = the perfect Unity of God as an infinite Substance that gives a perfect individuality to each logon;**
- b) **0 = the absolute size or measure of each logon;**
- c) **\aleph_0 = The laws or instructions that lie at every logon; \aleph_0 represents the "conscience" of each logon that comes from the Absolute Conscience of God;**
- d) **Φ = the place in God's Mind at which all logons are in superposed state before the creation; the eternal position from which the initial zero, the "eye of God", comes as the first physical manifestation of the Infinite Substance of God.**

Note: The geometry of the Reuleaux tetrahedron could be utilized to represent a "continuous" space-time.



Usually the Reuleaux tetrahedron represents four spheres of probability surrounding four quantized logons (atoms of space-time) interlocked so that the center of each sphere is on the surface of the other three, at the center of the four spheres is a tetrahedron that contains a space-time common to all four spheres.

This central tetrahedron that I propose to call "Aleph" has some interesting properties:

- 1 - Each point of its volume is common to the four quantized logons.
- 2- The distance between its vertices is assumed equal to " \hbar ", the Planck constant.
- 3- Its total probability is shared $1/4$ among the four quantized logons.
- 4- Since the logons (ie the space-time atoms) are dimensionless physical points, this central tetrahedron or Aleph, despite being of limited size, contains infinite atoms of space-time and its total probability is 1.
- 5- Any possible event that has a non-null probability to occur within the Aleph will be verified in it, as if its space-time were continuous.
- 6- The sum of infinite Aleph fills all the infinite space-time available.
- 7- It follows that the space-time inside the Aleph is a "continuum".

In this case we choose to explain the unity of the quadruplet

$\langle 1, 0, \aleph_0, \Phi \rangle$

with the Aleph, which represents the Holy Tetragrammaton, **YHWH**

the Name of God. (5)

(5) The mystery of the Word (the Name of God) becoming Substance is analysed.

Now we can try to figure out how the Name of God, in each of the metaphysical quadruplet

$$\langle \mathbf{1}, \mathbf{0}, \aleph_0, \Phi \rangle,$$

that generates “infinitesimal Reuleaux tetrahedrons” in every point of the Universe. Basically, these infinitesimal Reuleaux tetrahedrons are regions of *possibility* that surround all logons, being these tachyons or photons. Besides that, such possible tetrahedrons put into the physical world the seven properties above listed related to every “tetrahedral regions” of the continuum of spacetime.

First of all, let’s consider four logons:

$$\langle L_1, L_2, L_3, L_4 \rangle$$

Each logon in the quadruplet above, has \aleph_0 instructions; then, from each logon in the quadruplet, we can derive a *possible continuous world* $M = 2^{\aleph_0}$. Thus, from the quadruplet above, emerges a new quadruplet compound by *four continuous possible worlds*, namely:

$$\langle M_1, M_2, M_3, M_4 \rangle$$

We can assume that these *possible continuous worlds* are “spheres of possibilities” whose centre lies at each logon.

Let’s consider the intersection of these four spherical possible continuous worlds. Such an intersection is a possible region of the Universe that has the geometrical aspect of a “very small Tetrahedron of Reuleaux” whose distance between its vertices is $h/4\pi$. **Such a possible tetrahedron of Reuleaux surrounds every point of the Universe: for every photon or tachyons in the Universe, there is a very small tetrahedron of Reuleaux of**

possibilities. Then, to every point α of the Universe, we can relate a probability ψ_α (the image of “Nullity” Φ), a very small tetrahedral volume ε (the image of “0”), a continuous 2^{\aleph_0} of points inside the volume ε of the possible tetrahedron of Reuleaux (the image of “ \aleph_0 ”), and the distance between the vertices equals with $h/4\pi$ that gives “mathematical and formal unity” to the tetrahedron (the image of the Unity “1”).

Then we have the following relation between quadruplets

$$\mathbf{YHWH} \rightarrow \langle \mathbf{1, 0, \aleph_0, \Phi} \rangle \rightarrow \langle \mathbf{h/4\pi, \varepsilon, 2^{\aleph_0}, \psi_\alpha} \rangle$$

From the “Name of God” to the quadruplet that presents the essential properties of the possible tetrahedron of Reuleaux that surrounds every point of the Universe, the causality becomes more physical than “theological”.

Now we can picture how the Riemann space came from the set of all \aleph_0 logons that are superposed at “Nullity”, a point outside the continuum of space-time.

At Nullity Φ , **before the Creation would take place**, all logons are superposed in a point, and their geometrical arrangement in that metaphysical situation is described or modelled by the mystic quadruplet

$$\langle \mathbf{1, 0, \aleph_0, \Phi} \rangle,$$

the first expression or the first emanation of the name of God YHWH.

Then, in God's Mind, all logons are **sizeless** (0), they have a denumerable number of instructions (\aleph_0), have a perfect individuality (1), and are all "outside" the physical space (the point at Nullity Φ). As Melli says, in that initial situation and in the immediate successive instant, the instant $T = 0$, the logons are separated and become Tachyons:

"Before Creation, the Planck distance between the logons was: $\hbar = 0$, because nothing moved and time was stopped. Then in the instant after Creation the logons were separated from each other and became Tachyons, particles that travel at infinite speed, since Time stopped and a movement that takes place with time zero, occurs at infinite speed" (MELLI, p.41).

And the creation continues from the superposed set of logons $\Lambda \oplus$ to the world of Tachyons and photons:

"How did the symmetry occur? We must imagine that Creation occurred from a plane, the *Plane of God*, which separated the Past from the Future, as shown in Figure 5, and was therefore made up of infinite zero points (the logons).

These logons were in contact with each other, leaving no gaps, because they were of size = 0 and between two consecutive zeroes the distance was zero. They formed a unique and undifferentiated substance, the Substance of God that filled everything that existed before Creation (so it was also infinite). At the time of Creation, the logons separated, at infinite speed, preserving between them, on the first plane 0, the distance \hbar between the vertices of the triangles, then, again at infinite speed, on the first plane 0 overlapped all the other planes that constitute reality, one after the other, at the speed of light, and always at the distance of Planck \hbar . The speed, from infinite, had slowed down and become the speed of light, because the

logons had become first tachyons and then photons, when God had said:
"Let there be light!"

Let's remind us of one the first transformations presented here, namely:

$$\oplus\Lambda \rightarrow ds^2\langle i \rangle$$

In such a transformation, we are presenting the passage from the set of all superposed logons to the Riemann space in which imaginary numbers prevail over real numbers (Tachyons have "imaginary masses", and such a condition interferes on the spacetime surrounding them; and the spacetime that has Tachyons as its elements is supposed to have an enumerable number of points... in other words it's quantized).

Tachyons are superluminal particles. In order to create the Observable world, in which the Riemann metric is prevailing with real numbers, all logons that became tachyons must slow down and acquire the velocity of light. So, the second transformations appear:

$$ds^2\langle i \rangle \rightarrow ds^2\langle r \rangle$$

ds^2 is an infinitesimal region of spacetime. It is composed by three spatial components, and one temporal component. Then, the structure of each point P_U in the Observable Universe is made of the following quadruplet of real numbers:

$$P_U = \langle x, y, z, t \rangle$$

Now consider that, for each point P_u , we can relate the set of Riemannian metrics $ds^2 \langle r \rangle_u$ - the set of all metrics that is extended from P_u to any neighbouring point P_{u+h} , in such way that h is a very small number.

Now we can consider the region $ds^2 \langle r \rangle_u$ as a "sphere" whose centre is P_u and radius is equal with h ; **let's consider h equal with $h/4\pi$** . Then we see the third manifestation of the Name of God as a sphere that encloses every point P_u of the continuum spacetime given by Riemann space:

- a) **the region $ds^2 \langle r \rangle_u$ has a perfect unity given by the distance $h/4\pi$;**
- b) **The volume of $ds^2 \langle r \rangle_u$ is a very small number ε ;**
- c) **There are 2^{N_0} points inside $ds^2 \langle r \rangle_u$;**
- d) **the region $ds^2 \langle r \rangle_u$ is an orbital, a region of probability; and we can relate to $ds^2 \langle r \rangle_u$ the density of probability equals with $\psi_{ds^2 \langle r \rangle_u}$**

Then, every point of the observable Universe could be seen as surrounded by a "possible tetrahedron of Reuleaux".

We can explore in more details what is the region $ds^2 \langle r \rangle_u$. Such a region is a region of probability attached to each point of the observable universe: each point has related to it such portion of possibility. We can postulate that this portion occurs by the interference of a quantized Tachyon that disturbs the neighbourhood of a point of spacetime. When a Tachyon slows down and achieve a luminal velocity, it goes from a state at which its velocity was infinity (a Tachyon is a separate logon...) and potential energy (physical energy) is equals to zero, to another state at which its velocity is equals with c . Thus, at velocity equals with c , the energy of a tachyon varies from 0 to ∞ ; and the total amount of energy necessary for transforming a

logon into a point of the observable universe, an observable point in continuum of spacetime, is equals with “nullity”:

$$U_u = \infty_u - \infty_u = \Phi$$

And, as seen before, such a potential energy equals with “nullity” introduces into every point of the continuum of points in spacetime a probability $\Psi_{ds^2 < r > u}$ - **the “demonic probability”** ...

So, the “granular quantized” Riemannian space of logons and Tachyons (a space in which we have \aleph_0 points) generates in the continuous spacetime, in which we have 2^{\aleph_0} points, the appearance of the probability – an infinitesimal “string” played by the Devil in the infinite and metaphysical symphony of God...

Now we can summarize the following passage of Massimo’s Melli “Geometry of God” in terms of Transreal Math:

"In the beginning" {Genesis 1: 1} - when the will of the King began to take effect, He engraved signs in the celestial sphere {which surrounded him}. Inside the hidden depths a dark flame emanated from the mystery of the *En Sof*, the Infinite, like a fog forming in the formless - enclosed in the circle of that sphere, neither white nor black, neither red nor green, of no possible color. Only after this flame had begun to take on size and measure did it then produce radiant colors. From the deepest center of the flame sprang a fountain from which colors were emitted and spread throughout the Inferior, hidden in the mysterious concealment of *En Sof*. The spring erupted but did not penetrate the ether of the sphere. It could not be recognized until a hidden supernal point shone under the impact of the final fissure {**hokhmah**} (the ideal thought of Creation). Beyond this point nothing can be known. Therefore, it is called *reshit*, principle - the first word {**out of ten**} by which the Universe was created. "

The Creation from the Name of God, the Logos

At the beginning, a countable number of logons, each one with \aleph_0 **divine instructions**, are superposed in God's Mind. The set of all superposed logons are called

$$\oplus\Lambda,$$

And that set is situated *before* the creation of spacetime; this metaphysical fact can be translated into Transreal Math by saying that the "position" of such a set in a metaphysical space (God's Mind) is at "nullity".

And then the creation begun: the logons are separated from their initial superposed state and "granular spacetime" is generated; such a spacetime is compounded by superluminal particles called *tachyons*, and these tachyons have imaginary masses, a starting infinite velocity and energy equals with zero. We can postulate each Tachyon as a bidimensional structure: one is real, and the other is imaginary. By considering the mass and the "absolute initial velocity", each tachyon could be represented as:

$$\langle i, \infty \rangle$$

i represents the imaginary mass, and ∞ the infinite velocity.

So, the first step of the creation is the passage from the supernatural set $\oplus\Lambda$ to the "granular" space of tachyons $\langle i, \infty \rangle$, a non-observable space

in which “causality” is based on spatial relations instead of spatiotemporal relations. Then, we have:

$$\oplus\Lambda \rightarrow_1 \langle i, \infty \rangle$$

The schematic representation above shows to us the action of God of generating the first appearance of His own intellect. The *countable* and *granular* space of superluminal particles is the first phenomenological manifestation of God’s mind, a *pure topological and metaphysical space*; God’s Mind is a space situated at “nullity”; and from “Nullity” the creation begins.

But now we can consider the passage from tachyons to photons. Each tachyon, with zero energy and infinite velocity, from its imaginary axe, creates a photon by slowing down its velocity and by increasing its energy; by such a way, a new granular spacetime of photons, represented by

$$\langle 0, c \rangle.$$

Where 0 is the mass of the photon, and c is the luminal velocity.

Then, the second phenomenological manifestation of God appears: the world of photons, in which each photon has **ℵ₀ divine instructions...** Thus, the second passage from God’s Mind to phenomenological world is the following:

$$\langle i, \infty \rangle \rightarrow_2 \langle 0, c \rangle.$$

Then, from the “Back” of God”, the world of tachyons, the “face” of God appears, and the light was made: the world of photons; the God’s order *Fiat Lux* finds its correspondent in the realm of physical events.

But how the “body” of God, full of His conscience and divine power, appears? In other words, how the infinite Substance of God originates itself from a “set of countable photons”?

The answer of such a question lies on Cantor’s transfinite theory of sets. The continuum spacetime, whose cardinality is 2^{\aleph_0} , comes from the set of \aleph_0 photons, by means of the transfinite operation of exponentiation, namely:

$$\text{Card} \langle ds^2 \rangle = 2^{\aleph_0} = c$$

In the expression above, $\langle ds^2 \rangle$ is the totality of points of the continuum spacetime whose metric ds^2 is the metric of Riemann, namely:

$$ds^2 = g_{\mu\nu} dx^\mu dx^\nu$$

Now the “granular” spacetime of photons becomes a continuum spacetime -the infinite Substance of God- with no gaps.

Then we have the following passage from photons to Riemann spacetime:

$$\langle 0, c \rangle \rightarrow_3 \langle ds^2 \rangle$$

And so, we can consider the “Creation”, in its mathematical-metaphysical” schema, as the following passage, a passage that summarize in one step the three steps mentioned above that describe how God goes from “logons” in His Mind to the continuous Riemannian spacetime, the expression of His infinity Substance:

$$\oplus\Lambda \rightarrow \langle ds^2 \rangle$$

In the schema above, we have the “metaphysical” transformation of God’s Mind into the observable universe. The starting point of such a passage is the point

$$\langle 0, 0, 0, 0 \rangle,$$

The absolute beginning of the universe: the “God’s eye” from which the Divine intelligence see the entire universe and knows with certainty every future path of His creation; the point above is intersection of the “conscience” of God and His infinite Substance – the Cartesian “pineal gland” that connects God’s Mind and His infinite body. The local energy that concentrates in this point is infinity, and such fact reveals the absolute infinite power of God’s Mind and Will.

For every point P of the continuous Riemann space different than the absolute beginning, the “metaphysical” potential energy, as said before, is nullity. Let’s consider that we take into account every point whose distance from P is **less than $h/4\pi$** . In this way, we have a sphere surrounding every point of Riemann space whose radius **less than $h/4\pi$** . Such a sphere is an orbital, a region of probability, and it is caused by the potential energy equals with nullity at the point P : **the potential energy equal with “nullity”**

introduces into the observable universe a state of superposition that could be seen as the totality of all physical possibilities given at the same time. According to “God’s eye”, such region of probability is a region of certainty, since it coincides with the initial and metaphysical state of superposition from which all logons were separated to create the world;

for the Human’s eye, such certainty is not possible: human intelligence cannot immediately perceive the Universe in a exhaustive manner; the human intelligence must operate with “concepts and mathematical laws”, and for this reason the probability, an epistemic notion, enters into the universe: probability, as an epistemic notion, approximates human to his limits, to his “demons”...

At the centre of every sphere of probability of the Riemann continuous space, we can insert \aleph_0 divine instructions: the laws that govern the entire Universe from such sphere of probability. This centre could be identified as the centre of a Tetrahedron of Reuleaux whose **distance between its vertices is $h/4\pi$**

Then, at every point of the observable universe, the name of God

YHWH

and its “Theological” Tetrahedron of Reuleaux – the Theological quadruplet

< 1, 0, \aleph_0 , Φ >

is reflected upon each point of the observable universe as the Tetrahedron of Reuleaux inscribed in every sphere of probability that surround every

point of the continuum of the observable universe; the quadruplet related to such Tetrahedron, the “phenomenological quadruplet”, is the following:

$$\langle h/4\pi, \varepsilon, 2^{N_0}, \psi_\alpha \rangle,$$

Such that:

- 1) $h/4\pi$: the distance between the vertices of the Tetrahedron;
- 2) ε : the volume of the Tetrahedron;
- 3) 2^{N_0} : the cardinality of the points inside the Tetrahedron;
- 4) ψ_α : the probability “inside” the sphere.

Now we can ask about the meaning of the probability “inside” the sphere. What is its meaning? Such a probability represents that all possibilities in the physical world, that are given at every point of the universe by a set of an infinite and countable divine instructions, are condensed at each point as an image of the Omniscience of God’s Mind: at each point of the Universe, there is the mirroring of “God’s Eye”, and such mirroring is the probability “inside” the sphere: each “infinitesimal” region of probability gives to the entire universe the notion of “Liberty”. At each point of the Universe, the mixture of “Necessity/Chaos” is transformed into “Certainty/Liberty”. The only region of the physical world where all is certainty is the initial zero, where all things are determined. At all other points, the substance of God is surrounded by “little smokes of liberty”, and from such a liberty the Universe moves itself: the laws of Physics based on probability. Contrary to Peter Hoffman in his book “God’s gears”, Melli

assumes that the pair Certainty/ Liberty is the fundamental dialectical “gear” that rules over the Universe:

“I agree perfectly with Hoffmann that they are always Chaos & Necessity (a roll of the dice bent to the laws of physics) to dictate the rules of what is and what is not. In other words, even more direct: the chaotic - therefore "random" - movement of molecules, combined with the need given by physics, is all that is needed and is necessary to explain the existent. The rest is unnecessary added value, pure science fiction, abstract theorem for its own sake?

On this last point I do not completely agree.

I agree with Hoffmann on everything he says and I must admit that I learned a great deal from him, reading his book. The only point in which I allow myself not to agree with him is the concept of space-time, which is not an inert substance for me, but the "Substance of God". For me the laws of physics, mathematics and chemistry are the Laws of God and mine is a "vitalist" hypothesis which states that in practice: everything that animates living matter giving it a purpose, would arise from a "substance " fine, invisible, divine, (the ether of Nahmanides and Spinoza). I am a Pantheist, follower of Spinoza and Einstein ... and for me Chaos & Necessity are laws of God.

The difference between me and Hoffmann is therefore perhaps only a detail: while for Hoffmann everything starts from Nothing and a Divine Mind is not necessary to the two fundamental ingredients of his theory that are Chaos & Necessity, for me the Initial Zero is not nothing, but Probability 1, i.e. Certainty. In fact, for years I have tried to explain that that initial Zero contained within itself all the Potential to build the Future” (MELLI, p.59)

Some considerations must be made on the Tetrahedra of Reuleaux that exist at every point of the Observable Universe. They are the “divine fire” from which all things have come. We can even say that “every tetrahedron of Reuleaux” is a “divine factory” from which material particles (bradyons) emerge. At the centre of each Tetrahedron of Reuleaux, there are \aleph_0 instructions (in this way, the two attributes of Spinoza’s Substance, namely “Extension” and “Thought” are connected), and by means of such

instructions, in a *non-deterministic way*, the particles *dialectically* erupt from the Tetrahedron; and then a distance greater than $h/4\pi$ is metaphysically “broken” by the particle. But for breaking such a distance, the distance between the vortices of the Tetrahedron, an infinite amount of indeterminacy or “liberty” must be observed inside the Tetrahedron: if a creative event P has certainty inside the Tetrahedron and can go out from the Tetrahedron (if P can exceeds the distance $h/4\pi$), another event P^* must remain complete indeterminate inside the Tetrahedron. And then we have the “metaphysical” foundation of Heisenberg’s Principle of Uncertainty expressed in Transreal Mathematics – a situation that say that for something that comes out the Tetrahedron with precision, another one must remain “locked” inside the Tetrahedron with an infinite indeterminacy; and the “metaphysical rectangle” formed by P and P^* must have an area *not smaller* than $h/4\pi$. Namely:

$$P \text{ times } P^* \not\leq h/4\pi$$

If we consider P equal with 0 and P^* equal with ∞ , **then we have:**

$$0 \text{ times } \infty \not\leq h/4\pi$$

In Transreal Mathematics, the product $0 \cdot \infty$ is equals with Nullity, and the inequality above becomes the assertion:

$$0 \text{ times } \infty = \Phi \not\leq h/4\pi$$

A metaphysical mathematical statement that reinforces that all things come from "God's mind" and His Logons that are at superposed state at Nullity, the point where God's Mind rests...

According to Melli:

"Everything that exists in space-time has a geometry, so if God exists and is the Substance of Spinoza, it must have a geometry ...

If everything was created by the Substance of Spinoza, which is All in All and is also Thought or **Logos** (the mind of God) and Infinite Extension, the "Logon" should also exist, since it is the atom of the Mind of God, whose description is the following:

"The Logon is a geometric point endowed with existence and probability."

Thus, the logon is a point and not a number. (6)

(6) Being a point gives the logon its certainty of existence and its probability 1 gives the logon a central place in the Unity of God.

How is it possible that all Logons are all here instead of there? Every point of the infinite Substance is its center, because it is an infinite distance from the circumference (this is the explanation of God's Ubiquity)" (MELLI, p.69)

Each infinitesimal Tetrahedron in the Universe operates as "infinitesimal God's Mind": From its center the creation occurs, revealing the face of God – what comes out from such a center, and showing the back of God (the divine silence) – what remains locked in the Tetrahedron with infinite indeterminacy. Besides that, at the centre of the Tetrahedron, a set of \aleph_0 divine instructions – or divine *laws*, or divine *poems*... say how to act freely to create the material particles: probability laws that govern the world, and such a set of instructions is analogous to God's Mind

$$\oplus\Lambda,$$

a set of \aleph_0 superposed logons... Then, each Tetrahedron of Reuleaux scattered over a continuum of points in Riemann space gives to us the Image of “**God’s Ubiquity**”.

And what about the “divine Logic”? What kind of logic we must postulate to describe the behaviour of the Logic of God? Initially, we must consider that the Logic of God operates with “absolute **Truth**” and “absolute **Falsehood**”, and such notions are metaphysically grounded on the ontological notions of “**Being**” and “**Not-Being**”.

In fact, the absolute Being of God is His Substance that is Infinity (∞). Then, the Not-Being will be represented by the total absence of Being, and the best candidate to this is the Transreal Number ($-\infty$). Thus, the absolute Truth in God’s Mind is identified with the Infinity, and the absolute falsehood with Minus Infinite.

A logic inspired in God, if transformed into Arithmetic, will not represent True and False by 1 and 0 respectively, but it will consider such a semantical value as ∞ and $-\infty$; and all logical theorems and propositions must be expressed in terms of these Transreal Numbers. But in God’s Logic, it must have a number that represents the “absolute Liberty that reigns in all points of the Universe”, and such number is Nullity (Φ). In fact, as said before, at every point of the Universe there is a metaphysical potential energy that reveals the passage from “being in God’s Mind” (Logons superposed”) to “Being outside God’s Mind” (The continuum of Riemann Space), and such process demands a total energy, at each point of the Universe, equals with:

$$U_{\alpha} = \infty - \infty = \Phi$$

And the energy, a degenerated kind of superposed set of events, inserts into the world the “probability”, the mathematical concept that tries to translate into physical world the metaphysical notion of “Liberty”; then Nullity will be the “absolute mathematical expression” of the Liberty, of what cannot be decided by means of precise logical procedures; then, at each point of the Universe, a lot of propositions analogous to Gödel’s theorem could be discovered, and **Nullity is the number of the “Undecidable”**.

Then, God’s Logic operates is an absolute Three value Logic:

<True, False, Undecidable>

And such Three valued Logic has the following Transreal translation:

$$\langle \infty, -\infty, \Phi \rangle$$

And the Trinity above shows us the triplet

<Being, Not-Being, Liberty>

that is present in every portion of the Creation and the Human activity.

According to Melli:

“The Midrash-Konen, that is the Study of Creation attributed to Rabbi Isaaq ha-Zaqen, that is Isaac the Old, says: " The Holy of Holies created men and, against them, He created demons ... He created beasts and the animals and, against them He created the Bears, the Lions and the Leopards ... and He created the pure birds and, against them, he created the Eagle and the Vulture. "

Based on this, this passage could be interpreted as follows: God would have created tiger-mosquitoes, to make us understand the beauty of butterflies and the usefulness of bees or that of ladybugs that feed on aphids, cleaning up the plants of harmful parasites. Everything has its opposite to strengthen its beauty in our eyes. A kind of Yin and Yang for which everything was created together with its opposite, without which it could not be understood?

The Kabbalist Leon did not like the solution that God did not exist (God avoids this for us and frees us!) because he had shown His Divine existence with his studies.

Then?

Leon thought that God had resorted to a stratagem, a **Demiurge**, a kind of neutral mechanism between Man and God, **Probability**, that is, the Psi (Ψ) function that allowed God to make events happen, keeping Man's free will.

In other words, if things went wrong, it was their business (that is, of the living beings) and not God's fault, but it was the fault of the Demiurge.

That Demiurge was mathematics that mathematicians liked very much, because even if it wasn't good, at least it was fair and impartial.

But it was undeniable that there was also goodness and good feelings on Earth. The love of mothers of all kinds for their children and altruism and solidarity towards the poor, the weak and the sick. Then math didn't explain all that was in the world. Rabbi Hillel and Jesus, each on his own, had said that the synthesis of the Law was: ***love your neighbor as yourself***" (MELLI, p.88).

And what about the role of the Devil in the Universe? Devil is a the Lord of the realm of "**Not-Being**", and his role is disturbing the creation by introduction illusions and "metaphysical silliness" whose aim is introducing

“not-being” into the order of creation; then, because of the introduction of the absolute “Liberty” Φ into every point of the Universe, such a potential energy introduces an infinite “degenerate” set of superposed events at each point of the Universe, and this set contains all possibilities that come from the set \aleph_0 of free divine instructions that rules over such a point, including those instructions that can generate “phantasies” or “illusions”. This kind of things have “negative probability” ψ^*_α and, superposed with such events that have positive probability ψ_α , gives to us events that have probability equals with zero ψ^0_α . Namely:

$$\psi_\alpha \oplus \psi^*_\alpha = \psi^0_\alpha$$

And the expression above, a metaphysical law of probability, shows that the set ψ_α results from the “separation” of such a set from the sets ψ^0_α and ψ^*_α **by means the metaphysical inverse operation of \oplus^{-1} applied to ψ^0_α and ψ^*_α** (the free creation of positive probability from its “anathema”).

$$\psi_\alpha = \oplus^{-1} (\psi^0_\alpha, \psi^*_\alpha)$$

According to Melli:

“Leon was not convinced of the existence of the Devil (and in general of the various devils named in the sacred scriptures), but from the point of view of mathematical logic and Kabbalah, his existence was logical, even if difficult to prove. Bertrand Russell, whom Leon admired for his intelligence, had told the following story that in the book *Anilao* Leon had the old Jew Nahum quote in its entirety: "Nahum smiled and said:" *I see that you have progressed a lot in the study and all that you have said is true, except for one thing: God deals with the world but cannot intervene directly because he lives outside of time and his probability is only certainty. He can only do what is certain, not what is probable unlike the Devil, the king of the*

kingdom of darkness and the absolute denial of being. "Then Nahum went to look through his books and returned with a book of essays written by Bertrand Russell. "Here is the explanation. God is probability 1, that is, certainty. The probability of Satan must then be the opposite of that of God, that is, -1, the opposite of certainty, because he is the opposite of existence, the embodiment of non-existence. But here is written what Bertrand Russell thinks, in his story: The nightmare of the metaphysicist. Russell says that a friend of his, the philosopher Andrei Blumblowski, had a nightmare in which he dreamed the Devil. Finding himself in front of Satan in his dream, Blumblowski realized that the Prince of Darkness and the Spirit of denial possessed a negative body in addition to a negative mind. In other words, his body consisted of an absolute emptiness, devoid not only of particles of matter, but also of light. The empty region of his body was absolutely black, not just black, but infinitely black. It represented an absolute void, even though that special nothingness was a black hole that had the shape of the Devil, complete with horns and tail. "

"Beautiful description of God and the Devil, but I don't understand where you want to go from that story." Replied Leon "I want to get to tell you that God is the Being, and in the realm of being everything is possible. The Devil does not exist, because he is not. But don't doubt. Even if God cannot intervene personally, he can always send his messenger angels to make his will be done."

The solution was probably to understand what the Devil was made of. Leon knew that the word Satan derived from the Hebrew Sàtàn, which meant the adversary, the opposite and it was abundantly shown that the scriptures implied that Satan represented the Evil that was inextricably associated with the Good, because the two concepts were mutually exclusive and without one, one could not define the other. After long studies, Leon had come to the conclusion that the Devil, together with all the devils, contrary to what Nahum claimed, existed and consisted of the same substance that formed the Being, that is God, but this substance was immersed in a field of negative probability, which started from 0 to finish at the most at - 1. Devils were the opposite of normal probability and their success was the opposite of good: the devils won when everything was wrong and their immaterial body was made up from "antigravity bubbles" where the negative probability reigned.

The equation could be written like this:

positive probability of God = negative probability of the Devil

And if the probability of the Devil was brought into contact with that of God, this happened: $+1 - 1 = 0$

The zero was the sum of all possible probabilities (which was God), in which zero everything is equalized and everything becomes possible.

Leon had the whole theory in his hands to figure out who the opponent was, i.e. Satan and who his helpers were, in order to build the lethal weapon that could destroy them. This weapon had to fire the tachyons at infinite speed so as to transform the substance of the devils into antimatter and disintegrate them” (MELLI, p.99)

And now, we can summarize Melli’s book by presenting the following passages:

“My Pantheism

Basic axioms: The sum of all that exists is the indivisible One, that is God.

During the creation God was not only the observer but all the space-time enclosed in a single infinite point, but without dimensions.

In this sense Leon was perfectly in agreement with the teachings of the Torah and with the doctrine of Buddhism, because paradoxically that One was at the same time infinite and zero ... The One was at the same time Infinite Thought and Extension, and in Him all physical and intellectual phenomena took place, without exception. The Substance was Unique and indivisible and therefore it was God. Why? It was easy to explain mathematically: being infinite, each of its points was the center of space-time. Before Creation Time was zero because the distance between each of its points was zero, so in addition to Existence, its fundamental attributes were Ubiquity and Simultaneity. Being Thought, God had a Mind (the Logos for Christians), which was the consciousness of Existence, and a physical Substance, in which events took place, but Mind and Substance were an indivisible unity and the same thing. This was obviously a difficult paradox to explain.

One could think of a transparent, undifferentiated and compact "jelly", impossible to cut, that could be counted with a single number: 1.

Spinoza had never explained exactly what his Substance was, limiting himself to geometrically demonstrating his existence and explaining his most comprehensible attributes to Man, which are only Thought and Infinite Extension. Spinoza did not give an easy-to-understand explanation to describe his Substance, but based his explanation on geometric axioms necessary for the study of geometry such as the concept of point. From these he then proceeded to build an entire building from a first brick (axiom) as the point that we have accepted as true but that no one will ever show us as true. This will never be possible because the point in itself is an absurdity: it is something that for example constructs the segment or space with other infinite points, but does not have a real extension. We accept the geometric point only intuitively.

Spinoza then gives a definition of Substance as we do to define the geometric point or any other axiom of geometry that must be accepted without proof. Let's see if Spinoza's definition is acceptable:

"Substance is what is in itself and is conceived for itself"

Not understanding anything we are obliged to find an explanation and here it is:

The definition of Spinoza of Substance seems to me to describe the Being, all that is, that is Existence, which is in itself and is conceived for itself, even if it is often compared to non-being to define it.

Being Spinoza a Jew, his definition reflects what YHWH said to Moses on the Sinai:

"I am He who is!" (I am the existence ...)

Reading his works, it is easy to understand that Spinoza was very religious!

But we, being incredulous and intellectually sophisticated human beings, we need concrete examples to understand, so we can say:

"Infinite space-time is the only Body that represents the Substance of God, formed by geometric points of zero dimension or by dimensionless points of zero mass, called Logons, because atoms of the Logos (the Divine Mind). All the material that exists is made up of parts that can be divided infinitely and that therefore leave empty spaces.

Only space-time is a unique and undifferentiated substance that fills everything that exists, because between the parts of the bodies that are inside it, however small, there is always the space-time that represents the Substance of God. "

God is extended and God is thought. However, the thought of God is not a psychological process like the human one. And what is it then? It is this: individual things, including human beings, are not creatures of God finished with an autonomous existence, nor are they particles of God. They are, as Spinoza says, modifications of the Substance, they express God. The Substance, that is God, has no parts. The infinite extension is indivisible, there are no parts: what is composed of parts cannot be perfect.

Since the Substance of Spinoza has infinite extension and at the same time is One, it must be made of zero-dimensional points, which form the basis of its geometrical explanation of the Substance. Only that which is not made up of parts can form a single whole without leaving empty spaces. These are the atoms of the Logos, that is the Logons. How can Substance be infinite and at the same time One? This fact is explained by my essay: The mathematics of God.

All that occurs, that has occurred or will occur, necessarily occurs in His Substance and God is omnipotent for all that is possible.

Not even God can do the impossible.

Probability is God's dice game to make His will come true in the Universe and elsewhere. Before the probability makes them verify, the events are only probable and not certain.

Not even God knows what will happen in the future.

Only probable events often occur, unlikely events occur rarely, but sometimes occur.

Impossible events never occur.

Past events form History and Information, which is a fossil probability that has come true.

The future exists only in the human mind and cannot be predicted, because it is not part of the Being, as it has not yet occurred.

The Future and future events are governed by Probability and not by God.

Not even God can foresee the future.

Since all that occurs, happens within the Ether / Substance, which controls the laws of physics and Thought (Logos), the Creation must have taken place starting from the Ether / Substance and starting from the logons, which are the mass at rest of the photons of light. The photons in turn can be transformed into energy and therefore into quarks, which are the basis of matter with the full consciousness of the God-Substance and with the cooperation of Probability, which, even if it is independent of God's will, is part of God because it is part of the physical laws of its Substance.

Therefore, the God-Substance is the physical and mathematical Law and not the hand that causes or modifies the events.

This is a paradox that it is impossible for man to understand. To explain it one must believe that the Logos of the Ether / Substance, with its physical laws, directs the events according to its Laws, but the end result is only the work of an uncontrollable force, a potential energy of the God-Substance that identifies itself with probability.

Not even the God-Substance can control that potential energy that is part of itself.

Modern quantum physics shares the view that space-time-ether is probabilistic and all events are indeterminate before occurring.

Therefore, both the God-Substance and Man, who represents the fully self-conscious Life of on Earth, are free only in the present and cannot extend freedom to the future, because they do not control it. Spinoza consequently denies free will.

The Divine Spirit (Logos) penetrates the whole world and God causes everything that happens in the world of our experience. Not in the sense that He causes every event with a particular command, but in the sense that in the infinite concatenation of events within the Ether / Substance each is inevitably determined by the previous events. Causality in the world is absolute, no chance incidents occur; free will is a superstition of the people. God acts for the necessity of His Nature, which if we understand correctly includes a strange potential energy, Probability. His actions are inexorably perfect, like himself; in Nature there are no final causes, since their presence would presuppose free will, but there are good natural laws, precisely because they are natural, which form the "chessboard" on which the game of Life is played.

This is Spinoza's thought that I share. But mine is not an Atheistic Pantheism, because I am influenced by the thought of my ancestors, who, being part of history, influence my future thinking. Mine is a *Religious Pantheism*, because I believe in the unknown God, who hides behind Nature. If I have to explain who God is, I can't, but I know very well who He is. God is the Voice that laughs in the depths of my conscience amused by the absurdity of my explanations" (MELLI, p.126)

And the work is "already" done: an attempt to translate the main ideas of Melli's work into a narrative based on Transreal Mathematics...



$$\Phi = 0/0$$

