



$t = 0$



$t = t_1$



$t = t_2$



$t = t_3$



height =  $h$



## Chapter II

# What is Logically prior Event or Law?



*DR. CAMPIZIONES:*

*“What are laws? You and I can discuss this. You and I believe that laws are immutable, constant, and prior to events. This is our conclusion about laws. But we also admire the pre-Socratic philosophers. We have Heraclitus, who said that reality lies in change: ‘All is flux, and nothing abides.’ Then we have Parmenides, who said change is an illusion. Reality is immutability. And this is what troubled Plato. For those two philosophers expressed part of the truth but not the whole truth.”*

One cheerful Sunday morning, my wife, Carolina, and I were strolling in Monastiraki, a pretty neighborhood in the center of Athens, north of the Acropolis. I adore antique objects. Old furniture, old gramophones, old books, all kinds of old things exert a strange attraction for me and have a unique collectors’ value. Some folk musicians lent a special charm to the authentic ambiance of the picturesque flea market square.

Suddenly our interest was drawn by an outdoor exhibition of scientific instruments, antiques of bygone times. The salesman who approached us particularly impressed me.

**“My name is Dimitris, and my job is to distinguish authentic antiques from imitations.”** These were the salesman’s first words.

**“Whatever you see in this small space is strictly scientific, genuine, and functions according to law.”**

**“Which law?”**

**“The law that makes musical harmony come out of this gramophone; the law that governs the sky, which places stars in their orbit, and we, with that telescope, are able to observe them.”**

**“Do you watch the stars too...with that telescope?”** I asked Dimitris.



Telescope

	100	
	200	$u'' + u + u^3 = 0$ $u(0) = \epsilon$ $u'(0) =$
	300	$u(t + \frac{2\pi}{\omega}) = u(t)$
	400	$u + u = \epsilon y$
	500	$y = \omega(\epsilon)t = (\omega_0 + \epsilon\omega_1 + \dots)t$
	600	$y'' + y + \epsilon^2 y^2 = 0$
	700	$y(0) = 1$ $y'(0) = 0$

“Many times at night, when the sky is clear, I observe the stars. I am enchanted by their glow. If the stars did not follow the path set by the laws, the sky would be pitch black. But stars do follow the laws, this is why they exist, and move, and adorn the sky!”

“And how do the stars know what the laws are?” I asked.

“All the stars know all the laws, because they are intelligent.”

“The stars are intelligent?” Carolina asked surprised.

“Yes! In fact, they are intelligent enough to abide by the laws of the celestial world with absolute precision!”

“Do humans know these laws?”

“Ignorance of the law is prohibited! We are all obliged to know the law, so that we may know why we exist!”

“Do you read many books, Dimitris?” Carolina asked him.

“Yes, I read constantly. I am fond of books about oceans, animals, nature, and especially about the Universe and the galaxies.”

This maxim expressed by this colorful salesman of scientific instruments,

	100	
$O(\epsilon)$	200	
$\omega_0^2 y_1'' + y_1 = -2\omega_0 \omega_1 y_0$	300	
To avoid secular terms: $\omega_1 = 0$	400	
Apply ICs $y_1(0) = 0$ $y_1'(0) = 0$	500	
$O(\epsilon^2)$	600	
$\omega_0^2 y_2'' + y_2 = -2\omega_0 \omega_1 y_0'' - y_0^3$	700	

“**ignorance of the law is prohibited**”, was imprinted in my mind. In other words, am I obliged to be aware of all the laws of the state, I wondered, as I strolled with Carolina in the bustling square of flea-market salesmen?

But the laws are many. Very many... and new ones are always being passed. Even if, from morning to night, I read legislation, an entire lifetime is not enough for me to learn. But this is a utopia, I thought. Because, the moment that I learn a law, some legislator is drafting a new one, which perhaps will revoke the previous one.

Walking absent-mindedly on the road with Carolina, my mind trained on the law and the legislator, a new question came to me: I wonder, in the beginning of the world, what came first, event or law? ...events or laws?

I thought of A Brief History of Time written by the intellectual Stephen Hawking.

I am certainly not a scientist or an intellectual. However, I have always been a hard worker in the quarries of ancient Greek philosophy, and thus I feel entitled to pose questions to myself, to try using my own logic to provide



answers, and then to discuss the answers with the experts.

If there was a beginning to the world, the legendary Big Bang... at that very moment when the actions of the events begin to unravel, that moment when the web of natural creation was being designed, what came first, and what followed?

Do events precede the laws?

Or, do the laws precede events?

**DR. CAMPIZIONES:**

*It would be incomprehensible to have an event, to have an apparatus, without having the laws that define and direct the event.*

*Therefore, I believe that laws come first."*

Certainly, it is the laws that precede; otherwise, there would be no world, not even the salesman, Dimitris, who brought home to Carolina and me that we are all obliged to know the laws so that we know why we exist.

That night, I delved into Stephen Hawking's Brief History of Time for a fresh reading. From within the pages of the book, the image of the inspired visionary of the Universe came to life, during his appearance on September 7<sup>th</sup>, 1998, at the amphitheater of the Heraklion Medical School in Crete, while his electronic voice still resonated in my ears.

**Prof. HAWKING:**



*“In my opinion, Positivism is the only philosophy for a physicist who wants to discover the laws of the Universe. No one can say beforehand what these laws are. On the contrary, scientists formulate theories and afterwards compare them with experimental data.”*

The Positivism mentioned by Professor Hawking is based on proof that results from these very laws. Therefore, the greatest concern of the researcher ought not be whether scientific proof corresponds to laws, but Hawking’s question, “what is law, and what is its nature?”

I tried to find something more in the book to inform me specifically about the nature of the laws that are said to follow the events. Apart from the theory and the scientific proof of the events that take place in the Universe, I was unable to find any other relevant view.

In my youth, I realized – reading through the ancient Greek philosophers – that the “first principle of all things is that there is no beginning.”

Thales of Miletus inaugurated cosmological investigation. He believed that the first principle of all things is water. But water does not constitute the beginning of the world.

Anaximander of Miletus believed in “the infinite” – that which never began, and whose totality is indescribable. Heraclitus believed in fire as the cause of the constant condition of the existence of all things.

The Pythagoreans sought the essence of the world in mathematical relations

Thales' most famous belief was his cosmological doctrine, which held that the world originated from water.



that were always there. Xenophanes identified the beginning of the world with a deity that is itself eternal, without a beginning. Empedocles accepted the four, self-sustaining forms of being that pertain to the elements: earth, air, fire and water. Anaxagoras discovered the Mind that regulates all Matter forever and ever. Democritus discovered the atom, which contains and is surrounded by infinity. Socrates and Plato believe in the Universal Soul, which is unborn and immortal.

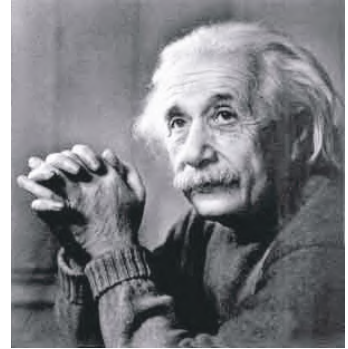
Summarizing the sages of the ancient world, we can confirm that there is no **“cause of the beginning”** but only **“cause of existence”** which is based upon one unique reality: Laws!

Einstein once asked: **“How much freedom in choosing Laws did God have in the creation of the Universe?”**

I wish to venture an answer to this question: **“If the Universe had a Creator, his degree of choice of Laws would have to be infinite.”**

Laws are immeasurable, they have no material dimensions, but they are affirmed by their manifestations, in the totality of this cosmic becoming. The manifestations of laws consist of numbers, equations, geometrical formulations, chemical formulas and the derivatives of these formulas.

No form of matter or energy in the Universe can be manifested without Law. In our era, the combination of quantum mechanics and the theory of relativity offers the possibility to the modern researcher of constantly discovering new laws that connect the macrocosm with the microcosm, thus decoding the relation between matter and spirit.



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Law is a note on the cosmic harmonic staff, played in a key ordained by the Composer of the World.

give us the capability to comprehend the unity of man and the Universe.

Man may stand upright. He may see... hear... smell... taste... comprehend... move... breathe... This is because he lives and exists within a framework of legal codes that include man and the Universe, not simply as a unity, but as a relationship – interdependent and co-functioning.

The Big Bang Theory always gave me the impression that it was an interesting “**opinion**”, but as “**knowledge**”, in a philosophical sense, it was lacking.

The idea of unknown laws, which was triggered that morning when we met the scientific salesman in Monastiraki, now helped me probe deeper into the law and its nature, which constitutes the essence of each form of substance in the material world. Let us return to the hypothesis that the Universe, according to

certain interpretations of the theory of relativity, once began with a Big Bang. Using our imagination, let us halt the explosion and mark on the blackboard of infinity two words: Law and Event!

The explosion is an event executed by that which is designated by law. If we discard law, then there is no event designated by it, or even if there is, it is automatically negated. We conclude, therefore, that law constitutes the sole principle of transformation of a potentiality into an actuality, which is viable in the material world.

What is law?

Law is a note on the cosmic harmonic staff, played in a key ordained by the Composer of the World. Every physical law is self-existent, self-sufficient, un-interpretable in its origin; it is not an entity, but it is predominant in the entities which compose the genesis and the course of each act in the cosmic **“becoming”**.

Every physical law is self-existent, self-sufficient, non-interpretable in its origin; it is not an entity, but it is predominant in the entities which compose the genesis and the course of each act in the cosmic **“becoming”**.



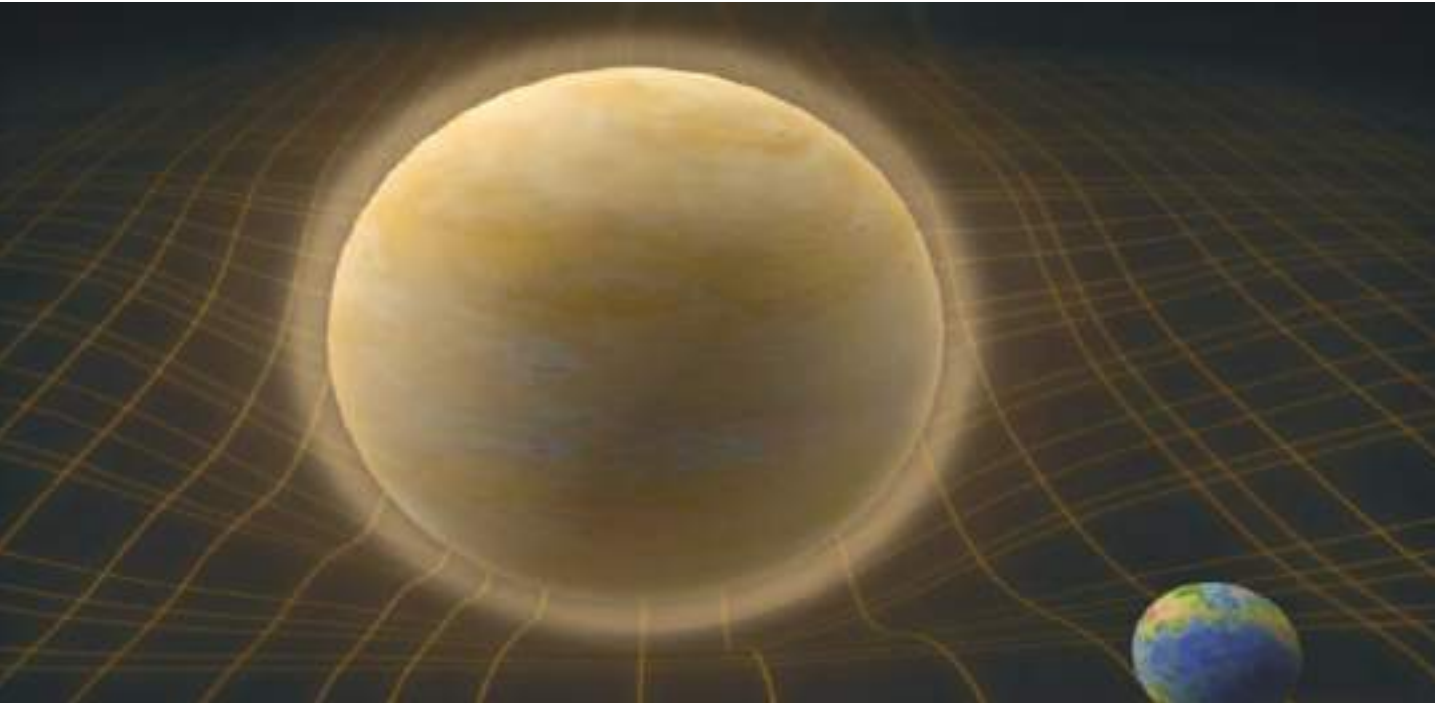
**Imagine a running track with athletes waiting at the starting line. Suppose that the firing of the gun is the moment of the Big Bang.**

The existence of laws is confirmed by the action of numbers and equations on the whole of the harmony of the Universe. The Big Bang, assuming it took place, does not constitute a beginning of existence of a Universe, since laws pre-existed.

The nature of law is of divine origin and, therefore, divine destination. For this reason both laws and events are in the realm of wisdom.

If we trace the Big Bang explosion as it unfolds, we note that each form of matter that appears follows the course defined by the law that regulates it.

Imagine a running track with athletes waiting at the starting line. Suppose that the firing of the gun is the moment of the Big Bang. Each athlete runs in his designated lane. And although the events of matter, represented by the athletes, evolve according to the pace of each of them, the track is ready and the lanes are drawn, long before



the starting-gun fires, and even before the athletes are born. Those lanes are the laws. The difference from the racetrack is that while on the track, the athletes and lanes are predetermined and measurable; the laws in the Universe are infinite and immeasurable.

Let us concern ourselves further with these lanes: On the track, we will observe that if the athletes, hypothetically, run an infinite distance, they will shortly return to the point of departure and continue their course. This must occur because every infinite journey of Matter follows a curved orbit and never a straight line.

Einstein supposed that gravity is a force that differs from the other forces of nature. Gravity is a consequence of the fact that space-time is not flat, but curves under the influence of the mass and energy within it. This is the reason why the earth, the planets and the galaxies move in curved orbits, like athletes running along the curve of a track.

**Gravity is a consequence of the fact that space-time is not flat, but curves under the influence of the mass and energy within it.**

The measurements of certain objects called Super Nova explosions that took place about seven billion years ago, tells us that the expanding universe instead of expanding regularly is expanding at a much greater pace.



**DR. SIMOPOULOS:**

*When in the decade of the 1920s, Edwin Hubble, the American astronomer, discovered the expansion of the universe, Einstein invoked the term “cosmological constant”, the biggest mistake of his career. But just a few years ago, many scientists began to think that perhaps the cosmological constant was not such a big mistake; in other words, they think today that on the basis of developments in our measurements that perhaps the cosmological constant is a type of fifth force, so to speak, which makes the universe not only expand successfully for approximately the last seven billion years. The measurements of certain objects called Super Nova explosions that took place about seven billion years ago, tells us that the expanding universe instead of expanding regularly is expanding at a much greater pace. Up until a few years ago, it was believed that curved orbits were the results of gravitational attractions. However, today science has established the view that those orbits are linear, but bent to the curve of space-time. That is to say, while the athletes run on a*



*track and must complete the turn to return to the point of departure, now the athletes run straight, on a field that is already curved. This is called in astrophysics a geodesic arc, while in philosophy, it constitutes one of the basic theories that govern the fixed nature of laws.*

*Prof. HAWKING:*

*“...The predictions of a sound theory must be experimentally verifiable. Perhaps today’s theories will be proven faulty by future observations, but I do not believe so...”*

Regarding the enigmatic nature of the lawful framework upon which the whole Universe rests; regarding, that is, the idea and the content of law, which governs everything, the only solution to the enigma remains submission of thought to the omniscience which steers the world order.

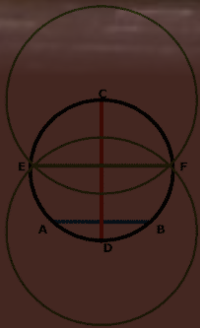
**Prof. HAWKING:**  
 “The predictions of a sound theory must be experimentally verifiable. Perhaps today’s theories will be proven faulty by future observations, but I do not believe so.”



The musical staff upon which the notes of a melody are written, where every note represents a law or a cluster of laws, is a part of a masterpiece of music, which in its entirety refers to cosmic harmony.

.....  
*Professor Hawking says about music:*

*“I’m very fond of music. Maybe you can see the batteries under my chair, are called Mozart and Mahler, I also have batteries called Verdi and Brahms but the bike is dead. However I would not analyse the music in mathematical terms. It appeals directly to the spirit”.*



I wonder, does music address the spirit? Or perhaps it encompasses the spirit of the laws of mathematics, geometry, art, and science that demonstrate the cosmic harmony. I believe that Professor Hawking grasped what thousands of years ago was declared by Orpheus in his teaching on the function of cosmic harmony.

.....

Number Tonus	C	Cle/Cve	D	Dre/Fa	E	F	Fu/Ges	G	Ges/Aa	A	Au/B	H	C
1 A. Sphæra	Red	Pink	Yellow	Blue	Green	Red	Blue	Orange	Pink	Green	Blue	Red	Orange
2 Quaternaria	Red	Pink	Yellow	Blue	Green	Red	Blue	Orange	Pink	Green	Blue	Red	Orange
3 Cell/Lar	Red	Pink	Yellow	Blue	Green	Red	Blue	Orange	Pink	Green	Blue	Red	Orange
4 L.B. Cassi	Red	Pink	Yellow	Blue	Green	Red	Blue	Orange	Pink	Green	Blue	Red	Orange
5 J.L. Hoffmann	Red	Pink	Yellow	Blue	Green	Red	Blue	Orange	Pink	Green	Blue	Red	Orange
6 H. Bess / B. Tafel	Red	Pink	Yellow	Blue	Green	Red	Blue	Orange	Pink	Green	Blue	Red	Orange
7 H. Schlichter	Red	Pink	Yellow	Blue	Green	Red	Blue	Orange	Pink	Green	Blue	Red	Orange
8 H.B. Bress	Red	Pink	Yellow	Blue	Green	Red	Blue	Orange	Pink	Green	Blue	Red	Orange
9 A. Lauer	Red	Pink	Yellow	Blue	Green	Red	Blue	Orange	Pink	Green	Blue	Red	Orange
10 P. Harnisch	Red	Pink	Yellow	Blue	Green	Red	Blue	Orange	Pink	Green	Blue	Red	Orange
11 W. Lohr	Red	Pink	Yellow	Blue	Green	Red	Blue	Orange	Pink	Green	Blue	Red	Orange
12 W.B. Nussli	Red	Pink	Yellow	Blue	Green	Red	Blue	Orange	Pink	Green	Blue	Red	Orange
13 Democritus	Red	Pink	Yellow	Blue	Green	Red	Blue	Orange	Pink	Green	Blue	Red	Orange

Pythagoras Panel supposed to be for the harmony of planets

I believe that contemporary science must give more attention to the nature and function of music. Perhaps music interprets not only the laws of cosmic harmony but also the laws of the soul itself. In the musical staff, the notes of a melody are written. If we suppose that each line of the staff is a law and each law an event, then we have before us a vivid representation of the harmony of nature and the world, in the masterpiece of creation. In a concert or a choral dance, we enjoy the harmonic result only when the dancers and the instruments faithfully follow the course of the unwritten music, with instruction by the orchestra conductor's baton. In the opposite case, if even one of the dancers or the musicians of the orchestra makes a mistake, the harmony is destroyed. The same occurs with the harmony composed by the laws of the Universe. When there is a point of deviation from that law, harmony is destroyed. We have, in other words, an undesirable event. At night, in the light of the moon and stars, in the tabernacle of the Muses, Pythagoras taught his students that mathematics and music are the same science and that harmony depends on specific mathematical relations. He saw these relations in the distances and revolutions of the heavenly bodies.



For Pythagoras, the basic principles of the cosmos are numbers. The cosmos exists because harmony dominates, and for that reason that harmony is number.

For Pythagoras, the basic principles of the cosmos are numbers. The cosmos exists because harmony dominates, and for that reason that harmony is number. In philosophy and in science there is no deviation in the functioning of a law, because the nature of law is divine, that is, perfect. There is, however, the possibility of a change in the conditions of an action, which, instead of following the pattern of law, deviates because an unforeseen event took place. If again, we see some athletes running on a track, and some of them deviate from the course described by the lines on the track and run into the line of a fellow athlete, then we have a clash of events, which brings about a momentary confusion, without however, influencing the lanes on the track, for these suggest the lawful framework of the Universe and always remain constant. If, in a galactic system, the stars collide, owing to an unforeseen cause, they may disintegrate. They may dissolve into molecules and recombine, without, however, transforming or influencing laws and the results of the harmony of the surrounding cosmic space. The nature of laws is equally



If we suppose that each line of the staff is a law and each law an event, then we have before us a vivid representation of the harmony of nature and the world, in the masterpiece of creation.

confirmed in Universe and in man. That which in the cosmic domain is called harmony, on a human level is called ethics. Ethics is the tendency of the human will to identify action with the ideal, which constitutes harmony. The father of human ethics, Socrates, developed it within the context of social laws, to a degree, perhaps, beyond any other mortal, in the world. When I found myself standing before his cell, in the ancient Greek Agora, I remembered with poignancy that when the great sage was called upon to drink the hemlock as punishment for a crime he never committed, he accepted his sentence with serenity of spirit, in spite of the frustration of the crowd over the court's decision. And this, because he respected human laws. When Crito urged Socrates to escape from prison, Socrates refused and preferred death rather than deviate from the law of ethics, which was inscribed in his soul. Let us extend the meaning of Socrates' decision to serve the law of the Universe; we then reach the conclusion that the great teacher recognized the final human destination, which promises the victory



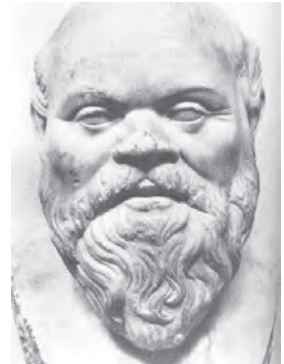
**Athenian law** prescribed death by drinking a cup of poison hemlock. Socrates would be his own executioner.

of the soul, by its ascent to celestial spheres. For this reason he did not deviate from the straight lines of the track of life. The problem of the nature of laws that define every form of life, and evolution on earth and the world, was for me a daily perplexity. Stephen Hawking describes in his books and his lectures that Time and the Universe began with a great explosion, which continues to this day, and perhaps will continue for all time.



...time and the Universe began with a great explosion, which continues to this day, and perhaps will continue for all time.

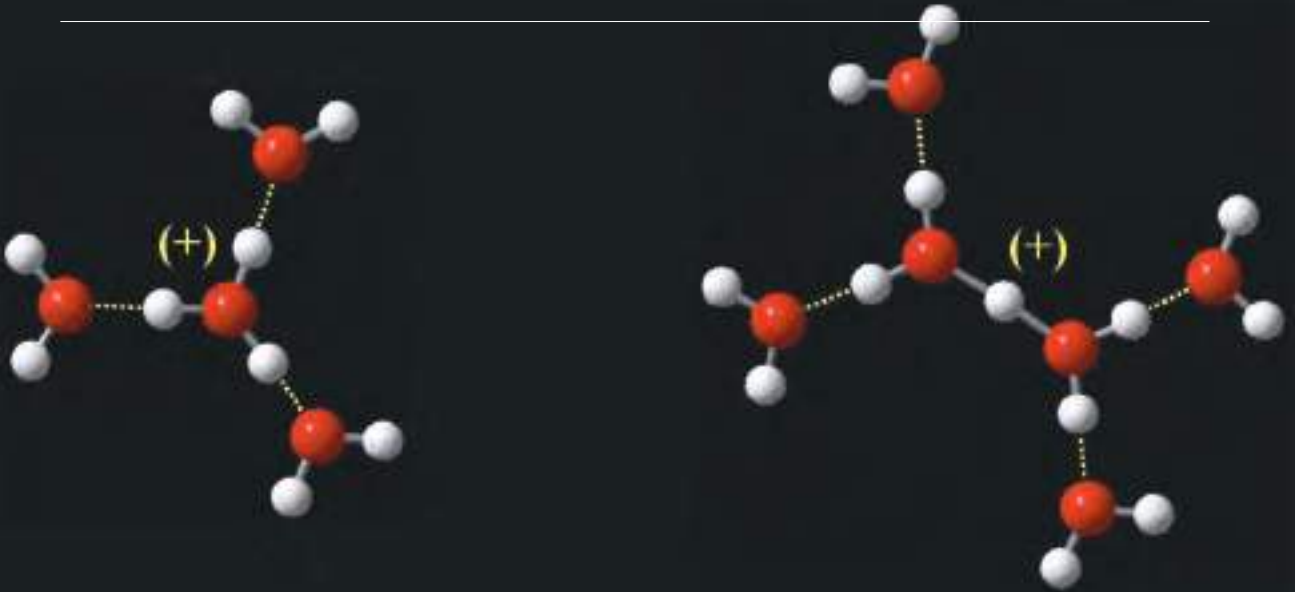
*“The gravitational force of attraction means that the Universe, or Time itself was born together with the Big Bang, approximately fourteen billion years ago. The Universe will perhaps collapse again, with a Big Crunch, if the quantity of matter in it is insufficient to halt the present day expansion and reverse it, in keeping with ‘motion’ and the ‘kinetic principle’.”*



**Socrates**

**470- 399 B.C.**

He is best known outside philosophy for being condemned to death by an Athenian people's court and choosing to die by drinking hemlock. He had been charged with impiety and of corrupting Athenian youth through his teachings and had been given the opportunity to go into exile. However, he chose to die as sentenced as he believed he would otherwise dishonor the agreement he had willingly made to abide by the laws of Athens. Ultimately, virtue relates to the form of the Good; to truly be good and not just act with i right opinionī ; one must come to know the unchanging Good in itself.



The entire universe is made up of three foundation stones: electrons, neutrons, and protons. Those three foundation stones together with quarks compose atoms.

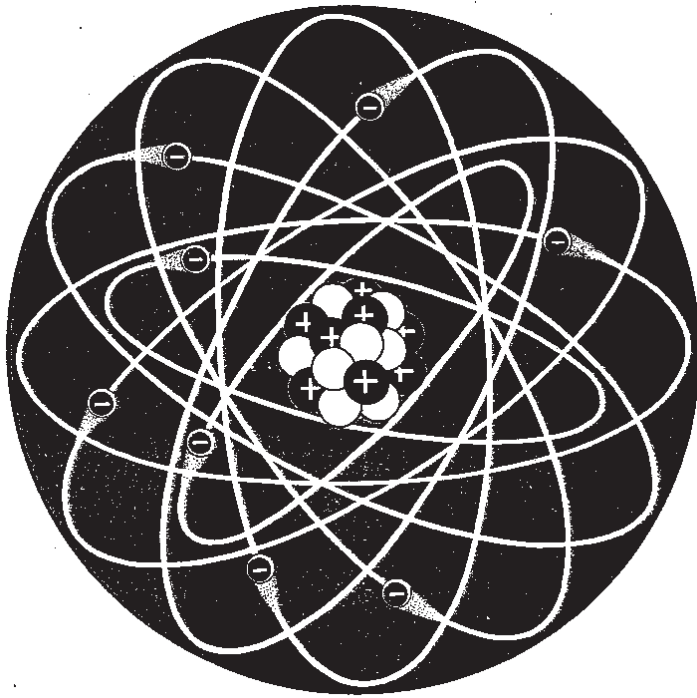
Aristotle placed the existence of the world in an automatic mechanism of divine origin and believes that the distribution of matter in the Universe is sufficient for it to be eternal.

The great philosopher believed that the existence of the Universe manifests a divinity that contemplates itself eternally.

I believe that for an interpretation of the nature of the Universe to be given there must be prior knowledge of the nature of law. And that shall be the vehicle by which a Universe proceeds towards its evolution. As I mentioned earlier, everything in the world of material substance is subject to lawful specification of its function. At this point, I must give some information about the function of the Universe that may comprise its code of existence. The entire universe is made up of three “**foundation stones**”: electrons, neutrons, and protons. Those three foundation stones together with quarks compose atoms.

There are 92 different types of atoms.

The atoms unite with each other and make various chemical bonds. These bonds comprise the total of matter in the world as much in animate beings as in inanimate things. Whatever we see around us – nature, the sea, mountains, animals, earth,



Around this atom, electrons move. In the atom's nucleus there are neutrons and protons. Every neutron and every proton has three quarks. The quarks are charged elementary particles that are subject to the action of the strong nuclear force.

light – all these things are made up solely of these three “**foundation stones**”. Around this atom, electrons move. In the atom's nucleus there are neutrons and protons.

Every neutron and every proton has three quarks. The quarks are charged elementary particles that are subject to the action of the strong nuclear force.

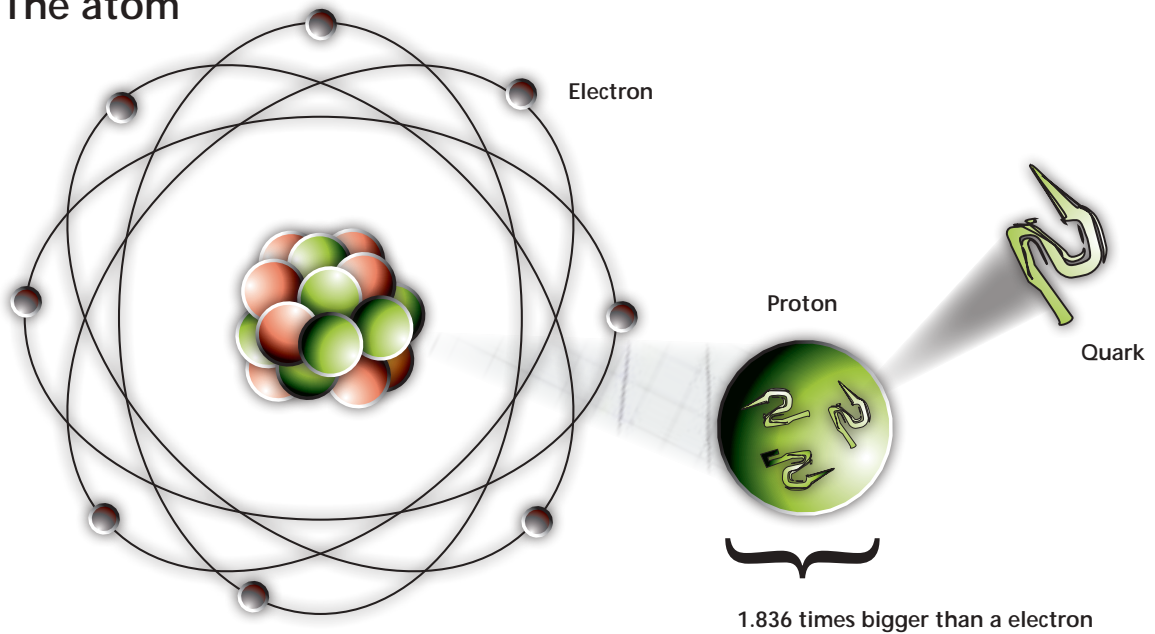
It is surprising that in the infinitesimal world of the atom, we observe that a proton is 1.836 times heavier than an electron. What is special about that number? And why are all the electrons, protons and neutrons of the universe of similar type? And why are they all immortal?

And why does every electron have a negative electric charge, every proton a positive electric charge, and every neutron no electric charge?

And why do quarks always appear together, in groups of three and never alone?

Did you know that when scientists attempted to split a proton in order to liberate quarks, they failed and considered it impossible? Did you know that

## The atom



if protons collide with great force, new particles suddenly appear without quarks being freed? Finally, did you know that all these things happen so that we humans may exist and live with the earth and the universe?

In the quest for a profound interpretation of the lawful function of nature, we arrive at the following questions:

Is this exquisite flower that I hold in my hand a result of the existence of certain laws which act inwardly upon it, so as to give it form, design, size, weight? Or perhaps the laws initiate their function from the core of the flower and manifest themselves in an outward flow?

Although the two versions have the same result – that is, I am holding the same flower in my hands – I am entitled to think that law acts in both directions, inwardly and outwardly, in every form of matter, for example:

Let us suppose that this lake represents the Universe as a whole, in other words, a framework within which laws act. If we were to toss a pebble into the lake of the infinite, we would see the results of the laws unfold before

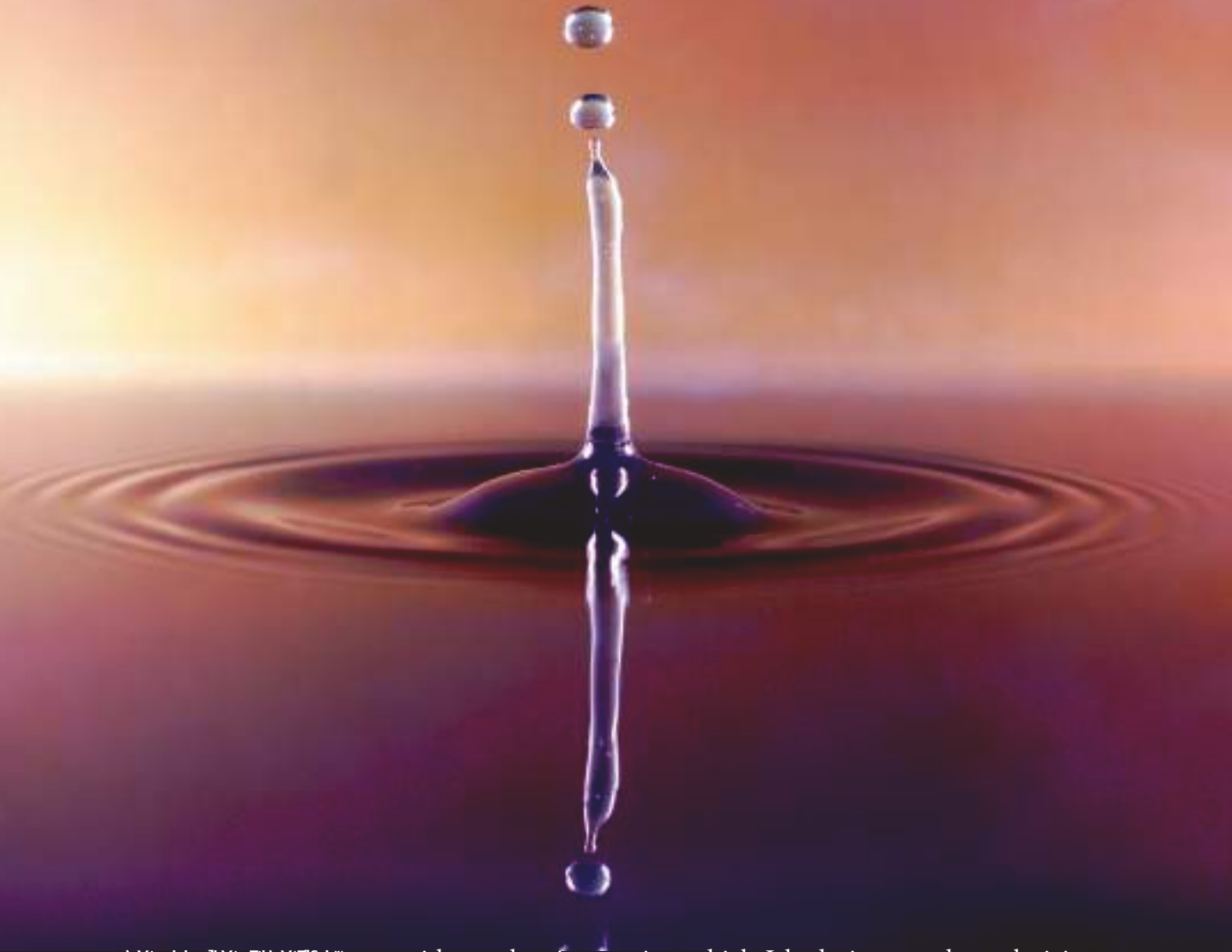


us – the laws as they are comprehended and measured by our senses.

In the initial phase of that action, we comprehend a Universe that is self-directed from the center outwards, towards an infinite horizon. Instructing the montage technician of this film to reverse the shot, we see the flow of the previous event in reverse order. The waves flow towards the point where I tossed the pebble, and finally the pebble turns back to my hand.

With these two motions, we comprehend the antithetical flows. The first is that which we perceive with our five senses, and name **“comprehensive evolution”**.

In the initial phase of that action, we comprehend a Universe that is self-directed from the center outwards, towards an infinite horizon.



\Y'cddcgjhY'cZhY'Zfgzř  
with the result that we  
see a Universe returning  
to its initial condition,  
at the same time as it  
flows towards its outer  
manifestation.

with another instruction which I had given to the technician, so that the viewer may perceive the simultaneous action of the law, through a series of activities which pertain to its interior function, with the result that we see a Universe returning to its initial condition, at the same time as it flows towards its outer manifestation.

In the scientific program that I present on television entitled Apocryphal Harmony, I discuss with my guests the properties of the laws that make the universe exist.



Because in science there is no absolute time, each law must resemble a two-sided coin. One side must act on behalf of the five senses; the other must act on behalf of harmony. These two actions are called opposite flows. If each law did not have two opposite flows, in the same “**present**” and in the same “**space**”, that is, a law and a counter-law, then it would not exist, for it would be finite.

Now, the manifestation of the first flow is from the inside outward. The simultaneous manifestation of the second flow from the outside inward is a mirror image of the first flow. At the wedding of my daughter Elizabeth, I urged Professor Bourodemos to step out with me so that I might get his opinion on some questions that tormented me in regard to matter and law. I informed the professor about the interdependence of matter and law as I had understood it, and asked for his approval of my view. Professor Bourodemos agreed and confirmed the dependence of the notion of matter and law and the manner of their collaboration. Our conclusions



were identical. Matter manifests its presence through the law, which acts inside outwardly and reveals its animate nature. All matter is living; hence it is intelligent. It has a soul.

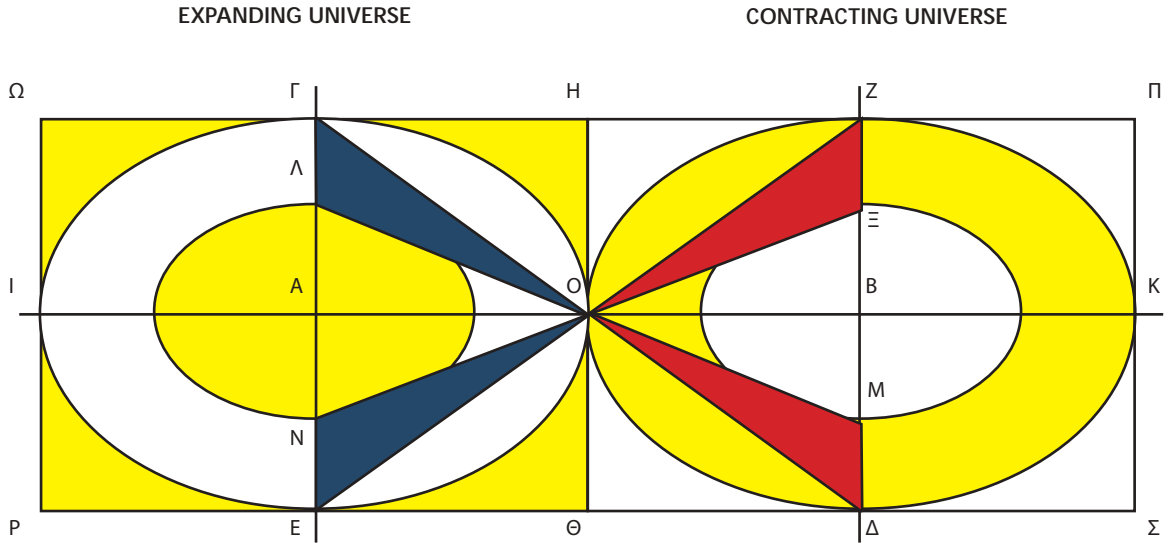
Its soul manifests itself through its automatic motion. At the same time, the law that functions from the outside inwards, acts so as to cause matter to recombine, a process which constitutes the universal “becoming”. Thus, in regard to the “**totality**” of all things, matter is living, intelligent and animate. Whenever science attempts to interpret “**becoming**” in a Universe it considers “**inanimate**”, it will comprehend only the material constitution of all things and never their essence. On the other hand, whenever science assumes an intelligent Universe, animate and eternal, then it will arrive at the esoteric interpretation of the laws, which will define both the material constitution and the essence of all things. When for the first time in 1981,



the idea of mirror image symmetry in the functioning of laws occurred to me, I committed myself to hard work, writing my first book entitled *The Great Testament*. The ideas I had at that time concerning the nature of laws and the constitution of the Universe have not changed at all. The dual flow of manifestation of law has always been for me a basis of interpretation of every scientific theory or proof. This dual flow I described and analyzed in a chart I named **“The Oyster-shell Universe”**.

Because the general framework of the action of laws is the Universe, I sketched a Universe that resembled an open oyster. The first half referred to a Universe in action, expanding from the inside outward. The second half I conventionally named counter-universe and referred to its active manifestation from the outside inward as a type of evolution. I summarized all my ideas in the following personal theorem of mine:

# THE OYSTER-SHELL UNIVERSE



$\Omega\Sigma\Pi\rho\Omega$  = MIRROR-IMAGE OF SPACE-TIME CURVE  $\Omega\text{H}\Theta\rho\Omega = \text{H}\Pi\Sigma\Theta\text{H}$   $\text{IAO} = \text{OBK}$  = AXIS OF ETERNITY  
 $\text{AO} = \text{OB}$  = EQUIVALENCE OF OPPOSITE FLOWS  
 $\text{O}$  = MEETING CENTER OF OPPOSITE AXES OF SPACE-TIME CURVE  
 $\Omega\Gamma\text{E}\rho\Omega$  = REFLECTION  $\Sigma\Pi\Sigma\Delta\text{Z}$   $\Gamma\text{H}\Theta\text{E}\Gamma$  = REFLECTION  $\text{H}\text{Z}\Delta\Theta\text{H}$   
 $\text{HO}\Theta$  = REFLECTIONS OF MIRROR-IMAGE UNIVERSE  $\text{O} = \text{I}\Gamma\text{O}\text{E}\text{I} + \text{K}\Delta\text{O}\text{Z}\text{K}$   
 $\Lambda\text{ON}\Lambda = \Xi\text{MO}\Xi$  (EQUIVALENCE OF OPPOSITE FLOWS)  
 EXPANDING UNIVERSE=UNIVERSE OF 5 SENSES (PERCEPTION)  
 CONTRACTING UNIVERSE=UNIVERSE OF 6TH SENSE (ANTI-PERCEPTION)  
 $\text{A}$  = REFERENCE CENTER OF GRAVITY  
 $\text{B}$  = REFERENCE CENTER OF ANTI-GRAVITY  $\text{A} + \text{B}$  = COEFFICIENT OF EINSTEIN'S COSMOLOGICAL CONSTANT

## SYMMETRY CPT TRANSFORMATION

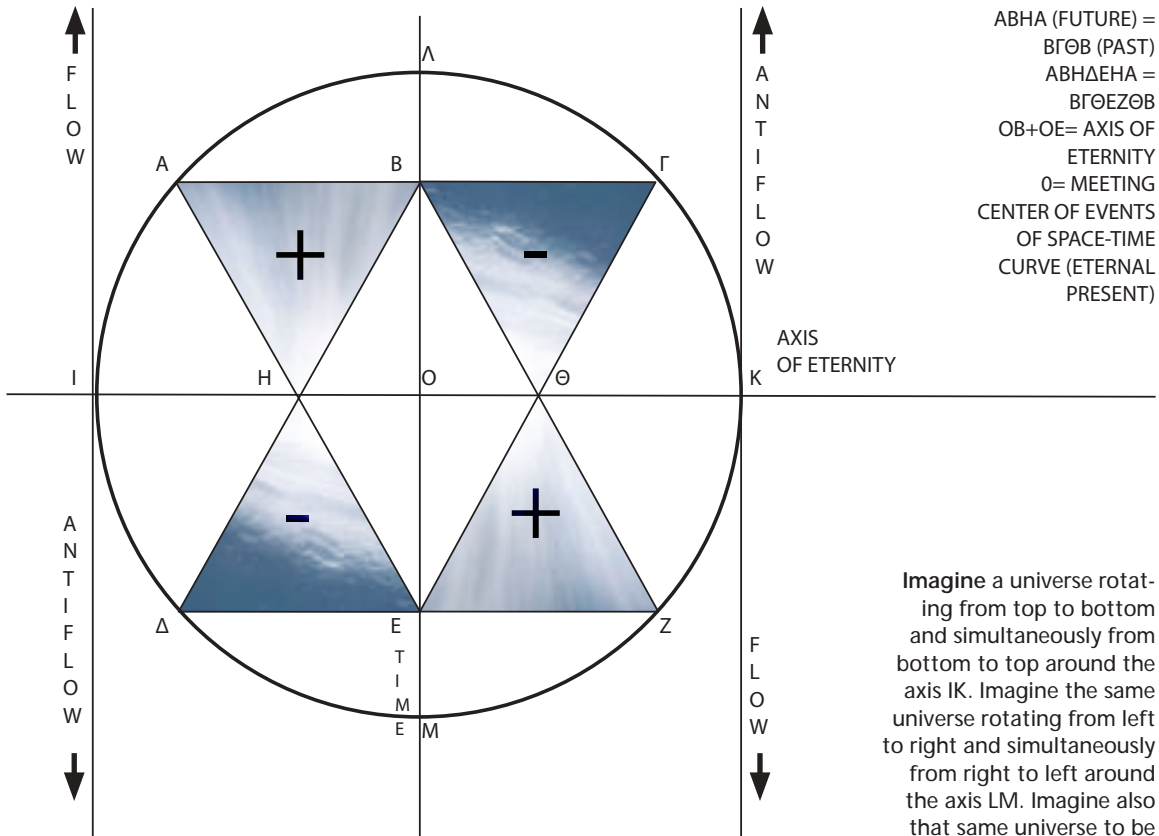
$\text{C}$ =SUBSTITUTION OF PARTICLES WITH ANTI-PARTICLES  
 $\text{P}$ =FORMATION OF SYMMETRICAL MIRROR-IMAGE  
 $\text{T}$ =COUNTER-CLOCKWISE DIRECTION OF MOTION OF ALL

Every theory that obeys the laws of quantum mechanics and the special theory of relativity must likewise obey combined symmetry CPT

“All values of mass and energy in the Universe, including all the manifestations of the laws which govern them, have their counterpart in a potential unification which is called “Eternity”. In a few words, I believe that for the Universe to be eternal, perfect, complete, and finite, which presupposes a beginning and

# CLEPSYDRA OF TIME

Eternal Static State



Imagine a universe rotating from top to bottom and simultaneously from bottom to top around the axis IK. Imagine the same universe rotating from left to right and simultaneously from right to left around the axis LM. Imagine also that same universe to be opening from the inside out and simultaneously to be closing from the outside in with the point O as common center. This is the ETERNAL STATIC STATE universe of simultaneous expansion and contraction. For us to conceive, both perception and anti-perception must operate simultaneously, properties that belong to this and our next life which unite two lives in one, placed in STATIC ETERNITY.

an end, it must function as an absolute system of expression of laws with opposing equivalent tendencies that secure its eternal nature. If this is not the case, then I believe that the Universe is but a common mortal, who lives without hope in a chaos of numbers, without destination, without the existence of a true God, since it is destined, at some point, to collapse and vanish, along with the mortal God who created it.