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From the desk of Pierre Beaudry

ANTIMATTER OF MIND AND LIFE

An insight into the Defense of Earth.

By Pierre Beaudry. April 12, 2012.

«It is the principles of life and human creativity, respectively, which reflect the essentially 'voluntary,' governing principle of the universe, as directly opposed, in the sense and effect of their intrinsic form of action, to the customarily preferred, merely apparent, false viewpoint of non-living 'sensecertainty.'"

Lyndon LaRouche

"Thus far, we have seen that the Biosphere, by structure, composition, and physical makeup, is completely enclosed by the domain of life, which has so adapted itself to biospheric conditions that there is no place in which it is unable to maintain itself in one way or in another."

Vladimir Vernadsky

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FOREWORD

Two sets of epistemological boundary conditions for the Defense of Earth are required in any preliminary approach to the question of antimatter. One is the inclusion of the human creative process as understood by Plato, and the other is the inclusion of living processes as understood by Vernadsky.

Up until now, in most of my previous reports, I have shown that if man wishes to willfully develop his mind to a higher level of creative mentation, he is required to go through a window of axiomatic change that uses inversions to cause him to reject his previous knowledge. This process also enables him to acquire a higher form of energy flux-density of mental powers through the discovery of new universal physical principles.

This report will demonstrate that if man wishes to willfully export life beyond the limits of its terrestrial envelope, he is required to transport life through a similar axiomatic window, without destroying life itself. To be successful, the conditions for this extraterrestrial mission require to understand, ahead of time, the singularities of axiomatic change that antimatter of mind and life represent in the Cosmos as a whole, not just on Earth. The report contains the following eight sections.

- 1. THE FUTURE: THE UNKNOWN THAT IS NOT YET KNOWN
- 2. PLATO'S CAVE: THE UNKNOWN THAT SHOULD HAVE BEEN KNOWN
- 3. LEARNED IGNORANCE: THE UNKNOWN THAT IS UNKNOWABLE
- 4. THE PRINCIPLE OF THE BANYAN TREE AND PLATO'S CAVE
- 5. COGNITIVE CERTAINTY AS OPPOSED TO SENSE CERTAINTY
- 6. THE EPISTEMOLOGICAL FALLACY OF ELEMENTARY PARTICLES
- 7. THE LIMIT METAPHOR OF THE PYTHAGOREAN WINDOW OF DISCOVERY
- 8. THE NEAR ZERO POINT AND THE VERNADSKY WINDOW OF ANNIHILATION OF LIFE

INTRODUCTION: ANTIMATTER CONSIDERED AS COGNITIVE AND LIVING

When dealing with the Cosmos as a whole, the most important thing to understand is to access three forms of unknowns. This can only be done by first eliminating from the mind's view the visual universe that is represented by a telescopic picture of the universe, and replacing it with the vicarious hypothesis view that includes the solution to the paradoxical identity between non-living matter, the living universe, and the knowledge that man has of it. This is the view of *antimatter of mind and life*, because it is through the transparency of such a mental construct that man can view the whole of the Cosmos universally, and conceive of it as acting on itself as a whole by including the triply-connected evolution of Creative thinking, Living Processes, and Non-Living Processes, as Vernadsky conceived the matter of the Cosmos to act, ontologically. As Lyn demonstrated, anything short of this will not be universal and thus, will not be valid. The difficulty is to understand how the universe acts as a whole.

What this means is that if we are to survive the next step into the unknown, without destroying ourselves as a species through the folly of thermonuclear war, or economic disintegration, we must realize

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the necessity of discovering the willful principle of the great integration of *Mind*, *Life*, *and Matter* as the next governing scientific principle of the universe, as the Cosmos has already established, without our consent.

This said, let's take up Lyn's challenge of the *five fallacies* that prevent us from accessing this higher universal knowledge of the universe, and examine them with this vicarious hypothesis in mind:

- 1. The fallacy of *sense-certainty*.
- 2. The fallacy of *elementary particles*.
- 3. The fallacy of *constructing from the bottom up*.
- 4. The fallacy of *the notions of space and time*.
- 5. The fallacy of cause and effect.

The next bold step is the responsibility that all of mankind must take, because it is a matter of mind for all of humanity to determine what the future of the universe will be, from the top down; that is to say, as a matter of "unity of opposition" among the three fundamental principles of the Cosmos: Mind, Life, and Matter. In this way, the concept of antimatter must be understood as being in opposition to matter, in opposition to what is dead. In other words, the traditional Dirac opposition between Matter and Antimatter must be replaced by the Vernadsky oppositions among Mind, Life, and Matter, because the traditional Dirac model is entirely constructed on the fallacy of elementary particles and excludes life and human creativity. On the other hand, Lyn's vicarious hypothesis is universally encompassing, as any cosmic hypothesis should be:

"Even if we limit the essential distinctions among elementary types of phenomena to those situated among those identified as 'matter,' we must emphasize an ontologically fundamental distinction between what is usually classed as 'ordinary matter,' on the one side, and the contrary qualities such as those of *life*, or *human creativity*, on the other. The former ('matter'), and latter ('living') qualities of existence, are opposites, as they also are comparable, even if they are only roughly drafted first impressions, to a 'rough' sense of the distinction between 'matter' and 'anti-matter.' Better said, both the specific category of life and Vernadsky's conception of the human creative will, are of crucial, ontological significance on precisely this point, as they exist only in the character of as if opposing directly the accustomed notions of states of 'matter.'" (Lyndon LaRouche, THE PRINCIPLE OF METAPHOR, LaRouche Political Action Committee, incomplete, un-edited pre-release, March 19, 2012, p. 3 of 8.)

The irony, here, is that it is the divine principles of the Cosmos which created both life and the human creative mind, and yet, mankind has not yet seen fit to search that Cosmos to discover where the shadows of those two principles of life and of mind exist, ontologically. It is as though the universe was giving itself a way to be a step ahead of itself, and human beings refused to see themselves in that function. This forgetfulness is even more ironic when you think that Plato had given us the means of finding a solution to this problem. The crucial blunder comes from the fact that so-called "scientists" have

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forgotten that Plato's Cave and the Cavity ($\kappa o \iota \lambda o \varsigma$) of the Heavens represent the one and same thing, and that this is where the truth of this antimatter connection is to be found.

However, the strangeness of this mistaken lack of identity is that, aside from a handful of scientists throughout modern history, such as Cusa, Kepler, Leibniz, Vernadsky, and Einstein, not a single scientist, during the last century, has considered this question to be a considerable scientific problem to be solved. It is not so strange, however, when you consider that this opposition is, in all respects, attached to the chains of the oligarchical principle. LaRouche is the first, and the only one, to have identified the magnitude of this problem, and to consider that creative thinking and living processes are the first forms of opposition to matter that can be recognized clearly as a knowable form of expression of antimatter; that is to say, whose ontological character I have identified, here, as having the form of *an antimatter of mind and life*. However, one way to understand this question of antimatter is to begin with understanding three forms of anti-knowledge from the future.

1. THE FUTURE: THE UNKNOWN THAT IS NOT YET KNOWN

Generally speaking, the easiest form of unknown I know of, from the top down, is the one that is not yet known, because it is located in the immediate future ahead, and it is ignored because most people do not live in the future. This doesn't mean, however, that the future is just around the bend, waiting to grab you by the hand as you come by. That unknown is not going to grab you, you have to grab it and make it yours.

This first type of unknown is the easiest one to know, because it is the most natural next step that a willful human mind must take with respect to the past. No one else in the universe is better organized to discover that unknown, willfully, than man is, because the history of ideas has brought us to the point of finally discovering that the future has always been the natural home of the human mind, and that now is his last chance to grab it. Most people believe that their home is the soil where they were born. That is silly and totally untrue. Even the Banyan tree knows this is not true. The true home of man is the Cosmos, that is, the future.

You did not know that, did you? That not yet known home that every human being must get back to has been ordered and organized from the future of the universe as a whole, for a long time, and it has also been prepared from a series of creative human minds of the past, whose ideas were necessarily ahead of their times, because these discoverers were all living in that future, and understood the directionality of what the next step of the universe would have to be. They knew how to change the past. The proof of this is that when you discover that same directionality, these past discoverers all say: "But, of course!" This is one of the reasons that truth in science is always "delayed," because most people are not ready for this sort of thinking, and they are not ready because they are prevented from knowing what's ahead because of their belief in the oligarchical principle.

Firstly then, and again, from the top down, since creative thinking and living processes are two expressions of the universe as a whole that depend on the future for their livelihood, would it not be

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reasonable to consider them as being extensions of antimatter from the future, in all matters of ways, that we have not yet begun to comprehend? Secondly, the primary characteristic conduit for this form of penetration of matter must be a new form of physical space-time that cannot be reductionist forms of sense perception, and must be opposing complements to matter. The primary form this change must take is that of a process of change and not of a thing. The primary characteristic of antimatter, therefore, shall not merely be that of the already known, but that of the unknown.

2. PLATO'S CAVE: THE UNKNOWN THAT SHOULD HAVE BEEN KNOWN

This second "unknown" which must be identified as "what should be known," is also known as a "delayed action," in the manner that Lyn identified when he wrote:

"It is the evidence of the ostensible 'delayed' effect of the actions represented by the resulting demonstration of creativity as such, which conveys the true sense of that which human creativity expresses. It is that evidence, as of the delay between the act of the discovery of a new physical principle, and the first realization of the applied action of such a discovery, which supplies the real sense of the direction of the universe, rather than what might be attributed as intrinsically akin to kinematic "physical" effects.

"The powers of life, and, especially, of human life, are higher than, and opposite to what is otherwise recognized as 'matter.' That which is neither living, nor cognitively defined as creativity, is not truly universal—it is merely, from a well-informed human standpoint, 'mortal.'" (Lyndon LaRouche, <u>THE PRINCIPLE OF METAPHOR</u>, LaRouche Political Action Committee, pre-release, March 19, 2012, p. 3 of 8.)

The first reason for this "delayed action" comes from Plato's Cave. The unraveling of Plato's Cave is the most important unknown known to humanity, because it is that form of unknown which keeps people in chains as a fictitious means of self preservation, and prevents them from discovering what has to be known as a matter of principle, which is the benefits derived from the source of fire that lies outside of that Cave. The scope of what should have been known also includes the universe which exists outside of your sense perception. Your true home is the future outside of yourself.

This form of "unknown," is the greatest weakness of mankind and also the greatest weapon used by the ruling oligarchy to keep people in the dark by feeding them mere shadows of what's to be known. This also represents the greatest injustice that has ever been perpetrated against humanity since recorded history. In Plato's Cave, the shadows are served as the truth, and truth is dished out as either nonexistent, or inaccessible, because all that the prisoners know is the perceptions they have of it through the media of oligarchical puppeteers. At best, the oligarchy uses Plato's Cave to treat people like mushrooms: "Keep them in the dark and feed them bullshit."

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Such are the oligarchical self-made chains of enslavement of the minds, for the minds and by the minds, otherwise known as the chains of going along to get along. Plato's Cave experiment can be understood as a five-fold metaphor:

- I. The Sun outside of the Cave is the metaphor of Truth, Beauty, Justice, and the Good.
- II. The fire inside of the Cave represents the oligarchical principle control over science.
- III. The Oligarchical Delphic puppeteer selects what people should or should not know.
- IV. The prisoner believes that the projection on the wall of the Cave represents the real world.
- V. The shadow of the real world which is cast on the wall of the Cave is a deformed perception.

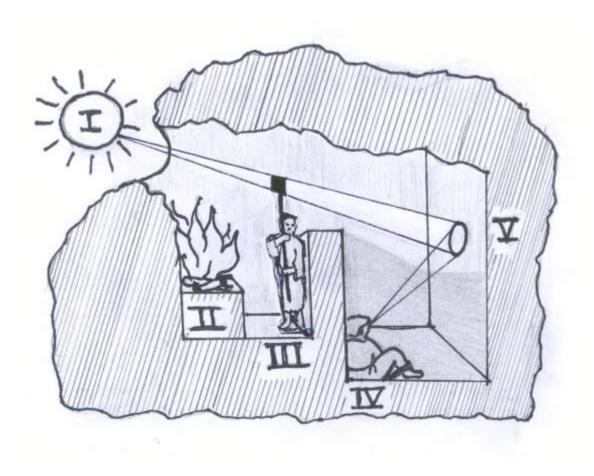


Figure 1. Plato's Cave. When the oligarchy makes you believe that black is white.

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In Plato's Cave, the shadows are the closest you get to reality, because man has accepted to be chained to the interpretations of the world adjusted for him by the oligarchy, and given to him through sense perception, rather than through the truth of what he could discover with the powers of his own creative mind. The political organizer's role, therefore, is to free himself, and others, from the chains of the Cave by understanding that the shadows are mere constructs to satisfy one's appetite for sense certainty. These shadows are not the real world that the mind yearns to attain, which lies in the principle of the light source coming from outside of the Cave. The irony of the whole matter is that once you have discovered the truth by coming outside of the Cave, your responsibility is to return to that Cave and tell the good news to those who are still enslaved.

The other reason for this "delayed action," as Lyn stated, is because there is always a lapse of time between the act of discovery of a universal principle and the application of that principle to physical reality. Don't forget that what should have been known is also the power that people don't know they have. This is what gives the orientation to the Cosmos into the future. Several such principles have been discovered in past history that remain largely unknown to this day, and which have been discovered by Plato, Cusa, Kepler, Leibniz, Vernadsky, and Einstein. Yet, they should have been known as crucial markers in the progress of the universe, yet they have not been internalized and applied by humanity. The reason why what should have been known is not known is ultimately due to the fact that people are afraid of looking at the power of their own minds and of challenging themselves with the last and most difficult unknown, the unknowable.

3. LEARNED IGNORANCE: THE UNKNOWN THAT IS UNKNOWABLE

Here, we must enter the domain that Nicholas of Cusa has opened for us, the domain of Learned Ignorance. The reason why this domain is so important, and must remain so secured in that importance, is because it is not accessible to oligarchism, but only to those who pursue the ideals of the Platonic Republic. As a matter of fact, if oligarchs were to secure this unknown knowledge for themselves, they would no longer be oligarchs, as Charlemagne demonstrated through his economic projects. In other words, it is only after you have discovered that the whole process only works from the top down, and from Truth and the Common Good, that the experiment of knowing the unknowable can take place.

As a result of such an experiment, it is impossible to know how much remains to be known in the universe, but it is possible to know how much of this remainder is knowable. Cusa showed us how to do this in his *Learned Ignorance*. As long as we understand that Plato's Cave is an epistemological metaphor for how we do know, what we don't yet know, as well as what we should have known, this Platonic experiment sets the boundary conditions for what is the remaining unknowable. All we know about this unknowable is that it is completely outside of the boundary conditions of Plato's Cave. As a matter of fact, the unknowable is the only part of reality that remains outside of the boundary conditions

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of this process, because our minds can only know the unknowable as what is incomprehensible. Everything else is knowable, provided it is set within appropriate boundary conditions.

4. THE PRINCIPLE OF THE BANYAN TREE AND PLATO'S CAVE

The best example of Plato's Cave that I can find in the living domain of the Biosphere is the Banyan tree, the national tree of India. The Banyan tree is the only living being I know outside of man whose immortal intended function is to liberate life from deep underground, transform it and expose it to the Sun, then, return underground with the explicit purpose of freeing and transforming more underground life, repeatedly and indefinitely.



Figure 2. The Great Banyan tree located near Kolkata, India, is the largest and most extraordinary tree in the world. Although it looks like a circular forest, it is a single tree, a living One of the Many.

Like any other tree, the Banyan tree spreads its branches vertically upwards toward the sun, but unlike all other trees, between the reaches of about 5 and 25 meters above ground, it interlaces its

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branches and spreads them horizontally outward over the ground, generating branch offshoots that are driven back down vertically to penetrate the ground by transforming themselves into branch-roots that dig into the soil as deeply as the height level they had grown above the soil, and, disappearing completely from view after reaching a depth level of between 5 and 25 meters underground, they turn upward again to come back out of the earth transformed into new root-branches reaching out to the Sun, one more time, and repeating this cycle endlessly as long as the life principle remains in it. If the Indian people did not prune Banyan trees, a handful of them would probably cover the entire country in no less than a few thousand years.



Figure 3. The area covered by the single <u>Great Banyan</u> tree is a circle of about 4 acres, with a crown circumference of about 1 kilometer. It has about 3,300 areal branch-roots digging into the ground and has been growing for about 250 years.

The marvelous lesson of this wonder of the Biosphere is not only that the Banyan tree has within its intention the power of growing in an apparent contradictory manner by digging in its branches and rising up its roots to the Sun, thus becoming the chiral opposite of itself within itself, but that it behaves

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like a creative human mind, however without consciousness, by transforming metaphorically the minds of the Indian people in the same spirit of higher energy flux density as does the principle of Plato's Cave. Although the Banyan tree does not change antientropically, it grows in a manner that shows how the mind should change. There is a beautiful Platonic metaphor from the *Bhagavat Gita* in which Krishna confirms this Platonic idea of antientropic growth in the section on the "Ultimate Truth," when he says: "Metaphorically it is stated, the banyan tree with roots above and branches below is imperishable; the Vedic scriptures are the leaves of that tree, one who understands this is knowledgeable of the Vedic scriptures." (*Bhagavat Gita*, 15, 1.)

5. COGNITIVE CERTAINTY AS OPPOSED TO SENSE CERTAINTY

Don't be deceived by sense certainty, because you will likely end up realizing that what you thought you knew to be true is, actually, totally wrong. What is important about understanding the evil of sense certainty is to acquire complete victory over it. Unless you have waged a life or death war over this issue, you will never know what cognitive certainty is all about. One of the best examples of victories over sense certainty that I can think of is the cognitive certainty of the unheard music of the creative mind that Beethoven has expressed, for example, in his *Piano Sonata Opus* 27. Another poignant example of cognitive certainty is the marvelous case of Helen Keller. Finally, another very provocative example of such cognitive certainty was recently captured on tape by the CBS TV program, 60 Minutes.

The interesting aspect of this last case is not the quality of the music as such, which is limited to jazz and popular tune improvisations, but the fact that the British blind pianist, Derek, who is featured in the tape, showed how he was able to communicate his love of mankind through his victory over his blindness, and has, thus, created a higher form of music that sense perception cannot hear. He used his blindness as a means to change the minds of people, and, in doing that, he succeeded in playing a higher form of music which no one can hear, but through which he is able to give thanks for the talent the creative powers of the universe gave him by reaching out to people and showing his love of mankind. God only knows how much the poor British people need that sort of higher music, under any circumstance, and especially during this current period of financial breakdown crisis of the British monetary system. This is a beautiful example of reaching out to immortality as exemplified by Corinthian 13. The point to be emphasized, however, is the higher domain that the poet is compelling us to reach:

"Heard melodies are sweet, but those unheard Are sweeter; therefore, ye soft pipes, play on; Not to the sensual ear, but, more endeared, Pipe to the spirit ditties of no tone..."

John Keats, Ode on a Grecian Urn.

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6. THE EPISTEMOLOGICAL FALLACY OF ELEMENTARY PARTICLES

Over a century ago, Vladimir Vernadsky challenged the scientific community with the necessity of introducing in our scientific knowledge of the universe the functions of the Noosphere and of the Biosphere as the two most fundamental principles of the Cosmos as a whole. He was pushing scientists to change their conception of matter and to consider the matter of mind and the matter of life as primary in the universe. The reason for this revolution was straightforward. The concept of matter that modern science has adopted from ancient Greece was wrong and it had to be thrown out. Modern science was not wrong merely because it did not include the human mind and living processes within its purview, but because the idea of matter that it had derived from ancient Greece, and is still clinging to, simply does not exist anywhere in the universe. What does exist is the principle of the Banyan tree, or the principle of Plato's Cave. Therefore, what has to be done is to dump the false notion of matter which dominates science, today, and adopt a new vicarious hypothesis, as Lyn identified it, which corresponds to the triply-connected reality of inclusion of the creative universe, the creative mind of man, and living processes. Remember that you cannot deal with any one of those three realities without taking into account the other two. This is the trinitarian function of modern science.

The problem with the traditional notion of matter is that it is based on a complete fallacy of composition of elementary particles. However, this theory of elementary particles has to be understood as a form of epistemological defect, a mental flaw, that has been infecting and crippling the scientific domain for a very long time. It was invented by very ancient oligarchies in order to control and limit the growth of human beings on the surface of our planet.

As Astrophysicist, Hannes Alfvén reported, the modern form of this theory which appeared in 1927 under the name of "l'Atome Primitif" (or "Big Bang") was invented by l'Abbé Lemaitre in order to accommodate modern physics with the Catholic dogma of Thomas Aquinas "creatio ex nihilo," (creation from nothing). Aquinas had revived Aristotle for the purpose of expanding the Holy Crusades for the Habsburg oligarchy. However, it is not by serving an old dish with a new sauce that you can pretend to have invented the original recipe. This invention of Aquinas and Lemaitre is much more ancient and its original intention was always to commit genocide against mankind, and more specifically, epistemological genocide against the creative human mind. In ancient Greece, the intention was meant primarily to destroy Pythagorean and Platonic thinking, and keep the great majority of the human population ignorant of their creative powers. The form of this crippling intention is historically specific. It is known as Atomism.

Originally, atomism was invented in ancient Greece during the second half of the fifth century BC by Democritus, and became consecrated as the doctrine of elementary building blocks of the universe by Aristotle. These atoms were conceived as irreducible and indestructible sort of mathematical entities that remained eternally impenetrable and unchangeable. They could only exist because they were contained by the boundary conditions of empty space. Later on, the geometry of Euclid was meant to express, visually, the ordering of such elementary beings in a void of multiply-connected logical deductions. It was Aristotle who asserted their dependency on empty space as mathematical objects are originally dependent on the void. As he said: "The void would be the empty separation among

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consecutive things and their boundary condition; moreover, this void would be primarily among numbers, because it would act as the limit of their natural state." (Aristotle, *Physics*, IV, 6, 213b, 25) Thus, the invention of elementary particles represents one of the most persisting fallacies of composition in history, but owing their existence only under the underlying assumption of an unlimited empty space.

This fallacy was very similar to the fallacy of building the Euclidean system of geometry, because each step required the guarantee of some previous conclusions as the *Thirteen Books* of Euclid required. The assumption that the cause of anything had to come from a series of provable preceding steps, like a series of deductive theorems, had completely infected the collective mind of Greek society with the intervention of Euclid. Causality was then connected fallaciously to time by some past event. Everything began to be justified by the past as the cause of effects that were defined as by-products of linear time in the present. The past is the cause and the future is the effect. This is the world upside down.

The same fallacy applies to space which, in the very large, cannot be understood by elementary building blocks, because the galactic can only produce in the large. If you start with small elements, you'll never get to the large. This is why galactic causality could never be understood from elementary building blocks. The same fallacy is applied to children who have to repeat what their fathers and grandfathers did before them in the small, starting with A, B, C, and never from the top down. You can never learn a language starting with A, B, C.

Gradually, a completely mechanistic set of epistemological conditions were imposed on the human mind through the fallacious use of visual sense perception. The traditional sense perception construct was historically concocted as a reaction against Pythagoras and Plato, primarily. This is how causality, elementary building blocks, and empty space all began to be fitted together for the purpose of trapping people into accepting the fallacy that knowledge came primarily from visual perception and ordered from what preexisted, never from the future. An immutable simulacrum, a ghost of scientific knowledge, had been construed out of the blue that was to endure for more than two thousand years. This Greek model of thinking was then codified, consecrated and, called *Euclid's Elements*.

7. THE LIMIT METAPHOR OF THE PYTHAGOREAN WINDOW OF DISCOVERY

The true Greek ideal of Pythagoras and Plato was not destroyed by Aristotle and Euclidean geometry. Truth kept piercing through the cracks of Greek civilization into Southwest Asia and was revived through the Arab Renaissance of Haroun Al Rashid and through Charlemagne in Europe. After the death of Charlemagne, Pythagorean and Platonic ideas became bastardized or were reduced to their skeletal elements, again. A good example of this sort of distortion was the so-called Pythagorean Theorem, identified with that name by Proclus centuries after its original discovery, and whose skeletal remains came down to us in the Euclidean form of a deductive trick with right triangles. Euclid's *Elements*, Proposition 47 states: "In right-angle triangles, the square on the side opposite the right angle equals the sum of the squares on the sides containing the right angle." If this is the way you were taught the so-called Pythagorean Theorem, then, you have been brainwashed, and you don't know anything

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about Pythagoras, because you were given a fallacious construction built from the bottom up. This had nothing to do with the *Pythagoras window of discovery*, which can only be built from the top down, and from an understanding of the universe as a whole.

Pythagoras asked himself: "How does the universe grow by acting on itself as a whole?" First of all, the cosmos acts on itself both inwardly and outwardly, at the same time; that is to say, from the outside-in and from the inside-out, simultaneously. Secondly, it acts by anticipation of the future in the simultaneity of eternity, and from an anticipatory time of action which is oriented from the future to the past, changes the past, then returns from the changed past to a new future, back and forth, continuously; that is, by means of a chiral motion that is both clockwise and anticlockwise. That process reflects the chirality nature of antimatter of mind and life in the universe as a whole. How does that work? First of all, start with the idea of a universe that acts on itself from the outside-in as opposed to from the inside-out; that is, from the top down as opposed to from the bottom up. If you don't start from the large, you will never get anywhere with the small.

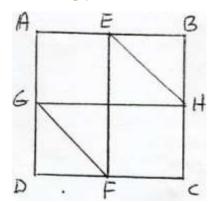
That is how the Pythagorean discovery of principle was made in its original form. However, that discovery has been completely buried and forgotten for over two thousand years and must be rediscovered in that form, and only from that epistemological process. In other words, the original Pythagorean discovery can only be validated by demonstrating that it is a *limit metaphor* which is absolutely contrary to the fallacy of composition represented by Proposition 47 of Euclid's *Elements*. You can demonstrate this for yourself by experiencing the truth of the matter in your own mind, and step by step, as I show below.

Again, I must stress that you must make this Pythagorean discovery from the top down, and from the universe as a whole, not from the bottom up, because the idea you are looking for is a principle of mind that demonstrates how an axiomatic change occurs in the cosmos, when you change the boundary conditions of any given situation your mind may be controlled by. It is in that sense that axiomatic does not mean elementary as a building block, but primary as a universal principle. Moreover, as per its intention, the Pythagorean discovery is related to the discovery of the doubling of the square in Plato's *Meno*, and to the discovery of the doubling of the cube by Archytas, because they are all metaphors of how the universe changes and grows. These three discoveries belong to the same family. From that vantage point, the purpose of the Pythagorean Theorem is not to discover the third side of a right angle triangle, or the sum of two squares. Those two features are merely derivative shadows which fail to reflect the original intention of its discovery and are destructive if you start from them.

The Pythagorean discovery is a pedagogical device reflecting a transformation window whose purpose is to demonstrate how the creative human mind is able to grow by going through a lens of axiomatic change and reach beyond its apparent limited boundary conditions. As an epistemological crucial experiment, this Pythagorean Window of Discovery is the same as the Apostle Paul's Corinthian 13.

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Take this heuristic device to represent how Pythagoras' mind works. You can build this little model simply with a cork board, a closed continuous string, and 8 push pins simply identified as **A**, **B**, **C**,



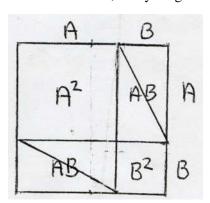
D, **E**, **F**, **G**, and **H**. The idea is to weave the string loosely around all of these pins in such a way that you are able to displace and change, simultaneously, the diagonals **EH** and **GF** only by moving the push pins **E** and **F** sideways, and **G** and **H** up and down, in any parallel position to the sides of the larger square **ABCD**, but without exceeding its boundaries. **Figure 4**.

Figure 4. Model for the *Pythagorean Window of Discovery* experiment.

Now, consider that square **ABCD** is the metaphor of Pythagoras's creative mind which is able to change only within these given fixed parameters. The question is: How do you discover something that is not there? How did Pythagoras generate the theorem that came to be known as the Pythagorean Theorem expressed by the formula $A^2 + B^2 = C^2$? Can you make that discovery only by modifying the internal boundary conditions of this model? No algebra is needed, only an inquisitive mind.

First, you must move the mobile lines **EH**, **GF**, **EF**, and **GH** in such a manner as to generate two rectangles of area **AB** and two square areas of A^2 and B^2 . By doing so, you are deriving the well known formula $(A + B)^2 = A^2 + 2AB + B^2$ which is variable from the minimum internal arrangement of four small equal squares to the maximum of a single large square. (**Figure 5**.)

However, everything between those limits will be composed of two unequal squares, two equal



rectangles, and four equal right triangles. Nothing else can be found. This process of internal action represents a constant variable which appears to be the only possible combination of change. Those parameters do not permit the mind to go beyond those boundary conditions. That is to say, whatever changes you chose to make among the $\bf A$'s and $\bf B$'s of this geometric construction, you can only derive the same formula $(\bf A + \bf B)^2 = \bf A^2 + 2\bf A\bf B + \bf B^2$ or some other variation of that formula. Your freedom of action is entirely limited to those forms of action, and no other form. However, if you think that your mind is limited to this sort of necessity, you are wrong.

Figure 5. The boundary conditions before the inversion. $(A + B)^2 = A^2 + 2AB + B^2$

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But, you have done much more than demonstrating the variability of an algebraic formula. You have proven the effectiveness of the creative principle of the human mind by demonstrating that algebra is derived from constructive geometry alone. So, you see, you are no longer simply on a geometric or algebraic plane. You are, here, on an epistemological plane of the creative process which you can now apply to any other algebraic construct. Your mind is both inside and outside of the box.

But there is more. This construction is also able to take you beyond these apparent existing boundary conditions. From this construction alone, you are able to change those apparent limits, and discover the window singularity which lets you go through to the discovery of the so-called Pythagorean Theorem. So, how can you demonstrate that?

Given that the limits of the boundary conditions are known, you can generate, from any axiomatic process, a new and higher principle of action that did not exist before. However, this can be done only by changing the boundary conditions of your mental process. But, what happens when you change the boundary conditions of your mind? What happened to Pythagoras when he started looking for something that was not there? His mind was as if it were "going through a glass darkly."

Let's examine this frame of mind more closely. How do you create the area of \mathbb{C}^2 of the well known formula $\mathbb{A}^2 + \mathbb{B}^2 = \mathbb{C}^2$, when \mathbb{C} is not even included as a part of the boundary conditions of a square whose "elements" are simply different combinations of \mathbb{A} and \mathbb{B} ? How do you create the conditions for \mathbb{C}^2 to emerge as a whole, without using the fallacy of elementary building blocks from the bottom up, as Euclid did in his Proposition 47? How do you go about finding something that cannot be discovered through its parts, but only through a universal physical principle of change of the whole, which you know exists somewhere in the future, because there must exist such a square \mathbb{C}^2 which must correspond to the sum of two squares, $\mathbb{A}^2 + \mathbb{B}^2$, and for the same reason that there also must exist a cube which is the sum of two cubes? Let's do this step by step, and remember that the steps must always be derived from the top down.

Now, search inside the mind of Pythagoras and locate what he was considering just before he made his discovery of principle. He had to find the area of \mathbb{C}^2 , but, he had to find it by some construction, not simply like mathemagicians do it, out of the blue, only with manipulating their formulas. Pythagoras examined closely the geometrical boundary conditions of the problem and he asked himself if there was anything else he could do besides moving those lines around, in the manner shown in **Figure 5**, and if he could generate something else beside the variables **A** and **B**, **A**/**B**, or **A**² and **B**². He asked: "How do you deal with something unknown that you know exists, but whose existence is not allowed because of mental limitations?" This is when Pythagoras asked: "How can you change the rules of the game?"

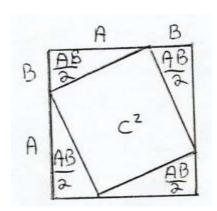
Pythagoras wondered what would happen if he took the two squares A^2 and B^2 out of the larger square $(A + B)^2$. What would be the remainder? Would that remainder not give him the same area that he has just taken out? Would that not be C^2 ? Yes and No! That would leave the two rectangles, 2AB, inside of the box but, this is not a squared area. Pythagoras knew he could not get anywhere simply by manipulating what was already known. So, he had to find something that existed inside of the box, but which had to come from outside of the box, at the same time; something like being inside and outside of Plato's Cave at the same time.

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Pythagoras had to get rid of his previous fallacious knowledge, because it was paralyzing him. His old knowledge had become destructive. He had to reach out into the unknown future and look for something that had to exist but which had to become known. He had to go where nobody had ever gone before, and confront himself with the fact that a higher knowledge had to exist in the future, not merely in theory, but also in practice because, otherwise, the universe would not make any sense.

So, the most important thing Pythagoras had to do was to get rid of his previous knowledge and reach a point of cognition that came near zero, but not quite zero. He had to reach that near zero state of mind in order to become pure intention after having kicked out his previous knowledge. Then, his mind started to rotate, twist, and go into a tight pinch effect that led him into a higher dimension at the same time that he was shedding a high density of singularities.

The action of time reversal that Pythagoras anticipated became completed at the near zero point when he went ahead into the future without any preconceived past knowledge, and only with the confident intention that he could discover that what he was looking for had to be for the sole benefit of



mankind. At that near zero point, all he was left with was the discovery of what wasn't there, the future state of higher energy flux-density. As that state of pure intention was beginning to take hold and his concentration had absorbed all of the parts of the problem into a single conception, he changed the positions of the whole by transforming the two rectangles **2AB** into four triangles **AB/2** triangles. This is when, in the middle of this whole process of space-time reversal, a new state of mind had suddenly taken the shape of an open window, a gestalt that fused everything together. It was the gestalt of the definite new state of existence that he had anticipated, but which did not exist before. (**Figure 6**.)

Figure 6. The Window of Discovery. Since $(A + B)^2 - 2AB = A^2 + B^2$, then, $(A + B)^2 - 2AB = C^2$.

Now, come down from the heights of Pythagoras' mind and examine what I have just said in its geometric format. Consider the larger square $(A + B)^2$ as maintaining itself unchanged except for its internal boundary conditions in which each of the two rectangles AB have split open and rotated to throw out the two smaller squares A^2 and B^2 , and thus, became changed into a new axiomatic limit formed by four interconnected and closed AB/2 triangles. The two previous squares have been replaced by a third square whose area is C^2 . That is the unknown future.

Thus, this process shows that Pythagoras discovered much more than a theorem of geometry. He discovered the window of the future piercing through the process of creativity itself, the very opening that Democritus, Aristotle, and Euclid had closed by means of their elementary building blocks. Pythagoras discovered how the mental process of creativity works through an inversion function of physical spacetime. In other words, what he discovered is not simply something new that wasn't there before, but most

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importantly, the closure of a process by means of which you can discover everything else, as something that was already inside of his mind, but as a dormant creative potential. That is the epistemological framework for developing a vicarious hypothesis. Now you know, with total cognitive certainty what Pythagoras, Socrates, and Plato wanted you to know, but that Democritus, Aristotle, and Euclid did not want you to know.

But, why is it vital to restore this Pythagorean window now, rather than at some other time in history? The reason is that Europe and America have now come to the end of Western Civilization, and this is the last opportunity that mankind has to change its oligarchical state of mind, before it is too late. This is not a threat of end times, but the end of the oligarchical era of human history. Humanity has finally come to recognize that it has come into a time of annihilation of the sovereignty of minds, everywhere around the globe, and it is that insidious form of annihilation which has determined the limiting boundary conditions of creativity throughout human history.

Therefore, unless our state of mind is oriented toward the future, very soon, there will not be another chance for mankind to make that necessary step for a long, long time to come. Therefore, the reason why such a discovery of principle must be made now, rather than later, is to prevent mass suicide of the human species, in the wake of the currently ongoing British oligarchical system mass menticide. This warning has been made clear, recently, by the German poet, Gunter Grass, when he wrote:

"...Why do I say now for the first time,
Aged and with my last ink:
The atomic might of Israel endangers
The already fragile peace of the world?
Because it must be said,
What may be too late tomorrow..." Gunter Grass, What Must Be Said.

Similarly, this concept of the *limit metaphor* must be understood as a last measure of change, because tomorrow will be too late to prevent the current annihilation factor. The matter is a matter of truth and of courage, and there may not be enough courageous individuals around the planet to make the required axiomatic change, in time. Therefore, the time has come for humanity to act on the future as the only place to go to for our entire species to survive. But, this is already taking us to another window of discovery, that of Vernadsky. Now, take the Pythagorean Window of Discovery and apply it to the question of antimatter of life.

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8. THE NEAR ZERO POINT AND THE VERNADSKY WINDOW OF ANNIHILATION OF LIFE

"Our job is to understand things which are created out there, before we know they're generated. And it's these things that are going to determine the future, or mankind's future."

Lyndon LaRouche.

The epistemological discovery that Pythagoras made, and which is expressed by the shadow formula of $A^2 + B^2 = C^2$, is similar to Albert Einstein's discovery of the shadow formula of $E = mc^2$, because both represent open windows to a higher dimensionality of the human mind in relationship with the Cosmos. In fact, they both incorporate the creativity of the cosmos into human creativity as a matter of mind, and from the top down, by reaching out to the new domain of antimatter. The irony is that even though it is the Universe which creates matter, antimatter, and the human mind, and not the human mind that creates the universe, the question of creativity of antimatter is not to be found first and foremost in the domain of the cosmos, but, rather, in the domain of the creative mind. That is what brings together Pythagoras and Einstein with Vernadsky.

However, these equation formulas are not designed to express equality or symmetry of matter and antimatter in the universe, but rather, the universal character of transformation and dissymmetry of a universe dominated by constant increases in energy flux-density. This means that increases in energy flux density also implies a Defense of Earth against annihilation of life. This has several implications with respect to human immortality.

One of the direct consequences of this dissymmetry of the universe is represented by the fact that an antimatter universe poses a direct challenge to the oligarchical-theological conception of end times. An antimatter universe must also be an anti-eschatological universe, because there are no end times for an immortal humanity. There will not be a last judgment, because we shall be out of here before the Sun burns out. Therefore, for those who believe in the Resurrection, this transformation must be reconsidered metaphorically from the standpoint of a great uplifting irony, as I discussed the matter in my report on Piero Della Francesca: The Resurrection. Since the end of the world conception is an oligarchical view of the end of our species, it is appropriate, then, to also consider the antimatter conception of the universe as being a form of antiprophecy forecasting.

The point to be made is to look inside of your mind and locate the hinges where things rotate and change, or where the lack of such things threatens you with mental death. Then, you investigate those hinges and changes, not the state of how things were before the changes, but the changes themselves, including their inversions, their misfires, or their malfunctions. And, ask yourself: What is it that did not exist before which can cause a higher state of existence to materialize through those changes? What's the new direction? What's the new form of action that needs to be introduced to make the changes stick? Also, what do you do with everything else that refuses to change? Where does that go? What are all of the

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old ideas worth after they become obsolete? Can you recycle them? Can they serve some useful purpose again, or are they also completely changed in some fashion?

In <u>The Biosphere</u>, Vladimir Vernadsky looked at the defense of life on earth from the same higher standpoint of his creative mind. He examined the condition under which life could be maintained inside of the terrestrial envelope as well as outside of it, and he concluded that such a "living envelope" must be maintained separated from other envelopes in the universe, only under very definite boundary conditions. He looked at the nature of this singularity much in the same way that Pythagoras looked through his window of discovery, from the top down. However, Vernadsky looked at that window of change as the crucial singularity of annihilation of life. This is not just individual death; this is a matter of extinction of the Biosphere as a whole.

We have to do the same thing today for the Defense of Earth, with the intention of securing the safety of a future man mission to Mars and beyond, because this Vernadsky defense of life is where to locate, properly, the singularity of annihilation of life. It is necessary to start looking at these new boundary conditions. The cosmological frame of that Vernadsky window included a minimum of five boundary conditions: "1. Temperature; 2. Pressure; 3. State of matter of the medium; 4. The chemistry of the medium; and 5. Luminous energy." Vernadsky wrote:

"The extreme limits of life in the biosphere probably represent absolute conditions for all organisms. These limits are reached when any one of these conditions, which can be expressed as independent variables of equilibrium, becomes insurmountable for living matter; it might be temperature, chemical composition, ionization of the medium, or the wavelength of radiations.

"Definitions of this kind are not absolute, since adaptation gives organisms immense ability to protect themselves against harmful environmental conditions. The limits of adaptation are unknown, but are increasing with time on a planetary scale.

"Establishing such limits on the basis of known adaptations of life requires guesswork, always a hazardous and uncertain undertaking. Man, in particular, being endowed with understanding and the ability to direct his will, can reach places that are inaccessible to any other living organisms.

"Given the indissoluble unity of all living beings, an insight flashes upon us. When we view life as a planetary phenomenon, his capacity of *Homo Sapiens* cannot be regarded as accidental. It follows that the question of unchanging limits of life in the biosphere must be treated with caution." (V. Vernadsky, *The Biosphere*, Copernicus, Springer-Verlag, New York, 1998, p. 218-219.)

Vernadsky's "insight," here, about the "unchanging limits of life" relates not merely to the conditions of life on earth, but also to the export of life outside of its protected terrestrial envelope. Look at this inversion as you would the *Pythagorean Window of Discovery*, from the future. In this case, the Vernadsky window is made up of those five annihilation factors which, no doubt, should represent the boundary conditions of the necessary Vernadsky-Leidenfrost layer between matter and antimatter as their boundary conditions.

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It is this Vernadsky "caution window" which must be examined when mankind considers intervening through the yet unknown interplanetary and cosmic domain. Any other approach should be discarded. In that sense, the Vernadsky window of annihilation of life between matter and antimatter interactions functions like a protective shield. The two sides of this enveloping process must be considered as a Vernadsky-Leidenfrost layer that must be kept as impenetrable as possible from either sides, as both sides of the boundary limit represent the near zero annihilation point at which life can or cannot be maintained.

These Vernadsky-Leidenfrost boundary conditions should be considered as layers between two plasma regions of drastically different parameters of magnetization, density, electrical radiation velocity, temperature, and chemical composition. This is the crucial singularity to be studied. It is within the boundary current sheets of such layers that major changes develop strongly enough to modify the fields inside or outside of the separate domains. It was Hannes Alfvén who first referenced the magnetosphere of the earth as the limiting envelope, but without relating it to the conditions established by Vernadsky. An important hypothesis that Alfvén also proposed to investigate lies in the Leidenfrost effect as applied to antimatter, and more specifically in the layer of the magnetopause of the Earth. This, to me seems to be the crucial area to investigate.

It is only after having evaluated these new conditions that one could get out of the terrestrial envelope of life without risking sudden death. There are no answers for these questions yet, but it is clear to me that they must be investigated in the same way that Pythagoras investigated his window of discovery. Ultimately, the answers will lie in discovering new technologies that will permit life to be maintained outside of the terrestrial envelope, and within the range of acceptable limits, but primarily from the set epistemological boundary conditions that rule over the so-called annihilation process between matter and antimatter. And, that is where the question of morality comes in. This *Pythagorean Window of Discovery* can only be established as a metaphor of a new state of existence through a moral action based on the future.

Therefore, from the standpoint of epistemology, two boundary conditions should be taken into account. One is that the impenetrability of the Vernadsky-Leidenfrost plasma phase space layer must be investigated like an impenetrable layer between two Riemannian manifolds of different dimensionalities. Secondly, this Vernadsky window of annihilation of life must be held as the initial epistemological frame for the moral Defense of Earth based on both the *Pythagorean Window Discovery* and the Apostle Paul's Corinthian 13.

It is for those two reasons that the conditions for the adaptation of life in the universe must always be done through the higher dimensionality window of the human mind, provided it is scientifically and morally situated at the entrance of Plato's Cave. With this approach in mind, there is hope that man will be able to secure the future home of mankind for *antimatter of mind and life* outside of the Earth and almost anywhere in the universe as a whole.