CLASSICAL SCIENCE AS THE BRICK WALL

- By the end of the nineteenth century, Science was thought to be perfected into deterministic, clockwork view of the universe.
- The French mathematician Pierre-Simon de Laplace asserted that the perfect determinism of Newtonian mechanics meant that, in principle, everything in the universe can be predicted if enough data was available.
- Maxwellian electrodynamics seemed to complete the picture by incorporating electricity and magnetism into an equally deterministic framework. It seemed that science had it all known: Nature follows its own rules that are all embedded in this world. Therefore, there would be no free will; nothing apophatic; no need for God.
- Science became like a brick wall separating the longing for Faith from the respect for one's own mind.
- Atheism became an indication of one's sophistication and "thinking-out-of-the box". No wonder that Carl Marx who came in that era, adapted its atheism as a pre-requisite for being "illuminated". Same with other secular revolutions around the world.
- It still dominates our secular society today.

THE FOOLS PARADICE IS CHATTERED

- The fools-paradise, of classical science, came to an abrupt end with the "Ultra Violet Catastrophe" of "blackbody" radiation in 1900. The intensity of ultraviolet radiation was drastically less than what was predicted by classical science. A "catastrophe" that stripped classical science from any claim to the ultimate truth; reducing it to applied science.
- Mystery solved in 1901 by Max Plank by using discrete wavelengths instead of a continuum. Quantum Mechanics was born. Nobel Prize, 1918. But a new mystery was born: why wavelengths are not continuous?
- That mystery was explained by Albert Einstein, in 1905, that light lumps in "quanta"; an ad-hoc assumption. Nobel Prize, 1921. But why is light lumpy?
- Lumps mystery was explained by Niels Bohr 1913, that light is jumpy, from one orbit to another. Nobel Prize, 1922. But why is it jumpy?
- The jumpiness mystery, was explained by Louis-Victor de Broglie proposed, in 1923, that electrons are wavy. Nobel Prize, 1929. But why are electrons wavy?
- Waves of what? Waves of probability, according to Erwin Shrodinger, 1927. Nobel Prize, 1933. Apophacy is back and growing!
 - Finally, QM was called "confusing" by Einstein; "weird" by renowned Theoretical Physicists Brian Greene; "absurd" by Richard Feynman. Nobel Prize, 1965.

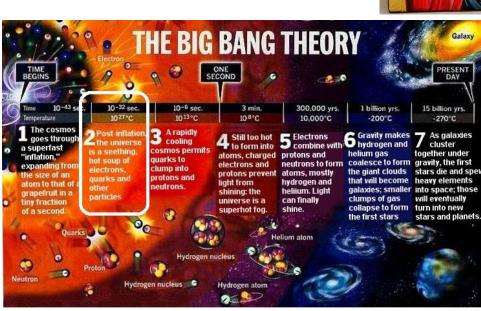
BLESSEDNESS IN IGNORANCE

- The admission of such leading Quantum Physicists that their science is "confusing", "weird" and "absurd" is a testimony to their humility. They are willing to concede that the truth is based on ad-hoc observations rather than dogmatic theories that claim to explain everything.
- They are a testimony to what Mother Maria said: "Blessed are the poor in spirit". (Mt 5:3) "The vow of nonpossession can and should be expanded to the spiritual domain." (p. 104).
- And they were rewarded by pushing science further, by just being open-minded to the unknown; fitting into Mother Maria's words: "*Thus the virtue of nonpossession, spiritually understood, should make a person open to the world and to people.*" (p.105)

QUANTUM PHYSICS IS THE PANTOCRATOR'S TOUCH



The Pantocrator's
Divine and earthly
fingers touching at a
fine point:





Creating the world in discrete particles.

- God the creator: Combining Quantum Mechanics, describing the subatomic world, with General Theory of Relativity of gravity, describing the cosmos at large, results in the following:
 - o Any attempt to measure a distance less than 10 exp-35 meter (ten to power −35, or one over a hundred billion trillion trillion) of a meter (also called Plank's dimension), will create gravitational force so powerful that it will collapse into a black hole destroying the device. Therefore, there is nothing smaller than Plank's dimension.
 - o Because of that, any clock that will attempt to measure an interval of time less than 10 exp.-43 seconds (called Plank's time), will collapse into a black hole too. Therefore, there is no interval shorter than Plank time.
 - o If the universe can only be observed with quantum leaps of time, like in snap shots; like discrete frames of a video. What happens in between these gaps? What sustains the universe while its existence is constantly being interrupted? It means a moment-by-moment dependence on the Creator. Not only the universe needed a Creator, but needed the constant sustenance by the Creator as well.

• The world as the music of God: According to M-Theory (the overall String Theory), elementary particles are the excitations of vibrating strings. These strings are wrapped around six dimensional spatial entities called Calabi-Yau shapes; mathematical spaces that are entities of real existence. These shapes, of Plank length, are located at every possible point in our 3D space; they are spaced apart by about the same Plank length. Think of the six-winged angels that sing ceaselessly. (Is. 6:2 & Rev. 4:8). Those strings are made of any material in our universe; they are not made of particles. Particles are the energy of their vibration. As if our world is the "music" of violin strings where Calabi-Yau shapes are violin box. Who is playing the violin?

> A 2D slice of a 6D Calabi– Yau quintic manifold.

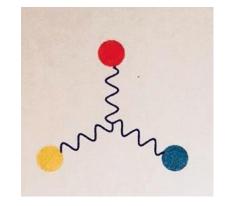
In algebraic geometry, a

Calabi–Yau manifold, also
known as a Calabi–Yau
space

• Uni-Trinity: Abundance of examples:

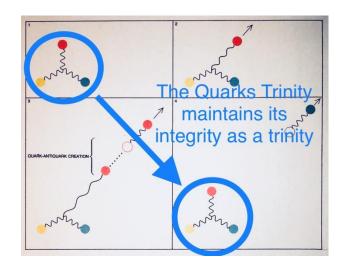
o In Matter; the Quark Model: 99.97% of your body is made of Protons and

Neutrons (Nucleons, a sub category Baryons). Each is made of three quarks. Their interrelationship resembles that of the Holy Trinity: three entities with the same essence but of different characters (in this case "colors") that don't infringe on each other but don't leave each other either. They are bonded together with the mightiest force in the universe, yet



they don't bump with each other. If you try pulling a quark away, the energy required is so huge that it will generate a quark-antiquark pair. The new quark joins the remaining two quarks to restore the baryon to its original form: a trinity of quarks. Meanwhile, the antiquark adheres to the dislodged quark to form a

new particle, a meson. This quark-antiquark coupling reminds us of God-world coupling in the form of the Incarnate Son. The meson is short-lived; the Holy Incarnation in this world was short-lived too. But the Trinity is never broken.



- Uni-Trinity: In Matter; the Quark Model, continued:
 - As an icon of the Holy Uni-Trinity, the quark model offers more: 1-The force that bonds quarks together ("Color Force") represents most of the mass of the overall particle (baryon). In the HT, the binding force (love), is all of it: God is love; not just a loving God. 2-A fringe of the Color Force escapes its confines, creating the "Strong Force" that bonds nucleons together in the nucleus. If the three quarks collapsed on each other, to create a mono-particle, their Color Force will disappear, and with it the Strong Force. Without it, the positive charge of protons repulsive force will explode the nucleus. There will be no world as we know it. Similarly, if the three persons of the HT collapse into one, their bonding love will vanish, and with it all love in the world.
 - o In the fabric of space: There are three known families of particles (Electron, Electron-Neutrino, Up-Quark, Down-Quark; Muon, Muon-Nutrino, Charm-Quark, Strange-Quark; Tau, Tau-Neutrino, Top-Quark, Bottom-Quark). For string vibrations to generate these three families of particles, the 6-D Calabi-Yau shapes need to generate three groups of resonances. That requires them to have three loops within. These three loops have independent characteristics, yet they all are of the same essence: A uni-trinity; another image of the Holy Trinity.

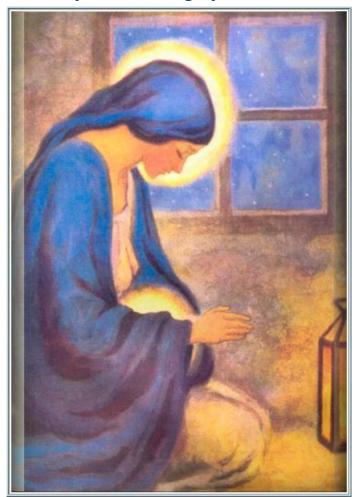
• The Cosmic Cross: Tears do happen in the Calabi-Yau 6-D shapes as they undergo transformations. Yet we don't see any catastrophic consequences to the fabric of the universe. Edward Witten, a world-renowned physicist, showed that the tear within Calabi-Yau shape is actually surrounded by a shield created by a string. But how can a string, make an effective barrier? It is like you are trying to shield yourself from a cluster bomb by hiding behind a hula-hoop! Witten answered that the string places itself at the right place at the right time, by "sniffing" all possible trajectories. Would you trust that hula-hoop was

"sniffing" all possibilities and acting on its own to protect you? Or, the caring God was moving it to where it would protect you? Having to do that at every point in space, all the time, is like carrying an eternal cross across the whole cosmos.

This cross painting by Salvador Dali, shows the eternal cross: 4-D (including time), expanded over 8 3-D cubes! In Mother Maria's experience: "... finally feeling God's overwhelming presence. "God is over all," she knew with certainity, "unique and explaining everything." (p.17)

• Quantum Tunneling and the Virgin Birth of Christ:

Can you walk through a wall? In QM, yes if your particles are coordinated enough and if you can repay borrowed energy fast enough. A particle trapped behind an



"energy wall" can borough energy from the universe provided it can repay it back within the time period determined by the uncertainty principle. Once out of the well, it can pay the borrowed energy back. But for you to walk through the wall, you need to have ALL he particles of your body borrowing energy at the same time, then moving through in full tandem. That has very low probability that is nearly impossible, but not exactly so. For a cosmic event like the birth of Cgrist, that very small possibility can happen so that He can still be born from a virgin who remains virgin all through the birth. He has QM tunneling available to Him if He wished so.

For Mother Maria it was: "new road before me and a new meaning in life, to be mother for all, for all who need a maternal care, assistance, or protection." (p.20).

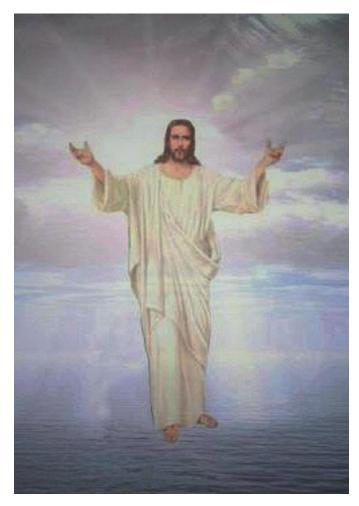
• Dual Nature of Christ; how can it be?:

Strange things happen in QM:

- Light, which shows every sign of being a wave,
 was found to have properties of particles
 (photons) with all the impact that comes with it.
- Electrons that are well known to be particles, surprised scientists by behaving like waves (the double slip experiment)

In the end, it was found that all matter in the universe have wave character while being made of particles too; dual nature that confused scientists.

But for a Christian, who believes in the dual nature of Christ, that is easy to understand: matter is simply an image of its Creator carrying the fingerprints of His dual nature.

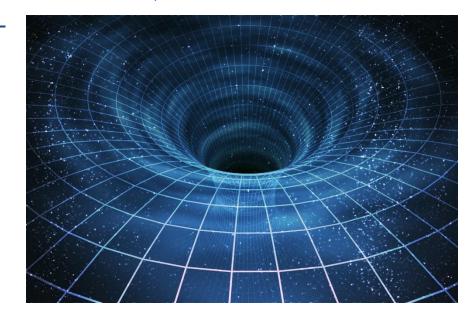


COSMOLOGY: RELEVANT OUTCOMES

• Black Holes, End of Determinism:

Free will hit its lowest point with Laplacian determinism, in the 19th century. Then, Heisenberg's uncertainty principle placed limits on determinism at the small-scale world by proving that there will always be a small uncertainty regardless of the accuracy of measuring devices. In principle, that alone should be enough to put an end to Laplacian determinism since a none-perfect determinism is no determinism at all. But, somehow, determinism survived albeit in a softer form. In particular, it was felt though, to be almost perfectly preserved at the large cosmic scale. But, in 1976, Hawking noted that even at cosmic scale, determinism is violated by the presence of black holes. When any matter is sucked into a black hole, its information is

irreversibly destroyed. The fabric of spacetime is not smooth as was assumed by Einstein's theory of general relativity; it is filled with creases and knots that destroy information. That is destruction of information at a cosmic scale. Determinism is dead; free will lives on. Next, Prigogine adds more.



THEORY OF DISSIPATIVE STRUCTURES: END OF DETERMINISM

Ilya Prigogine, End of Determinism

(https://en.wikipedia.org/wiki/Ilya_Prigogine 3/27/2019)

"Prigogine is best known for his definition of dissipative structures and their role in thermodynamic systems far from equilibrium, a discovery that won him the Nobel Prize in Chemistry in 1977".

"The End of Certainty: Time, Chaos, and the New Laws of Nature", 1997:



"Prigogine contends that determinism is no longer a viable scientific belief: "The more we know about our universe, the more difficult it becomes to believe in determinism." This is a major departure from the approach of Newton, Einstein and Schrödinger, all of whom expressed their theories in terms of deterministic equations. According to Prigogine, determinism loses its explanatory power in the face of irreversibility and instability... In deterministic physics, all processes are time-reversible, meaning that they can proceed backward as well as forward through time... determinism is fundamentally a denial of the arrow of time."

QUANTUM EVOLUTION AS WORK OF THE HOLY SPIRIT

It would be futile to question evolution, in the face of fossil evidence. Yet, there are two obstacles against Darwin's explanation of evolution:

- Selection of the fittest out of random mutations would require much more time than what is recorded.
- There are large gaps in the fossil record. For example, there is nothing between the records of apes and humans.

"Prigogine, quite aware that the second law of thermodynamics renders evolution impossible...made speculative attempts to square the circle between the two, in order to be able to claim that evolution is possible...starting out from chaos theory, Prigogine proposed a number of hypotheses in which order develops from chaos (disorder). However, despite all his best efforts, he was unable to reconcile thermodynamics and evolution." (https://thefactofcreation.blogspot.com/2012/08/ilya-prigogine-and-myth-of-self.html?m=1 2019-04-01)

Summing up the above facts:

- o Evolution did not happen out of small steps of chaos; it happened in large leaps.
- All attempts of explaining those quantum leaps as "order out of chaos" analysis have failed. There is no determinism. So, it is a mystery that defied all analysis.
- o By elimination, that leaves only one explanation: A life giving mystery; we call it the Holy Spirit. It's a miracle that life was created in such a short time.

Where is the "other world"?

Eschatology is so essential to Christianity, that without a hope in the other world, our faith falls apart. "Do not store up for yourselves treasures on earth, where moth and rust consume and where thieves break in and steel; but store up for yourselves treasures in heaven, where neither moth nor rust consume and where thieves do not break in and steel. For where your treasure is, there your heart will be also" (Mt 6:19-21).

Mother Maria said: "When they rise higher, they turn into light clouds before being dispersed in limitless space. In the same way, our souls, once they have torn themselves away from this sinful earth, move by means of effortless unearthly flight into eternity, where there is life full of joy." (p.40)

It's a pity that, in the face of today's "scientism", some clergy and churches are dropping the reference to "the life in the world to come"; some just preach "heaven within" to avoid embarrassment. But, as we will see, there is an indication that it truly exists as "another world" that we are in communication with.

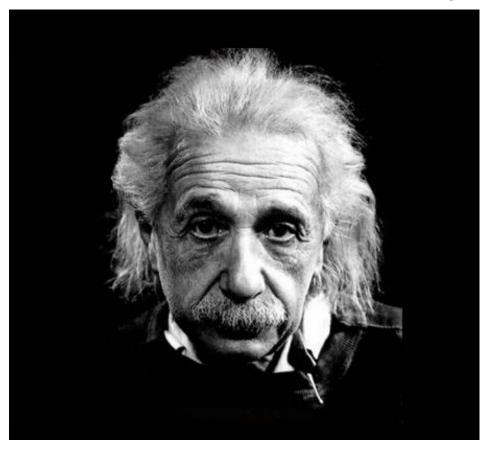
Where is the "other world"?

That was a burning question for me, since my faith experience in 1984. I was certain that there is another world and that it is the ultimate reality and meaning, but science stood in the way. First, it can't be on Earth which is going to vanish at some point. It can't be anywhere in this universe, either, since it will ultimately expand into a freezing death. Could it be located in some other universe that "telegraphs" into ours due to some sort of overlap? But how long will that universe last anyway?

In 2014, I got a break: Someone introduced me to biophotonics research by Fritz-Albert Popp (http://viewzone.com/dnax.html 2019-03-20) and others. It was about the interaction light with DNA. It sounded significant that life is intimately connected to light.



And it is significant that light is the boundary with another world. That other world was mentioned casually by Albert Einstein, theoretical extrapolation from the equations of the Special Theory of Relativity (STR).



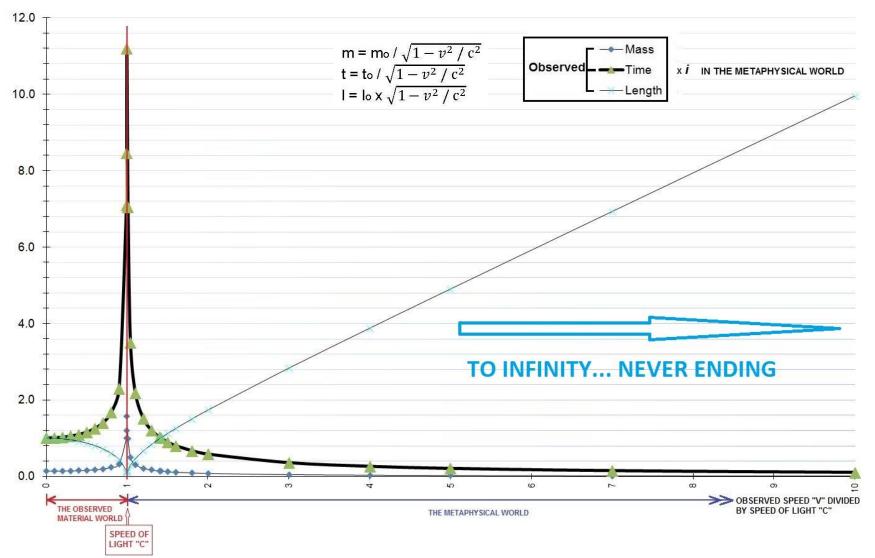
m = m_o /
$$\sqrt{1 - v^2 / c^2}$$

t = t_o / $\sqrt{1 - v^2 / c^2}$
I = l_o x $\sqrt{1 - v^2 / c^2}$

Albert Einstein noted that in principle, there can be another world where the speed of light, c, is the lowest speed, instead of being the highest speed as it is in our world. In that world, it will be as impossible to lower velocity v down to c, as it is in our world to increase v to c.

The three equations, below, show that in our world, when v increases, mass m increases, time t slows down and length l shortens.

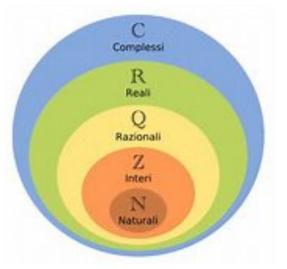
In the other world, where v > c, the same happens when v decreases, even though with some differences; see next page for more information in graph form. However, all three entities will be multiplied by the imaginary number "i", the square root of (-1). That means the other world cannot be seen from our world except at its boundary: the light.



1 ← THE OTHER WORLD IS PERPENDICULAR TO OUR WORLD \rightarrow THAT MEANS NOTHING IN IT CAN BE SEEN FROM OUR WORLD EXCEPT ITS BOUNDARY WITH OUR WORLD: LIGHT; HOWEVER, IT IS A DIFFERENT KIND OF LIGHT (x i). ONLY LIFE CAN SEE IT.

The two worlds together, make a Complex World, as in Complex Numbers and Complex

Equations.



Main types [edit]

Natural numbers (\mathbb{N}): The counting numbers {1, 2, 3, ...} are commonly called natural numbers; however, other definitions include 0, so that the non-negative integers {0, 1, 2, 3, ...} are also called natural numbers. [1][2]

Integers (Z): Positive and negative counting numbers, as well as zero: {..., -3, -2, -1, 0, 1, 2, 3, ...}.

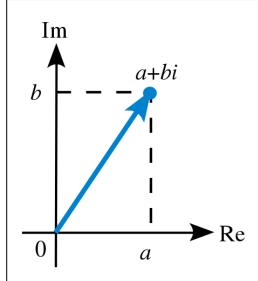
Rational numbers (\mathbb{Q}): Numbers that can be expressed as a ratio of an integer to a non-zero integer. [3] All integers are rational, but the converse is not true.

Real numbers (\mathbb{R}): Numbers that can represent a distance along a line. They can be positive, negative, or zero. All rational numbers are real, but the converse is not true.

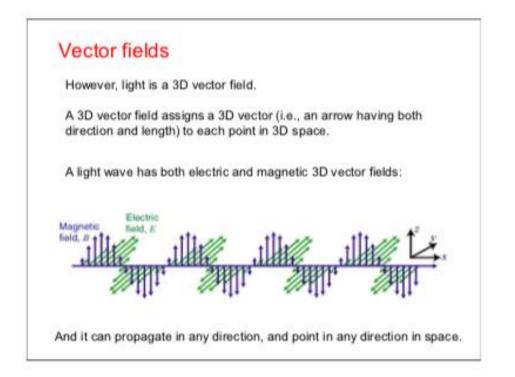
Irrational numbers (I): Real numbers that are not rational.

Imaginary numbers: Numbers that equal the product of a real number and the square root of -1. The number 0 is both real and imaginary.

Complex numbers (\mathbb{C}): Includes real numbers, imaginary numbers, and sums and differences of real and imaginary numbers.



A Complex Number can be visually representd as a pair of a Real Number and an Imagenary Number



THE OTHER WORLD MYSTERIOUS FEATURES

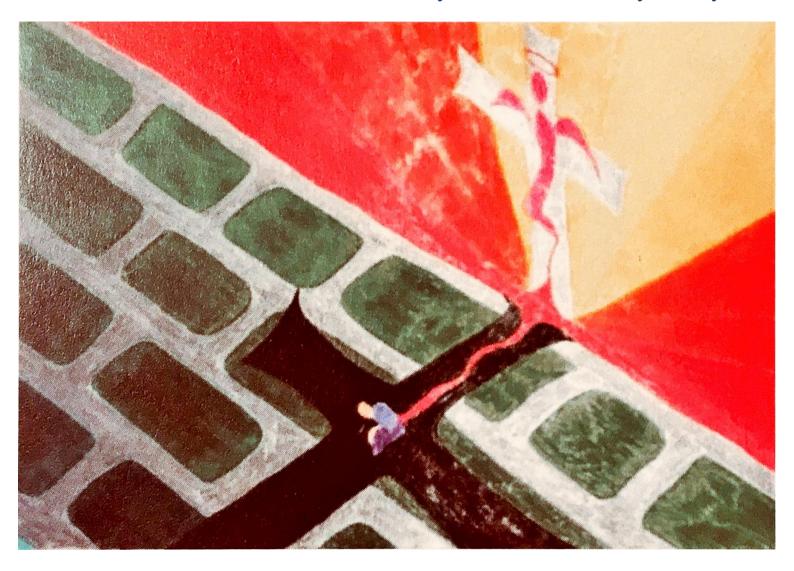
The v > c world being multiplied by "i" is perpendicular to our world, because multiplication by "i" represents rotation by 90 degrees. Both worlds represent a "Complex World" as in Complex Numbers and complex equations of electro-magnetic waves. The bottle neck in this argument is in further research on the relationship between DNA and light.

In the world of v > c:

- Movement never ends; mass transforms to energy spontaneously; getting closer and closer to zero without ever reaching it; accelerating continuously without ever reaching infinity. Eternal movement and transformation in a continuous. Unlike our world, that world is continuous.
- o It connects with our world only by light. However, that light mass is multiplied by "i" which renders it none detectable by our world, except by life (DNA) that is intimately connected to light.
- That is compatible with Mystical Theology, that God is shown only by His energy (Light) and only to those who are most connected to the HS, the giver of life. It's fitting that light is the simplest particle all as God in His mystery, is of utmost simplicity that is beyond comprehension.

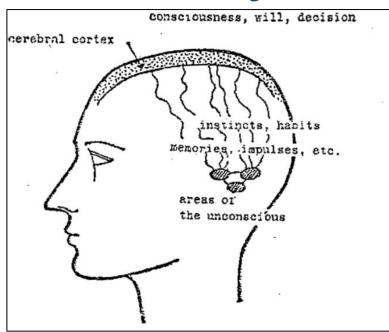
THE OTHER WORLD AN ART REPRESENTATION

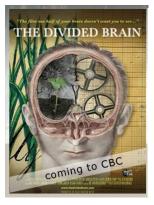
The two worlds, combined together, form a complex world where the other world is perpendicular to our world. The artwork, courtesy of Susan Smandych, says it all:



SALVATION IN CHRIST OF THE DIVIDED MIND

Given intimate relationship between light and DNA, therefore life; it is reasonable to assume that our best resonance with God is through the Unconscious Mind that is most connected with feelings and life functions.





The above is taken from psychology book. The one on the left, is a poster for CBC documentary.

The human mind ranges from the cerebral cortex representing conscious thinking, will and learning; to the unconscious mind responsible for feelings and closely linked to the heart, immune system and other functions of life.

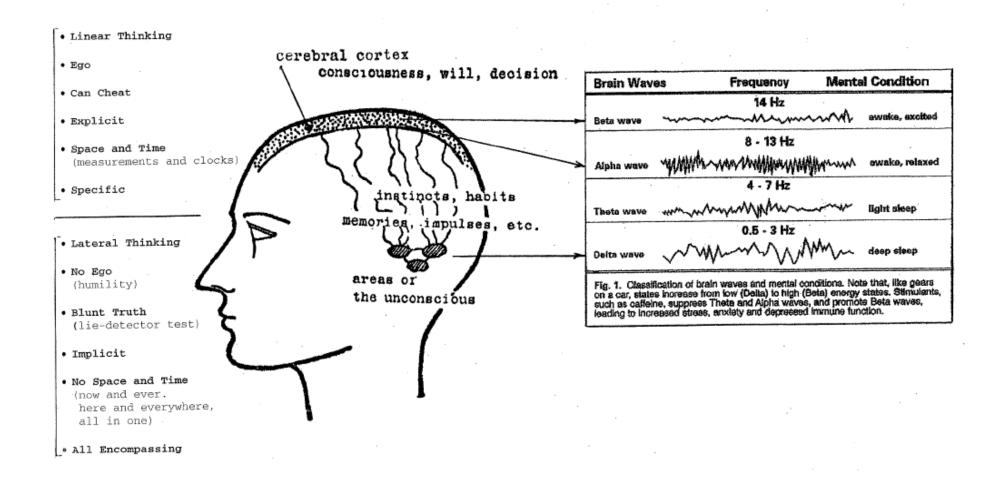
The rational mind works by linear thinking; cause and effect; logic; like a computer.



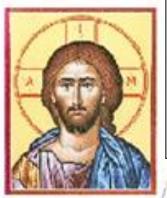
While the unconscious works by lateral thinking; multidirectional; by association; connects everything with everything including life body functions.



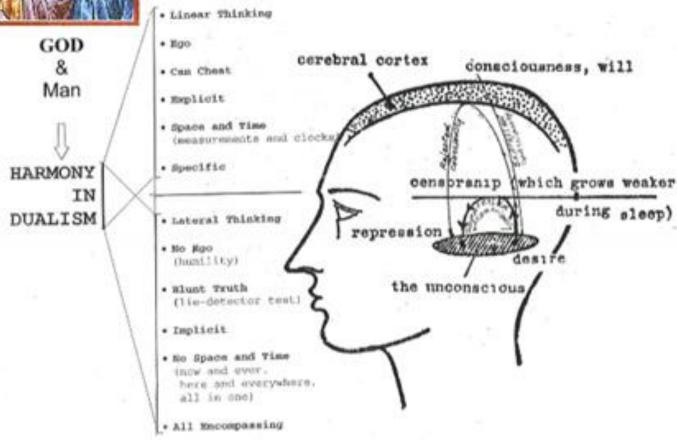
SALVATION IN CHRIST OF THE DIVIDED MIND



SALVATION IN CHRIST OF THE DIVIDED MIND



Inner life is trapped, like in a "Faraday Cage" by the censorship of the world. No amount of rituals or meditation, can break the bondage. Only a direct connection with Christ can. The only way to see Christ is in the human beings whom he took the nature of.



SALVATION IN THE IMAGE OF CHRIST IN HIS BROTHERS

In the words of Mother Maria:

"a man encounters the terrible, inspiring mystery...He encounters... the authentic image of God in man, the very incarnate icon of God in the world, a glimmer of the mystery of the Incarnate Godmanhood. And man must unconditionally and unreservedly accept this terrible Revelation of God, must bow down before the image of God in his brothers...in the name of the love for this image of God that pierces his heart, he will want to begin a struggle with the devil." (p.21). I would assume that what she meant by "terrible" in this context is "awesome".

