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From the desk of Pierre Beaudry

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# OVID'S METAMORPHOSES AND TIME REVERSAL

by Pierre Beaudry, 29/09/2009

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[Poetry is future nesting oriented, not past oriented. This report will investigate the Pythagorean and Platonic method of poetic transformation of Ovid's poetry with respect to time reversal. The report examines especially Lyn's challenge of the notion of physical space-time from the standpoint of the incubating treatment that Ovid gave to it in two Greek myths: the myth of the failure of Narcissus and the myth of the successful metamorphosis of Ceyx and Alcyone. The paradox of the first demonstrates that the more Narcissus is concerned with his self-image, the less he is self-reflexive. On the other hand, the metamorphosis of Ceyx and Alcyone shows how time reversal in the simultaneity of eternity is the key to understanding the idea of immortality underlying the ancient doctrine of transmigration of the souls, that is, metempsychosis.

However, if, on the one hand, the story of Narcissus shows how "CHANGE WE CAN BELIEVE IN" was a stillborn idea, the transformation of Ceyx and Alcyone, on the other hand, shows how "CHANGE WE CAN DISCOVER IN" is the nesting place where time mixed with the product of enduring love of mankind becomes an inexhaustible source of creative change for the future of humanity.

Finally, the transformation of Alcyone leads us to investigate Lyn's approach to solving the conflict between perception and conception, the differential between the Type A and Type B personalities. This brings us to the expression of a triple form of astronomic, astrophysical, and epistemological equation of time that opens the way to understanding the significance of Plato's "moveable image of eternity" as the form of time for space-travel.]

"Nothing is constant in the whole world. Everything is in a state of flux, and comes into being as a transient appearance. Time itself flows on with constant motion, just like a river: for no more than a river can the fleeing hour stand still. As wave is driven on by wave, and itself pursued, pursues the one before, so the moments of time at once flee and follow, and are ever new. What was before is left behind, that which was not comes to be, and every minute gives place to another." (Ovid, The Metamorphoses.)

### INTRODUCTION.

When Thales visited Egypt under the invitation of King Amasis, the King asked him: "Thales, please tell me: where can I find wisdom?" After a short moment of reflection, Thales replied: "In time!"

Ovid (43 B.C. – 17 A.D.) was the Platonist poet of Rome who, during the opening years of the first millennium A.D. turned Greek mythologies into metaphorical ironies of human and other transformations based on the Pythagorean notion that everything changes and nothing ever dies. Thus, the spirit of Pythagoras wanders from story to story, weaving through the meanders from the origin of the world and the creation of man, through Greek history, until Roman time. Ovid's *The Metamorphoses* are insightful psychological incursions into what happens to the human mind under the influence of the universal physical principle of change, or under the lack thereof. Ovid's insatiable curiosity was to investigate every form of change and especially those pertaining to the transformation of the human soul, and to decipher in what manner the soul went with or against the flow of time.

Following Pythagoras, Ovid sought the ordering principle of the harmonies that relate the faculties of the soul to the physical bodies that this soul inhabits before and after a change. That, for Ovid, became the essence of poetry such that one's voice could be transformed into either the West Wind or even the song of a Nightingale. Thus, as he set out to look for these underlying harmonies, Ovid discovered the multiple layers of universal change that overlap one another in the human mind as anyone experiences who proceeds to discover a universal physical principle in the simultaneity of eternity. Upon reading Ovid, the reader is not only made to realize that his own mind is the actual subject of those metamorphoses, but, also, that such changes do not pertain to the past, but to the future.

Ovid showed that time was of the essence, not because it means money, as fools believe, but because it is related to creativity and immortality. However, how time and creativity may be related to each other through immortality is not an easy knot to untangle. That is the key question of this present report. The short answer to this question comes to me as a Gordian solution from Ovid at the end of his book, where he said: "My work is complete: a work which neither Jove's anger, nor fire, nor sword shall destroy, nor yet the gnawing tooth of time. That day which has power over nothing but my body may, when it pleases, put an end to my uncertain span of years. Yet with my better part, I shall soar, undying, far above the stars, and my name will be imperishable." This is how Ovid proceeded by time reversal to establish his name as a poet forecaster. That is also the sort of forecasting of immortality which is most speedily required to understand at this present historical moment in time.

But, the more one concentrates on time that passes the more it completely escapes one's sense perception. Time can easily become a very slippery affair. You cannot see it, you cannot hear it, and as hard as you might try to seize it, it will already be gone from your grasp when you think you have a hold of it. Time is fluid and fugitive like the slow drowsiness of constant sleep: it is as a tasteless wine that slowly fills a cup of silence. In that shadowy view of sense perception, therefore, time is not a friend: time is a waste. It is like a complete anonymous stranger just passing through, nothing else. It holds your hand in the most familiar way as if it had always known you; and yet, it is totally indifferent to you and ignores you completely even though it never leaves you alone, no matter where you turn. Like an empty dream, time is indistinguishable from the shapes it accompanies. So, what could such an unfriendly form of passing time have to do with creativity?

There must be another form of time which relates to the creative process. What if there existed a form of time that was a faithful and constant companion to universal physical principles? Aha! What if time were like an intention coming back from the future? How would it affect universal physical principles in that form? The ancients believed that universal physical principles were communicated to men through messages from the gods in their sleep. Is there any truth to such beliefs? Do we have to travel as far as the Cimmerian country where the secret dwelling of the god of sleep, Hypnos, is located, and call upon him in the deepest recesses of his cave? Can Hypnos or his sons tell us anything about our inquiry? Can they tell us anything about change and becoming in the future?

What about dreams? Do time reversal dreams exist? Dreams generally relate to the past, not to the future. However, someone might ask: "Couldn't there be some sort of anticipatory principle attached to some dreams? If conscious causality comes from the future in the form of time reversal, and not from the past, couldn't that connection be made in dreams as well?" There is no doubt that the terms of causality that we wish to establish for the determination of the present course of history lie in the form of long term planning coming back from the future; however, whatever plan or design coming from the future might be, it must be contained in some dynamic mnemonic device, if we wish to make it imperishable. Thus, through poetry Ovid was able to discover nesting ways

that incubated as mnemonic devices did, and stopped the wasted flow of time from going into the pit of oblivion. In this way, he was able to have time work to his advantage.

In other words, because physical space-time reversal, as opposed to clock-time, is the form of time that pertains to the potential of universal change, that is, to creativity, as Lyn demonstrated in his recent paper on *The Science of Physical Economy*, it is essential that the idea of incubation of time, that is to say, the infinitesimal idea of maturation of the process of relativistic becoming in physical space-time, be considered as the central most important feature of any action involving a creative process, anywhere in the universe, and at any time. Let me buttress this hypothesis with Lyn's concluding statement of his most recent report:

"Ontologically, the infinitesimal is, as Leibniz emphasizes, the expression of the process of the "becoming" as bounded within a process which is essentially dynamic, as Leibniz and Bernhard Riemann define dynamics.

Now apply that to the relationship between an action and the context, such as a capitalized form of physical potential, as being the type of space-time expression of the relationship between a capital investment and the application of that investment at a certain point in the lifetime of the finite value of that investment.

The relationship between the potential and its variable expressions over a lapse of time, when defined in those terms of reference, is resolved as the replacement of the function of time by relative space-time. This leads to such interesting considerations as the relativistic effect associated with acceleration and deceleration in space-time seen as an expression of potential; in our case in this discussion for economics, the generation, consumption, and effects of that potential. Here, I limit my emphasis to the domain of a science of physical economy, while conceding to the broader implications to be taken into account by others, as Bernhard Riemann might have cautioned me, whose special talents are located in a different quality or relevant other skills.

However, that description of the relationship which I have just given, is only an approximation, but an approximation which serves us here as a way of introducing a more general notion of an efficient physical principle's function in the domain of physical economy: the approximate ontological distinction of a process in physical space-time, as distinct from an action at a particular point in a linear "time-line." Thus we depart the domain of mere things as if occurring at some point on linear time, for a reality of physical processes in physical space-time. The essential physical-economic correlation is an action within physical space-time, not linear clock-time. The expression so described is one of potential, physical space-time potential. The potential, so defined, and appropriately measured, are the essential relations in the physical space-time of a real life physical economy." (Lyndon H. LaRouche Jr. The Science of Physical Economy, EIR, September 18, 2009, p. 126.)

And, I might add that it is in the domain of classical artistic composition that one finds the most elaborated forms of such relativistic space-time for the purpose of

increasing relative population density, and most emphatically in the dynamic domain of painting, poetry, and music. However, such relativistic space-time is also evident in comparing the different aspects of duration of time from the vantage point of productivity per capita and per square kilometer affecting the phase changes of the Lithosphere, the Biosphere, and the Noosphere. Compare, for example, the duration factor of time in the relativistic effect of acceleration and deceleration with respect to the aging of human living beings. Psychologists have long noticed that psychological time and healing time of individual human beings were generally inversely proportional; that is to say, at a young age, psychological time tends to be very long while healing time is very short. As you get older, psychological time becomes shorter while healing time becomes longer. This is the proof that time does play tricks on us under the influence of acceleration and deceleration of the process of aging. Thus, if this inversed proportionality of time is integrated into a third form of time, that of the assimilation process of cognitive knowledge, the results of their combination may be surprising, as they may have something to do with measuring the time it takes for increasing the quality of a society's relative population density. This is where the increasing of the modes of energy-fluxdensity of a society's classical artistic compositions becomes the litmus test for both the mental and physical health of that society's progress in the future.

First and foremost, maturation represents the most important ontological character of what can be called cognitive closure in relativistic physical space-time. This maturation idea of cognitive closure is a notion that is attached to the idea of an open-ended potential of change, and is, therefore, related directly to causality from the future as all relativistic processes are, and must bring a finite limit to a process of change at a foreseeable moment in time. As such, this is a reflection from the universe as a self-bounded and finite universe as a whole. However, closure and completeness is not the same thing. As Lyn showed, this form of closure in relativistic physical space-time does not pertain to a linear time-line because it is born from the future acting on changing the present as a maturing inversed form of causality; that is, it pertains to a different chronology of time which is expressed in the moral objective of correcting the errors of clock-time. It is in that sense that maturation is the quality that could be attributed to the causal process of creativity, as such, and which could only be actualized from the future as opposed to from the past. This might be the reason why Baby Boomers never matured into complete human beings and have remained as children all of their lives.

The maturation of physical space-time, however, is not a period of waiting. It is a very active and tumultuous period of gestation which, like the thunderous financial cataract of October 2009 that is about to fall on the whole world, is characterized by what Chinese wisdom has called a "crisis of opportunity." This time is the fall of the Berlin Wall of sense perception! That is the character of time that is presently gripping the totality of humanity in the midst of the greatest worldwide economic breakdown crisis of all times. The reason the maturation-time of this crisis is necessarily coming to a close at this moment in history is because the totality of the past values of humanity, especially those of the Aristotelian-Euclidean forms of the last 40 years, has been completely invalidated. Time's up! It is time to grow up fast and change! But, it is not the change that poor President Obama is wishing for. The required change is rather the opposite of

what he wishes. It is the form of change that is attached to the mass-strike movement as it is currently occurring inside of the United States at the present time. It is a change which forces the entire population to be turned toward the future in a way that it defines a new way of looking at reality. This present turn toward the future is the greatest poetic moment in the history of mankind to date.

### 1. WHAT TO EXPECT WHEN THINKING BACK FROM THE FUTURE.

"If a man be born of earth, he shall be bounded internally by earthly changes; however, if a man be born of the universe, he shall be bounded internally by universal changes. Tell me where you come from, young man, and I will tell you who you are."

(Dehors Debonneheure.)

In the Epilogue of his last report, Lyn wrote: "To sum up what has been written here thus far, the quickest way to reach an understanding of 'the new economics' which I have introduced here, is to think of looking back toward Earth from the kind of habitat on Mars, a few decades ahead." The question this raises is how should we imagine the time-function of this idea of reversed causality? How can we get the whole of humanity to think from the future? It is the whole future of humanity's self-interest that is posed in that question. Again, it is poetry which compels us to investigate this by connecting with the spirit of the time, as Percy Bysshe Shelley wrote in his *The Defense of Poetry*.

As Lyn indicated, the way to think about physical-time as opposed to clock-time is to think backward: not backward to the past, but backward from the future to the present, and start thinking about how this simple inversion process of thinking jars your imagination with respect to the survival of humanity. If you look backward in time, as in an inversed wave function that comes from the future to affect the present, as Lyn looks back from Mars toward the Earth, what is the pathway of transformation that would represent such a conception of time in our minds? What is the epistemological shape of that mental motion of change? How can one design a trip back from Mars without having been there? What is the flight pattern that schools of birds sometimes take to pass the time playfully? How can birds know in advance when and where they will be in the next turn, and how they will all come back together on the same wire they started from?

The motion that comes to mind is that of an open-ended process of going back and forth, from the future to the present and back to the future again, in a sort of modular cyclical wave motion that keeps going backward to the present again, after a certain lapse of time and after a number of changes in physical space-time; as if everything about this choreography had been written into the script in advance for the flight. The mental image might be something that is projected upward and goes through several gyrations before returning to its original staging area in the future, after a number of changes, but without ever closing completely on itself. The point being that, at the level of universal physical

principles, there exists no completeness. For example, you can completely cover the area of the circle and you can even completely cover the area under the physical curve of a cycloid, but you cannot achieve completeness in a dynamic universe where even universal physical principles also change. You can only bring a process of change to the closure of maturity, in time; that is, before something happens to break it down.

However, if the change is not harmonically controlled, you need to know how and when it will break down. You may not know where you are going to end up, but you know the pathway through which you have to travel to get there. For example, by presuming the changes from the future are not being introduced, in time, you can know what form the curvature of the breakdown would have to assume. That is the poetical curvature you want to work with in time reversal. Let me give you an example of this space-time nesting process.

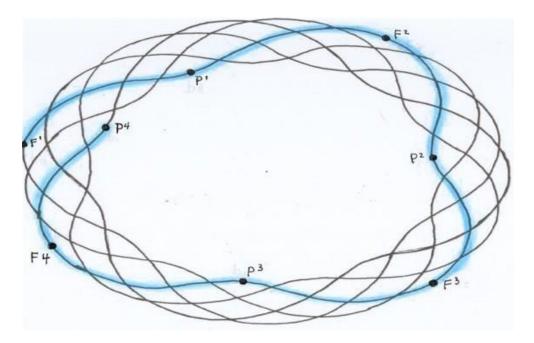


Figure 1. Modular-time-reversal-wave.

Take the example of Figure 1. Because the process of looking from the future F¹ back to the present P¹ never returns to the same future that you started from, as time progresses, the infinitesimal change in the motion of curvature could be the expression of a fraction of a nano-second or of the duration of several decades or even precession cycles of economic investments. In that sense, the nesting space-time curvature of this modular-time-reversal-wave can serve as a model for any time forward mapping, providing the proper equation of time is included in the program and investment incentives are set well in advance, that is to say, providing you have sufficient dynamic impetus and you know how to see yourself changing. Let me give a couple of examples of such bad and good nestings of modular-time-reversal-waves.

# 2- TIME, NARCISSISM, AND NO CHANGE.

There are forecastings and there are prophecies. The story of Narcissus is a case of forecasting pronouncement, because, as Ovid put it: "The strange madness which afflicted the boy and the nature of his death proved its truth." Ovid knew that Narcissus was going to break down, but he did not know when. Indeed, the truth of Narcissus' character and of his inevitable failure comes from what the results of that psychological condition will be in the future. This may be useful for understanding some aspects of the psychology of President Obama and of the new Olympian gods that he is working for. Here is how Ovid presented the case of Narcissus:

"Narcissus, wearied with hunting in the heat of the day, lay down here: for he was attracted by the beauty of the place and by the spring. While he sought to quench his thirst, another thirst grew in him, and as he drank, he was enchanted by the beautiful reflection that he saw. He fell in love with an insubstantial hope mistaking a mere shadow for a real body. Spellbound by his own self, he remained there motionless, with fixed gaze, like a statue carved from Parian marble. As he lay on the bank, he gazed at the twin stars that were his eyes, at his flowing locks, worthy of Bacchus or Apollo, his smooth cheeks, his ivory neck, his lovely face where a rosy flush stained the snowy whiteness of his complexion, admiring all the features for which he was himself admired. Unwittingly, he desired himself, and was himself the object of his own approval, at once seeking and sought, himself kindling the flame with which he burned. How often did he vainly kiss the treacherous pool, how often plunged his arms deep in the waters, as he tried to clasp the neck he saw! But he could not lay hold upon himself. He did not know what he was looking at, but was fired by the sight, and excited by the very illusion that deceived his eyes. Poor foolish boy, why vainly grasp at the fleeting image that eludes you? The thing you are seeking does not exist: only turn aside and you will lose what you love. What you see is but the shadow cast by your reflection; in itself it is nothing. It comes with you, and lasts while you are there; it will go when you go, if go you can." (Ovid, Metamorphoses, Penguin books, Translator Mary M. Innes, Baltimore, Md. 1955, p. 85.)

The irony of Narcissus is that he became incapable of true self-reflection and had to, therefore, self-destruct under his own eyes. These calm waters are the most disturbed of all, because the more Narcissus focused on his own reflection, the less he was able to be self-reflective. It is important to look at this aborted reflection with respect to the notion of time and change. The notions of time and of change come to a screeching halt, here, because the identity is negated with respect to human self-consciousness and no investment is introduced for anything else but fantasy. Indeed, everything comes to the standstill of a gaze in which time itself has been frozen. Narcissus is trapped in a bad time capsule. But, if what they say is true, that love transforms everything, why can't Narcissus transform himself?

The problem is not that Narcissus is not conscious of what is happening to him. He is conscious, but he is stupid in his consciousness. Stupidity of no change is the problem. Narcissus cannot love because he cannot change. And, when you have a president of a nation like the United States who cannot love but himself, you have a serious problem.

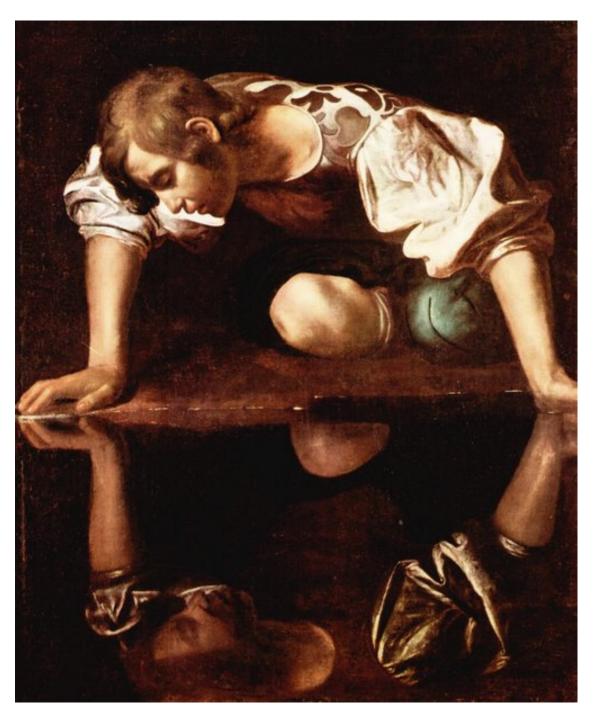


Figure 2. Caravaggio, Narcissus.

Narcissus is well aware of his tragic situation, but he doesn't wish to escape the perceived form of the trap that he has stupidly created for himself. The only hope for Narcissus would be to look away from himself, but he cannot do it, because he finds nothing else to look at, nothing of interest, that is. Any attempt to leave his reflection in the pool would make the whole universe disappear. The only consciousness he has is the cruelty that encloses the ugly shadow of himself. Note how Caravaggio has completely enclosed Narcissus within the exclusive frame of himself, without any room left for anything else. Narcissus is both the content and the frame of the trap he got himself into. Ovid wrote:

"I am in love, and I see my loved one, but that form which I see and love I cannot reach: so far am I deluded by my love. My distress is all the greater because it is not a mighty ocean that separates us, nor yet highways or mountains, or city walls with closed-barred gates. Only a little water keeps us apart. My love himself desires to be embraced: for whenever I lean forward to kiss the clear waters he lifts up his face to mine and strives to reach me. You would think he could be reached – it is such a small thing that hinders our love. (Ovid, Op. Cit., p. 86.)

So close, and yet so far! Indeed, it is less than the skin-deep distance of an axiomatic surface that prevents Narcissus from breaking with the domain of sense perception, a mere change of axioms in which the reflection of the mirror has to be broken, not the mirror itself. This ugly situation is like the moustache of Obama. It won't go away because it grows from the inside of the reflection, the more he looks deeply into the pool the more it shows up under his nose. And, that is his greatest obstacle. The break cannot be made because Narcissus considers that no matter how bad his cruel torment may be, it would be an even greater tragedy if he were to abandon his fantasy. He does not want to change. Therefore, death must be preferable to any other option because Narcissus refuses to put himself in the skin of another. He cannot see himself changing and looking at himself back from the future, from someone else's point of view. Ovid continues:

"What I desire, I have. My very plenty makes me poor. How I wish I could separate myself from my body! A new prayer this, for a lover, to wish the thing he loves away! Now grief is sapping my strength; little of life remains of me – I am cut off in the flower of my youth. I have no quarrel with death, for in death I shall forget my pain: but I could wish that the object of my love might outlive me: as it is, both of us will perish together, when this one life is destroyed." (Ibidem, p. 86.)

Finally, Narcissus died of grief and could not even let his own image outlive his ill-fated love. He died from the psychological equivalent of a hyperinflationary process. Don't forget that it was Echo who followed Narcissus into the woods and who was in love with him; but he could not respond to her advances because she was incapable of initiating them. Narcissus fled from her, crying: "Away with these embraces! I would die

before I would have you touch me." And Echo replied: "... I would have you touch me." Narcissus could not return the love of Echo because she was as another coming back to him. She was not coming back as him. As you can see, sound does not reflect as image does: seeing and hearing are two different things. The inversions are not the same. The time between Narcissus and Echo had become impossible because she is another, but the no-change gap between his image and himself in the mirroring pool had been an abortion because there is no other. Thus, "CHANGE WE CAN BELIEVE IN" was stillborn and the desired consummation of self-love never came, and never will come. Here then, time was just wasted away because love was construed in the vain pursuit of a passing shadow. Nothing immortal could ever endure from such an experience; save a lesson on the fleeting illusion of stupidity. Unlike the murmuring rambling flows of the River of Forgetfulness, whispering over the pebbles of memory, here, nothing had been made to change in time. Time had died and its face did not even have a wrinkle.

### 3- THE IMMORTALITY OF CEYX AND ALCYONE.

Following this death of Narcissus and that of his awful self-image, it is useful to compare this form of false love and dead time with that of the immortal transformation of Ceyx and Alcyone and continue our investigation into the question of causality from the future with this amazing metamorphosis. The question, therefore, becomes: how can other be integrated into self in the form of change coming back from the future?

According to Ovid, once upon a time, King Ceyx was making preparations to visit the Cult of Apollo at the temple of Claros because he wished to consult the oracle concerning the welfare of his people. Since he did not want to go to the Oracle of Delphi because of the danger of robbers along the roads, he decided on Claros which was only attainable by sea. His loving wife Alcyone, however, was fearful of that voyage because she was terrified by the dangerous conditions at sea. However, after several failed attempts at convincing her husband to bring her with him, she resolved to let him go alone, and he set sail toward his objective in the hope of fair winds.

Less than halfway between his home and Claros, Ceyx encountered unfavorable East and South winds that grew into a violent storm as they moved forward in the same direction of his objective. At a certain point, the towering power of the winds threw the sea into turmoil and put Ceyx's ship in danger. All on board were rapidly overwhelmed and not one could gather sufficient strength to flank the fury of the elements directed against them. As one man, all flung themselves to the defense of the ship, but after only a brief period of time, the raging tempest was inside and had taken command of the vessel. Ovid wrote:

"All were in a state of confused terror, like the panic in a city when enemy soldiers are undermining the walls from the outside, while its own men strive to hold them within. Their seamanship deserted the sailors, their spirit sank, and a separate death seemed to be rushing upon them with each oncoming wave,

breaking through their defenses. Some could not restrain their tears, one stood dazed, another called those men happy for whom there was proper burial in store, another begged and prayed for heaven's help, vainly stretching out his arms towards the sky he could not see. Some thought of their fathers and brothers, some of their homes and children, and whatever they had left behind. It was the thought of Alcyone that distressed Ceyx: Alcyone and nothing else was on his lips. She was his one desire, and yet he was glad she was not there. He would have liked, too, to look back at the shore of his country, and turn his eyes for a last time in the direction of his home, but indeed he did not know where it lay, amid the boiling and swirling of the sea, and the curtain of pitch-black clouds that concealed the sky, redoubling the darkness of the night. The mast was broken by the onrush of the tempestuous whirlwind, the rudder shattered. Then like a victor triumphing in his spoils, one last wave arched itself on high, looking down on all the other waves. As violently as if Athos and Pindus were torn from their foundations and hurled in their entirety into the open sea, it crashed sheer down and, by its weight and the force of the blow combined, submerged the ship in the depths of the ocean. Many of the crew sank with the vessel, and were swallowed up in the sea, to die without rising to the surface again. Others clung to spars and broken fragments of the ship. Ceyx himself, with the hand that once wielded a scepter, held fast to a piece of wreckage and called, alas in vain, upon his father and his father-in-law. But as he swam, the name most often on his lips was that of his wife, Alcyone. He thought of her, spoke of her, prayed that the waves might wash his body up where she would see it, and that in death he might be buried by her loving hands. While he kept himself afloat, whenever the waves let him open his lips, he called to Alcyone, far away, and even when the seas closed over him, still he murmured her name. Suddenly an arching mass of black waters came crashing down over the midst of the seething ocean, and Ceyx sank and drowned beneath the breaking wave. On that day, Lucifer was dim and unrecognizable: since he could not leave the sky, he shrouded his face in thick clouds." (Ovid, Op. Cit., p. 260-61.)

Meanwhile, every day that Ceyx did not return, Alcyone prayed at the altar of the goddess Juno for the safekeeping and safe return of her husband. Juno was the goddess of remembrance and of concord between peoples. She was also the protector of women. During ancient times, it was said that every man had his Genius, while every woman had her Juno. However Alcyone knew nothing of the disaster that befell her loved one and the goddess could not endure to hear her constant pleas without telling her the truth that her husband was already dead in a storm. Ovid wrote:

"So, to remove those ill-fated hands from her altars, she said to Iris: 'Most faithful bearer of my messages, go quickly to the drowsy home of Sleep, and bid him send Alcyone a dream, in the shape of the dead Ceyx, to tell her the true state of affairs.' At her behest, Iris put on her trailing robe of a thousand colors and, tracing a curved arc across the heavens, sought the cloud-wrapped palace of the king she had been told to visit.

Near the Cimmerian country is a cave, deeply recessed, a hollow mountainside, the secret dwelling-place of languid Sleep, where the sun rays can never reach, whether at his rising or at noon or at his setting. Dark mists are breathed out from the ground, and the half-light of evening's gloom. No crested cock summons the dawn with wakeful crowing, no anxious dog break the silence, or geese, shrewder still than dogs. No wild beasts are heard, no cattle, nor is there any sound of branches swaying in the wind, or harsh quarrelling of human tongues. Voiceless quiet dwells there: but from the depths of the rocky cave flows the river of Lethe whose waters invite slumber as they glide, murmuring over whispering pebbles ..."

"The goddess entered, and brushed aside with her hands the dreams that stood in her way. Immediately the god's dwelling was filled with the shining gleam of her bright raiment, and Sleep himself struggled to lift his eyes, languid and heavy with slumber. Again and again he fell back and, as his head drooped, his chin nodded against his breast. At length, however, he roused himself and, leaning on his elbow, recognized Iris and asked her why she had come. She replied: 'O Sleep, in whom all things find rest, most peaceful of the gods, you who calms the mind, put cares to flight, soothe limbs wearied by harsh tasks and refresh them for their toil, bid your dreams, which are indistinguishable from the real shapes they imitate, put on the appearance of King Ceyx, and go to Alcyone in the city of Trahis, which Hercules made famous. There let them conjure up a vision of the shipwreck, for this is Juno's command.'

Her mission over, Iris departed, for she could no longer bear the compelling influence of Sleep. As she felt his drowsiness stealing into her limbs, she escaped and traversed once more the arched path by which she had lately come.

Now from his host of sons, a thousand strong, the father woke up Morpheus, who was skilled in imitating human shapes. None was cleverer than he at reproducing a way of walking, an expression, and the sound of a voice. In addition, he used the words and wore the clothes most typical of each person. Morpheus specialized in imitating men..." (Ibidem. p. 262-63.)

The point to be made, here, is that the classical artistic compositional role of Morpheus is a crucial function of sleep that visits only the minds of those who live by universal physical principles. Therefore, since the goddess had called on Morpheus to visit Alcyone, it was because the love that united both Alcyone and Ceyx was an expression of the love of mankind, and of the general welfare of their people.

Now, let's recast in our minds the pathway of the incubating modular-time-reversal-wave that Ovid described in his story of the transformation of the two lovers, and project the trace from after the metamorphoses of Alcyone and Ceyx all the way back to before the tragic event of the shipwreck of Ceyx's ship. Let's investigate what crucial function of creative epistemological likeness exists between the role Morpheus played in

the dream that Alcyone had of the death of her husband and the axiomatic change that both lovers had to go through as a result of it. Ovid wrote:

"Morpheus flew through the darkness, his wings making no sounds, and soon reached the Haemonian city. There, he laid aside his wings, and changed himself to look like Ceyx. When he had assumed the appearance of the king, pale as death, his clothing gone, he stood before the bed of the unhappy wife, Alcyone. His beard was seen dripping wet, and drops of water splashed heavily from his sodden hair, as he leaned over the bed, tears streaming down his cheeks, and said: 'My poor unhappy wife, do you recognize your Ceyx, or has death changed my appearance? Look up, and you will know me: you will find your husband's ghost in place of his true self. O Alcyone, your prayers for me were of no avail. I am dead. Indulge no false hopes of my return. A South wind, blowing from a sky heavy with clouds, overtook our ship in the Aegean, and flung it about with tempestuous buffetings, till the vessel was wrecked, and the waves washed over my lips, as they vainly called you name. No unreliable messenger brings you this news, not do you glean it from vague rumours. I myself, who suffered shipwreck, am here to tell you of my fate. Come now, rise up, shed tears for me, and put on mourning garb. Do not send me unwept into the void of Tartarus.'

"As he spoke, Morpheus seemed to Alcyone to be weeping real tears: moreover, she could easily believe that the voice was that of her husband, and he had Ceyx' gestures too. She moaned and began to cry in her sleep, raising her arms and trying to touch his body – but she embraced only empty air. 'Wait!' she cried. '[Why] whither away so fast? We shall go together!'"

After awakening, suddenly, and discovering the awful truth of her dream, Alcyone was in total distress. She tore her hair and beat her breast in despair, crying in the emptiness of her room as she realized the terrible event she had forecasted:

"This was the reason, this was what made me apprehensive and afraid, when I begged you not to run away from me, not to follow where the winds bore you. If you were going to your death, I wish you had at least taken me too. It would have been far better for me to go with you, for then none of my life would have been spent away from you, and we should not have been separated in our death. Now, though I was not there, I perished none the less, I too was tempest-tossed, though I was left behind, and though the sea does not have me, still it holds me in its depths. My heart would be more unfeeling than the waters themselves, were I to strive to live any longer, to struggle to survive such grief. No, I shall not fight against my sorrow: I shall not desert you, my poor husband. Now, at least, I shall join you and, though our ashes may not lie in the same urn, one inscription will unite us in a single tomb. If my bones may not mingle with yours, yet our names will be ever linked.' Her grief prevented her from saying more: sobs interrupted every word she spoke, and groans that came from the depths of her stricken heart." (Ibidem, p. 264.)

The next morning, Alcyone went down by the shore to see if she could not find again the spot from whence Ceyx had departed. She projected her hope as far as she could to the boundary line that separates the sea and the sky and pulled back towards her that horizon limit until she discovered something floating in the far distance. She was moved by the anticipation that it might be the floating body of Ceyx coming back to her. But she wasn't sure. If Ceyx had heeded her warning and had not taken such a risk, their lives would not have been in such a torment today. The more she anticipated the more the floating object was being pulled and pushed by the waves of her exertion, nearer and nearer to the shore, until she recognized that it was, indeed, the body of her beloved. Then, came the great moment of discontinuity. As Ovid wrote:

"Adjoining the water's edge was an artificial breaker which, receiving the first onslaught of the waves as they came in from the sea, broke and weakened their force. Alcyone leaped upon this – it was a miracle that she was able to do so. Then, she found herself flying, beating the air with wings newly formed. Changed into a sorrowing bird, she skimmed the surface of the waves. As she flew, a plaintive sound, like the lament of someone stricken with grief, came harshly from the slender beak that was her mouth. When she reached the silent lifeless corpse, she embraced the dear limbs with her new wings, and all in vain kissed the cold lips with her hard beak. The people doubted whether Ceyx felt her, or whether it was the motion of the sea that made him seem to raise his head: but surely he had felt her! (My emphasis) At last the gods had pity on them, and both were changed into birds. Their love endured, even after they had shared this fate, and their marriage vows were not dissolved when they acquired wings." (Ibidem, p. 265.)

Here, the highpoint of the axiomatic singularity of change in relativistic spacetime is represented through the irony of the ambiguous raising of Ceyx's head. Had the kiss from Alcyone reached into the soul of Ceyx and made him respond accordingly by anticipation, or was it simply the motion of the wave that lifted his head to the approaching kiss? Was it dynamics or was it mechanics? It is very important that Ovid brought this poetic ambiguity to our attention, and it is not by accident. This is precisely the kind of anomaly that occurs in a crucial moment of axiomatic change, during a phasespace change like we are living through today, for example, in the present global economic breakdown crisis. This is when people who were totally mechanical before, become dynamical by means of the spirit of the time. At that singular moment, when an ambiguous irony of physical space-time is generated, the active presence of a universal physical principle makes its presence known, as if from behind the veil of the event, but by remaining completely invisible to sense perception. The question then arises: "Is the event of axiomatic change occurring by the dynamics of time reversal?" If we pay attention to the intention, here, it was the anticipation of that future effect in time when Ceyx would be transformed into a Kingfisher bird, as Alcyone had been transformed, just a moment earlier, that made the poet confirm by time reversal, back from the future, that the soul of Ceyx was still alive in his dead body. Thus, Ovid anticipated with the certainty of his foreknowledge: "but surely he had felt her."

What Ovid is also conveying poetically, here, is that if you listen to the "voiceless quiet" of the "murmuring over the whispering pebbles," as sleep draws near, you might come across some dream that may fill your cup with a creative thought. Listen to yourself sleeping, and if you hear any universal murmuring, call on Morpheus, the artistic manager of creative sleep, in the simultaneity of eternity. Morpheus is a very ancient and very friendly character who happens to be one of the three sons of Sleep and of Night, that is, Hypnos and Pasithea, and who has been watching over human beings ever since the origin of mankind. He is the night watchman of flight travel.



Figure 3. Alcyone the Kingfisher.

Morpheus is also the counselor of your dreams in the simultaneity of eternity. He resides in his father's cave near the River of Forgetfulness, and he is always ready to fly, at a moment's notice, when awaken by a creative thought, to any corner of the universe, and will attempt to rescue any distressed human being during his sleep, if he calls for help. Also, his wife, Iris, the rainbow goddess, has similarly pledged to help her husband in all of his missions. However, the reader should be warned that Morpheus also has two brothers, Phobetor and Phantasos, who are less friendly than he, because the first haunts humans with fearsome dreams, while the second injects human sleep with fantasies. So, be careful who you call upon to help you during the night.

#### 4- METAMORPHOSIS AND IMMORTALITY!

The question which now arises is a Pythagorean one: "What if true time were the empty shell of the soul which, like the pliant wax that received all forms of new and old designs, remained the same amidst all of the changes in the universe?" This also raises the question of the "equation of time" for the creative human mind; that is to say, the question of the relationship between chronological clock-time on Earth and the simultaneity of eternity with respect to the universe as a whole.



Figure 4. Sea nesting place of Alcyone incubating the idea of simultaneity of eternity.

According to Ovid, Alcyone and Ceyx were transformed into birds because their love had endured the test of hard times and they had reached out beyond the world of mere perception toward a higher cognitive purpose for mankind. They would always be seen flying together as if their union had been based on some common universal purpose. They were, as they say, birds of a feather who did not see themselves as themselves, but as representing others. So, as a result of their commitment to mankind, the gods decided to give flight to their greatest impulses. Consequently, like Ovid reported, "Alcyone and Ceyx's marriage vows were never dissolved." Their love broods on the sea and their outstretched wings keep guard over the winds as, each year, they bring about the Alcyone (Halcyon) Days of winter solstice on their floating salangane nest. These are the fourteen days of calm sea that stretch seven days before and seven days after the 21<sup>st</sup> of December. Consequently, that period of the year became most propitious for travelers.

This metamorphosis, however, does not mean that Ovid was transforming human beings into lower animal beings. This is not what Ovid was doing. In his section on creation, Ovid is explicit about the creation of man through the intermediary of Prometheus "in the image of the all-governing gods." After the creation of the stars in the heavens and animals on Earth, Ovid wrote:

"There was as yet no animal which was more akin to the gods than these, none more capable of intelligence, none that could be master over all the rest. It was at this point that man was born: either the Creator, who was responsible for this better world, made him from divine seed, or else Prometheus, son of Iapetus, took the new-made earth, which only recently separated from the lofty ether, still retained some elements related to those of heaven and, mixing it with rain water, fashioned it into the image of the all-governing gods. Whereas other animals hang their heads and look at the ground, he made man stand erect, bidding him look up to heaven, and lift his head to the stars. So the earth, which had been rough and formless, was moulded into the shape of man, a creature till then unknown." (Ibidem, p. 31.)

The introduction of Prometheus as the creator of mankind tells us quite clearly what Ovid thinks of the gods of Olympus. But, he goes further by identifying with his doctrinal master, Pythagoras. If we pursue the intention of Ovid to its full potential, we discover that there was a higher purpose to the axiomatic change of Ceyx and Alcyone, as the great crisis of their metamorphoses brings forth extraordinary opportunities. Replicating what came down to him from the doctrine of Pythagoras, Ovid said:

"Now, since a god directs my speech, I shall duly follow him who guides, reveal the secrets of my beloved Delphi and of the heavens themselves, and unlock the oracles of a majestic mind. I shall speak of things of great import, never studied by previous intellect, which have long lain hid. I joy to journey among the stars, high above, to leave the earth and this dull abode, to ride on the clouds and stand on stout Atlas' shoulders, looking down from afar on men as they wander aimlessly, devoid of any guiding principle, to unroll for them the scroll of fate, and cheer their panic and their fear of death, saying: 'You people, dismayed by the fear of icy death, why are you terrified by the Styx, by shadows and empty names, the stuff of poet's tales, by the dangers of a world that does not exist? Our bodies, whether destroyed by the flames of the funeral pyre, or by slow decay, do not feel any suffering – you must not think so. Our souls are immortal, and are ever received into new homes, where they live and dwell, when they have left their previous abode." [...] All things change, but nothing dies: the spirit wanders hither and thither, taking possession of what limbs it pleases, passing from beasts into human bodies, or again our human spirit passes into beasts, but never at any time does it perish. Like pliant wax which stamped with new designs, does not remain as it was, or keep the same shape, but yet is still itself, so I tell you that the soul is always the same, but incorporates itself in different forms." (Ibidem, P.338.)

As a special gift for mankind, Morpheus seems to have given Ovid the ability to replicate the powerful minds of past philosophers. By some unique dynamic osmosis between dream, discovery of principle, and simultaneity of eternity, accessible only through the mastery of the discipline of classical artistic composition, Morpheus had imparted to Ovid his own artistic ability to replicate the physical likeness of men as well as the epistemological likeness of their thinking processes. For example, this is how Ovid

was able to replicate the insight of the powerful epistemological discovery of Pythagoras about the hylozoic monist principle of universal physical change. Ovid said:

"Time, the devourer, and the jealous years that pass, destroy all things and, nibbling them away, consume them gradually in a lingering death. Even the things which we call the elements do not remain constant. Consider the changes that they undergo: for I shall instruct you. The everlasting universe contains four elements that give rise to bodies. Two of these, earth and water, are heavy and, by their own weight, sink down, while the other two, air and fire, which is more rarified than air itself, are weightless, and soar upwards, unless something holds them under. Though these four elements are distinct from each other in space yet they are all derived from one another, and are resolved back again into themselves. Earth is broken up and refined into liquid water, water becoming still less substantial changes into air and wind, and air too, being already of the finest texture, flashes upwards when it loses weight, into the fiery atmosphere above. Then, the process is reversed, and the elements are restored again in the same order: fire condenses and thickens into air, air into water, and water, under pressure, produces earth.

Nor does anything retain its own appearance permanently. Everinventive nature continually produces one shape from another. Nothing in the entire universe ever perishes, believe me, but things vary, and adopt a new form. The phrase 'being born' is used for beginnings to be something different from what one was before, while 'dying' means ceasing to be the same. Though this thing may pass into that, and that into this, yet the sum of things remains unchanged." (Ibidem, p. 341.)

Thus, the cycles of the true equation of time continue to incubate, change after change, throughout the universe, whereby everything that died was rejuvenated as if by some process of acceleration and deceleration of change. Ovid reminds us, here, of the wise epistemology of the principle of the advantage of the other that Rabelais had proposed as a Westphalian type of peace when Gargantua decided to stop the war fighting with Picrochole: Gargantua said:

"Our fathers, grandfathers, and ancestors from time immemorial have been of such a nature and disposition that as a memorial to the victories and triumphs they have won in the battles they have fought, they have preferred to erect monuments in the hearts of the vanquished by a display of clemency, than to raise trophies in the form of architecture in the lands they have conquered. For they have valued the lively gratitude of men, won by their liberality, more highly than mute inscriptions on arches, columns, and pyramids, which are subject to the injuries of climate and all men's spite. [...]

Such is the nature of gratuitousness. Time, which gnaws and fritters all things away, only augments and increases the value of a gift. For one good turn freely done to an intelligent man grows continuously by his generous thoughts

and remembrances." (François Rabelais, Gargantua and Pantagruel, Penguin Books, London, 1955, pp. 145-47.)

So then, it is wrong to say that time flies and never returns. Time does come back through the uninterrupted flow of changes, back from past discoveries into the form of the simultaneity of eternity, as if into an astrolabe of creativity. There is nothing strange in that, if we understand the generative cognitive links to the discoveries of the past that the future holds for us.



Figure 5. Kingfisher Ceyx flying over the flows of change.

# 5- THE EQUATION OF TIME AND THE SIMULTANEITY OF ETERNITY.

The crucial significance of the simultaneity of eternity lies in the ability to dynamically internalize the mind of someone who lived and died several centuries ago, and to relive what that person discovered or lived through, as if you had been there, yourself, making that discovery, or living that experiment with him. However, this experiment not only gives you the impression of "déjà vu," but it also might give you the impression of having been that person yourself in a previous life, as if your soul were immortal and you had migrated from that previous body into your present one.

This is how Ovid had Pythagoras explain how he had lived before and had participated in the Trojan War. Ovid wrote, quoting Pythagoras speaking: "I myself at the time of the Trojan War – for I remember it well – was Panthou's son, Euphorbus, who

once received full in the breast the heavy spear of Menelaus, Atreus' younger son. Quite recently, in the temple of Juno at Argos, Abas' city, I recognized the shield I used to carry on my left arm." (Ibidem, p.339.) This is not magic; this is simply a way of experiencing immortality in the historical form of universal time, the time where the here and now converges on eternity, that is, converges on the simultaneity of eternity. This is the time when man is the closest to God, because it transcends mortality and feeds the soul with appropriate universally truthful and immortal fruits. This is why a true discovery is never isolated and uniquely closed onto itself in time; it belongs to a higher equation of time, a relativistic space-time that must replace ordinary clock-time by integrating both its antecedents and its successors. It is in that sense that ideas are social and are never personal. Let me give you an example of such a universal discovery and its triply nested equation of time. I am speaking of the discovery of the astrolabe.

The astrolabe is a poetic-scientific instrument without compare which, historically speaking, has been rediscovered by a family of Type B personalities throughout probably more than three millennia. It is the instrument of change *par excellence*. In that sense, it is an ageless instrument that transcends both time and place because it reflects the principle of change in the universe as a whole. In a way, it is the timekeeper of the universe, the universal watch. However, it is also an instrument that cannot be truly understood by a Type A personality, because its very nature is to generate axiomatic transformations and bridge gaps between different axiomatic domains.

Its general design and purpose was already known by the astronavigating People of the Seas before the erection of the Great Pyramid of Egypt. It is the most ancient calendar of universal physical space-time. A crude portable instrument was invented during the ancient Greek period, as suggested by the recent discovery of the Anticythera. After Eratosthenes (c. 275-195 B.C.) had successfully established the first scientific measure of the terrestrial meridian, it was Hipparchus (190-120 B.C.) who elaborated the modern form of the astrolabe, which was later to become of common use during the Arab Renaissance of Haroun Al-Rashid (763-809), up through the 10<sup>th</sup> century AD. The modern astrolabe dates from the fifteenth century and only a few changes have been added during the nineteenth and twentieth centuries. It would not be inappropriate to consider the astrolabe as the first personal analog computer in history.

The astrolabe is the most complete and most appropriate instrument for understanding the heavens by a Type B personality because, at any time and any place on Earth, its poetic discovery gives an astronavigator a complete snapshot of relativistic physical space-time of the universe as a whole, and includes both human perception and conception. I say "poetic discovery" because the principle of its discovery is essentially based on the method of generating ironies and paradoxes; the central paradox being the stereographic projection of the sphere onto the plane. What also makes this instrument ironic is its relationship to immortality: the duration of the snapshot that it takes from outside the spherical abode of the universe, at any moment and any location, is long-lasting enough to be considered as a nesting place for the historical process of discovering simultaneity of eternity. As an instrument projecting the simultaneity of eternity, the astrolabe becomes the proof of its own validation. As the American astrolabe

builder, James E. Morrison, wrote about the construction of his own astrolabe: "It is a device of wonder to those who do not understand its simple elegance and a source of admiration to those who do." (James E. Morrison, *The Personal Astrolabe*, <a href="mailto:janus.astrolabe@verizon.net">janus.astrolabe@verizon.net</a>) As such, the astrolabe is a poetic-scientific self-portrait of the creative process.

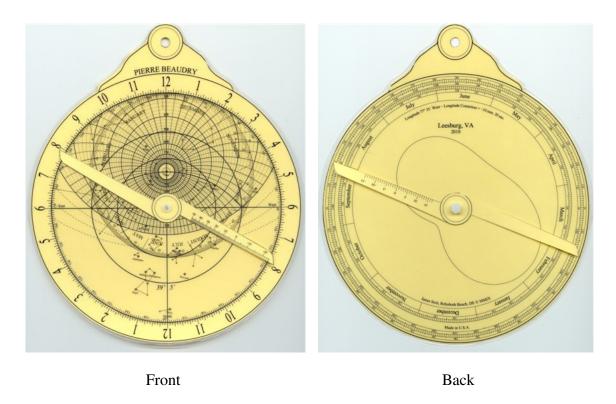


Figure 6. Astrolabe that James E. Morrison made for my personal use in Leesburg VA.

The back of the astrolabe shows the bean shaped pathway of a triply nested equation of time. (See Figure 6) Four times a year, the pointing alidade shows how the equation of time of zero marks the starting points of acceleration or deceleration of the Earth's orbit around the Sun. The minimum value of -14' minutes 15" seconds for the equation of time occurs on February  $10^{th}$ , while the maximum value occurs at +16' minutes 25" seconds on November  $3^{rd}$ . The four dates when the equation of time is equal to 0 are September  $1^{st}$ , December 25, April 15, and June 13. On this illustration of the astrolabe, both front and back alidades point respectively to September 1st, at 8:00 P.M., and to the equation of time 0 in Leesburg Va. at Latitude  $39^{\circ}$  5' North, and Longitude  $77^{\circ}$  35' West. Thus, the astrolabe is set for the imaginary moment at which Vega shall culminate at the zenith of Leesburg at the same time when the spaceship Alcyone should be arriving back from its first manned voyage from Mars in 2030.

When you investigate time from the vantage point of the real physical universe, there arise many paradoxes and ironies that baffle your mind. One of those ironies is represented by the triply nested equation of time representing three relativistic features of time-change in universal physical-space-time. This relativistic triple curve experiment

also marks the essential difference between the Type A and Type B personalities. Firstly, in its strict astronomical acceptation, the equation of time is the difference between the time measured between the Sun crossing your meridian at noon (culmination) and clock-time on your wristwatch at that moment. Secondly, as an astrophysical reality, the equation of time expresses acceleration and deceleration of our planet because Earth is orbiting faster at perihelion and slower at aphelion. Thirdly, in its epistemological acceptation, the equation of time expresses relativistic space-time as the conflicting differential between the sense-perception of Type A personality and the sense-conception of the Type B personality.

In this last acceptation of the term, which is actually the first and most important one in terms of universal principles, the equation of time creates a very crucial anomaly for all time and for all human beings throughout history by putting sense perception and cognition into a conflicting situation between apparent solar time, or perception-time, and civil time, or clock-time. This situation is as if civil time were accurate, but not a true time; while apparent solar time were true, but not an accurate time. In that tug and pull sense, the question is not so much which is the correct time, but how do you relate one to the other in such a way that you convey a real infinitesimal sense of relativistic physical space-time. This is where the pathway of the equation of time shows its more profound significance.

From the higher vantage point of Leibniz, what I would call the epistemological equation of time represents an anti-Euclidean curve that connects the two processes of perception and conception, thus resolving the infinitesimal conflicting differential between the mechanical Type A and the dynamical Type B personalities. Thus, the higher dynamics of the astrolabe reflects the triply connected astronomical, astrophysical, and epistemological equation of time. That is the crucial axiomatic change to concentrate on. I venture to guess that this would be the type of pathway that Lyn had referenced "as the relativistic effect associated with acceleration and deceleration in space-time seen as an expression of potential." Who knows, this may also be the cognitive timing that Bill Clinton was attempting to internalize when he participated in the Audemars Piguet Equation of Time auction of October 11, 2007.

Moreover, not only must this triple equation of time be taken into account when you make observations of the heavens from Earth, but it will also have to be taken into account during future inter-planetary flights as well. Any travel back from Mars, for example, will require an equation of time such that it will have to include tracing back the relativistic physical space-time relationships between the Sun, the Earth, and Mars, as taken from the future as the home base from which to operate. What that equation of transorbital-space-time will look like, with the inclusion of the human mind, we don't yet know. That is a nice little three-body-mind problem for anyone's astrolabe to solve, because any travel from Mars to Earth will also require the equation of time from a Martian astrolabe. Thus, it is essential to project from the future that which will be necessary to begin implementing now, while time is propitious; because if we wait for the future to come on its own, without pulling from it what it must bring to mankind today, some change for the worst will have occurred predictably, in the meantime, and we will

find ourselves in the unfortunate position of having to admit that if we had been more forceful and insightful, the world would not have had to suffer from a dark age caused by our lack of leadership. So, this is the tricky triple equation of time we have to resolve now in order that we have Type B people take power over Type A people in the immediate future ahead. How can this be done? From time reversal.

Stupid people always start something from the beginning. That's utterly wrong. That is why such people never get anywhere. If you wish to begin anything, you must start from the end, because that is where the intention of your objective is located. So, if you want to go to Mars you must not start from the here and now on Earth, you must first proceed by knowing how you are going to get back from Mars, starting two decades from now. This implies the answers to minimally three simple questions. First, how will you go about planning a trip back from Mars without going there first? Second, what star will appear at the zenith of your launching pad, on the night that you return from Mars, and which star will culminate over your landing pad on Earth, when you return? And third, what time is it when you pull over the future as the functional driver of the present? You can only answer these three questions by putting yourself as representing humanity already living on Mars and by imagining yourself already there, designing your trip back to Earth. This is what you do, when you are not a British behaviorist, and when you replace the clock-time sense of chronology by a relativistic relationship of space-time that is defined, in advance, from the future and which includes the human mind by an ordering principle that nourishes the intention of that mind through the simultaneity of eternity.

The reason I am raising these questions in this way is because it is essential to identify the different forms of time that are pertinent to Lyn's investigation of the question of time reversal and simultaneity of eternity for future space travel. Space travel is not possible without such knowledge. This is "CHANGE WE CAN DISCOVER IN."

Indeed, historically speaking, it was the correlation between sense-perception and sense-conception that generated the discovery of such an instrument as the astrolabe. This has always been an instrument turned toward the future and, to a great degree; it is by means of such an invention that one is best placed to study the corrections to be made between Type A and Type B personalities. In point of fact, the dynamics of the construction of the astrolabe itself enables you to go, progressively, from Type A to Type B. Ironically, that was the very intention and purpose for the creation of the astrolabe in the first place. The intention was never to simply plot a star from the apparent sphere of the heaven onto a round disk, but to show how perception and cognition can be correlated because the orbits of the heavens are congruent with the orbits of human reason under the same unifying principles.

The key to a Type B personality, therefore, is to relive such epistemological discoveries in the company of the original discoverers themselves, like Hipparchus and Eratosthenes, as if they were still alive today. Thus, the notion of physical space-time becomes the time of experimenting with people who died centuries ago, but who are more alive in your own mind today than the neighbor living next door. As I said before,

that experiment of the simultaneity of eternity must be so alive in your mind that you have the sense of having "been there" before. However, this Pythagorean sense of "déjà vu" is precisely what became known as the phenomenon of metempsychosis, but whose meaning had been distorted since the early polar residing Vedas and the ancient Egyptians. Don't be fooled by silly astrologers on this account. There is no magic here. This is also part of the ironic beauty of Ovid's poetry. It is the essential characteristic of immortality of the soul to give the impression of having dwelled in previous abodes, but that is essentially the poetic experience of rediscovering a universal truth of some discoverer of past history over at least 3,000 years of human progress. This is why Herodotus reported that the complete transmigration of an individual soul takes at least 3,000 years.

Therefore, immortality is not what remains after having gone through a series of dead bodies during three millennia or more. That is a very ghoulish way of looking at immortality. Immortality is what you leave behind for tomorrow as a contribution for the benefit of the future improvement of mankind. Immortality is in the future, not in the past. However, what you leave to humanity is also proportional to what humanity has passed on to you from past history. This is why the experiment of simultaneity of eternity must be so familiar and intimate that you are convinced you have lived in these ancient times yourself, as if you had lived many lives. Therefore, that form of epistemological metempsychosis is nothing else but the effective experimentation of the simultaneity of eternity in relativistic physical space-time.

At length, as an instrument of simultaneity of eternity, the astrolabe's epistemological equation of time represents such a form of metempsychosis immortality. This is why the epistemological equation of time is not reducible merely to an expression of solar system time relative to earth time. This higher equation of time might represent just a small window opening into the heavens before leaving Earth to venture into the relativistic space-time of solar system travel, but it is an important opening, because it includes the reality of the human mind. Soon, beyond the Earth's orbit in the vastness of space-time motion of our solar system and beyond, man will not simply be using clock-time. Time will have changed and will have become governed by this new character of Noospheric time.

Thus, as Plato reminded us that the orbits of the intelligence of human reason must be in constant proportionality with the orbits of the intelligence in the heavens, man will soon be navigating the waves of thousands of years of physical space-time with an equation of time wristwatch that will not only keep the time of Earth in constant proportionality with the solar system, but will also keep the equation of the human mind in the solar system proportional with the mind of the galaxies in relationship to the universe as a whole. This is the epistemological equation of time of tomorrow that we must start employing today. This is *epistemological time reversal*, which means that from now on, time must be centered from the future of the human mind, that is, onto the universal physical principle of discovery in the simultaneity of eternity. This is the sort of time that the poetry of Ovid has been incubating for the last two thousand years and that Plato had identified for us as the "moveable image of eternity." (Timaeus, 37D.) FIN.