DISCOVERING THE DOMAIN OF "*LEARNED IGNORANCE*"

Cusa, Leibniz, LaRouche, Beethoven, and MacArthur on the subject of the boundary conditions of human strategic thinking

by Pierre Beaudry, 1/1/2022

INTRODUCTION

It is not obvious that human beings are capable of understanding and determining the boundaries and limits of their own knowledge and thereby gain access to a higher knowledge of the nature of God, the universe, and the creative process.

Nicholas of Cusa made clear the nature of that difficult task when he introduced to the Italian Renaissance the fact that the only way to access wisdom was by not-knowing, as Socrates had done by realizing that all he knew was that he did not know.

There is an irony, somewhere here, which may be fleeting, but which is crucial to understand and which may be very useful for our present strategic thinking. How can we know anything by not-knowing something? Is that a contradiction or is it an actual warning signal that we must attempt to go beyond our current limits of thinking? What sort of knowledge, if any, is ignorance that can be learned and which might be essential to human survival?

Such "*learned ignorance*" is clearly not ordinary knowledge, nor can it be considered as ordinary ignorance. Cusa is referring here to some sort of special creative state of mind that can be taught and which is essential for human survival. Can *learned ignorance* be useful for strategic reasons? Can it serve some important

purpose under circumstances of general warfare, in politics, or in artistic composition? Cusa began to answer these questions in the following manner:

> "If we can fully attain unto this [knowledge of our ignorance], we will attain unto learned ignorance. For a man – even one very well versed in learning – will attain unto nothing more perfect than to be found to be most learned in the ignorance which is distinctly his. The more he knows that he is unknowing, the more learned he will be. Unto this end I have undertaken the task of writing a few things about learned ignorance."[1]

The superior method of a *knowledge of one's not-knowing* is not simply the acknowledgement of what we don't have yet the knowledge of, it is also the acknowledgment of limitations and of how to go beyond their actual effect on shaping the universe as a whole by means of principles. It is a sort of humility pact that man makes with God with respect to human imperfections and a challenge to the creative function of the human mind, which can be attained only with the help of God and by hammering one's own personality for the benefit of the other. Such a state of humility cannot be attained unless man desires to take the first steps into accepting that he doesn't know; that is, unless he applies to himself the poetic method of Socrates and Plato as opposed to the Aristotelian deductive method of propitiating practicalities. Lyndon LaRouche best expressed this yearning as follows:

> "My subject here is, therefore, the special, highest of experimental science as a whole, the role of the creative functions of human cognitive powers, in generating the increase of the relative population-density of mankind, per capita and per square kilometer: the function of individual human cognitive powers themselves in shaping the evolution of the planet, Solar System, and beyond. *This may be fairly identified, otherwise, as the essentially spiritual essence which underlies all competent notions of physical science and economy*."[2]

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[1] Jasper Hopkins, ***Nicholas of Cusa On Learned Ignorance: A Translation and an Appraisal of Docta Ignorantia***, The Arthur J. Banning Press, Minneapolis, 1985, p. 49.

[2] Lyndon LaRouche, ***FOR TODAY'S YOUNG ADULTS: KEPLER & CUSA***, EIR, Vol. 34, No. 9, March 2, 2007, p. 10.

CUSA AND THE *LEARNED IGNORANCE* OF SQUARING THE CIRCLE

The example that Cusa gave of *learned ignorance* is the case of the axiomatic difference between the polygon and the circle, which he found to be caused by a change between two different manifolds, the deductive manifold and the ironic manifold, the linear and the non-linear; that is, what I call here the difference between the bottom-up and the top-down method of investigation.

The missing point to focus on with *learned ignorance* is the gap or blind spot between two axiomatically different domains, which reveals that the polygon is made up of straight lines and the circle is produced by circular action alone without any straight lines or any discontinuities whatsoever. Although the increasing number of sides of a polygon may seem to be approaching the curvature of the circle, it is an illusion that is impossible to accomplish; the polygon can never change from the straight line to the curved line because the straight line never ceases to exist. As a result, there cannot exist any linear relationship or measure between the polygon and the circle; there is an absolute discontinuity between the two. The difference is like the one between an animal and a human being; one cannot pass from one to the other.

Here, Cusa starts from the top-down by asserting that there cannot exist any *knowable proportionality* between the finite and the infinite, because the finite cannot measure up to the infinite. Hence, the discontinuous cannot measure the continuous and, therefore, the polygon cannot measure the circle. The same principle applies to the difference between the human mind and truth. So, Cusa naturally concluded: "For the intellect is to truth as [an inscribed] polygon is to [the circumscribing] circle."[3] Now, one has to stop here and wonder, because the fact that the human intellect cannot measure absolute truth is, in itself, the discovery of an absolute truth; and the nature of this unknowable measure is called *learned ignorance*.

Furthermore, the investigation does not stop with this curious moment of irony. How could the human mind have found such an absolute truth? It has found

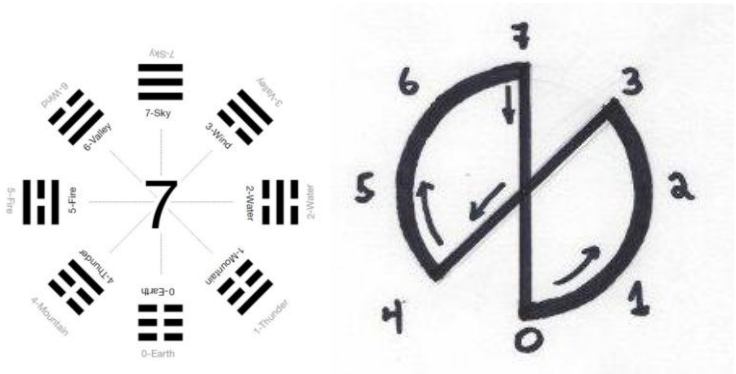
[3] Jasper Hopkins, Op. Cit, p. 52.

it by sliding into a higher domain by inversion; that is, by solving the paradox of a *coincidence of opposites*. It is as if you had peeled off a right hand glove to discover that what you are now holding in your left hand is a left hand glove. Confronted with this weird sort of paradox, then, ask yourself: how is it that you accomplish such a change of opposites without any discontinuity whatsoever?

What is the nature of this inversion? It is the same as the change of sides in a Moebius strip. How do you turn one side into its opposite, the right into the left, the front into the back or the before into the after?

Moebius Strip

The process of change is also similar to a clock with a figure 8 diameter (see below) that Leibniz and Fu Xi applied to their concept of axiomatic change in the I Ching circular action; as if the intention was to integrate into a continuous single motion the two opposite rotations of a circular action, clockwise and counterclockwise.[4]



The eight trigrams and the circular figure eight motion of an axiomatic change.

[4] See my previous report: **LEIBNIZ AND THE EPISTEMOLOGY OF THE PEACE OF WESTPHALIA**

Once you have discovered that this clockwise and counterclockwise paradox can be solved in different ways, come back to the initial problem: why can the problem be solved from the top-down and not from the bottom-up? Because only the infinite can measure the finite and never the other way around. Cusa discovered that when you proceed from the infinite, as from God's Mind, the process works both by unfolding and enfolding. For the human mind, however, if one way is not possible, the opposite process will be true, but only by going through a sort of inversion; that is, when the creative process can occur only by turning the process of investigation from the bottom-up (enfolding) to the top-down (unfolding) without considering the idea of succession. As Cusa wrote in his *Vision of God*:

> "Now, because in God's Concept the clock is the Concept, we see to some small extent how the following are true: (1) that succession is present in the clock without there being succession in the Word, or Concept; (2) that in this most simple Concept are enfolded all movements and sounds and whatever we experience as in succession; (3) that whatever occurs successively does not in any way pass outside the Concept but is the unfolding of the Concept, so that the Concept gives being to each [successive thing]; (4) that the reason [each event] was nothing before it occurred is that it was not conceived before it existed. So, let the concept of a clock be, as it were, eternity itself. Then, in the clock, movement is succession. Therefore, eternity enfolds and unfolds succession; for the Concept of a clock—a Concept which is eternity—both enfolds and unfolds all things.
>
> "Blessed be You, O Lord my God, who feed and nurture me with the milk of likenesses, until such time as You grant more solid food. O Lord God, guide me unto Yourself by these pathways. For unless You guide, I cannot stay on the pathway—on account of the frailty both of my corruptible nature and of the earthen vessel that I carry about. Trusting in Your help, 0 Lord, I turn once again in order to find You beyond the wall of the coincidence of enfolding and unfolding. And when at one and the same time I go in and out through the door of Your Word and Concept, I find most sweet nourishment. When I find You to be a power that enfolds all things, I

> go in. When I find You to be a power that unfolds, I go out. When I find You to be a power that both enfolds and unfolds, I both go in and go out. From creatures I go in unto You, who are Creator—go in from the effects unto the Cause. I go out from You, who are Creator—go out from the Cause unto the effects. I both go in and go out when I see that going out is going in and that, likewise, going in is going out. (By comparison, he who counts unfolds and enfolds, alike: he unfolds the power of oneness, and he enfolds number in oneness.) For creation's going out from You is creation's going in unto You; and unfolding is enfolding. And when I see You-who-are-God in Paradise, which this wall of the coincidence of opposites surrounds, I see that You neither enfold nor unfold— whether separately or collectively. For both separating and conjoining are the wall of coincidence, beyond which You dwell, free from whatever can be either spoken of or thought of."[5]

Following in the footsteps of Cusa, Leibniz described the nature of the inner possibilities of the living substance (monad) as being entirely self-determined in the Image of God. This is also coherent with the function that LaRouche called moments of *high density of singularities*: It is the freely accepted responsibility of the individual to develop such a potential as Cusa describes in his *Vision of God*, as a process of going in and out of God in the *simultaneity of eternity potential* considered by Leibniz; that is, as the "realm of possibilities" in God's Mind.

In that sense, it is only the infinite [or the transfinite] which can measure the finite, as only truth can measure the intellect, and as only the circle can measure the polygon by means of circular action. Such knowledge can only be acquired by means of *learned ignorance*. Therefore, as Cusa established, knowing is not-knowing, when the human mind discovers that God gave the human individual mind the natural desire to improve upon mankind and the power to go beyond his own limitations, and ultimately access "the best possible world," as Leibniz discovered.

[5] Jasper Hopkins, ***NICHOLAS OF CUSA'S DIALECTICAL MYSTICISM***, THE ARTHUR J. BANNING PRESS MINNEAPOLIS, 1988, p. 701.

The question, therefore, is how do you access the infinite from the top down? The way to do it, geometrically, is by using a sky hook, that is, by discovering the higher principle of circular action which generates polygons from the top-down, or by discovering the higher principle of spherical action generating polyhedrons. Both of these processes enable the mind to access the infinite by realizing that it is not able to measure truth in a complete and perfect manner from the bottom-up, but only from a higher principle. The way the intellect progresses beyond such axiomatic limitations between the polygon and the circle or beyond the polyhedron and the sphere is by starting from an actual infinite, the Platonic One of the Many. And, as Cusa stated: "The more deeply we are instructed in this ignorance, the closer we approach to truth."[6]

LEIBNIZ'S CONCEPT OF THE 'MONAD' AND THE BOUNDARY CONDITIONS OF THE HUMAN MIND

> "Provided that something of consequence is achieved, I am indifferent whether this is done in Germany or in France, for I seek the good of Mankind. I am neither a phil-Hellene nor a philo-Roman, but a phil-anthropos."
>
> Leibniz, Phil., VII, p. 456.

Following LaRouche's method, the only way to properly succeed in understanding the idea of economics is to consider mankind as an immortal species and to understand how God's Mind works as a Creator. It is from that higher vantage point that both Leibniz and LaRouche became the most important thinkers to have provided mankind with an economic model of man's quest for immortality with the concept of God as "The Perfect Being" in accordance with St. Anselm's ontological argument, which is: "Being that which nothing greater can be conceived."[7]

[6] Jasper Hopkins, Op. Cit, p. 53.
[7] ***Anselm's Ontological Argument [PDF]***

Leibniz first started deductively by considering that God's essence of perfection implied his existence, because, otherwise, it is an imperfection not to exist. In other words, the quest for human immortality is the quest for being God-like or, becoming the best that can be conceived in Omniscience, Omnipotence, and Omnibenevolence.

The domain of God's knowledge is indeed accessible to mankind. This is a domain which is not entirely beyond our capabilities; it is a domain which is eminently accessible, but only through the perfectibility of the human species. In other words, it is through the perfecting of humanity that the individual is able to contribute to the improvement of human knowledge and of the species as a whole. One of the ways Leibniz was able to bring such a contribution to mankind was with his Monadology; that is by developing the idea of God as the "Absolute Monad." This new concept was introduced in his 1696 writings in order to introduce the idea of vital force (*vis viva*) to the meaning of "substance" or "*entelechy*"; that is by making it capable of action. Leibniz first identified this idea of Monad with the perfection of God and His Creative Power. In his Monadology, Leibniz wrote:

> "38. Thus the final reason of things must be in a necessary substance, in which the variety of particular changes exists only eminently, as in its source; and this substance we call God. (Theod. 7.) →
>
> "39. Now as this substance is a sufficient reason of all this variety of particulars, which are also connected together throughout; there is only one God, and this God is sufficient. →
>
> "40. We may also hold that this supreme substance, which is unique, universal and necessary, nothing outside of it being independent of it,- this substance, which is a pure sequence of possible being, must be illimitable and must contain as much reality as is possible. →
>
> "41. Whence it follows that God is absolutely perfect; for perfection is nothing but amount of positive reality, in the strict sense, leaving out of account the limits or bounds in things which are limited. And where there are no bounds, that is to say, in God, perfection is absolutely infinite. (Theod. 22, Pref. [E. 469 a; G. vi. 27].) →"

Such perfectibility, however, is not accessible through deductive logic or mathematical thinking. The domain of God's thinking is the domain of eternal truths and of necessary existence where all forms of deduction and practicality must be abandoned. As Leibniz further adduced:

> "42. It follows also that created beings derive their perfections from the influence of God, but that their imperfections come from their own nature, which is incapable of being without limits. For it is in this that they differ from God. An instance of this original imperfection of created beings may be seen in the natural inertia of bodies. (Theod. 20, 27-30, 153, 167, 377 sqq.) →
>
> "43. It is farther true that in God there is not only the source of existences but also that of essences, in so far as they are real, that is to say, the source of what is real in the possible. For the understanding of God is the region of eternal truths or of the ideas on which they depend, and without Him there would be nothing real in the possibilities of things, and not only would there be nothing in existence, but nothing would even be possible. (Theod. 20.) →
>
> "44. For if there is a reality in essences or possibilities, or rather in eternal truths, this reality must needs be founded in something existing and actual, and consequently in the existence of the necessary Being, in whom essence involves existence, or in whom to be possible is to be actual. (Theod. 184-189, 335.) →"[8]
>
> "45. Thus God alone (or the necessary Being) has this prerogative that He must necessarily exist, if He is possible. And as nothing can interfere with the possibility of that which involves no limits, no negation and consequently no contradiction, this [His possibility] is sufficient of itself to make known the existence of God a priori. We have thus proved it, through the reality of eternal truths. But a little while ago we proved it also a posteriori, since there exist contingent beings, which can have their final or sufficient reason only in the necessary Being, which has the reason of its existence in itself. →

This difference between man and God is fundamental in that it establishes the boundaries and limitations between the two axiomatically different types of Monads; that is, the infinite and perfect Monad on the one side, and the limited and imperfect monad on the other. It is only by investigating the boundary conditions between the two that one is able to see beyond such limitations of knowledge as a new form of power by means of *Imago Viva Dei*. Leibniz added:

[8] Leibniz, ***The Monadology***, (1724).

"47. Thus, God alone is the primary unity or original simple substance, of which all created or derivative Monads are products and have their birth, so to speak, through continual fulgurations of the Divinity from moment to moment, limited by the receptivity of the created being, of whose essence it is to have limits. (Theod. 382-391, 398, 395.) →

"48. In God there is Power, which is the source of all, also Knowledge, whose content is the variety of the ideas, and finally Will, which makes changes or products according to the principle of the best. (Theod. 7, 149, 150.) These characteristics correspond to what in the created Monads forms the ground or basis, to the faculty of Perception and to the faculty of Appetition. But in God these attributes are absolutely infinite or perfect; and in the created Monads or the Entelechies (or perfectihabiae, as Hermolaus Barbarus translated the word) there are only imitations of these attributes, according to the degree of perfection of the Monad. (Theod. 87.) →"[9]

Thus, the boundary conditions between God and man are clearly set by Leibniz not as practical deductive obstacles, but as generative insights into discovering how the finite and limited nature of man can be mingled with the transfinite nature of God's mind, as it is reflected ironically inside of the human mind "whose essence it is to have limits" but whose God given power gives him the ability to surpass them, in *Imago Viva Dei*. Such mixtures of contradictory qualities can only be expressed through ironies. That is why Leibniz hypothesized the idea of "fitness" as being the best of all possible connections among all created things and God, when he concluded:

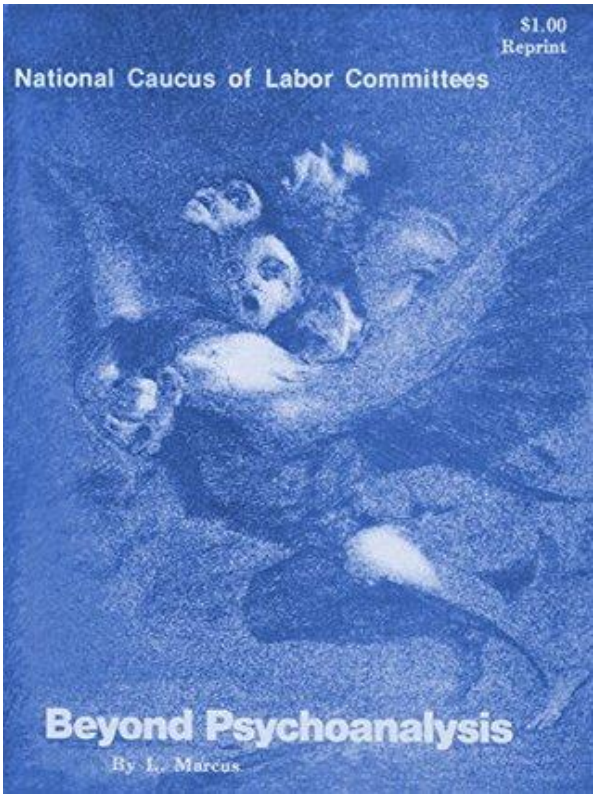
"54. And this reason can be found only in the fitness [*convenience*], or in the degrees of perfection, that these worlds possess, since each possible thing has the right to aspire to existence in proportion to the amount of perfection it contains in germ. (Theod. 74, 167, 350, 201, 130, 352, 345 sqq., 354.) →

"55. Thus the actual existence of the best that wisdom makes known to God is due to this, that His goodness makes Him choose it, and His power makes Him produce it. (Theod. 8, 78, 80, 84, 119, 204, 206, 208. Abrégé, Object. 1 and 8.) →

"56. Now this connection or adaptation of all created things to each and of each to all, means that each simple substance has relations which express all the others, and, consequently, that it is a perpetual living mirror of the universe. (Theod. 130, 360.) →"

[9] Leibniz, ***The Monadology***, (1724).

Moreover, within this Living Image of God, not only have we limitations to take into account, but there are also deadly traps that must be avoided. On the other side of this divine boundary divide, there is another fearful and dark domain that Francisco Goya (1746-1828) explored extensively in his "*Disparates*," which are know in Spanish as the domain of the *duente*, that is, a sort of goblin-like creature which is a mischievous troublemaker who wrestles with our passions and who leads our imaginations, more often than not, into irrational and demonic activities rather than toward the domain of rigorous axiom busting insights. It is essential to take control of this genie and to guide him into those newly discovered optimistic regions. That may be the reason why LaRouche chose Goya's "*Bon Voyage*" *Capricho* 64 to illustrate his axiom busting booklet on *Beyond Psychoanalysis*.



This process of transfinite transformation is the domain that Cusa, Leibniz, Cantor, and LaRouche have each in their own ways investigated extensively in order to understand the Divine Creative Process.

The main sources that I recommend the reader to master for such an investigation are the following three documents: Cusa's ***The Vision of God***; Leibniz's ***Monadology*** and the ***Leibniz-Bouvet Correspondence***; and Lyndon LaRouche's ***Beyond Psychoanalysis***. Bon Voyage!

Francisco Goya, *Capricho 64*. "*Buen Viagge*" (*Bon Voyage*). Cover of Lyndon LaRouche's *Beyond Psychoanalysis*.

LAROUCHE'S IDEA OF INCREASING THE DENSITY OF DISCOVERIES

> "Whether in astrophysics or in physical economy, the investigator who believes the myth of 'linearity in the small' will prove incompetent, every time."
>
> Lyndon LaRouche, ***Truthful, or merely 'factual'?*** EIR, Vol. 25, No. 2, December 25, 1997.

Lyn always insisted that he needed a negentropic form of epistemology to back up his economics, because he knew that once you had made an initial discovery of principle, your mind was then not only able to further expand its knowledge of new principles, but it was also able to do so, more profoundly, more accurately, and more densely. The reason for this increase in density per unit of space-time is because your mind has taken the habit of remaining in the higher sphere of principles more consistently than in the domain of practical things.

Lyndon LaRouche.

This sort of *learned ignorance* is not the result of a deductive process, but of a process which causes a change for the better by a non-linear inversion of one's way of thinking, whereby the effectiveness of the actual density of discoveries, and their proportional affinity and consolidation of the mind's original axiomatic change, propels the mind to higher powers of discovery into the future. As LaRouche stated:

> "In the real universe, the increase of the productive powers of labor, as measured per capita and per square kilometer, is made possible through man's discovery and use of notions which qualify, efficiently, as either universal physical principles, or their derivatives. All such principles, like universal gravitation, bound the universe of our experience. It is the exploration of the practical implications of a concert of universal physical and comparable principles, which enables mankind to increase the expressed power in the universe which the individual's or society's actions gain through application of those principles and of their combined action.
>
> "All such principles are invisible to the senses, but their effects, like the effects of gravitation, clearly, are not. These principles are the objects of cognitive insight, a quality of insight unique to the powers of the individual human mind (and that of the Creator).
>
> *"Hence, the principle of* Learned Ignorance, *of Cusa's De Docta Ignorantia*."[10]

As the history of science shows, there exists a relevant series of such discoveries of principle inspired by Cusa's *learned ignorance,* which has been rediscovered principally by Kepler, Leibniz, and Riemann, and which LaRouche has gathered under the form of *generalized dynamics of principles.* LaRouche expressed it as follows:

> "The central feature of my original contribution to the Leibniz science of physical economy is the provision of a method for addressing the causal relationship between, on the one side, individuals' contributions to axiomatically revolutionary advances in scientific and analogous forms of knowledge, and, on the other side, consequent increases in the *potential population-density* of corresponding societies." [11]

[10] Lyndon LaRouche, ***FOR TODAY'S YOUNG ADULTS: KEPLER & CUSA***, EIR, Vol. 34, No. 9, March 2, 2007, p. 23.

[11] Lyndon LaRouche, ***On LaRouche's Discovery,*** Fidelio Magazine, Spring 1994, p. 37.

LaRouche's discovery leads to the understanding of why his original contribution of the idea of negentropy was a means of bringing together the previous discoveries of Plato, Cusa, Leibniz, Riemann, and Cantor, in one fell swoop, in order to bring the present civilizational level of hypothesizing Plato's original higher hypothesis to the realization of a New Just World Economic Order that is meant to correct the 1971 Nixon error of re-monetizing Franklin Roosevelt's gold-back dollar.

What is required is not simply a change in the money system; we must completely reorganize the education system in human and physical sciences by replacing the deductive Aristotelian method with a Socratic-Platonic method of teaching in the school system as a whole. In other words, replace the current hypocritical form of demoncracy by a Win-Win New Just World Economic Order. What is required, primarily, in both artistic composition and physical science is to restore the notion of *universal causality* and reject the present statistical vulgarization of scientific babbling, which dominates scientific research institutions since the 1920's with Ernst Mach's positivist introduction of pseudo-scientific knowledge. LaRouche warned against this dangerous subversion of science with the Mach method:

> "Ernst Mach (1838-1916) initiated the effort to impose positivism on science in the twentieth century, and is generally credited with founding the fraud known today as modern 'philosophy of science.' While most of his scientific conclusions have long been proven false – for example, 'that atoms [don't] exist' – his general method, particularly his opposition to any notion of causality in science, have become prevalent in modern physics. Mach led a scientific vendetta against Ludwig Boltzmann – eventually leading to his suicide in 1906 – because Boltzmann refused to completely abandon the concept of causality in thermodynamics. He afforded similar treatment to Louis de Broglie at the 1927 Fifth Solvay Conference on physics, and later, to Erwin Schrödinger. De Broglie characterized those events as 'a virtual *coup d'état* in theoretical physics.'"[12]

[12] Lyndon LaRouche, ***Ibidem***, p. 55.

LaRouche always understood that the teaching of economics was not to be based on money or production of physical goods as such, but on a form of epistemology that can bring together physical science and artistic composition together into a unified conception. This means that it is primarily the individual human being's affirmative relationship to the universe as a whole which gives the individual the ability to discover the creative powers of his mind, and therefore, contributes to the immortality of the human species. On June of 2014, LaRouche wrote a short piece of legislature that he titled; ***THE FOUR LAWS TO SAVE THE U. S. A. NOW! NOT AN OPTION: AN IMMEDIATE NECESSITY***, in which he emphasized the need for the United States to retrieve its original use of a Federal Credit-system for the purpose of improving the general welfare of all of the individuals of the nation. He formulated this immediate necessity as follows:

> "The only location for the immediately necessary action which could prevent such an immediate genocide throughout the trans-Atlantic sector of the planet, requires the U.S. Government's now immediate decision ***to institute four specific, cardinal measures: measures which must be fully consistent with the specific intent of the original U.S. Federal Constitution***, as had been specified by U.S. Treasury Secretary Alexander Hamilton while he remained in office: (1) immediate re-enactment of the Glass-Steagall law instituted by U.S. President Franklin D. Roosevelt, without modification, as to principle of action. (2) A return to a system of top-down, and thoroughly defined, National Banking."[13]

LaRouche made the point most clearly when he previously provided this unique flanking strategic maneuver:

> "Because economics is not, "economics": Economics is man's relationship to nature, man's relationship to the universe, per capita. It's the ability of the individual to survive; it is longevity; it is cultural conditions of life; it is science; it is Classical art that ennobles the spirit. This is what economics is. And we've taken that away. We are poorer, much poorer, than

[13] Lyndon LaRouche, ***THE FOUR LAWS TO SAVE THE U. S. A. NOW! NOT AN OPTION: AN IMMEDIATE NECESSITY***, EIR, Vol. 48, No. 50, December 17, 2021, p. 3.

> we ever were before…. What you have to do, is think of yourself as an angel; not a family member, but an angel. Because you were born, and you're going to die. You've got to think about that. Not about your pleasure in life, not about the money in the bank, not about the entertainment you receive, not about the neighborhood you live in; but you've got to think about the coming and going of your personal life, because you're coming into a period of time when that's all that really counts. Bank accounts will be wiped out for most people. Savings will be wiped out. If you sit there, and wait, and try to fend off the storms, and say "What do I do with my money?" or all these kinds of things, there are no individual answers to these questions. There is no safe place to run to; there is no place to hide! The epidemics and the financial crisis will hit all…."[14]

Lyndon LaRouche stated that it is necessary to restore the U. S. Credit System now in order to reestablish the only viable affirmative scientific method of economic development created under the original Constitution of the United States. This idea is not to be construed as being understood as a complex statistical form of economic framework; this policy directive must be understood as the only affirmative form of future government for mankind to be adopted by the United States, if a republican world, in the sense of Leibniz, Cusa, and Plato, is to survive, because the only underlying issue under the idea of the U. S. Credit System is the immortality of mankind in the form of a planetary program of health and welfare system for every individual human being. Thus LaRouche made the point clear to everyone:

> "My point here, is that the principle of what Kant foolishly, and fanatically libels as "synthetic judgment" (i.e., hypothesis), or noësis, which is the process of generation of experimentally provable qualities of universal physical principles, is the same quality of individual's mental activity which is expressed by valid principles of Classical artistic composition in plastic and non-plastic art-forms (as absolutely opposed to Romantic, Modernist,

[14] Lyndon LaRouche, Video: Jan 17, 1998 ICLC/Schiller Institute conference, https://larouchepub.com/lar/1998/lhl_top_1_percent.html.

Post-Modernist diversions). In the former, the noëtic powers of the individual mind are applied to the individual's relationship to nature itself; in the latter, the same quality of individual cognitive powers is applied by the individual mind to the social processes of cooperation by means of which society is enabled to apply discovered physical principles effectively, as in the case of Treasury Secretary Alexander Hamilton's non-British, American System of political-economy.

"The significance of this principle of physical economy, which I have just broadly described, is that this defines the specific quality of essential superiority of man over ape. Were man an ape, as Friedrich Engels claimed himself to be, never more than several millions of the human species would have even existed at one time on this planet. *Man repeatedly changes his species, in effect, first, by making discoveries of universal physical principle, and, second, by those methods, such as music, poetry, and drama, through which society develops those systems of cooperation which are essential to successful application of discovered physical principles through which man's potential relative population-density is increased*

"*Thus, man comes to recognize the difference between an object which he calls a 'rock,' and a similar or identical object called an 'ore.' Only a human individual could make this quality of distinction*. [emphasis added]."[15]

THE *LEARNED IGNORANCE* THINKING BEHIND MACARTHUR'S LANDING AT INCHON

General Douglas MacArthur's achievement with the Inchon landing during the Korean War is a clear example of a superior way of thinking from the top-down, demonstrating how the "practical" deductive methods of U. S. President Harry S. Truman, Winston Churchill, and Bertrand Russell, were wrong and destructive. What MacArthur was faced with was much more than fighting a local war. What MacArthur demonstrated with the Inchon Landing is how the superiority of an idea can change the outcome of civilization by outflanking and

[15] Lyndon LaRouche,

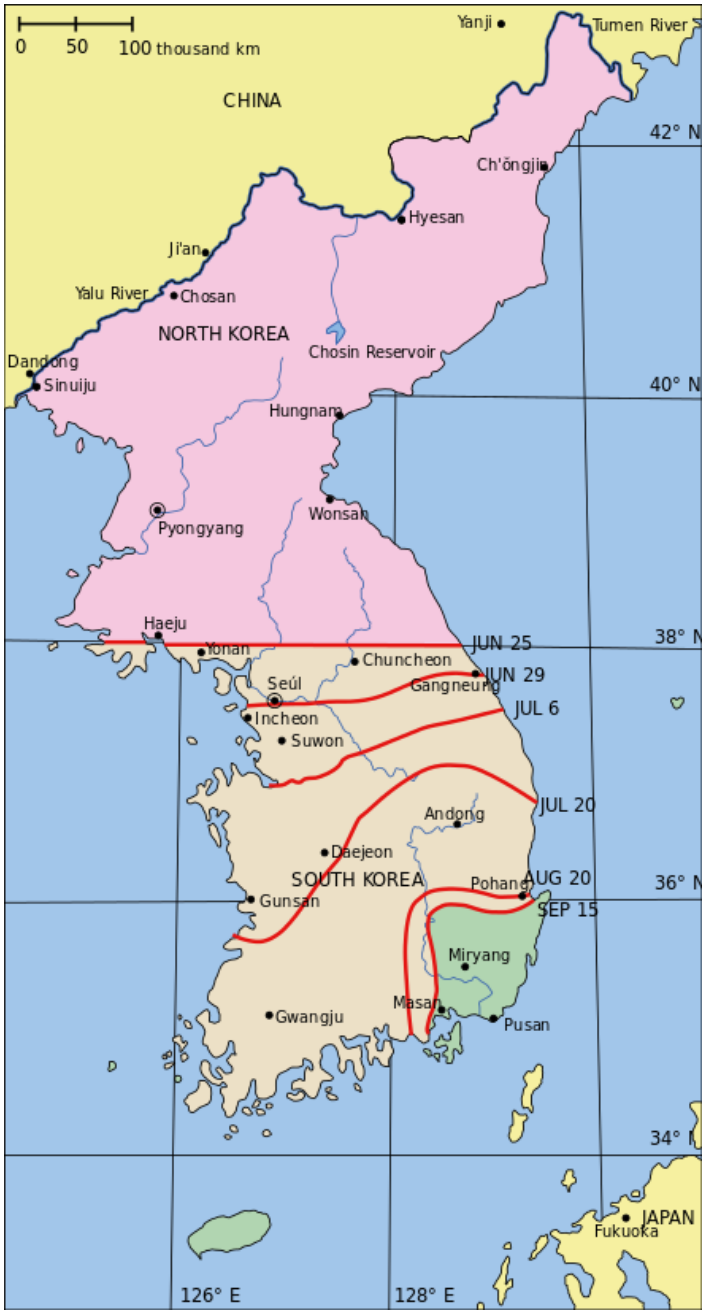
forcing the enemy to accept the necessity of following creative ideas. If the North Korean conflict is still not resolved to this day, it is because the MacArthur strategic idea has not yet been understood.

Whatever the outcome, the conflict in the Korean peninsula had to be a limited one, in time, extension, and magnitude. LaRouche made that point clear when he identified the general background of MacArthur's strategy. LaRouche stated:

> "Thus, the most significant about-face, from a deceased hero-President Roosevelt, to British lackey Truman, occurred with the crime of the worse-than useless nuclear bombardment of two cities, Hiroshima and Nagasaki, in Japan. Thus, World War II was transmogrified into being de facto "World War III." Douglas MacArthur was keenly aware of that fact; instead of the end of a world warfare, a new, future world warfare, nuclear war, was begun, and has been continued up through the present date. The unnecessary, long, useless, and ruinous war in post-President Kennedy Indo-China (as General MacArthur had warned), brought about the most crucial turn, downwards, in U.S. history to date."[16]

Recall the highlights of the strategic conflict: the open war fighting between North and South Korea lasted three years, from June 1950 until July of 1953. During that short period, the Soviet Union gave their support to North Korea while the United States and the British supported South Korea. By September 15, 1950, the South Korean and American forces were pushed by the North Korean forces behind the Southeast side of the peninsula in the Pusan perimeter area (see map). The Pusan perimeter formed a line of defense controlled by the U. S. Eight Army with no retreating lines of defense except the sea. For the Commander of the Eight Army, Lieutenant General Walton Walker, retreat was not an option. He told his troops: "There is no line behind us to which we can retreat…We are going to hold this line."[17]

[16] Lyndon LaRouche, **OR, CALL IT "END-GAME": CRUX**, EIR, April 12, 2013, p. 29.
[17] See James D. Clayton, *The Years of MacArthur: Vol. III*, 446, quoted by Jeremy Blascak, **RISK VS. REWARD: THE OPRTATIONAL ART AT INCHON**, Small Wars Journal, 11/08/2019.



Pusan Defense Perimeter, August 1950, South Korea. A map showing successive North Korean advances. The Pusan Perimeter is the border of the green portion of the peninsula.

Confronted with such an impossible situation, MacArthur had only one thing in mind: do the impossible. MacArthur was thinking of the most impracticable intervention that the Red Army (KPA) would never think he could do: land in the opposite Northwest corner of South Korea, in Inchon and launch an offensive from behind the enemy line to regain the capital city, Seoul. The entire Chief of Staff was against MacArthur's idea. They all said that the location is too far away from the main body of the American Army, the high tides are dangerous, the channel to the port is too narrow, and the drain to the U.S. Reserve was too high of a risk, etc.

For a practical mind, a landing in Inchon was a major strategic blunder; however, from the vantage point of a creative mind, the seemingly impossible idea of cutting off the enemy supply lines was brilliant. As MacArthur said himself: "The history of war proves that nine out of ten times an army has been destroyed because its supply lines have been cut off…We shall land at Inchon, and I shall

crush them [the North Koreans]."[18] MacArthur was right, because the landing at Inchon was not only an offensive behind enemy lines but, most significantly, a surprise capture and liberation of the South Korean capital of Seoul, thus restoring hope and optimism among the entire South Korean population and army, while demoralizing the North Koreans by cutting off their supply and communication lines.

As a result, the Inchon Landing forced the Red Army to completely reorganize its deployments in the most awkward manner possible, thus forcing them to be on the defensive for the rest of the war. Although the Red Army managed to send a division northward to defend Seoul, MacArthur won the battle of Seoul because he was able to force his enemy to fight according to his rules of engagement on two fronts at once, and forced them to increase dispersion, friction, and logistical strain. By the end of September 1950, the Red Army (KPA) had "ceased to exist as an effective army-size fighting force."[19] This is how LaRouche identified the "ghost" of *learned ignorance* in that Korean conflict:

> "However, there was another aspect to the strategic situation inside Korea as a whole: *the ghost in the woodwork of war then engaged within Asia, the Anglo-American nuclear (and also thermonuclear) global war-option.*
>
> "No competent understanding of the actually global implications of the war in Korea at that time could have been recognized then, except by a special quality of citizens during those immediate years. General MacArthur showed clearly that he did recognize those crucial future prospects which most among his immediate colleagues failed to foresee. This brings the matter of Korea into the proper perspective which MacArthur obviously employed, and which leading military and political associates concerned, evidently did not. That fact, which I have just now stated, is the really crucial matter to be considered, then, as also now. The crucial issue so situated is the crucial importance of shunning blind faith in what has already

[18] Roy E. Appleman, *South to the Naktong*, 488.
[19] James D. Clayton, *The Years of MacArthur: Vol. III, p. 482.*

> been experienced, to the degree that even most leading figures in warfare and other matters, turn out to have been mere bunglers who stumble as if almost witlessly into the future, because they can never see the actuality of history beyond the immediate period of a merely 'practical man's' present moments' ongoing developments in the actual course of future history."[20]

The lesson to be learned, here, is that not only MacArthur understood how to win the peace against a less astute opponent, but that he would have also understood that the way to solve the Korean conflict and have peace in the world as a whole was to have America assist Russia and China in the effort of bringing the Belt and Road Initiative into South Korea via North Korea, which is precisely what has to be done today.

I wish to conclude this section with an example of what "unlearned ignorance" also means. The point is that we have come into a historical period in which every human individual is being confronted with some sort of axiomatic change; that is to say, a sort of inversion of the way one should be thinking. One of the best examples of such an inversion is the one that the British oligarchy is currently manifesting in their futile attempts to save the remains of their liberal democratic system. The point to focus on is not so much the self-deluding statement as such, but the inevitable self-destructive manner in which the defense of democracy is being handled. Will the British oligarchy ever realize that the best way to prevent stupidity is to laugh at yourself?

You can relish that special irony in Jacques Cheminade's response to the question posed by French Mandarin TV: ***IS THE SUMMIT ON DEMOCRACY A DEMOCRATIC SUMMIT?*** The full flavor of the British side of the equation can be found in the following report that Gretchen Small wrote for the Daily Alert and Morning Briefing of December 10, 2021:

"UK Foreign Secretary: 'Global Britain' Is in Charge of Global 'Democracy' Operation

[20] Lyndon LaRouche, **OR, CALL IT "END-GAME": CRUX**, EIR, April 12, 2013, p. 29.

"Dec. 9, 2021 (EIRNS)—On the eve of what is billed as 'President Biden's' Democracy Summit, UK Foreign Secretary Liz Truss aggressively asserted British imperial leadership of this agenda, the agenda through which the British Crown still rules the waves, she promised.

'It's time to wake up. The free world's age of introspection must end now…. Britain is determined to work with our friends to form a network of liberty that spans the world,' she proclaimed in a speech to Chatham House, grandiosely titled 'Building the Network of Liberty.'

'In fashionable circles, people talked about who should be ashamed of our history and doubtful of our future,' she admitted. No more; Britain again is 'taking the lead,' as it has since the Magna Carta, 'the establishment of the rule of law,' and 'the pioneering of free market economics'[...]

'It's time to be proud of who we are and what we stand for. It's time to dump the baggage holding us back. Our history—warts and all—makes us what we are today. Britain is the greatest country on earth.' She delicately neglected to mention the British Empire's role in spreading, slavery, opium, and famine across the globe, although she did claim the degenerate Beatles rock band as an example of Britain's 'unrivalled influence in the world.'

"Britain's 'formidable diplomatic machine will be put to work, relentlessly promoting Britain,' Truss added. We will lead as we did in leading 'the largest collective expulsion of Russian diplomats in foreign history' after the Salisbury [Skripal] 'attacks,' she bragged, and in being 'the first European country to impose sanctions on Belarus.'

'We have the best diplomats in the world, and a diplomatic network with unique reach and expertise. It represents us across 180 countries, speaking 46 different languages—everything from Albanian to Urdu…. Our diplomatic heft has been shown time and time again…. After almost fifty years in the EU, once again all the levers of international policy are in our hands— diplomacy, development, trade and security. It's a new opportunity for the UK to shape the international agenda. An unfrozen moment that we must capitalize on…

'[W]e are rebuilding our muscle to fulfill the promise of Global Britain—ready to win opportunities for our country and win the future for freedom.'

"The strumpet has sounded!"[1]

The world is in such a mess that one never knows where the next brilliant self-destructive paradox will come from. Then, as she was walking away from the podium, Secretary Truss was overheard uttering to a friend: "We shall destroy any authoritarian who is against democracy!"[21]

BEETHOVEN'S LYDIAN PRINCIPLE OF *LEARNED IGNORANCE*

"I shall seize fate by the throat; it shall certainly never wholly overcome me." Ludwig van Beethoven

As MacArthur's Inchon Landing showed, the principle of *learned ignorance* is first and foremost the decision of taking a step back to undo axioms from the past that have to be changed, and, secondly, of taking two steps forward to the future and discover new principles that never existed before.

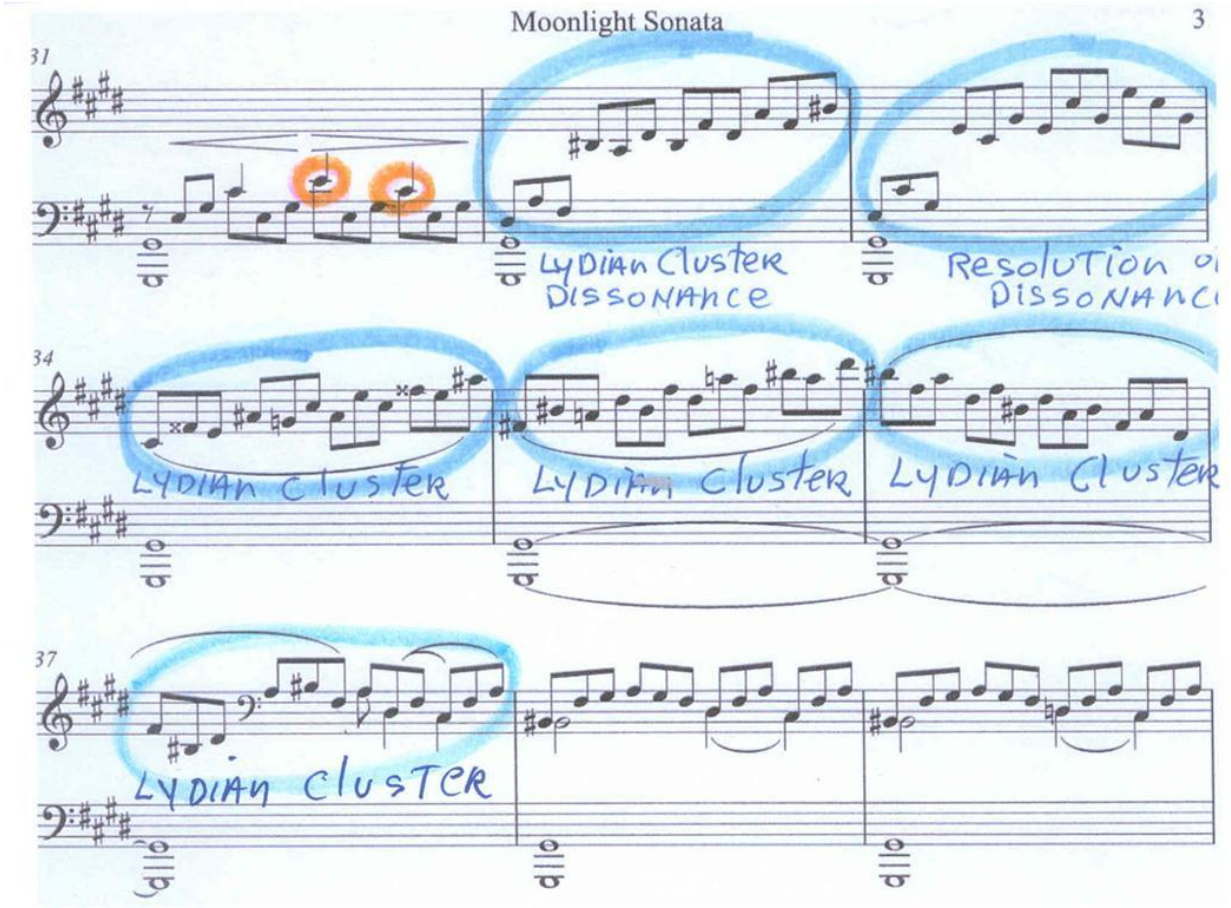
When Beethoven lost his hearing, his biggest fear was to lose his musical creative powers. However, he was able to turn that tragic moment of the past into a sublime recovery of optimism for the future, when he discovered the powers of Lydian transformations with one of his most axiomatically transformative Piano Sonata Opus 27, No. 2, the misnamed "Moonlight Sonata," which Beethoven called "*Quasi Una Fantasia*" (Almost A Fantasy).

What makes that Sonata Opus 27 No. 2 so special is the powerful discovery of how the Lydian Modality that Bach had previously introduced in his *Well-Tempered Clavier* which truly transforms the tragic into the sublime through a process of self-developing *learned ignorance*.

I have indicated the main aspects of this discovery in a previous report titled: **THE TRUTH ABOUT BEETHOVEN'S SO-CALLED "MOONLIGHT SONATA".** The principle that Beethoven used was similar to what Cusa

[21] Gretchen Small, ***Morning Briefing of December 10, 2021***.

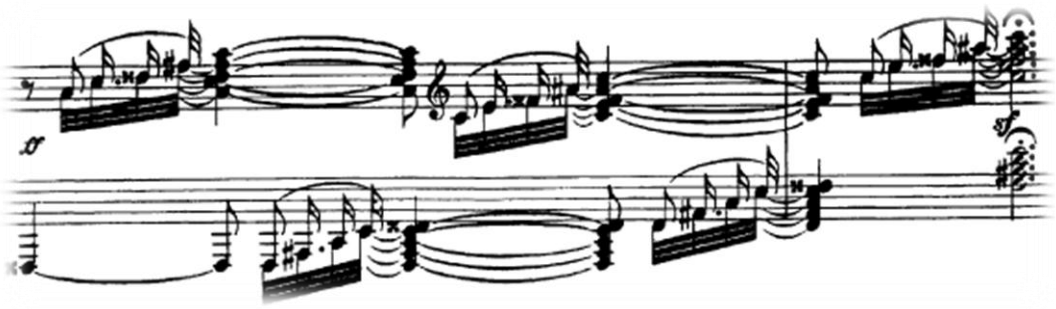
discovered: a simple and amazingly effective one step backward (enfolding) and two steps forward (unfolding).



First movement of ***Sonata quasi una fantasia***, Opus 27, No. 2. The two series of Lydian clusters, measures 32 to 37, represent the memory function for the whole movement. Here, with the Lydian cluster of measure 32 and its resolution in measure 33, Beethoven shows the originating line, the "*Urlinie*" that establishes the key of C-sharp minor for the entire piece.

Measure 33 which is where the resolution in C# minor takes place. That is the fundamental role of Lydians as a memory function: Lydians announce what is coming next; in this case, the key signature of the entire piece. That is where one can hear Beethoven whispering to the musician: "Go more softly here because this is the generative principle."

In the third movement, measures 166-167 indicate the passing of the same Lydian cluster to a higher dimensionality where Beethoven expresses the change by using what Lyn identified as a high density of singularities.



Beethoven's Piano Sonata No. 2, Opus 27, 3rd Movement, Lydian Measures 166-167.

The epistemological motion of transformation is crucial to understand for our purpose here; but, how can a musical arrangement be conformed to it? The following metaphorical illustration shows how the process of change takes place by way of Cusa's creative dynamic of unfolding and enfolding.

First of all, take the above quote (see p. 5.) from Cusa, which is taken from *The Vision of God*. Cusa's "vision" may be the most effective measure of application for this sort of axiomatic change, because it involves a clock-like motion in which God's time is one that *enfolds and unfolds succession* as one within the unity of simultaneity of eternity; while for the human mind, such a process of successive *learned ignorance* steps is first expressed by the motion of backing-up a step to eradicate an axiom from the past, then it moves forward two steps to establish a new principle that changes everything within the unity of a complex but explicit pre-established motion.

Secondly, Leibniz speaks of monads as dynamic substances which cannot be conceived as physical things which have parts, but must be conceived as abstract points or intersections of abstract unities which must be devoid of parts and whose compositions are made up of principles, primarily of action, perceptions, and especially transformations by rotation. I wish to bring the reader here, to a most difficult part of Leibniz's conception of substance or monad on the subject of which he added the following:

> "11. Furthermore, by means of the soul or form there is a true unity corresponding to what is called "I" in us. Such a unity could not occur in artificial machines or in a simple mass of matter, however organized it may be. For such a mass can be compared only to an army or a herd, or to a pond of fish, or a watch made of springs and wheels. If there were no true substantial unities, however, there would be nothing substantial or real in the collection. It was this that forced Cordemoi to abandon Descartes and to support the Democritean theory of atoms in order to find a true unity in them. But *material atoms* are contrary to reason, besides being still further composed of parts, since an invincible attachment of one part to another (if we could reasonably conceive or assume this) would not at all destroy the diversity of these parts. It is only *atoms of substance*, that is to say, real unities that are absolutely destitute of parts, which are the sources of action and the absolute first principles out of which things are compounded, and as it were, the ultimate elements in the analysis of substance. One could call them *metaphysical points*. They have something vital, and a kind of *perception*, and *mathematical points* are the *points of view* from which they express the universe. But when a corporeal substance is contracted, all its organs together make only one *physical point* with respect to us. Physical are thus indivisible in appearance only, while mathematical points are exact but are nothing but modalities. It is only *metaphysical* points, or points of substance, constituted by forms or souls, which are exact and real, and without them there would be nothing real, since there could be no multitude without true unities."[22]

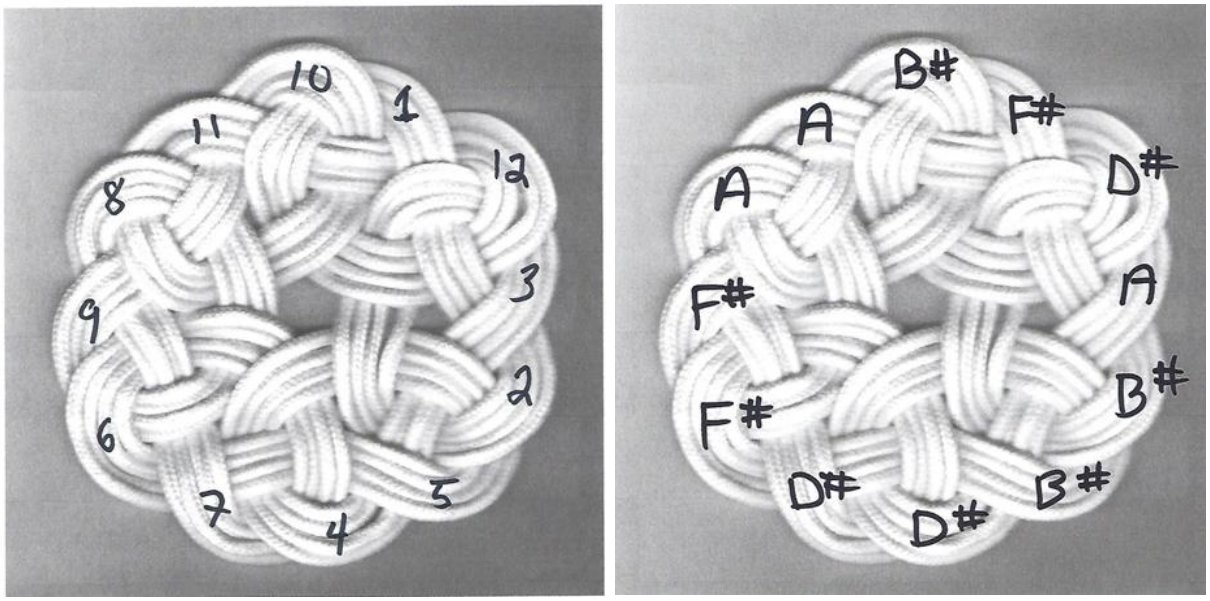
Consider from this text that what Leibniz called "*metaphysical points*" are actually part of his most mature thoughts on the subjective nature of *substance* or *monads.* The point to discover, here, is what is the common underlying principle behind *physical points*, *mathematical points*, and *metaphysical points*? The answer can be found in active motion; that is to say, only a pre-established mobility and the complex harmony that its pathway could have in common as a principle for those three domains needs to be considered. Consider that the principle of circular motion has to be primary among these three domains and you have, in substance, the dynamic domain of Cusa's enfolding-unfolding of creativity.

[22] L. E. Loemker, ***Leibniz: Philosophical Papers and Letters***, Vol. 2, Kluwer Academic Publishers, Boston, 1989, p. 456-57.

This creative process is one which involves the development of others as you develop yourself in the Image of God; it does not work in any other way. Such is the process of causality where enfolding is the motion of going from the effect to the cause, while unfolding goes from the cause to the effect; the two being uneven will cause the process of discovery to go forward by bringing the future into existence after changing the past.

Then, ask yourself the question: what could be the "visual metaphor" of such a creative dynamic of unfolding and enfolding *substance* or *monad*? How could such a process be expressed without clouding your judgment with sense perception?

Take the following Lydian musical process of twelve (12) notes from Beethoven's *Sonata Quasi Una Fantasia*, measure 35, and apply the knotting Cusa principle to them. Follow the motion with your finger starting from F# at one o'clock and move clockwise: the Lydians set the stage and your mind does the rest.



Musical Lydian Knotwork: Two steps forward (unfold) and one step back (enfold). Note that the ordering of the knotwork is not located along the circular rim, but along the spiraling and twisting of four knots: [F#, B#, A], [D#, B#, F#], [D#, A, F#], [B#, A, D#]. The monad is unified in the process of closing this quadratic substance which triggers inside of the mind the hearing of the future coming resolution in the key of C# minor.

Following Cusa's idea of unfolding and enfolding creativity: F# unfolds clockwise to B#, which enfolds back to A, which unfolds forward to D#, which enfolds back to B#, which unfolds forward to F#, which enfolds back to D#, which unfolds forward to A, which enfolds back to F#, which unfolds forward to B#, which enfolds back to A, which unfolds forward to D#, then the entire Lydian dissonant process gets resolved into the key signature of C# minor, which you hear in your mind before you hear in your ears.[23]

There is, here, a self-ordering plan of the whole which is anterior to the beginning of the motion itself; the plan for this construction is what Leibniz called a *pre-established harmony*, a state of creation in God's mind, a state of forethought organized before creation itself which prepares you for how to go before you go. And that pre-established plan is such that it gives the universe the ability to self-organize itself in accordance with this pre-established ordering principle without the intervention of God having to rewind its clock as Newton had wrongly imagined. This is what Beethoven's creative Lydian process represents metaphorically.

Leibniz imagined the existence of that process prior to the actual creation of the Universe that God had in Mind an infinite number of possible worlds to choose from, and that He chose the one we have as the "best of all possible worlds." Although Leibniz argues on the possibility of the best of all worlds strictly in a logical manner, the profound reason why it is the "best" is because both the physical world and the mental world are based on the same fundamental principles. This is also what the Beethoven musical Lydian knotwork represents as a self-moving principle which applies to strategic thinking as well as to artistic composition.

Both MacArthur and Beethoven's Lydian monads reflect such a creative process of changing the past in order to improve the future. MacArthur had proposed an axiomatic change that only Ho Chi Minh and Lyndon LaRouche understood and which needs to be understood today if we are going to avoid

[23] I sent out a faulty illustration of this process for Christmas and, my good friend, Fred Haight, corrected me in the following way: "***Your knotwork corresponds more to measure 35,*** although it is the same double Lydian configuration. Beethoven spells it differently though, which is very important if you don't want to confuse people who go to the score. Beethoven spells it B# F# D# A, instead of C F# Eb A. They are still the same intervals of Lydians clockwise and minor thirds counterclockwise."

Nuclear World War III. That is why I am using this mushroom flower shaped knotwork to illustrate the motion of the mind, and that is why I wish to dedicate this part of my report to Joe Biden: One step back (enfolding) and two steps forward (unfolding) is, first and foremost, an axiom buster idea which takes a step back to undo what causes us to make mistakes and, at the same time, propels us forward to discover a principle of goodness that did not exist before and which solves the crisis. As a good councilor of mine once told me: "When a great tragedy occurs, the tendency is to shrink from being a world historic individual to a small fear-driven individual. It is at this point that one is more concerned with one's own survival, forgetting how fundamental ideas that are in accordance with the laws of the universe endure forever." That was the effective Lydian solution to Beethoven's deafness problem in his *Sonata quasi una fantasia*, opus 22, No. 2.

If this is the sort of solution that is required in order to solve an axiomatic crisis in the domain of *learned ignorance* in the nuclear age, let us hope that such a Beethovenian Lydian epistemological geometry can also answer the question that Presidents John F. Kennedy and Nikita Khrushchev were able to solve with the Cuban Missiles Crisis and that Presidents Joe Biden and Vladimir Putin will have the same courage to answer positively, today.

CONCLUSION

Unless this sort of Leibnizian soul searching capability can be restored to people all over the world during the present period of history, the current breakdown of civilization risks destroying mankind as a whole by risking going into a nuclear showdown in the near term. This is how Lyndon LaRouche treated the matter summarily as early as January 1986:

> "In a true republic, the true citizen is personally accountable to the Creator, for the outcome of that republic; for the outcome of the general welfare, as it affects all persons in that republic; for the outcome, thus, of every personal life in that republic, and the outcome of the role of that republic in the world; for the welfare of humanity as a whole, and of every individual personality, present and future, of humanity as a whole. The individual citizen of a republic is personally accountable to the Creator, to

> the extent that that individual either has the capacity to influence the course of events, or can develop the capacity needed to influence the course of events. And that is what the individual must grasp, during 1986, or the individual will be a failure. His entire life, her entire life, will be judged a failure, or a success, to the degree that that conception, of the citizen of a republic, is grasped in the sense it ought to be grasped."[24]

If such a notion of creativity were to be internalized by people all over the world, today, it would become unlikely that the current American war mongering policy of Blinken, Sullivan, and Nuland et al., vis à vis Russia and China were to succeed. One glance at the recent strategic efforts of President Vladimir Putin and you will discover that his three-way diplomacy effort with Russia, India, and China can have the result of including the United States in what LaRouche proposed as a four-power alliance for the development of a New Just-World Economic Order. This would be a great victory for Cusa's promotion of *learned ignorance*.

Compare the same process with what is going on inside of your mind. Ask yourself: "How does an axiomatic singularity shape itself in the mind through the explosive social process of the history of ideas?" Think of how a new idea emerges suddenly as a yearning for something that did not exist before. This idea has existence as a potential, but it does not exist in any given form, and it has to be shaped as a charge, intentionally, for the purpose of changing the universe as a whole. The question is, therefore, how can the form of that new idea take shape, socially? How is a new idea received within the society of men? Think of Roosevelt's idea of Glass-Steagall, for example. How do you concentrate the force of the mass strike panic of society into a small Lydian monad called Glass Steagall? What sort of spiraling conditions are required for its success? This is not a glass bottle that you toss out at sea in the hope that someone will find it and come to your rescue.

As Lyn showed, this is a process that has to be constitutionally integrated with the consent of the governed in some form of artistic composition. The process is not a democratic one, it is a republican one, and its acceptance does not depend on its being popular; it only has to be truthful and its acceptance is morally

[24] Lyndon LaRouche, ***The End of the Age of Aquarius?*** EIR, Vol. 13, No. 2, January 10, 1986, p. 28.

dependent on the ability of the social leaders not to ignore the call for *learned ignorance*.

It is also dependent on how many world leaders are willing to make it a life or death question for the future of their children and grandchildren. In other words, the question is: how many people, today, will be able to rediscover Beethoven's fruitful idea of Lydian ordering as a required necessity for their survival? In the lead of the Sunday, December 26, 2021 Morning Briefing, Dennis Small identified what is at stake in the clearest manner:

> "Consider the facts as we present them in the abbreviated timeline below. Russia, like China, has been increasingly subjected to the threat of being destroyed by two distinct kinds of "nuclear war" by the bellicose and bankrupt U.K.-U.S. financial Establishment: 1) "first-use nuclear action," as stated most explicitly by the demented Sen. Roger Wicker (R-MS); and 2) the "nuclear option" in financial warfare, measures so extreme that they would be tantamount to laying financial siege to Russia to try to starve the nation into submission, as is being done against Afghanistan.
>
> "Russia has now announced, for the whole world to hear, that its red line is about to be crossed, after which Russia will be forced to respond with "retaliatory military-technical measures." That red line, it has made clear, is the further advance of U.S. and NATO military forces up to the very border with Russia, including the positioning of defensive and offensive nuclear-capable missile systems a scarce 5-minutes flight time from Moscow. Russia has presented two draft international treaties—one with the United States, the other with NATO—which would provide legal guarantees that NATO's eastward march will stop, that Ukraine and Georgia in particular would not be invited to join NATO, and that advanced weapons systems will not be placed at Russia's doorstep. These are neither more nor less than the verbal guarantees given to the Soviet Union in 1990 by the duplicitous Bush and Thatcher governments, guarantees that have been systematically violated ever since. They are neither more nor less than what President John F. Kennedy demanded of Khrushchev during the 1962 Cuban Missile Crisis, which was successfully defused by the deft back-channel negotiations of

JFK's personal envoy, his brother Bobby Kennedy, out of sight of the pro-war military-industrial complex.

"It is urgently necessary that the United States and NATO promptly sign those proposed treaties with Russia—and step back from the edge of thermonuclear extinction.

"What we chronicle below has been happening, step by step, while most people around the world were asleep at the switch. It is time to wake up, before we sleepwalk into thermonuclear World War III."[25]

Part of the answer to these troubled times can be found in the hope and optimism that the just launched James Space Telescope will bring to the world in what Krafft Ehricke called the driving force of the Extraterrestrial Imperative. See NASA's YouTube video: **29 Days on the Edge.**

FIN

[25] Dennis Speed, ***Morning Briefing,*** December 26, 2021.See our latest YouTube: https://www.youtube.com/watch?v=OhsOmuqHLDQ, and https://larouchepub.com/eiw/public/2014/eirv41n06-20140207/04-13_4106.pdf