

THE ZEPP-LAROUCHE SPHERE OF CHANGE

A galactic pedagogical in constructive geometry by Pierre Beaudry, 5/5/25

FOREWORD

The present report proposes a project in constructive geometry meant to elevate your mind to the triply-connected level of galactic thinking for the purpose of making axiomatic changes; that is, the different levels of *hypothesis*, *higher hypothesis*, and *hypothesizing the higher hypothesis*. This is the elevating process of the mind that Lyndon LaRouche identified as the domain of *Sphaerics*, the domain of universal physical principles which is necessary for making changes in the universe as a whole. This construction, therefore, is an expression of Lyndon LaRouche's *Four Laws*¹ and of Helga Zepp-LaRouche's *Ten Principles*.²

The axiomatic question this poses for us now is: how can the domain of geometry help us understand the Zepp-LaRouche principles underlying security and development for the global world economy which is presently in its worst crisis in history? Ironically, the answer to that question is located in the form of dissonant action known as the musical Lydian modality; that is, the form of action which proceeds *by dividing the whole by half and by half of the halves again*.

INTRODUCTION

“When you are asked to make a choice between two possibilities, you are always given a choice between two existing things. Why aren't you given a chance to choose between what exists and what does not yet exist?”

Dehors Debonneheure

Why is it so difficult for human beings to discover the higher form of *Sphaerics* as a way of axiomatic thinking as opposed to some ordinary down to Earth knowledge based on sense perception? The reason is because there are contradictions to be resolved in this higher domain of thinking that most people are

¹ Lyndon LaRouche, [The Four New Laws to Save the U.S.A. Now! Not An Option: An Immediate Necessity.](#)

² Helga Zepp-LaRouche, [Keynote: Principles of a New Security and Development Architecture.](#)

afraid of, because they call for making projective jumps from the top down; that is, from a non-visible higher dimensionality which forces your mind to leap upside down from a higher to a lower domain.

Today, the world is divided into two world views, one is self-interest, and the other is the common good. The question is how can those two necessities be satisfied? Both have to be modified one more time. But, how do you do that without conflict and by guaranteeing that both can participate in a higher development for mankind as a whole?

Take a mathematical solution, for example. Square powers are mere shadows of a higher principle which generates cubic powers. However, one cannot see the cube of the higher dimensionality when merely fixating on the sense perception plane of doubling the square. The question is: how can you make both the cube and the square grow to the double of their size, simultaneously? Once you discover the significance of this revolution in human thinking, you have discovered the domain of what Lyndon LaRouche identified as the galactic dimensionality of “*Sphaerics*,” which is the higher domain where contradictions and paradoxes can become resolved. For example, consider that the idea of *Sphaerics* is, politically and historically speaking, found in the difference between Russia and Great Britain. The only way to eliminate that difference is by applying to both Russia and Great Britain, the revolutionary American system of political economy.

SPHAERICS: THE LAROCHE SCIENCE OF PHYSICAL ECONOMY

The science of physical economy is not an assembly of physical sense perception nuts and bolts that go into making a national economy; it is rather the higher domain of knowledge which is based on the discovery of universal physical principles in art and science, which is the form of knowledge required for mastering the universe as a whole. Physical Economy, therefore, is based on the science of astrophysical principles reflecting God’s creation of the universe; and it calls for applying such principles to such a universe by mankind as a whole. Lyndon LaRouche identified this higher galactic domain of knowledge as the science of *Sphaerics*, which is the term the ancient Greeks used to illustrate what Gottfried Leibniz later called *dynamics*. LaRouche stated the matter as follows:

“It is, notably, ancient; it is a term, known in Greek as *dynamis*, dated in European civilization as a term of the science of *Sphaerics* associated with the Pythagoreans, such as the famous Archytas, and Archytas’ friend Plato. It is the name of the underlying conception of all of the work of Plato

and of the leaders of his Academy through the death of Eratosthenes. It is the term, translated by Leibniz as *dynamics*, which Leibniz introduced to modern usage, to distinguish the methods of competent modern physical science from the statistical-mechanistic fantasies of René Descartes.”³

From the most ancient times until today, one of the most difficult concepts to express the future orientation of universal change is the concept of *Sphaerics* because it is based on the mental process of creativity in the Image of the Creator, “Imago Dei.”⁴ Lyndon LaRouche identified the concept of *Sphaerics* as the most ancient basis of the science of physical economy because a revolutionary conception is what can eradicate the nefarious influence of the Aristotelian-based British monetarist system of John Maynard Keynes. If you base your economy in the image of Keynes, you will fail. This is why the present British dominated world monetary system is crashing right now, and that is why they want to have war at all cost.

THE ZEPP-LALOUCHE GALACTIC SPHERE

LaRouche identified the question of the fundamental principle of “*Sphaerics*” as follows:

“As the ancient practice of *Sphaerics* illustrates the point, what should actually be regarded as science, is limited to evidence of principles which are truly of the universe, principles whose proof is of a type rooted historically in the use of astronomy for celestial navigation in, especially, in the oceans and seas of the world, as this was done by Johannes Kepler, and his followers in scientific method as the great physicist, Carl F. Gauss.

“*This self-critical view is rooted in what is implicitly astrophysics, in observing one’s own creative processes in action, reflectively; so, as I shall emphasize here, it is also the key to the true meaning of the artistic imagination, as artistic imagination is the typical characteristic of scientific outlooks coherent with a sense of personal identity rooted in the concept of a “Type B” method. This is of crucial importance for understanding the foundations of competent approaches to understanding the roots of any*

³ Lyndon LaRouche, [*How Not To Play Chess*](#), EIR, October 20, 2006, p. 9.

⁴ Lyndon LaRouche, [*The Dialogue of Eurasian Civilizations: Earth’s Next Fifty Years*](#), EIR, January 2005.

competent attention to the subject of the principles underlying a science of physical economy.

“It is the discovery of the existence of universal physical principles, in that way, which has been required to develop the concept underlying all competent physical science. This is accomplished by forcing societies to cease depending on the depraved form of naïve faith in the bare human senses as such, as the modern ‘behaviorists,’ such as the evil Adam Smith, have done.”⁵

On April 10 2025, Gerry Rose gave a succinct and powerful briefing which inspired me to construct the Zepp-LaRouche Galactic Sphere of Change. Figure 1 below is an actual illustration of it, but its conception of change is rather more complex and more difficult to understand, because the sphere is made from two sets of *ten triply-connected rhombic quadrilaterals* representing a model for a world based on galactic principles of change. In other words, the galactic dodecahedral sphere is constructed with two sets of triply-connected *Ten Principles* of Helga Zepp-LaRouche and *The Four Laws* of Lyndon LaRouche.

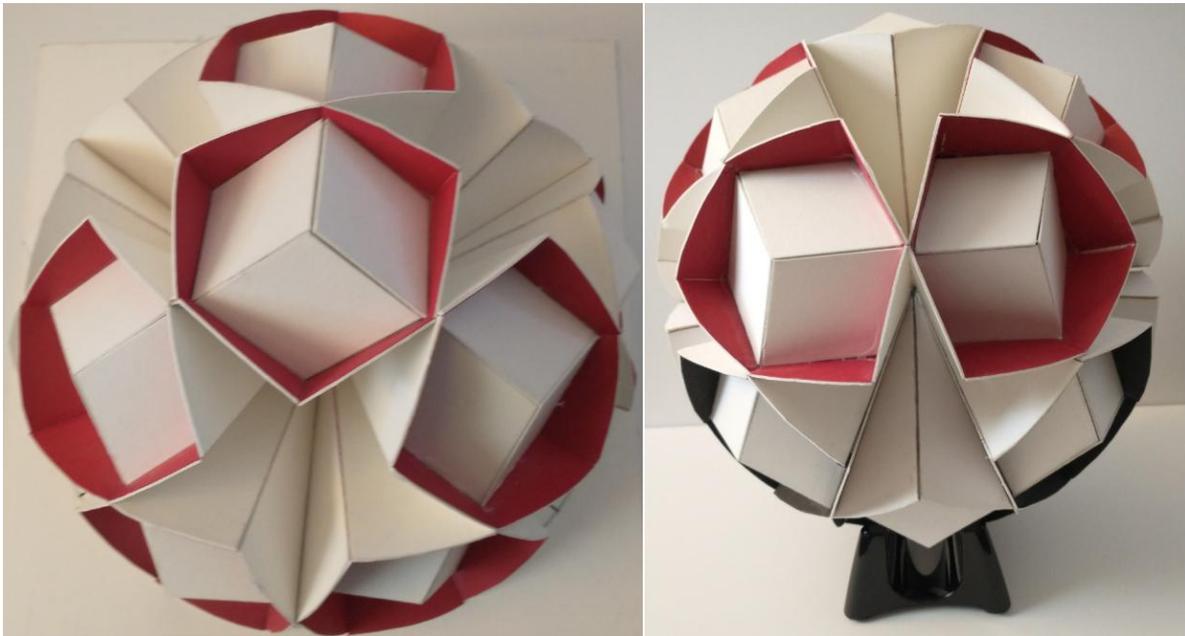


Figure 1. A bouquet of *ten triply-connected rhombic quadrilaterals*.

⁵ Lyndon LaRouche, [*Economics as History: The Science of Physical Economy*](#), Executive Intelligence Review, Volume 36, Number 36, September 18, 2009, p. 33.

THE CONTRUCTION OF THE ZEPP-LAROUCHE SPHERE OF CHANGE

1. Twenty 6-sided-cones representing the unity of six of the largest BRICSA nations of the world, Brazil, Russia, India, China, India, South Africa, and America forming a single spherical dodecahedron;
2. Two sets of ten triply-connected-rhombic-quadrilaterals (minor thirds), each of which reflecting Lyndon LaRouche's *Four Laws* as the twenty vortices of the spherical dodecahedron;
3. Ten great circles representing Helga Zepp-LaRouche's *Ten Principles*. Each circle represents the Lydian well-tempered musical system based on the 6 dissonant singularities of the human voice register shifts.

PHYSICAL COMPONENTS

1. Ten one square-foot cardboards (one side white) for the construction of ten 10-inch-diameter-circles each divided into the twelve notes of the musical system (12 circular triangles of 22 degrees and 6 triangles of 16 degrees.)
2. Two one-square feet boards each divided into 30 quadrilateral rhombics of 107 degrees each with edges of 4.3cm.
3. One cardboard cutter, compass, straight edge, ruler, scissors, binder clips, pencil, eraser, and Elmer glue.
4. A lot of patience; it may take up to a month to complete it.

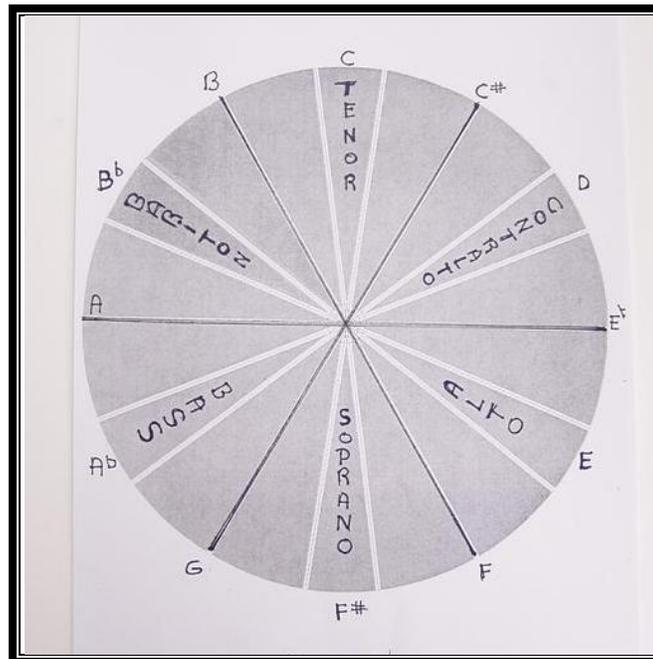


Figure 2. Circular form of the twelve-tone musical system divided into six voice register shifts.

The beauty of this ten-circle sphere is that each of those great circles is constructed with only two angles, one of 16 degrees and the other of 22 degrees. The 16 degree triangles are all missing because they represent the invisible Lydian principles. That is the key to understanding change in the universe: as the principle of division of living cells show, it is the singularities of partitioning each circular cell of the sphere by *half and half of the halves*, that is by **C-F#** then by **Eb-A**, which makes the whole musical system dissonantly Lydian in character through the generation everywhere of twenty edges of minor thirds. But, what is the cause of such dissonances in the world today? Helga answered as follows:

“All empires based on the oligarchical model have been oriented towards protecting the privileges of the ruling elite, while trying to keep the masses of the population as backward as possible, because as sheep they are easier to control (and we will hear something about that a little later). It was considered ‘normal’ to keep a certain portion of the people as slaves, or ‘helots,’ who can be killed if they become too many, as Friedrich Schiller describes it in his writings about the laws of Solon and Lycurgus. It was that same oligarchical outlook, which was the basis of the ideology of Malthus, and the underlying assumption of all colonial policies, including in the modern forms of colonialism, of which President Sukarno had warned in his speech at the first Bandung conference in 1955.

“Christianity emerged during the Roman Empire and spread, for the first time in European civilization, the idea of the sacredness of each human person as in the image of the Creator, being gifted with that creative power, the *vis creativa* as Cusa calls it, which emanates from his or her likeness with the Creator. That same idea is also found in the other two monotheistic religions, Judaism and Islam, as well as secular humanism, Confucianism, and Indian philosophy and religion in the tradition of the Vedic writings. Echoes of this idea are found in other cultures.

“Whenever currents emerged in these religions which deviated from the idea that all human beings are sacred, as in the Crusades and the Inquisition, that was always instrumentalized by the oligarchical elites for their own special purposes.

“The new paradigm, which will be characteristic of the new epoch, and toward which the new global security and development architecture must be directed, therefore, must eliminate the concept of oligarchism for

good, and proceed to organize the political order in such a way that the true character of humanity as the creative species can be realized.”⁶

The six intervals of 16 degrees each represent the six dissonant singularities of the six voice register shifts, (Soprano-Tenor, Alto-Baritone, Contralto-Bass) and form twelve invisible stars on the faces of the sphere which divide the heavens into twelve space-time months of the year and twelve faces of the dodecahedron. The stars are empty holes because they are not objects of sense perception; they are the reflections of the ordering principle behind the two sets of harmonic arrangements: Tenor, Alto, Bass, and Soprano, Contralto, Baritone.

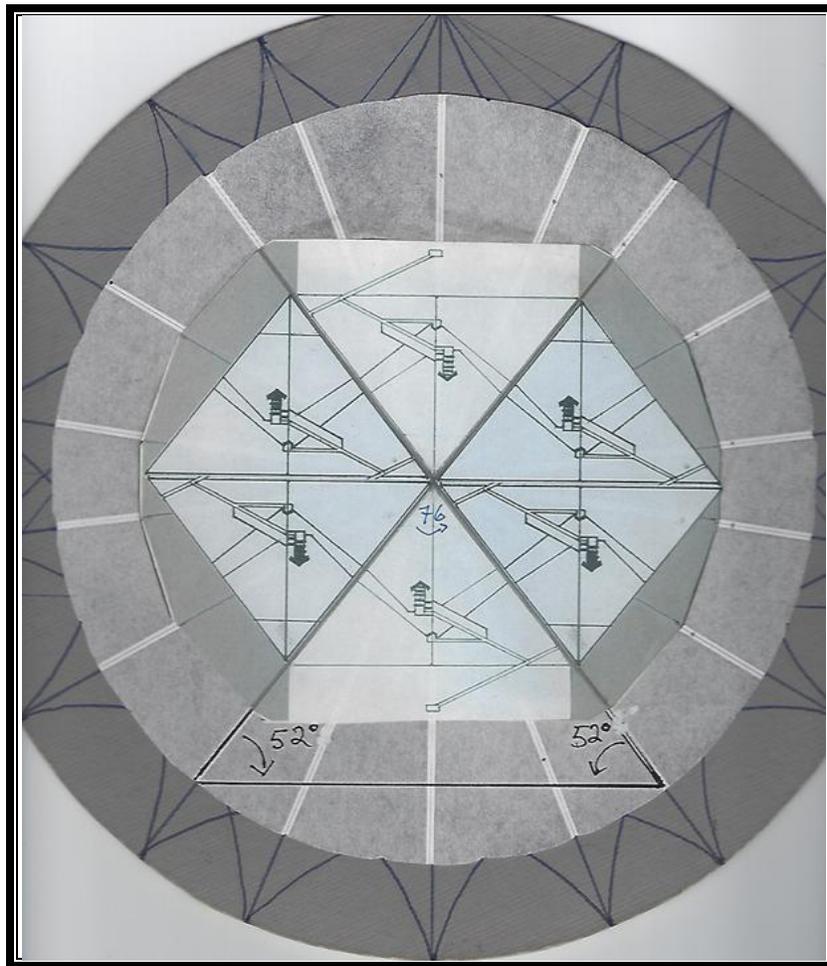


Figure 3. The Great Pyramid shadow of Archytas partitioning each great circle.

⁶ Helga Zepp-LaRouche, [Principles of a New Security and Development Architecture](#) EIR, Dec. 2, 2022, p. 10.

Figure 3 shows how the doubling of the two angles [$2(16+22 \text{ degrees}) = 76 \text{ degrees}$] composing the great circles of the dodecahedral sphere represents the apex and side angles (76 and 52 degrees) of the Great Pyramid of Egypt. Each of the 10 circles is constructed with two different couplings of those two angles (76 and 52 degrees) reflecting the shape of the mid-section of the Great Pyramid, the half of which corresponds to the Archytas shadow of the Great Pyramid for the doubling of the cube. (See Figure 8.)

Such a reflection of the Archytas principle reveals a unique connection between the Great Pyramid of Egypt, the Greek school of the Platonic Solids, and Lydian musical dissonances as the musical truth of the simultaneity of temporal eternity.

THE PARADOX OF THE CUBIC DOUBLING FUNCTION

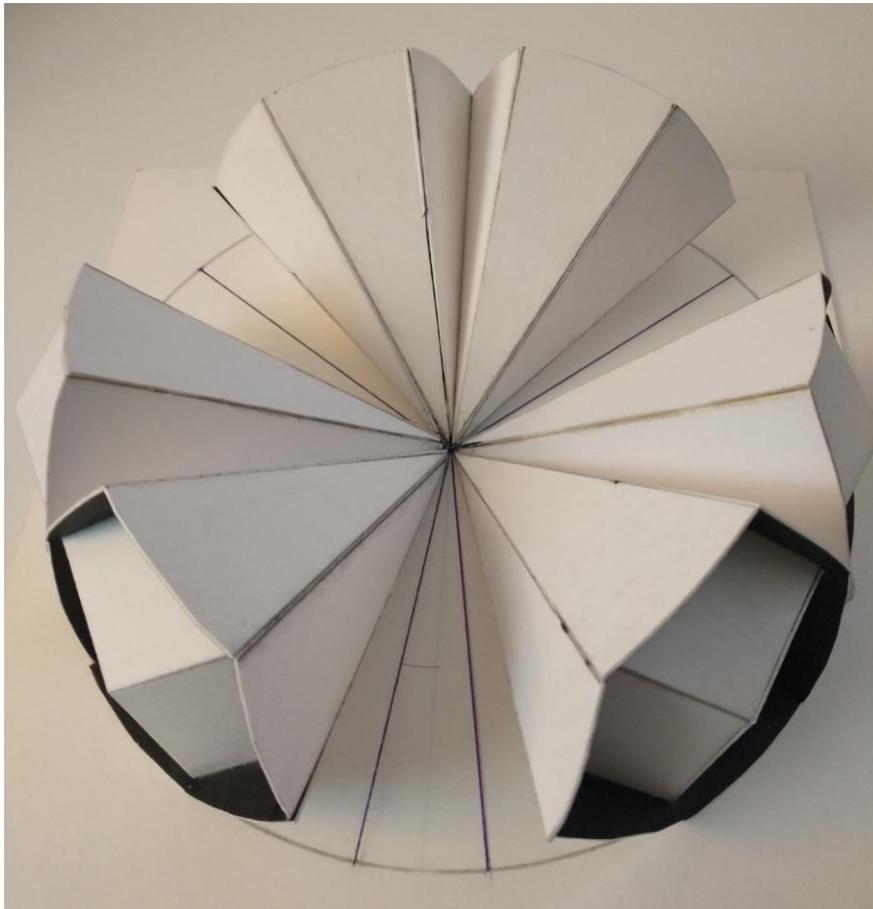


Figure 4. Six cones glued together two by two onto a circular plane with intervals of three register shifts.

Each cone is formed by the integration of two opposite sets of hexagonal Zepp circular triangles and three LaRouche rhomboid quadrilaterals. One is going outward while the other is going inward because the opposite directionality represents the singular paradoxical connection between the sphere and the dodecahedron. The paradox will be explained below with Figure 7.



Figure 5. Ten cones forming half of the Zepp-LaRouche galactic dodecahedral sphere.

If you build four additional cones and insert them within the intervals of the three double-cones of Figure 4, you will have constructed half of the sphere. The construction time estimate is about two hours a day during two weeks.



Figure 6 Two different halves of the Zepp-LaRouche galactic sphere.

The two halves have a different finish in order to show two different options for finishing the construction as a whole. The two halves are based on the same physical principles.

THE COUPLING OF THE ZEPP AND LAROCHE PARTS OF THE SPHERE

Since the circular components of the sphere are composed of only two angles, the spherical parts will be fitted together by also reflecting only two parts. The Zepp part of the sphere is formed by 20 colored hexagonal cones and the LaRouche part is formed by 20 rhombic triply-connected white quadrilaterals. It is the hexagonal shape of the cones which creates the perfect enclosing space for the dissonant rhombic quadrilaterals to fit into it. (Figure 7.)

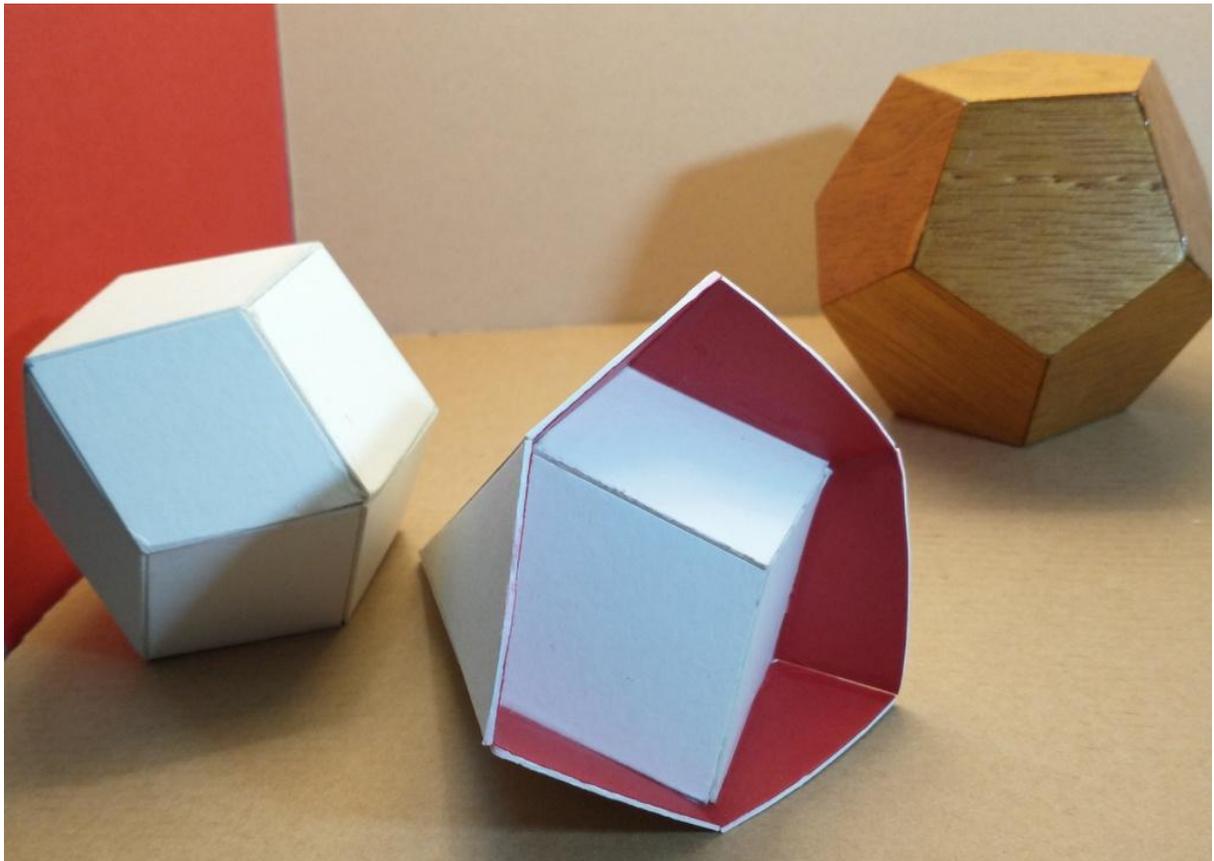


Figure 7. Rhombic dodecahedron, regular dodecahedron, and spherical rhombic quadrilateral

The fitting of those two parts is one of the most beautiful things I have ever seen, because they reflect the coming together of a flower of two different axiomatic domains; that is, the sphere and the polyhedron. The actual

transformative moment of change between the two is an axiomatic singularity. It is rare that one can actually visualize such a generative moment of contact between two different orders of magnitude, because it is as if two incompatible domains were shaking hands across an axiomatic abyss. What an Archytas moment!

THE ARCHYTAS GREAT PYRAMID PROPORTIONALITY FOR THE DOUBLING OF THE CUBE

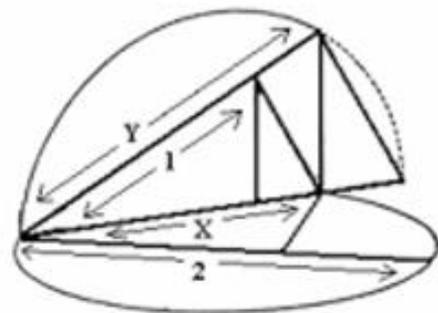
Constructing two means between two surfaces requires two circular actions orthogonally opposed to each other, but in touch with one another; that is how Archytas discovered the principle of squaring two magnitudes, which generated the golden section shadow of the Great Pyramid of Egypt and the power for the doubling of the cube. (See Figures 8 and 9.)

It is in that sense that mathematical squaring powers are nothing but shadows of the cubic power. Riana St. Classis and Peter Martinson gave an illustration of this process in their 2005 dialogue with Lyndon LaRouche on *The Principle of Power*. They wrote this crucial note about discovering the principle of cubic mean proportionality:

“Finding the construction for creating two means between two extremes, according to Archytas, demands an additional circular action, orthogonal to that action which has the power to generate square magnitudes (Figure 3).

“So, we see that the square powers are really a shadow of that principle that generates cubic magnitudes. Recall that, when one sees a cube, one is really piecing together a set of images of squares and lines, which are projections from the cube, which you can’t see.”⁷

FIGURE 3



$$1:X::X:Y::Y:2$$

Two circular actions, orthogonal to each other, generate two means between two extremes.

⁷ Lyndon LaRouche, [*The Principle of Power*](#), EIR Volume 32, Number 49, December 23, 2005, p. 59.

Such a conical projection of triply-connected spherical action demonstrates that accessing higher powers requires a mastery of changes that sense perception is incapable of assuming, but that only the human mind can have access to in order to master an appropriate understanding of universal change, as if through a shadow.

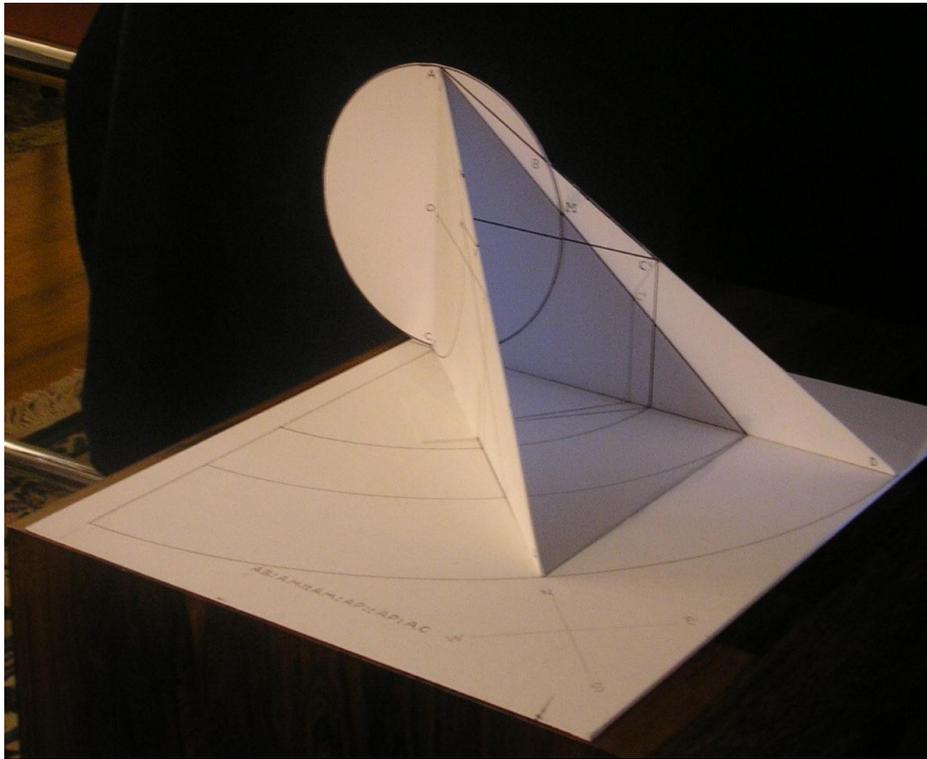


Figure 8. Archytas' shadow of the Great Pyramid for the doubling of the cube.

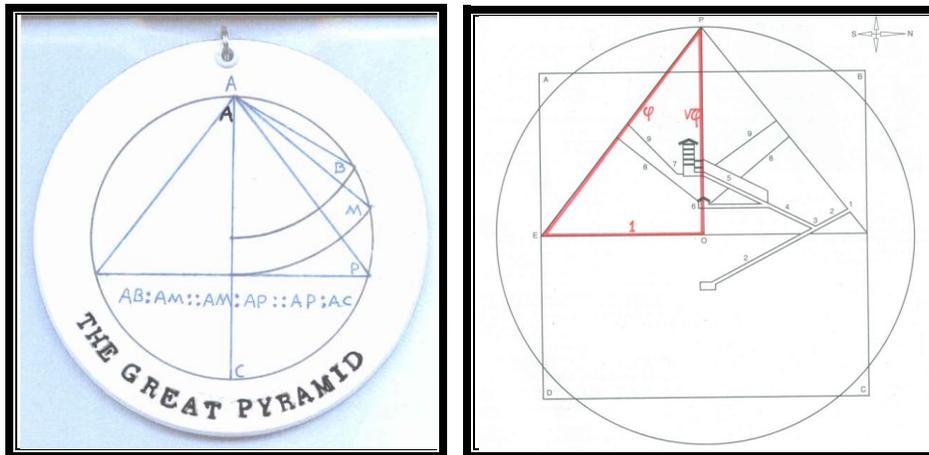


Figure 9. The Great Pyramid profile of doubling the cube and the divine proportion of half the pyramid's shadow.



Figure 10. [DOUBLING OF THE CUBE CONSTRUCTION BY THE LYM OF BOGOTA COLUMBIA](#)

One of the most suppressed secrets from the ancient Greeks is Archytas' doubling the volume of the cube with the double proportionality of the Great Pyramid's shadow.

It is fortunate, therefore, that the LaRouche Youth Movement (LYM) of Bogota, Columbia, had the opportunity to replicate such an ancient tradition under the direction of their teacher, Oscar Valenzuela, because the discovery of the LaRouche method of generating new principles is the most relevant method of discovery of all times.

**THE LYDIAN TWELVESIDEDNESS OF THE LAROUCHES'S
HYPOTHESIS OF THE HIGHER HYPOTHESIS**

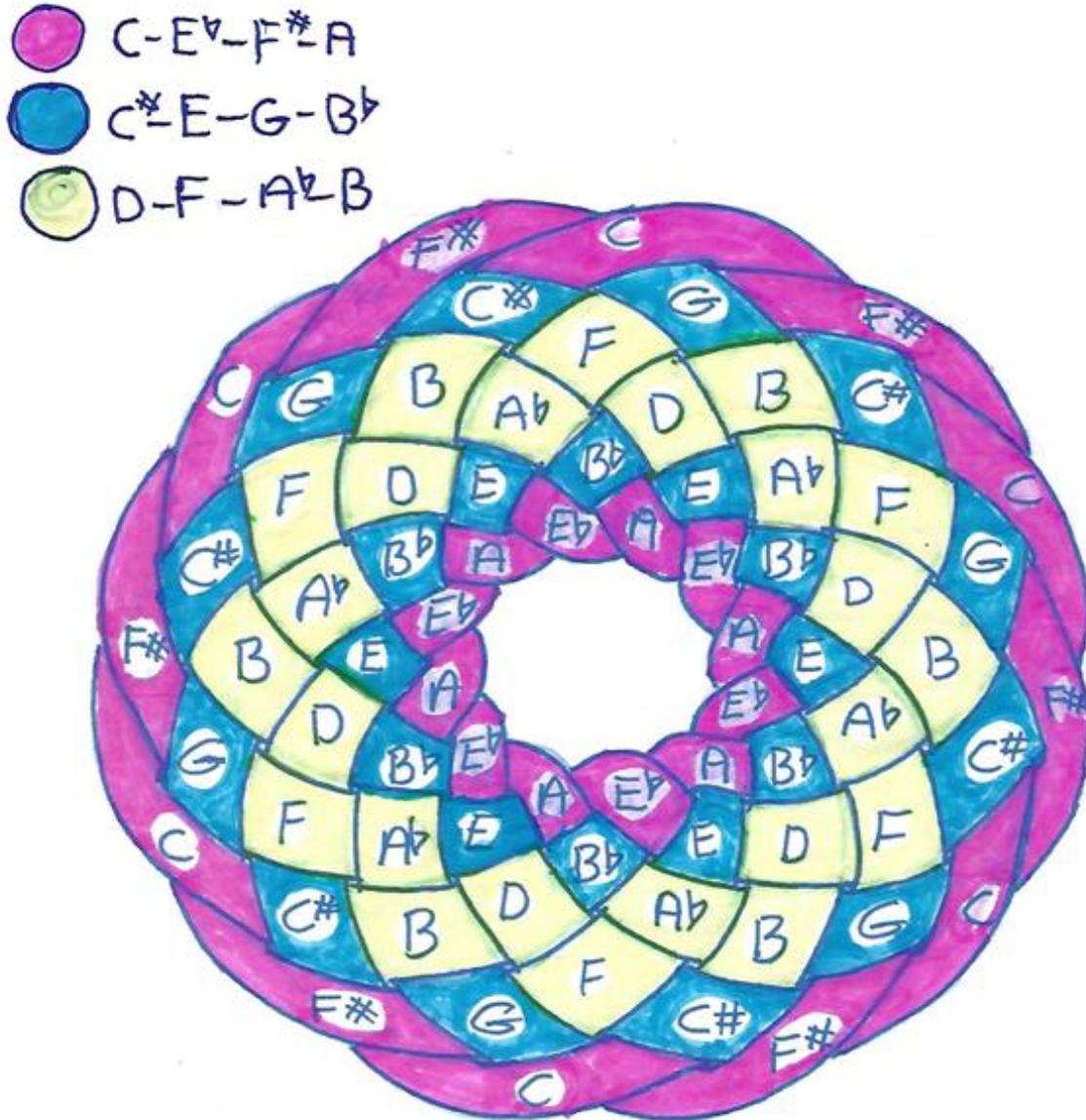


Figure 11. Six octaves with three separate Lydian spirals generate one another as follows: [C-E[♭]-F[♯]-A] generates [G-B[♭]-C[♯]-E], which generates [F-A[♭]-B-D]⁸, which generates [C-E[♭]-F[♯]-A], as in a dodecahedral torus.

If you apply to the cultural domain and to human governments the set of principles of Lyndon and Helga LaRouche, you will realize that the Lydian

⁸ See my report: [THE GEOMETRY OF LYNDON LAROUCHE'S DOMAIN OF DISCOVERY OF PRINCIPLES](#)

modality as expressed in the **C# Minor** series of compositions by Bach, Mozart, and Beethoven not only coincides with the Vernadsky conception of the noosphere, but also with the results of the political form of governing of the American system of physical economy that Lyndon LaRouche identified under Abraham Lincoln, Henry Carey, and F. D. Roosevelt.

Figure 11 is an expression of such a “Rosetta Stone” when you identify *Sphaerics* as a principle of universal composition. Such a geometrical “Rosetta” incorporates three sets of Lydian quadratic dissonances taking place within six octaves of the human voices: **C-Eb-F#-A** generates **G-Bb-C#-E**, which generates **F-Ab-B-D**, which generates back to **C-Eb-F#-A**, as a self-development process.

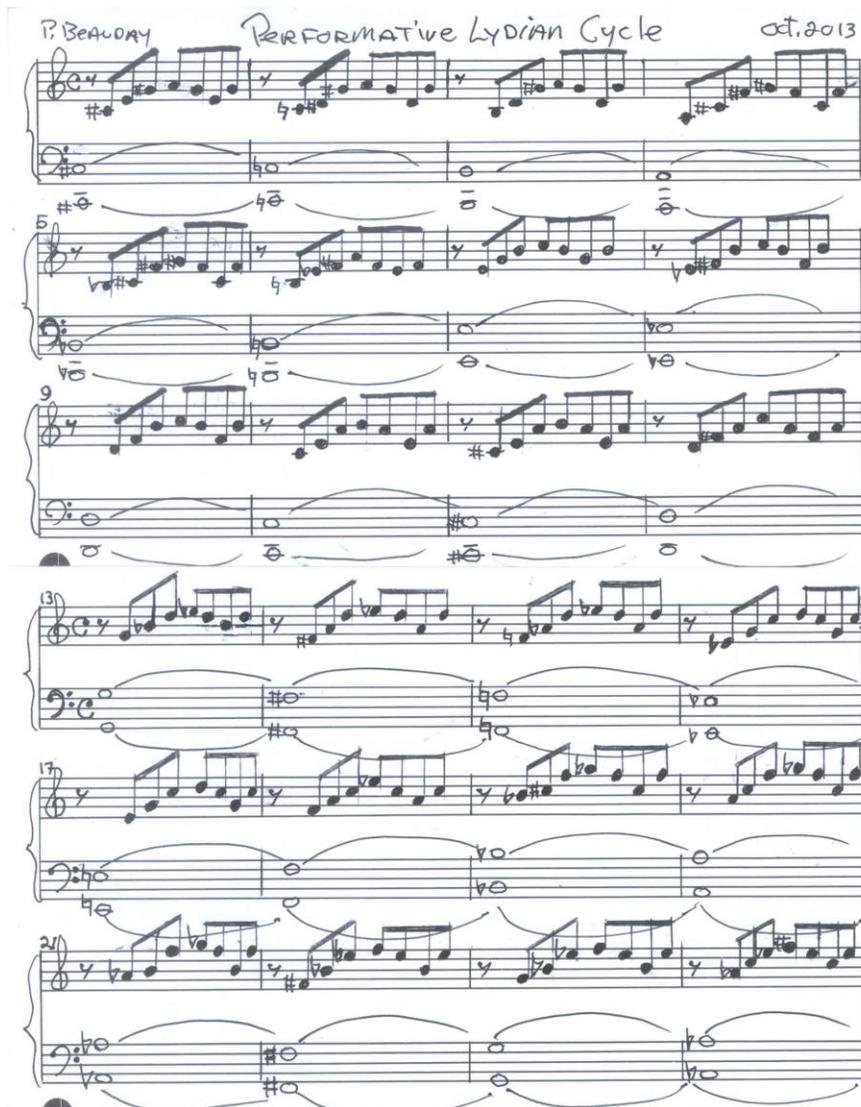
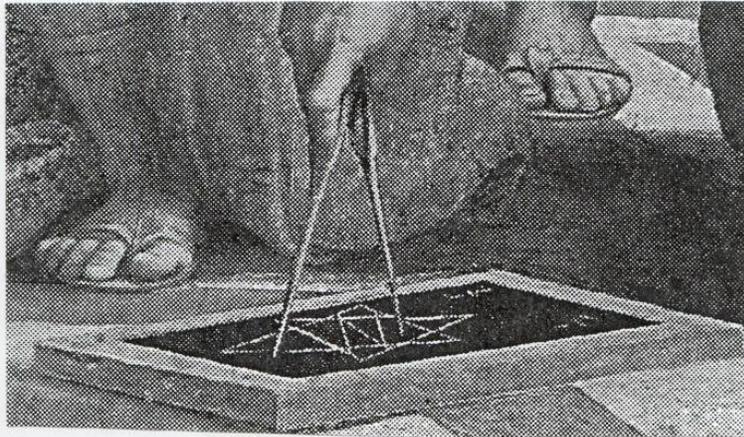


Figure 12. How **C-Eb-F#-A** generate **G-Bb-C#-E**

These Lydians act as a *hypothesis of the higher hypothesis*, showing how they generate each other in the small and in the large in the same manner of truth in temporal eternity as expressed by Raphael in *The School of Athens*. One look at the geometrical principle that Archimedes is drawing on the floor of Raphael's fresco and you will be able to discover the same dodecahedral transformative function of Plato's principle in the large that Raphael was drawing from in the small. Figure 13.



DETAIL OF THE SCHOOL OF ATHENS

Take a compass and two scalene triangles and construct a Star of David, like this. This is similar to the construction that Archimedes has drawn on his tablet, in RAPHAEL'S painting.

The hexagonal geometry is the geometry of the flat plane which only bees have been able to elevate to a higher dimension, and produce golden honey from it.

Inscribe points of decagons marking a golden section along the hexagonal radii of the Star of David. Project lines from the six points of the hexagon, as if from the inside of a sphere, to the six points of the decagons. You will see emerging from the plane a full size Kepler stellated dodecahedron. You can also generate the Poinset great dodecahedron.

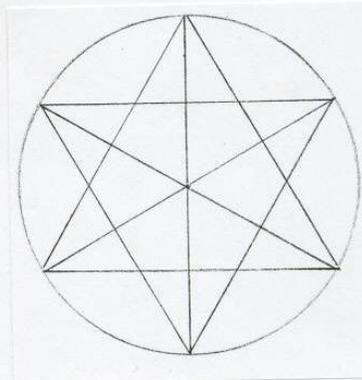


Figure 13. Detail from Raphael's *The School of Athens*: shadow of a stellated dodecahedron.

Thus, you have in artistic composition (music and painting) as well as in geometry, the integration of the same universal Lydian principle accessible to all human beings, and for all times to come. When you apply LaRouche's musical Lydian hypothesis of the higher hypothesis to the five Platonic Solids, you discover the dodecahedral function that Plato had chosen as the model for the evolution of the universe as a whole; that is, the Zepp-LaRouche galactic dodecahedral principle of spherical action.

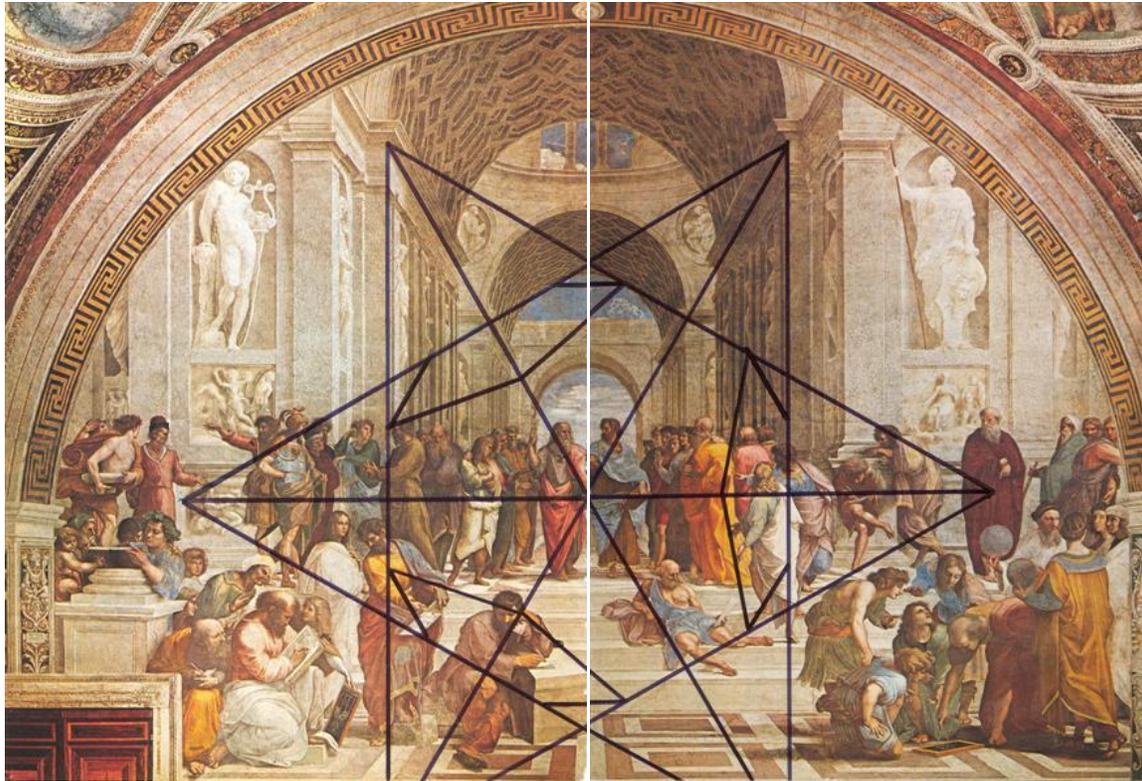


Figure 14. Dodecahedral scheme of The School of Athens.

This is the heart of the matter that LaRouche identified with the Lydian principle underlying the most advanced form of musical compositions ever written by Bach, Mozart, Beethoven, Shubert, Schumann and Brahms. As LaRouche reported in his writing on [The Substance of Morality](#):

“Once we pass from the level of considerations posed by J.S. Bach's *A Musical Offering* and *The Art of the Fugue*, into the generalized use of Lydian intervals by Mozart in the manner epitomized by his K.475 (and, later, Beethoven's Opus 111), the span of Classical musical development, from Mozart of 1782-1783 through Brahms' *Vier Ernste Gesänge* [Four Serious Songs], is opened up for us as a process of motivic thorough-

compositional development, a process of increasing density, in the sense of Riemannian series of the n-fold type. When we combine the apparent, formal considerations with the implications of a new mode of song composition, by Mozart, Beethoven, Schubert, Schumann, Brahms, with all of the resulting interpretive considerations bearing upon the training and use of the singing voice, all Classical musical composition opens up for us through this "Rosetta Stone" -like medium of Classical song.

“On this account, the musician must hear with two sets of ears. One is the ear of simple hearing; the other, the mind's ear, which locates the driving passion of a composition in its developmental processes of change, the latter the ear which, like Wilhelm Furtwangler's, sings "between the notes." In music, for Pablo Casals, as for Heraclitus and Plato, nothing is constant but change. It is that principle of change which is the ontological foundation of all Classical art. In music, that foundation is located in the developmental process of constant change, which is the mind's ear.

“Thus, when we sing with Bach, Haydn, Mozart, Beethoven, Schubert, Schumann, Brahms, and so on, we are expressing the essence of that playful domain in which the ontological essence of all art, and all morality, are supplied the ontological medium best suited to their expression. On this account, all great Classical music is, in its own way, sacred music, the soul's yearning toward its rightful, beautiful place in the simultaneity of eternity, as Bach's great student, Ludwig van Beethoven, best understood this.”⁹

That *Sphaerics* domain is the same that Riemann used with a quadratic circular action torus generating the Moebius scientific application of the dodecahedral circular action closing on itself in temporal eternity. (See Figure 14.)

CONCLUSION

However, before concluding with that LaRouche-Riemann idea, let me recall for you LaRouche's identification of this matter of human creativity as a direct expression of temporal eternity:

“These inhabitants of one's creative mental life, of this, one's personal, living "School of Athens," are persons whose mortal existences are

⁹ Lyndon LaRouche, [*The Substance of Morality*](#), Fidelio Magazine, Vol. 7, No. 4, Winter 1998, p. 27.

representative of three thousand years of the accumulation of progress in human knowledge. Against the millions of years before the most senior of these minds, these persons represent more development of mankind, and of knowledge than during all of the millions of years before. They are thus, in principle, a special kind of authoritative, representative body for all mankind to date. They are the sitting senatorial body for all human scientific and related thought and knowledge to date. They are the surrogate for all of man's temporal eternity to date.

“Include among them a fair representation of the greatest philosophers and Classical fine artists of the same span of history. For them, what is yesterday, even if it were a millions years in the past, or tomorrow, if it were a millions years yet to come? These, my dear friends and I, including the Disciple John and Apostle Paul, and Philo Judaeus of Alexandria, too, share a temporal eternity together, and have thus a much keener sense than most of you, of the purpose of this all, and of the Intelligent Good, touching all places and all times, including each of our own, from an Absolute where there is neither time nor place.

“Turn now to those my friends, my personal "School of Athens"; in this moment their attention is turned toward us. Ask them, now: What are Paradox, *hypothesis*, *higher hypothesis*, hypothesizing the *higher hypothesis*, and hypothesizing the *hypothesis of the higher hypothesis* as the certainty of the Intelligent Absolute Good above the limits of space and time? Their eyes will tell you, those are not mere words, mere doctrine; they are the living reality of creative scientific mental life. They are the certainties of self-consciously self-critical mastery of that universal principle of *change* in efficient knowledge, which is the subjective reality of knowledge of the truth of temporal eternity.

“The truth of temporal eternity is mastering the hypothesizing of the higher hypothesis, as the efficiency of that quality of change is measured for us, as better or poorer, in terms typified by the physical economist's notion of *per-capita*, *per-household*, and *per-square-kilometer* values for not-entropic improvement of relative potential population-density. The same principle of universally intelligible *natural law* can be expressed approximately in many ways, as has been the case down through the ages. It

is expressed most precisely in terms of physical economy viewed as that has been described here.”¹⁰

It is in that sense, as Jason Ross noted in the Briefing for April 23, 2025 that “*human progress has been the likely but uncertain outcome of history...*,” as Lyndon LaRouche wrote in his 1998 essay: “[The Substance of Morality.](#)”

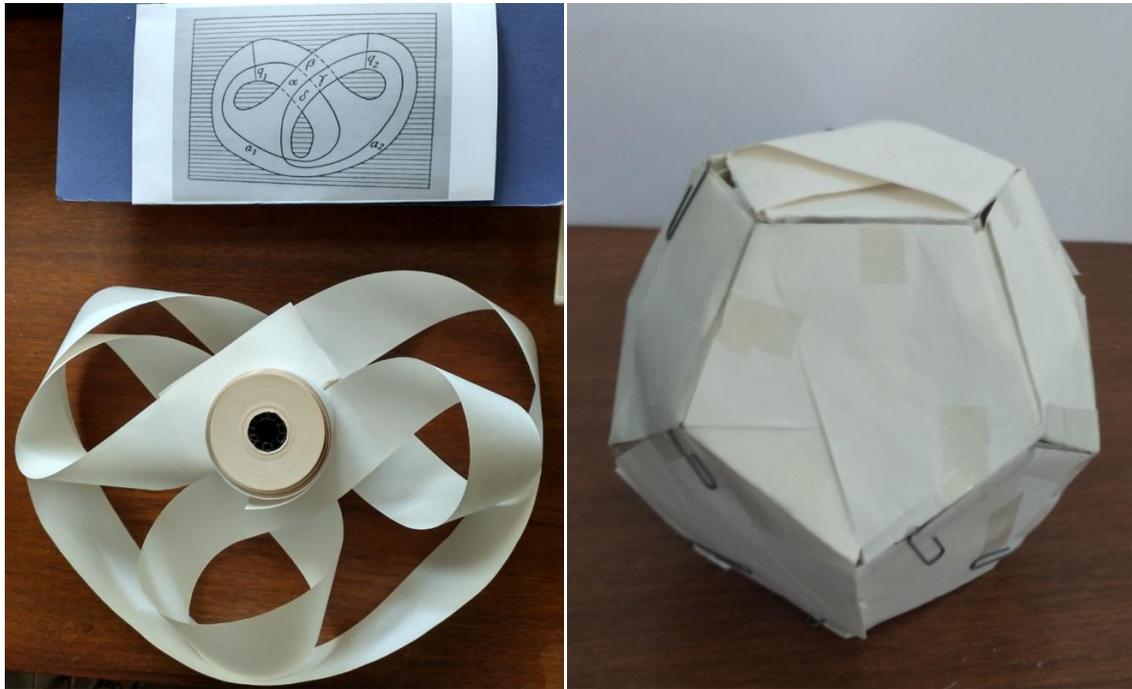


Figure 15. Folded and enfolded dodecahedral construction using the Riemann multi-dimensional quadratic torus principle of the Moebius Strip.

In conclusion, the beauty of the principle of change in the Zepp-LaRouche galactic dodecahedral sphere shows is that it can do the impossible. It is making visible the invisible by demonstrating *how ten red spherical circles can become one twelve-sided white dodecahedron*. It is that contradictory connection between the sphere and the polyhedron which, like the case of the Moebius strip, demonstrates the coincidence of opposites. So, in order to solve the riddle of LaRouche’s *Sphaerics*, your mind needs to look at these things as if you were turned upside down and standing on your head. Just turn yourself around a couple of times and you will succeed!

FUN

¹⁰ Lyndon LaRouche, [The Truth About Temporal Eternity](#), Fidelio, Vol. 3, No. 2, 1994. See also Lyndon LaRouche, [Economy and Ideas](#), EIR, February 28, 2005.