EXERCISE Science

MUSIC & STATECRAFT

How Space Is Organized

by Lyndon H. LaRouche, Jr.

August 29, 2007

Author's Prefatory Note on Music & Science: J.S. Bach, W.A. Mozart, Ludwig van Beethoven, and Franz Schubert, most notably, present us with music crafted to conform to what, viewed in retrospect, is implicitly a Riemannian conception of the characteristics of knowable physical spacetime as a whole. Nonetheless, relevant hoaxes expressing a contrary opinion, continue to proliferate, some in the name of what are purported to be scientific explanations of Johannes Kepler's discoveries, even, in one exceptionally disgusting, recent, Wikipedia-related case, planted, like a fungus, on the NASA web-site. The most essential facts about that latter hoax itself, will be identified, elsewhere, in testimony from relevant first-hand witnesses.¹

Here, in this report, I stress a crucial, related, underlying issue; with what is written here, I now take the discussion of the underlying, ontological idea of Kepler-Riemann space itself, to its appropriate, needed, still deeper level.

It is stressed here, below, in the main body of this report, that a competent grasp of the form of organization expressed

1. On May 25, 2007, months later than the December 2006 appearance of the LaRouche Youth Movement (LYM)'s original web page (http://www.wlym.com/~animations, copyright 2006 LaRouche Youth L.L.C.), the LYM has reported what is clearly a shoddy and shallow attempt at plagiarism, a pathetically incompetent forgery which appeared, months after the publication of the LYM's work, as an inset placed on the same NASA website where the LYM product had already appeared, months earlier. A direct comparison of key parts the original and the counterfeit, side by side, by topical sections, leaves no room for competent dispute of LYM's conclusion in this matter. The essentially, scientifically incompetent item, published many months later than the first appearance of the LYM's report, was a pathetic hoax whose anonymous authorship smelled of something like a parody of Maupertuis' infamous Eighteenth-Century hoax on the subject of the calculus, that a hoax which even Leibniz-hater Voltaire despised. See *Appendix*.

as the principle of gravitation in Kepler's Solar system, requires the same rejection of the usually supposed real existence of a simply visible space-time, which remains crucial for any honest and competent grasp of Kepler's work as a whole today.

That rejection, as I state it simply, as illustration, in these prefatory remarks, must always be raised as an emphatic denial of the separate functional existence of either a simply visible, or simply auditory space-time. That denial must be enforced in favor of a realization, that, essentially, it is precisely the apparently absolute contradiction between the two contrasted, naive notions of sense-certainty, sight and hearing, which is the required foundation, as in the notion of a "wavicle," for a competent practice of physical science in general, but emphatically so for any competent study of Kepler's work.

The contradiction between those two senses (as, with the other senses), which, when they are combined in the method of experimental science, as a manifold, provides a single conception located within a higher quality of state of mind than is known among even many professionals today. This is a state of mind, above the superficiality of sense-perceptions as such, a higher, visual-auditory standpoint, which then becomes both the principal, and the principled component of that single experience of reality. This approximation, the visual-auditory manifold, then, serves, exactly as Kepler did in The Harmony of the World, as the replacement for a naive reading of sense-experience.

This manifold, when employed in a task-oriented search for a principle enclosing the universe, then serves as a single, uniquely human conception of a type otherwise known only to the person of the Creator: that must be understood to signify the will to discover the means to change the behavior of the given form of the universe, either in part, or, potentially, on a broader scale. The method required by this higher,



Library of Congress

Helen Keller "listens" to music by feeling the vibrations from a piano. Her marvelous achievements underline that it is the human mind, not the senses, which are the seat of knowledge.

creative (i.e., anti-entropic) form of a single conception, must, therefore, replace the philosophical reductionist's naive devotion to mere perception of a statistical repeatability located within the fixed confines of what is, actually, an ontologically non-existent presumption of sense-certainty.

The crucial distinction of human mental behavior from that specific to the sense-perceptual manifold expressed as the behavior of an animal species, is man's specifically unique purpose, and ability to actually create, which is, essentially, the willful intention which translates into the actual existence of a capability to violate the oligarchical Olympian Zeus's ban against human knowledge of how to make seeming miracles of discovery of useful universal principles, to unleash knowledge of how man must change, first of all, the behavior of man himself, as his own behavior, and increased power, as a species, within the universe.

Thus, a proverbial Satan, typified by the Olympian Zeus and his pantheon, is the idealized prototype of the real-life oligarch who degrades men and women into the likeness of beasts, and therefore that Zeus, with the Delphi cult's eviltwin lackeys, Apollo and Dionysus, serves the purpose of poets and other creative thinkers as the Satanic archetype of all imperialist tyrants, who appears to man as a beast among beasts, a beast, like a creature from H.G. Wells' fictional Dr. Moreau, transforming men and women, his subjects and other victims, into the behavioral likeness of beasts. So, Delphi's Nietzschean Dionysus, like the post-World-War II Congress for Cultural Freedom, and the "Frankfurt School"

existentialists and former Freiberg Nazi professor Martin Heidegger, contributed toward the destruction of culture in Europe, and also, similarly, the savagely irrationalist "Authoritarian Personality" dogma of the cult of Theodor Adorno, Hannah Arendt, et al. within the U.S.A.²

Thus, when this matter is viewed so, the case of Zeus has profound implications for the contrary standpoint of Classical musical composition and the latter's performance; but, these implications also have a correspondingly profound importance for the comprehension of physical science generally, and for physical economy in particular. The systemic destruction of Classical musical culture, like the destruction of Classical drama's performance, as by the existentialism-ridden pestilence of the circles of the postwar Paris Review of Teddy Goldsmith, John Train, et al., or Stephen Spender, is an important example of this.

Competent science and Classical art each begin, when the naive sense-certainty specific to virtually illiterate men and women, is put aside. The senses, such as, principally, seeing and hearing, are to be considered only as, like the other scientific instruments, built-in instruments, delivered in a package with the newborn human infant, instruments to be employed in aid of the socially replicatable discoveries of universal physical principles.

The fact of the rich development of the mind of a Helen Keller, who lacked a functioning sense of sight or hearing, should have reminded any thoughtful person, that it is only the human mind itself, which is the seat of knowledge respecting practicable knowledge of the world which surrounds us, even when we can reach that mind which is imprisoned within a place without sight or hearing, only by indirect means.

In fact, **she created**, within her mind, a functional, social mapping of the universe which, in effect, corresponded functionally to the map of the social life of the person with full sight and hearing. She developed her own map which served the same purpose for her functioning as a social human being, as if her mental map of experience had been, socially, that of a sighted person with normal hearing. To that end, she generated, which is to say "created," that functional map. With help, yes. With great need of that help, yes. But, after all that,

^{2.} So, poet Goethe, in his *Grosskopta* fragment, attempted to portray Zeus, and, so, Romantic Hugo Wolf set Goethe's Zeus to song, but in a fashion not to my liking, despite the noble efforts of the Hugo Wolf Society's noble Friedrich Schorr.

she herself created it within herself.

The point I make here, also corresponds to the case of Carl Gauss's and Bernhard Riemann's collaboration with Wilhelm Weber on the true principle of electrodynamics, contrary to the foolish (and also nasty) Grassmann later: Weber et al. generated knowledge of a set of experimentally provable principles, a "map," discovered by the developed, sovereign cognitive powers of the individual human mind. The leading admirers of foolish science have not accepted that crucial-experimentally created map, from that time, to the present day!

When the needed improvement in the method of judgment of experience has been made, we must, then, experience a revolutionary change in the way we must think about not mere space as such, but physical space-time. Hermann Minkowski's famous 1907 argument, is a celebrated example of this fact; but, as I shall explain here, we must go much deeper than the otherwise able Minkowski did, then, with

his faulty, Lobatchevskian, rather than Riemannian conception of a non-Euclidean physical geometry. For understanding this fact, Bach, Mozart, and Beethoven will prove very helpful.

The crucial central feature of the greatly needed reform in the definition of scientific knowledge, must be premised on the actual inseparability of competent physical scientific method from the great musical reform by Johann Sebastian Bach. I mean Bach's reform as also developed by his great Classical disciples. That is the vehicle of the true principles of poetry and drama; it is the science of insight into the proper true, dynamic nature of the role of the individual within society. Since every true fundamental, or relative discovery, is new to relevant forms of human experience, science without Classical poetic expression, as irony, is not true science.⁴

The Controversy Over 'Angular Force'

In research conducted at Göttingen Univeristy with Carl Friedrich Gauss from 1830-1839, Wilhelm Weber exposed the fallacy of the attempts by Newton and his followers to reduce Kepler's discoveries of the laws governing planetary motion to an "inverse square law" relationship, and to then claim for that hoax the status of a universal physical principle. The experimental evidence established the truth of André-Marie Ampère's 1826 assertion of an "angular force" governing the relationship between electrical current elements. Hermann Grassmann insisted that the Ampère angular force could not exist, because it was more mathematically complicated than the simple inverse-square law. Hermann Helmholtz, with backing of Rudolf Clausius, later extended Grassmann's critique to Gauss and Weber's experimental validation of Ampère's electrodynamic theory.

In his 1846 memoir reporting the experimental work, Weber expressed the force between two electrical particles as dependent upon the relative velocities and accelerations of the particles. Weber later playfully described the paradoxical dependence of a force upon an acceleration (which is itself a component of "force" in the Newtonian system), as similar to the phenomenon of catalysis which Berzelius

had observed in chemical action.

Experiments, carried out in collaboration with Rudolf Kohlrausch at Göttingen in 1855, established the unknown constant in the Weber force law as equal to the product of the square root of 2 into the velocity of light. In an 1858 paper, "A Contribution to Electrodynamics," Bernhard Riemann, who was present at the experiments, proposed the "retarded propagation" of the electrodynamic potential at the velocity of light. The paper, which predated James Clerk Maxwell's now-famous proposal of a less rigorous representation of the phenomenon by almost a decade, was withdrawn from publication. When it was published post-humously, Clausius criticized Riemann's effort for an alleged mathematical error.

See:

Laurence Hecht, "The Atomic Science Textbooks Don't Teach: The Significance of the 1845 Gauss-Weber Correspondence," *21st Century Science & Technology*, Fall 1996, www.21stcenturysciencetech.com/articles/ Atomic_Science.pdf.

Wilhelm Weber, *Determinations of Electrodynamic Measure: Concerning a Universal Law of Electrical Action* (1846), transl. by Susan P. Johnson, www.21stcentury sciencetech.com/Articles%202007/Weber_1846.pdf.

Bernhard Riemann, "A Contribution to Electrodynamics" in *Collected Papers: Bernhard Riemann* (Heber City, UT: Kendrick Press, 2004), pp. 273-278.

—Laurence Hecht

^{3.} For a concise account of the scientific history of the "angular force" controversy, see box.

^{4.} John Keats' *Ode on a Grecian Urn*, is a convenient masterpiece to be used as a reference for this purpose. Like every discovered principle of physical science, the idea of the poem is as big as the universe, and powerful when recognized, but nowhere to be seen in any among the words or phrases. It is a fine example of a perfect, ontologically infinitesimal, efficient existence.

Now, look, on that account, at the function of what we know as the principled character of the social development of Classical music, as by Johann Sebastian Bach—the Bach of the Bachs.

I submit this report, as a work of conscience, which I would have wished to present as evoking a fond recollection of a great musician of our time, and very dear friend of decades, whose company I continue to miss, very much. He would probably greet my foregoing suggestion, with his typical bursts of that quality of laughter otherwise specific to the truly creative artistic thinkers I have known; my suggestion is, that, thus, after what I write here, departed scientist and author C.P. Snow, of Two Cultures fame, might now repose in sweet contentment.

1. Mozart K. 475

There is nothing in all credible expressions of modern Europe's Classical music and its performance, which is not rooted explicitly, as if axiomatically, in the work of Johann Sebastian Bach. There is no existence of actually "Classical" musical composition, or of its competent performance, which is not encompassed by a continuation of the "Columbus"-like discovery, by Bach, of the well-tempering of the Florentine *bel canto* tradition of the human singing voice.(Admittedly, his music is not always performed in that way.)

This discovery is most concisely demonstrated by the still persisting central role of the so-called "Royal Theme" of Bach, in such crucially significant instances as the K. 475 Fantasy of Mozart, especially in the refinements of his method traced from Mozart's association with the Sunday meetings, on the subject of the work and methods of Bach and Handel, convened at the Vienna residence of the host, Baron Gottfried van Swieten, a Bach scholar and former Ambassador to the court of Frederick the Great. Van Swieten brought a large collection of Bach manuscripts back to Vienna from Frederick the Great's Berlin, and had added relevant works by Handel. That Mozart K. 475, which, together with his great string quartets of that same interval, is among the crucially significant products of Mozart's association with that Sunday salon, which, itself, has also had an assuredly immortal place in its resonant influence on the work of the greatest composers and performing musical artists, from that time forward.

That model, as expressed in the form of that work, permeates the other work of Mozart and that of Beethoven, among others, and appears, with gripping persuasiveness, in key works attributed to the last months of Schubert's life, notably including his great piano sonata in C-minor (D958), which reflects the same Mozart presentation of the Royal Theme, as it is called, a Mozart treatment which is also the specific, signed—sotospeak—dedication of the entirety of Beethoven's



Wolfgang Amadeus Mozart, like all Bach's great disciples, unified the principles of scientific method with musical discovery.

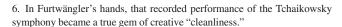
Library of Congress

Opus 111.5 This idea has dominated my own thinking about music, and the related matter of my specialty, the psychological organization of physical-economic space, ever increasingly, since my first hearing, in January 1946, of an HMV recorded performance under Wilhelm Furtwängler's conducting of a Tchaikowsky symphony, while I was housed in a U.S. Army replacement depot outside Calcutta, India. It was not that symphony itself, but Furtwängler's conducting, with his implicit use of the likeness of the Leibniz infinitesimal, which Furtwängler sometimes termed "performing between the notes," which virtually knocked me out of my chair on that occasion. The Mozart K. 475, expressing the same implied principle of true human creativity, has also been, since about that same time, almost the center of my experience of all Classical composition since Bach, as it had been for Beethoven, Schubert, and others. Furtwängler's method in conducting is exemplary of what is required in performance of all Classical

^{5.} There are three features of that Opus 111, a composition which I have loved more than any other solo-piano composition by Beethoven, that over the course of most of my adult life, features which are of special relevance in the report I am writing here. 1.) The opening, which already echoes the universal conception underlying Mozart's K. 475, but, more to the point, is a virtual act of creation (my essential subject in this report), which boldly defines the physical space-time which is that stage by which the performance of the composition as a whole is contained, as if in its own universe. 2.) The final portion of the concluding coda which, echoing that boldly great transition within the Third Movement of Beethoven's Opus 106 which inspired Brahms, the part of the Opus 111's coda which apotheosizes Mozart with an explicit, pivotal quote from Mozart's K. 475, leading into 3.) the almost divine affirmation of the Beethoven's personal homage to Mozart, in the close. All great Classical composers have followed and echoed J.S. Bach's revolution, in working in a similar direction, using a virtually Riemannian conception of universal physical space-time, a conception which has also long been my

compositions, or for lovely results even from works which are not perfectly Classical.⁶

Notably, I first became familiar with what I have already referenced as Schubert's great C-minor piano sonata, in that same interval of time I was based in that replacement depot, although I had been already aware, somewhat passionately, of the reflection of the opening of the K. 475 in work by Beethoven, in many other locations, such as the rather obvious conceptual design used for the opening of the Opus 57 F-minor ("Appassionata") and later, as in the intention of not only the awesome Opus 106, but, most explicitly, that Opus 111 as a whole, which latter grips me still, in memory, to this day.7 It was also the quality of experience of the Schubert C-minor sonata, and that great Ninth Symphony of Schubert rescued from dust by Robert Schumann, and delivered to its first performance by Felix Mendelssohn. That symphony's post-World War II performance under Furtwängler's direction, firmed up my opinion respecting Schubert's place and loyalties as of a spirit proximate to the presence of Beethoven.8

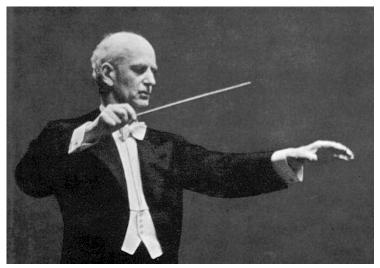


^{7.} Even in a not-so-nice recorded performance by the late Wilhelm Kempff, who made a bit of a mess of that business, but was the only recording handy back during the post-war 1940s.

The 'Royal Theme'

For further discussion of the pieces discussed here, with musical illustrations, see Lyndon H. LaRouche, Jr. et al., "The Substance of Morality," including an Appendix, "The 'Royal Theme' from A Musical Offering in Dialogue Among Bach, Mozart, and Beethoven," by Ortrun Cramer. These articles appeared in *Fidelio*, Winter 1998, and are available at: www.schillerinstitute.org/fid_97-01/984_substance_morality.html

The articles first appeared in EIR, Sept. 4, 1998.



Germany's Wilhelm Furtwängler, the greatest conductor of the past century, captured the concept of dynamics, and "the teleology to which the exertion is dedicated, which chooses the point of departure, and the route of intended travel."

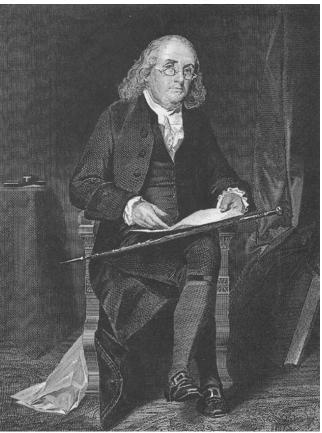
All of the preceding reflections on music here, are most relevant to that discussion of the universality, for Classical art and science, of this idea of space, in this present location. All truly great Classical composition, is implicitly organized around an underlying conception of the deep, and, actually, implicitly, deeply Riemannian, psychological organization of musical space-time, as exemplified by Furtwängler's conducting as "between the notes." This point of view requires us to see the performance of the notes as subordinated, that according to the unifying principle of Pythagorean, Platonic, Leibnizian, and Riemannian physical dynamis-dynamics, as truly great musical composers such as Bach, Mozart, and Beethoven do. All among that which each among these great composers have created, has been, in fact, a great moral act, the crafting of a mental image of an expanse which came to be known to us as of the quality, and in the form of a Riemannian physical spacetime. Within which space, the exploration and development of that so-defined domain proceeds, with successful climbers, in bringing science toward what is acceptable as a pinnacle, because it is the expression of a most gratifying sense of the inherent completeness, the integrity of that development.

Terror, the Napoleonic tyranny, and the evil which was Prince Metternich's (largely) sexual Congress of Vienna, marked a wave of infectious moral and intellectual degeneration, a taint which emerged as a controlling, corrupting, dynamically confining, tragic cultural matrix over most of Nineteenth-Century Europe. Franz Liszt and bomb-throwing '48er Richard Wagner typify the moral and intellectual degeneracy of such Classically trained talent in full, desperate flight from Classical art; but, even all still great and loyal Classical composers and poets of the generation of Shelley and Heine suffered in varying degrees, as Heine reveals even the effects on himself of the cultural dynamic installed at Vienna, in the aftermath of the Jacobin Terror, Napoleon, and the Vienna Congress. Art, and, to a large degree, science, are also a reflection of the truly dynamic relationship between the creative mind and the audience for its productions.

^{8.} As I stated the fact in locations published earlier, there is a certain difference of quality between the great Classical composers, and poets, alike, prior to the deaths of Beethoven and Schubert, and great, actually Classical composers, and poets, who emerged as adult artists later. Schubert, like the Percy Shelley of his *In Defence of Poetry*, typifies, like Heinrich Heine, the shadow of the glorious historical moments of their Classical tradition, but with some uncertainties which reflected social pressures from the oncoming decadence represented by Romanticism. The problem of those who came into adulthood about the time of the Vienna Congress and Metternich decrees, or slightly earlier, was the problem which was insightfully presented by Heinrich Heine, in his work on the subject of *The Romantic School*. The Jacobin

This aspect of that cultural revolution of the followers of Gottfried Leibniz and Johann Sebastian Bach, launched by the great Abraham Kästner, in collaboration with his student and friend Gotthold Lessing, and Lessing's collaborator, the great genius Moses Mendelssohn, had created the context, known as the Classical revolution in European culture, which was the indispensable context, the context provided by the influence of the Classical revolution in late Eighteenth-Century Europe, for our American Revolution of 1776.9 The rescue of Shakespeare's work from torture in both the virtual and actual whorehouses of Eighteenth-Century London's Liberalism, the rescue of Shakespeare's work which was promoted by Kästner, as reflected in the genius of Kästner's protégé Lessing, and, reflected in turn, the best part of Johann Wolfgang von Goethe, and in the towering genius of Friedrich Schiller and his circle, had supplied the kernel of possibility for the founding of that great American republic organized around the leading figure of that scientist and true Prometheus of his time, world citizen, and patriot, Benjamin Franklin.

It is not only our now imperilled republic, but civilization at large, which now depends, in a degree which permits no quibbling about the matter, on a grasp of the great cultural revolutions in Europe, especially the Fifteenth-Century Renaissance centered on the great Cathedral of Florence, and the related heritage of that Cardinal Nicholas of Cusa who inspired not only the discovery of America, but Cusa's faithful followers, Leonardo da Vinci, Johannes Kepler, and Leibniz, and also the great 1648 Peace of Westphalia, without which the creation of our republic would not have become possible. In all of this, the work and heritage of Johann Sebastian Bach



Library of Congress

Benjamin Franklin's visit with the scientist Abraham Kästner at Göttingen in 1766, was just one of the many ways in which the greatest European minds influenced "that scientist and true Promethean of his time, world citizen, and patriot."

is not only critical, but much more critical, culturally, than even the best living professional artists might suspect.

Without due regard for the full spectrum of the leading, closely related developments in science and Classical art, and their interconnections, in the making of history, we are as if purblind, perhaps learning much, but knowing almost nothing.

2. Life in Our Political Space

MySpace never actually existed, except as a place, a second Tavistock Clinic, so to speak, where dead souls are buried, like prisoners, by Rupert Murdoch's crew of electronic grave-diggers. Only our political space actually exists, and lives.

In my August 3rd prolegomena, *The End of Our Delusion!*, ¹⁰ I proposed that the U.S. Democratic Party, and others, must recognize, that the survival of both our republic, and also the larger world, at our present point of onrushing, existential

^{9.} Less known today, has been the important historical fact that Moses Mendelssohn created the program of education used for the training of the famous Gerhard von Scharnhorst at the school of Mendelssohn's friend and his great admirer, Graf Wilhelm Schaumburg-Lippe. Put Napoleon Bonaparte aside. The revolutionary military leaders of that time, were not from the infantry or cavalry, but the intellectually related fields of France's "Author of Victory" Lazare Carnot (science-engineering) and Scharnhorst (artillery). It was the improvement of artillery and its use, by the Ecole Polytechnique of Carnot's partner Gaspard Monge, which, not the braggart Savigny, contributed a crucial part of Napoleon's victories. Notably, after Waterloo and the (frankly sexual) Congress of Vienna, with Scharnhorst dead, and the Duke of Wellington in the occupation of France, Wellington installed the British Bourbon asset on the throne of France; the education program of the Ecole Polytechnique was in the process of being destroyed by a pair of scoundrels, Laplace and Cauchy, and France's greatest military genius of that age, "Author of Victory" and leading scientist Lazare Carnot was sent into exile, to live out the last years of his life, still honored as a former fellow-member, then with Alexander von Humboldt, of the Ecole Polytechnique, but with a post, retaining his full military rank of the past, passing the rest of his life in Magdeburg. Later, in a time when Sadi Carnot was President of France, Lazare's remains were escorted with full military honors supplied by Germany, to a last resting place in the Paris Invalides. Few seem to remember, today, how much Germany and France also owed on this account, to the Orthodox Jew, Moses Mendelssohn, who had played a leading role, with Kästner's protégé Gotthold Lessing, in the great Eighteenth-Century Classical renaissance in Germany and beyond. If we do not do justice in such wonderful cases, how could anyone ever expect justice from us?

^{10.} Executive Intelligence Review, Aug. 31, 2007.



National Archives

"Immigration into our republic . . . has transformed us, implicitly, and, in some large degree, actually, into a distilled self-expression of the common interest of the human family in the large," writes LaRouche. Here, newcomers arrive at Ellis Island, New York, in the early 20th Century.

quality of economic crisis, demands that we, now, promptly, abandon the ways of thinking about economy which have controlled, and ruined the destiny of our republic during these recent decades, most emphatically since the tides of willful decadence of the interval 1968-1972 and beyond. In that report launched on August 3rd, I emphasized the needed remedies for the threat posed by a currently onrushing, and very advanced state of spiralling and accelerating collapse of the present world economic systems. I warned that these considerations should impel a wise U.S. Democratic Party and U.S. government, to adopt what must seem to most, now, as revolutionary changes in ways of thinking about economy. These are revolutionary changes, but are more obviously movements away from recent decades of ruinous practice, and are fully consistent with the essential, constitutional tradition of the preparation for, and realization of the existence of our republic. This is, in fact, a tradition which has existed among us since roots planted here during the first half of the Seventeenth Century, a tradition reflected in my own, actually lived experience of adolescence and adulthood, and war, under the conditions of the great recovery organized under the leadership of President Franklin Roosevelt.

In *The End of Our Delusion!*, I also emphasized the functionally essential point on which any actual recovery now depends, that principle of *dynamics which is not* some Johnny-come-lately scheme. I now emphasize two principled points on this account:

First: I emphasize the American System, as it was founded and developed within our shores, here, during the course of the events leading into the Declaration of Independence and adoption of our Federal Constitution. This historical experience is axiomatically incompatible, on principle, with the economic systems which have usually ruled, and frequently ruined the hopeful prospects for modern western and central Europe, that since about the same time that our Federal form of constitutional republic had been installed.

Second: that the physical-scientific implications of that founding of our republic, had their proximate origin in the 1690s refounding of the ancient Pythagorean and Platonic principle of *dynamis* by Gottfried Leibniz, as the modern *dynamics*, and in the closely related articulation of that form of mathematical physics which had been intended by Leibniz, and which was to be realized, later, in the leading work of Bernhard Riemann.

Immigration into our republic since those earlier times, has trans-

formed us, implicitly, and, in some large degree, actually, into a distilled self-expression of the common interest of the human family in the large. This became clearly what we were close to becoming, by intention, once again, under President Franklin Roosevelt. That development is to be recognized as an actual expression of the present, vital self-interest of the posterity of all humanity, and, hopefully, in fact of practice, an intended direction.

That aim remains implicit, still today, in the founding, open statement of resolution by the great and healing, 1648 Treaty of Westphalia; it is "the advantage of the other," which served as the founding principle of that peace, which properly motivates the great melting pot which was our republic, into reliving the same spirit exhibited by the greatest among our founders. As we would have acted, had President Franklin D. Roosevelt not died when he did, we had been destined, then, to be the implicit special embodiment of the great principle of that Treaty of Westphalia, a republic which exists, as Germany's great Friedrich Schiller emphasized, to promote the betterment of the condition of truly human life for all mankind, as in the legacy for the future, of Solon of Athens and the great Plato.

In other words, we were crafted by the intention to serve a mission, not for selfishness, but, as the Marquis de Lafayette emphasized at that time, to be a perfectly sovereign republic, but also a beacon for the cause of the liberty and freedom of all mankind. That is the pursuit of happiness, as this idea was incorporated as the central principle of our 1776 Declaration of Independence, by that passage excerpted by our founders

from Leibniz's second rebuttal of the evils of John Locke. 11 We were intended to fulfill that promise, as many among us thought we were doing during our role in what came to be called "World War II," as we emerged from the victory over Adolf Hitler. Unfortunately, after the death of our beloved President Franklin Roosevelt, our morals were changed, sometimes as if inch-by-inch, going from the top, downward in quality. Our people became, in large degree, selfish, mean, and of increasingly hateful disposition, as we adopted more and more of the bigoted, and crudely selfish traditions of that British, and also brutish, imperialist misconception of "human nature" from which we had escaped to enjoy our original form of constitutional freedom as a republic.

I Am a Stubborn Cuss

After the close of war, when I returned here from South Asia, I was fully in accord with the Franklin Roosevelt legacy, and have remained so, that more and more militantly, and with excellent reasons, rooted in experience, for this, to the present time. It was not so easy, even then, to find many others, even among veterans, who retained that kind of commitment which I did, under President Truman and later; but, being a "stubborn cuss" in my own fashion, I remained, not so much actually a follower of Franklin Roosevelt, but one sharing that historical commitment of our nation which I recognized in the enduring contribution of his mission as President and leader during times of grave economic depression and war.

On that account, my adult life since those times became, in effect, a decades-long span of virtually implicit apprenticeship in the implications of economy in particular, and, gradually, and then more and more, statecraft generally. Matters with me continued so, until the time of crisis, during the course of 1968-1980, when it was made clear, by the interval of U.S. economic crisis of February 1968 through January 1972, and by related major world events of 1971-1972, that the requirements and qualifications for seeking a leading position in our affairs had come, like a bird landing suddenly upon my shoulder, as if by default.

It was as if a Private First Class might arrive, later in life, at the state of affairs, when, as by attrition, and, hopefully, also by training and experience, at which he must play, unexpectedly, a part like that of a commanding general in warfare. As it is very well known, my arrival at the point of the 1971-1972 turn in my affairs, was not widely welcomed; but, that is precisely the risk which any qualified leader must accept, and

that thankfully, to be thankful for, among other advantages, the wonderful means for discovering which persons on one's horizon are the assorted fools and foes, against whose mere folly or wickedness he has been called to contend.

This turn in my experience was colored largely by what was shown to be, early on in my younger years, a fiercely independent streak of creative intellectual potential, even, usually, against the grain of the supposed norm of schoolroom, home, university, and other opinion. I saw myself, early on, even in childhood, as situated to appear as an ugly duckling, or, as a black chick in a white world, That was, as I could attest, and that richly, an intrinsically troubled, and sometimes hazardous course for me to adopt; but, it is the only course by which one were likely to reach the day at which he (or she) is frankly surprised to discover himself actually qualified to lead even a nation, as Franklin Roosevelt did, amid the ruin brought about by that nation's earlier, popular and related follies.

I am thus qualified to warn would-be candidates for highest office, if, now, more than a wee bit old for the job of President. Nonetheless, I am able and free to launch initiatives, and to teach a thing or two to the young ones coming up. Therefore, I must warn you, that if you were to think you had reached the occasion to assume the leadership of a nation in crisis, the crucial test is not what you merely say, or even think about this or that subject; the issue, then, is, simply, how you think about almost everything.12 Whatever you are, you must be that universally. Otherwise, if you do not adhere to that sense of the mission, however noble the mission you choose may be, the state of confusion, or other corruption which you have permitted to remain within you, the corruption which is your unresolved internal conflict between mission and sentiment, becomes the internal conflict which, in the extreme, would tear you apart, or, would, in even lesser degree, ruin your ability to stay the course of effective leadership without the fatal error of hesitation, when prompt and clear intention were needed most. Such is, in the extreme, the great crisis of present misleadership of our nation, a quality of misleadership still permeating even those leading candidates which are to be seriously considered, which now threatens both our world at large, and our nation in particular.¹³ To understand that point

^{11.} I should repeat here, that, out of respect to Locke's death during the period Leibniz was writing his second rebuttal, Leibniz did not publish that work during his own lifetime. The belated publication was at the prompting of the circles of the celebrated Abraham Kästner, the Göttingen host of Benjamin Franklin's 1766 visit there. It was from the circulation of Leibniz's second rebuttal, that the excerpt, "the pursuit of happiness," which was introduced by Franklin to the core of the principled constitutional features of the 1776 Declaration of Independence, and thence into its restatement as the Preamble of the U.S. Federal Constitution.

^{12.} Those citizens who believe that tricky "test questions," as by polling agencies, or presented by live mass media, are the basis for a choice of candidate for high office, especially the office of U.S. President, are among the greatest of all silly fools, who are all too commonly typical of both the dangerous and also silliest of these times. Wise citizens would select important leaders not for what they say in bite-sized drops, but for the way in which the discernable map of their mind would lead those candidates under the conditions of their future personal crisis-situations.

^{13.} It is especially on this account, that my age prompts me to worry greatly about those who seem to think of themselves as leading candidates for U.S. President or like positions. Largely, on this account, the known candidates' performances thus far, worry me enormously. They are all too much of the same temperament, and selections of types of agendas, as that quality which has created, or condoned the misery which exists today.

clearly, you must first grasp that concept of *dynamics* which was presented as the pervading feature of my August prolegomena.

Beethoven helps.

3. Bach's Space-Time, and Ours

Lest you might have forgotten, I caution you as you read on, that this is not a treatise on music, but on the subject of certain little known, higher functions of the individual human mind: partly as the mind of an individual, but, also as the specifically social-dynamic characteristics that mind has also acquired, as a social phenomenon, and as a political phenomenon, as during a relevant, particular choice of time, place, and other circumstance, especially in this time of a nation and wider world in crisis. Although this is not a treatise on music, truly Classical music has played a crucial, integral role in the healthy moral, and related development in the individual's and society's power to think, during the best intervals of modern European civilization. In this report, my included, necessary, recurring emphasis on music, and Classical poetry, lies in the phase-spatial function expressed by what Plato's Socrates and the Christian Apostles John and Paul emphasized, with the same meaning, as the great constitutional principle of truly civilized peoples, known as agapē. That is the same $agap\bar{e}$, the enemy of usury, which served as the principle of the great 1648 Treaty of Westphalia, and the principle (the pursuit of happiness), the same principle restated as the supreme *Preamble* of our Federal Constitution. This report therefore continues to touch here, repeatedly, and necessarily, on the common topic of Classical modes in poetry and music; but the subject of this piece as a whole remains statecraft.

There is an important connection of the great work of the ancient Pythagoreans to the Florentine *bel canto* discipline for the natural human singing (and, speaking) voice, at C=256 and the consequent, respective, famous F# register shifts of the competently developed *bel canto* voice of the greatest of the sopranos and tenors of earlier generations. Johann Sebastian Bach's grasp of the implications of that for the necessary discipline of well-tempering, has a crucially important bearing on the matters of *both* physical science and Classical polyphony: a connection which is best made clear through the great discovery of the role of harmonics in the ordering of the internal organization of our Kepler's Solar system.¹⁴



There is nothing in the competent performance of Europe's Classical music that is not rooted explicitly in the work of J.S. Bach.

Maintaining the standards which those specifications imply, is indispensable, if the actual benefit of the Classical legacy for society is actually to be realized.

For example, as the celebrated Albert Einstein came to view matters, the uniquely valid current of development in modern European physical science, lies within a process of development traced, with unique appropriateness, from Kepler through Bernhard Riemann. For reasons which certainly would not surprise a skilled amateur violinist, Einstein, that report would certainly have satisfied the Kepler who assigned crucially important tasks of discovery of principle to "future mathematicians."

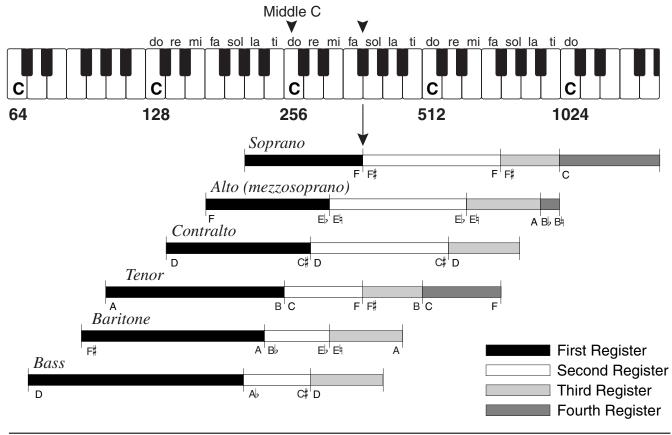
On this account, there is a specific, historical point of indispensable conjunction of Classical *bel canto* performance with Bach's work, within the rise of modern physical science out of the revolution in scientific method introduced by Cardinal Nicholas of Cusa, and by some among his followers in physical science and art as Luca Pacioli, Leonardo da Vinci, and Johannes Kepler.

The principal heirs of this legacy of agapic science, are

soon lost, burned out by the lusts expressed by both the obscenely pro-existentialist post-war *Paris Review* and among the hucksters of those relevant real-estate and related interests, who tended to treat great artists as if they were performing circus animals, or Las Vegas-style "talent." The best way to equip persons to conduct, and to understand intelligent speech, is to train them to think in modes of Classical *bel canto* song and poetry.

^{14.} All among the really great singing-voices of my own and the preceding generation, as heard directly by my generation, would agree, and did agree, explicitly, to a large degree, with my policy on this account. The post-World War II "official" change of assigned register-shift was, initially, chiefly a reflection of the modernist, or worse folly of the real-estate interests which demanded an elevation of tuning from about A=432 to 440, and then much higher. Only the exceptional singing voice could tolerate many years of that reckless, and essentially immoral treatment; other great artistic talent was too

The Six Species of the Human Voice, and Their Registers



EIRNS

many, but, shall we say for the sake of a light touch, not too many. In modern physical science, they are chiefly luminaries of science such as Kepler himself, Pierre de Fermat, Gottfried W. Leibniz, Carl F. Gauss, and Bernhard Riemann, and also their principal immediate collaborators, and their faithful followers. More recently, for the purposes of the discussion here, the Max Planck who was targeted so viciously by the rats bred by that virtual, mad Mephistopheles, Ernst Mach, is notable, while, in the tradition of the camp to which I adhere, there is the noble genius V.I. Vernadsky, and Einstein himself, who are outstanding in the sense of being, for us, outstanding among the more nearly contemporary leaders among such world-historical figures.

In all of this, Kepler and J.S. Bach have a very special, crucial connection, on which I place the emphasis now. The most essential connection today, is the ugly fact, that the world of modern European cultures, has come to be dominated by increasingly radical forms of Sophist styles, chiefly those cacophonous utterances which are termed *reductionist*, in science.

The root of this widespread moral and intellectual decadence, called, variously, reductionism, empiricism, positivism, existentialism, and so on, is, as I emphasized in my *The End of Our Delusion!*, ¹⁵ chiefly the result of the spread of what is termed that same modern *philosophical and political Liberalism*, which was established as an institution, and method, within modern society, through Paolo Sarpi's resurrection of the medieval irrationalist William of Ockham.

As with Ockham, so for the Anglo-Dutch Liberalism established by Sarpi's broad influence in northern European maritime centers, such as the Netherlands and England of René Descartes and William of Orange, no actual principle of human knowledge is permitted in physical science, or otherwise. Under the rule of that Liberalism, otherwise known as *empiricism*, or simply *reductionism* in general, a substitute for science is provided, most notably, by the successive frauds of Sarpi's lackey Galileo and by Descartes, as the politically motivated hoaxes of de Moivre, D'Alembert, Leonhard Euler, and Lagrange, were exposed as sophistries of an empty mathematics, by Carl F. Gauss's 1799 doctoral dissertation.

Therefore, consider the following.

^{15.} LaRouche, The End of Our Delusion!, op. cit.

Science, Space & Music

The prescribed abolition of a continued defense of Euclidean and kindred systems of geometry, as prescribed in Bernhard Riemann's 1854 Göttingen habilitation dissertation, had the effect, and the intention, of shifting the premises of all relatively valid physical science, universally, from the idea of the utopian, Euclidean-Cartesian extension of a starting-point in the very small, to the primary location in science's relationship to the very large, to the recognition that the small is really expressed only in its relationship to the effects of the great self-boundaries in discoverable so-called universal principles, within whose bounds our universe confines, and defines itself. In other words: *dynamics*.

These are the boundaries, such as Kepler's discovery of universal gravitation, which typify what are to be identified as experimentally-based universal principles, principles, such as Kepler's discovery of gravitation, which contain the existence of the universe as a whole, and which serve as that form of self-bounding of that universe which is expressed by that same principle, of *dynamics*, which was introduced for its use as a conception of modern scientific method, by Leibniz, during the interval 1692-1695. Thus, these are boundaries of not only the existing universe itself, but, therefore, of all processes within it.¹⁶

As I have stated repeatedly in earlier published locations, both in writing, as in lectures, and in private conversations: the use of the term *dynamics* to that effect was intended, by Leibniz, to represent a modern revival of the concept termed *dynamis*, as used by the Pythagoreans and the closely related circles of Socrates and Plato, and was associated, then, prior to Riemann's refinement of the concept of dynamic hypergeometry, with, chiefly, Riemann forerunners such as Carl F. Gauss, Niels Abel, Wilhelm Weber, and Lejeune Dirichlet.¹⁷

Traces of this development appeared in the work of the circles of Alexander von Humboldt's associates, who were Laplace's and Cauchy's leading adversaries within the post-Vienna Congress setting of the life of the internally conflicted, post-1815 Ecole Polytechnique.¹⁸

Universal gravitation, as discovered and defined by Kepler in his capacity as the avowed follower of Cardinal Nicholas of Cusa, is the prototype of that modern physical-scientific, dynamical notion of self-bounding, a notion which came to be known, centuries later, as Riemannian. Hence: Albert Einstein's recognition of the fact, that all valid known modern science is bounded by the process of developments proceeding from the work of Kepler, into the specifically related accomplishments, respecting fundamentals, of Bernhard Riemann.

Now, therefore, conceive of a physical geometry which meets that top-down, dynamical view of the universe's relationships to the processes which it contains as "internal" to it. To accomplish that, one must ask: what is the characteristic thing which such a universe does, which self-defines it as a universe? I think that the answer to that question would not have astonished Cusa, Kepler, Leibniz, or Riemann, at least not for long. The answer which properly follows from that question, reflects such precedents as Philo of Alexandria's denunciation of that silly, but also wicked Aristotelean notion of the Creator as having become self-afflicted with helplessness by the act of Creation, as this Aristotelean folly was later reasserted implicitly by Isaac Newton's political controllers and by the foolish "Second Law of Thermodynamics" by Clausius, Grassmann, and Kelvin.

The truth is, that the universe as a whole, as Philo's theological denunciation of the form of pagan Sophistry of Aristotle implies, and as Heracleitus and Plato had insisted in their time, is creating itself, over and over again, always aiming, thus, for *change* to qualitatively higher states of its own being. It is a self-creating universe. In other choice of language, it is an *anti-entropic* entity, defining a universe absolutely opposite to that blasphemous, neo-malthusian concept which is the neo-malthusian model on which the image of the Clausius-Grassmann-Kelvin "Second Law" is premised.¹⁹ That, following the famous respective precedents of Heracleitus and

EIR September 14, 2007

^{16.} This is not entirely a development within modern European civilization. The ancient *Sphaerics* which the Pythagoreans and others inherited from Egypt, is the actual existing forerunner, called then *dynamis*, now called Leibnizian *dynamics*, the method, reintroduced to modern European society by Nicholas of Cusa's *De Docta Ignorantia*, which, in turn, is the standpoint explicitly avowed in Riemann's 1854 habilitation dissertation.

^{17.} Modern dynamics, as defined in Gottfried Leibniz's 1695 Specimen Dynamicum, is, at its root, a revival of the pre-Euclidean mode of physical geometry called Sphaerics, with which the leading work, referenced by dynamis, of both the Pythagoreans and the other circles of Plato were associated. It is properly recognized as rooted in the principles of anti-Euclidean geometry. Examination of the method employed by the circles of the Pythagoreans and Plato, shows that Sphaerics is a reflection of ancient, very long-cycle maritime astronomy of the type reflected in the implications of the construction of the Great Pyramid of Giza. This astronomy already conceived of the universe as efficiently bounded, rather than extended indefinitely, from the very small, in linear space. The celebrated doubling of the cube, solely by methods of construction, by the Pythagorean, and friend of Plato, Archytas, has crucial implications for understanding these connections, as noted by Eratosthenes. This is underlined by the fact that the astronomy of Claudius Ptolemy was a fraudulent piece of sophistry concocted by what might be called, euphemistically, "adjustment" of the preceding work of Aristarchus of Samos. In contrast, as Kepler showed, Copernicus and Brahe were honest work-

ers, whose errors were not malicious, but were simply honest shortcomings, a reflection of the fact that they had failed to solve the fundamental problem of principle, which Kepler did solve in essential respects.

^{18.} The discovery of the relevant long-missing paper of Abel occurred in the auditing of the personal archives of Cauchy, after swindler Cauchy's death.

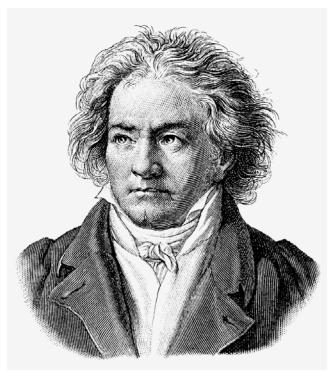
^{19.} Here, I am referencing the famous denunciation, by Philo of Alexandria, of Aristotle's version of a "God is dead" assertion, Aristotle's sophistry, that if God is perfect, then his original creation is perfect, and therefore could not be altered by God himself, thus leaving the field open for Satan to roam. This Aristotelean view, from which the "God is dead" of Dionysian cultist and forerunner of Nazism, Friedrich Nietzsche, is derived, is also the ideological root of the sophistry of modern malthusian dogmas such as today's "Global Warming" hoax.

Plato, ²⁰ is the crucial, anti-entropic implication of Riemann's principled discovery.

On the subject of Titius-Bode and all that, as Robert Burns might have spoken, the modern gnostic reductionists of academia could never actually provide a rational presentation of the general principle of gravitation, for which Kepler's then-known portion of the Solar system remains unique in fact, to the present time. The Sophist's scheme called Titius-Bode, is the attempted production of a likeness of a waxwork-museum dummy, a born-dead soul in science, a purported approximation, virtually a stuffed children's toy, being passed off as the image to replace the living work of Kepler. This aspect of Kepler's work, was a matter thoroughly, and hotly reviewed, during the middle into late 1980s, in a series of meetings, to which I have referred elsewhere, featuring physical scientists associated with the Fusion Energy Foundation (FEF).²¹

The Implications for Music

To refresh the reader's recollection of where we are going, on this leg of our journey into what is actually political *science*, is not only the structured physical-musical law of hearing²² as integrated with the relevant visual imageries. In Kepler's original discovery of universal gravitation; *the method of composition of Bach and his most notable followers, situates the composer's musical composition as adumbrated*



www.arttoday.com

Ludwig van Beethoven. LaRouche reports that he has loved Beethoven's Opus 111 more than any other solo-piano composition by Beethoven, over the course of most of his adult life. Its unique features are discussed here.

within the frankly dynamic notion of all effective action within the universe: as an expression of **the self-development** of **that** universality.

That is to emphasize, that Bach adopts, and employs the idea of functional universality in his concept of well-tempering, as in the case of the Royal Theme, and the Art of the Fugue, and as Beethoven opens his Opus 111. That is Mozart's treatment of the Bach Royal Theme from the opening, in K. 475. That is the opening definition of musical space in, for example, the Beethoven Appassionata, the Opus 106, and, again, the Opus 111. For Johann Sebastian Bach—The Bach of Bachs—this is certainly also a matter of his Christian theology: the notion of a created universe, created in such a fashion that man's mind must comprehend all important things as reflections of the action of a divine, always efficient principle of Genesis: contrary to the "God is dead" conjecture, an ongoing universal creation of ever higher states of being, in which men and women are assigned to function in the likeness of the Creator: Leibniz's "best of all possible worlds." 23

^{20.} E.g., Plato, Parmenides dialogue.

^{21.} In the original report on the Harmony, by the LYM team, a professionally trained cellist performed each of the frequencies specified by Kepler, supplying an essential ingredient for constructing the system of animations supplied to illustrate the manner in which the proposition was generated by Kepler's discoveries. On the subject of FEF: After the infamous 1988 Alexandria trial in which I participated as a victim, it was demonstrated that the leading charges against the defendants had depended significantly on that court's hiding of its own complicity in the earlier composition of a fraud upon a Federal bankruptcy court. The failure to correct that error by that Court, put an important scientific institution, the FEF, out of business, and thus, by not acting against the willful error crafted by a Federal judge's Rule 11 directive, also, avoided a relevant retrial of the 1988 case which could have occurred on that issue of a fraudulent bankruptcy action in which that Federal court had been complicit. The motive for this hoax was a heavily funded reaction, launched beginning Spring 1983, from circles, featuring the notorieties Richard Mellon Scaife, John Train, et al., reacting to my role in crafting the proposal of a Strategic Defense Initiative (SDI) which President Reagan had presented to the Soviet Union in a famous television address, a month earlier. The relevant far-right-wing circles and related financier and related circles, in and out of government, were determined to shut me and FEF down, permanently. They are at it, again, today. John Train, who organized the salon used to launch those attacks, had been formerly a prominent figure of the Paris Review deployed in the notorious effort to destroy Classical culture in Europe. Relevant attorneys and also even a Federal judge in relevant 1984 and later cases, repeatedly let the "well-connected" Train off the hook in this and related matters. Not all Federal judges are as problematic as that, of course. Federal Judge Robert Keeton, now recently deceased, in a related case in Boston, for example, ran an honest trial.

^{22.} The physics of sound and hearing have a functional relationship, of course, but for reasons already delivered here earlier, the physics of the conception of hearing and the physics of sound are not the same subject.

^{23.} *Nietzsche is dead!* If we are to accept the testimony of the Apostles John and Paul, this is essentially the Christian view. It is to be emphasized, on that account, that Leibniz had exerted a powerful, and persisting influence on behalf of his project of reuniting the Christian church, and that Johann Sebastian Bach's adult career was beginning within the time-frame associated with



EIRNS/Chris Jadatz

Maestro José Briano (left), a renowned vocal teacher from Mexico, works with the LaRouche Youth Movmement in Los Angeles on May 15, 2007. He specializes in the Florentine bel canto tradition of the human singing voice.

Like the Riemann of his own habilitation dissertation, Bach, like the Mozart of his own K. 475, like the Beethoven of the Opera 106 and 111, defined the relevant universe, first, and then placed the unfolding process within that. Their work of Classical composition as a whole ends, in each relevant case, with that universe's development fully, coherently explored as an expression of the phase-spatial principle which the composer has selected.²⁴ All great Classical composition

Leibniz's death. Leipzig-born Abraham Kästner, born in 1719, three years after Leibniz's death, had dedicated his life to the combined missions of promoting the life's work of Leibniz and J.S. Bach, early on. The Sophist corruption, known as Eighteenth-Century Anglo-Dutch Liberalism, had not yet become securely triumphant during the period of Bach's youth. Many philosophical errors of interpretation of ideas would be better avoided with the exercise of decent respect for the principle of historical specificity.

24. Optimally, there must be an opening section which defines a certain phase of the universe, one intended to contain an included, physical-infinitesimal-like feature of tension, an implied stubborn irony, a question-mark, and, thus, a spur to development, as wonderfully typified, with such concentrated tension, by the concluding moments of preludes of Beethoven's first movement for the Opus 111, and for the great fugue of the Opus 106. The action of that infinitesimal-like, ironical feature, is then revealed as "lawfully" coherent with the universe in which it is situated, but also changes that universe, to produce a new qualitative state of being, to be seen, as if retrospectively, at the close. All great drama, as with the case of the ghost's first appearance in Shakespeare's Hamlet, has the related kind of intended function. All great Classical musical composition, from Johann Sebastian Bach onwards, and all great Classical drama, especially tragedies such as those of Aeschylus, Shakespeare, and Schiller, are composed on the basis of that same type of working principle, and should be performed accordingly. Shakespeare and Schiller present us not with mere drama, but living medieval and modern European history's tragic essence apprehended.

since J.S. Bach has been implicitly Riemannian in that sense of *a unifying universal intention: functionally defined (by his method in counterpoint), as a single, unifying, creative identity.*

For example, how does one recognize a coherently composed (and, hopefully, coherently performed) composition? Ah! Some might think, mistakenly, lower jaws drooping in expressions of incredulity, that Beethoven should have considered Rameau or Fux as knowledgeable in the composition of music. A successful Classical composition, of any coherent form of existence, in art or otherwise, begins to be composed as a satisfactorily completely work, if and when the idea of a coherent development coincides, in retrospect, with the result of that process of development, when, as some prefer to say, "It

comes together."

Thus, in a successfully completed process of Classical composition, and its performance (as in competent statecraft), the chosen destination selects the beginning of its own development.

One approaches a newly discovered island, or a strange planet, or prospective battlefield, with the intent of exploring it fully before settling in. Nor, unless one is a fool, does one settle in permanently in any battlefield, if it is not already the entire world, or at least a continent. A reasonable composer creates such a domain, and does not advertise that kind of artistic "real-estate" for sale unless, and until, he knows how to develop that territory as a whole, and is able to present it only as one for which no significant, functional aspect remains undeveloped.

This means, that the finished composition is expressed by the transformations expressed, in turn, in its conclusion, not its conclusion merely on paper, but the intended conclusion of completing its performance without shameful consequences. Then, when that conclusion has been defined, he returns his attention to refining the beginning of the intended performance, to the germ from which the completed work will have begun. His departure for that journey, is chosen from foreknowledge steeped in certainty of the pathway of practice for reaching his destination. Then, when that sculpture has been completed, he (or, she) must breathe the life, the truly ontological infinitesimal, into its performance. There, the exceptional director, or Classical musical performer, one of a relevant type with a deep personal moral integrity in his approach, especially, is required, above all else, to make it, the great

dramatists' or musical director's and players' work, "come together," to that specific effect.

That policy is typical of dynamics, either in art or history. It is the end-result, the teleology to which the exertion is dedicated, which chooses the point of departure, and the route of intended travel.

Wilhelm Furtwängler was an exemplary such a director.²⁵

So, to recapitulate that crucial point: there are two principal vectors of action throughout. There is the expressed universality of each phase of the processes of statement and development; the unfolding of the development is ongoing. These vectors are defined by the interaction of the notion we associate with visual space, but the action is located in the faculty of hearing, which takes over from what might be seen, as representing the work of that ontological infinitesimal, the subtle breath of life which comes like surprise (which, as in great Classical poetry, subtly astonishes the senses), and which moves the mind.

In all of this, no competent musical composition, nor its performance, can ever be reduced, competently, in any way, to a formal—e.g., implicitly Aristotelean, or empiricist's—game, such as chess or Go, nor to any computer game which could ever be designed for a digital computer system, nor the likeness, or imputable ambitions of anything like a Moog synthesizer. The genius of true musical composition is to be found in the human creative intellect's conception of "performances properly played between the notes," as is shown by the contrast of the performance of Schubert's Ninth, especially the distinction of the conducting of the *agapic* second movement, by Furtwängler, to the relatively dirge-like, failed performance of the second movement, under the direction of Bruno Walter. The creativity lies beyond the reductionist domains, in the "ontologically infinitesimal," in the domain of "playing

between the notes," in the domain of the ontologically infinitesimal of the Leibniz calculus, as of his later development of the Leibniz-Bernouilli universal physical principle of least action.

4. The Fight About the Infinitesimal

The essential difference between the hand-organ and monkey, on the one side, and the actual musician, on the other, is the specifically human organ of creativity, which, if developed and employed, produces the necessary ironies which distinguish a mechanical, or bestial event, from expressions of the potentials of the individual human mind. Classical composition, as distinguished from the sounds of popular-musical efforts to simulate a cage-full of shrieking monkeys, obtains its power from its essential resonance with those capabilities of the human mind which are lacking in all lower forms of life, or mechanical and electrical contrivances.

This is the essence of the issue posed by the famous fight over the concept of the infinitesimal which broke out during the middle of the Eighteenth Century.

Here lies the organic (so to speak) connection to the inherent quality of $agap\bar{e}$ in insightful composition, or performance of Classical musical compositions. It is this proximity to $agap\bar{e}$ which defines the ability of the mind "to impart and receive profound and impassioned conceptions respecting man



creativecommons.org; Cleveland Zoo/Kabir Bakie What is the difference between Classical composition, and popular musical efforts to imitate such shrieking primates as this gibbon from the Cleveland Zoo?

^{25.} For the benefit of readers who may need help in thinking clearly about Furtwängler's role under the Nazi regime, the reader should recall that the horse and the rider are not necessarily of the same species-although, in some cases, there are suspicions, if only partial ones, of riders who come up to the quality of the beast, if only part way, from behind. Hermann Göring's preferred conductor for Berlin was then-oompah-bandmaster Herbert von Karajan. Göring insisted on the firing of Furtwängler, and his replacement by von Karajan. Goebbels intervened with the interesting argument, that the installation of von Karajan over Furtwängler would undermine the Nazi regime's influence over the German population. When the war had ended, and Hitler gone, the Furtwängler who used his post to protect Jewish musicians from the Nazi machine, was at first, fired by means of the power of the U.S. Truman Administration at the time, replaced under pretexts of charges of having been a Nazi collaborator; then, after an indiscreet interval, Furtwängler's former post was awarded to von Karajan, who, as reported by one relevant eyewitness and professional, used a stop-watch to run the conducting of a certain performance of a Beethoven symphony, implicitly thus, Mussolinistyle, literally by stop-watch! Hearing a certain recorded performances under von Karajan's direction, I considered that report on his role as conductor to be plausible. Even back in Boston, shortly after the war, my hearing of some recorded, highly agapic performances by Furtwängler provoked my spontaneous outburst, "This man was no Nazi!"

and nature,"²⁶ which is the common, closely interrelated function, and power of great Classical poetry and music. These connections to *agapē*, are, in that same way, also essential qualifications of statecraft, as Shakespeare, for example, was for President Abraham Lincoln, or the Schiller whose work was for a generation of young Germans who went to war for freedom from what Napoleon and Metternich, alike, represented.²⁷

For those who may have been either simply ignorant of, or hostile to the notion of the infinitesimal of the Leibniz calculus, the infinitesimal is, for them, merely a fictional existence produced, with a certain kind of stubborn persistence, by the formal methods of mathematical calculations for cubic, biquadratic, and higher-order algebraic functions.

In fact, however, as a pack of Leibniz-haters associated with Abbé Antonio Conti, Voltaire, and others, came together in a chain of salons around Europe, one of the members of this organized abomination, Abraham de Moivre, suggested that that stubbornly insistent entity, the infinitesimal of the algebraic, cubic functions of Cardano et al., is merely an unavoidable fiction imposed by the mathematical formalities of cubic and higher order equations. De Moivre's opinion was adopted by his associate D'Alembert, and also a turncoat convert to Leibniz-hating, the Leonhard Euler who indoctrinated Lagrange in the same persuasion. This same nasty enterprise was promoted by Napoleon Bonaparte's patronage of Lagrange, and was later installed in a post-1815 France under the occupation by Britain's Duke of Wellington, by Lagrange's successors, the pirates Laplace's and Cauchy's takeover of the job of wrecking France's Ecole Polytechnique as much as they were able to do so.

The root of this incompetence of both de Moivre et al. and their Nineteenth-Century reductionist followers, such as Laplace, Cauchy, Clausius, et al., or the virtually Satanic Bertrand Russell, is attributable, as I have emphasized this in my *The End of Our Delusion!*, to the influence of ideologues such as either Aristotle or Ockham, as the influence of the celebrated fraud of Claudius Ptolemy had persisted into Europe's Sixteenth Century, and beyond. That fraud is an expression of the anti-humanistic, oligarchical policy of the Olympian Zeus

of *Prometheus Bound*, and the twin evils, named, respectively, Apollo and Dionysus, of the ancient Delphi cult.

Those implications of this page from the political history of the calculus, can be summed up by focussing attention upon two crucially significant observations.

First: the idea of cubic functions, which had been addressed by the Sixteenth-Century Cardano and his followers of that time, was brought into the Eighteenth-Century reductionists' salons as a consideration of an echo of a persistently embarrassed scrutiny of modern European mathematics by consideration of what was known to Classical Greece as the Delian Paradox. The birth of the idea of the need for such a turn in history to a mathematics of the calculus, had first occurred, at best estimate from historical records, as a reflection of modern Europe's received information, of the successful doubling of a cube by construction, rather than by algebraic calculation; this success had been done, apparently uniquely, by the Pythagorean Archytas of Tarentum, a friend of Plato. The significance of this achievement by Archytas, had been later emphasized, after Archytas and Plato, by the great Eratosthenes.

The later, modern introduction of the term "infinitesimal" was an outgrowth of the efforts by Cardano et al. to degrade Archytas' achievement to formal algebraic expressions for cubic and biquadratic functions. For those algebraists and their perplexed followers, the term "infinitesimal" reflected the notion of a purely linear, formal, algebraic, infinite series.

The alternative, contrary modern view of this matter, within approximately the same time-frame, was the outcome of the work of Johannes Kepler, as the follower of Nicholas of Cusa, Luca Pacioli, and Leonardo da Vinci. Kepler had defined what the later Leibnizian calculus was to represent, not merely as the formal-mathematical infinitesimal, but as actually a physical magnitude, operating, as a universal physical principle, upon mathematics from the outside: rather than merely the kind of algebraic magnitude on which D'Alembert, Euler, Lagrange, and, later, Laplace and Cauchy, as also Clausius, Grassman, et al., were to insist. This second standpoint, was that represented by the original discovery of the calculus by Leibniz (whereas the silly claims of the mad Isaac Newton, were merely a coat of paint applied to algebraic infinite series).

The discovery of the *physical* infinitesimal, as contrasted to the *merely algebraic* formality of the so-called "infinitesimal" of algebra, was made, originally, by Kepler. It appeared in Kepler's work, first, as a reflection of Kepler's adoption of Nicholas of Cusa's pointing out the systemic scientific error committed by Archimedes' quadrature of the circle. Essentially, simply, the original Kepler discovery, of the simple Earth orbit, of equal times for equal areas in the sweeping of the elliptical orbit, followed Cusa, in its *rejecting* a formally algebraic definition for what was to be called the physical, rather than merely algebraic notion of universal gravitation.

^{26.} Percy B. Shelley, In Defence of Poetry.

^{27.} The misguided rumor is circulated, that I am opposed to promoting amateur drama. This, of course, is absolutely mistaken. Rather, my insistence is that my associates and I, as responsible political people, may, as learners, produce poor results in singing or drama, but their attempt must be a properly directed and informed attempt, free of such evils as the Romanticism of Coleridge, or the bestiality of Brecht. Drama partakes of a sacred calling, as the true principle of Classical tragedy attests, and does not overlook the importance of training in the *bel canto* singing voice, as the foundation of the ability to create the role of the character on stage. For me, lack of proper intent on that account, turns an important function of society into a farce, and will impair the moral judgment of the audiences and players alike. I often emphasize the opening part of Chorus in Shakespeare's *Henry V* for this reason: you may, as Shakespeare warns the audience for that play, speak imperfectly of your subject to the eye and ear of the audience, but only if you do not prompt cacophony, or banality, within the audience's mind.



This image from www. wlym.com/~animations/ whatsnew.html shows members of the LaRouche Youth Movement working through Kepler's New Astronomy, which the site describes as "the beginning of modern science along the narrow track of revolutionary development of the relationship of humanity to the universe." By comparison, the newly plagiarized Kepler's Discovery website is produced by an anonymous "graduate student" (see Appendix).

IDNIS

A second crucial Kepler discovery, the harmonic composition of the then known Solar orbits, led to the higher-order notion, of general gravitation, as operating within the Solar system as a whole. That same result was recently reexperienced, at my prompting, in the work done, as I had intended beforehand, *independently of my direction*, by the two successive LYM teams, in their presenting their actual reliving of Kepler's discoveries on this account.²⁸

Out of that same background in his own work, Kepler had bequeathed two great challenges to future mathematicians: first, the discovery of a universal physical-mathematical calculus, and, second, the need for a generalization of the physical implications of elliptical functions. The consequent, later of the two tasks, implied in these two concerns, had been taken up by numerous scientists around the time of the turn into the Nineteenth Century. This had led, in turn, through the

crucial work of Abel, as addressed by Gauss and Riemann from the standpoint of physical hypergeometries, which led, in turn, into the modern, Riemannian hypergeometry. This is the notion of hypergeometry to which Albert Einstein referred, in his coupling of his own contributions to the founding, in his own time, of modern European science's most essential aspects as to be adduced from the connection of Kepler to Riemann.

Euler had been a student of Leibniz, but that under the immediate direction of the Jean Bernouilli who had been Leibniz's close collaborator in the elaboration of the discovery of the catenary-cued universal *physical* principle of least action, the principle which is the basis employed for the elaboration of the physical conception of the complex domain of Gauss, Riemann, et al.

The issue between the two, so-defined factions of post-Leibniz mathematics, was underscored by what I have referenced, during a recent occasion, as a "science for ladies" style of science-apostate Leonhard Euler's pitiable 1761 "Letters to a German Princess." That piece by Euler is obviously trash, but, unfortunately, there was no notable improvement in his own way of thinking, in his writing to those with putative scientific credentials, from that time onward. Euler's argument was based on the disgusting presumption introduced by the ideologue de Moivre, that which he called the "infinitesimal" of the Leibniz calculus, was, for him, merely the smallness of each and every any latest quoted term in an algebraic "infinite series."

On this account, Euler was not merely mistaken; he was lying. The proof of the lie is elementary. The lie on Euler's side was essentially a matter of political issues, not scientific ones. Euler had gone over to the enemy camp, the camp of Paolo Sarpi's British followers.

^{28.} I had proposed to the LYM generally, that the most relevant of the defects of the education to which they had been previously exposed, were best remedied by, first, creating a foundation for the study of science in tracing the kernel of the development of the crucial modern achievements in physical science, from the Pythagoreans' and Plato's Sphaerics, through the work of Cusa, then Kepler and Leibniz, and concluding with Gauss and Riemann (picking up on the relevant work of the most relevant associated figures along the way). Thus, build an intellectual fire-wall against the disorienting and corrupting approximation of the Sophistry permeating those "Babylonian-like," anti-epistemological, "blab school" methods which I had met in the classrooms of modern mass education, and elsewhere, habits which I came to despise so much in my own earlier years. Really know the main line of the essentials of European science, and treat experimental physical science, and also physical economy, from the foundation provided by that historical background. I had rejected submitting to a good deal of what would have been not-un-useful aspects of available higher educational programs, but I saved my own intellectual soul in doing this.

5. For the Want of a Horseshoe Nail!

Euler's apostasy, his virtual treason against honest science, was to play a notable, if collateral role in the launching of the subsequent, Nineteenth-Century developments leading into what was to become known as the two "World Wars" of the Twentieth Century. To the best of the information I have received, these connections have been never considered, in available published works, in the manner which they should have been; but, from among serious historians, where such rare and precious folk might still be found today, there is no needless stretch of the imagination required for them to understand what I am about to report, factually, here, today.

The relevant fact bearing upon what I am about to say here, is, that, in contrast to the behavior of lower forms of life, ideas of universal physical or artistic principle, as distinct from just any old, or new ideas so-called, are the most important, and actually the only really determining factors in the shaping of *human* history.

Professional, and brilliant historian H. Graham Lowry and his wife walked into my office one day, as I seem to recall, in late 1983, or early 1984, to present to me his proposal for what later appeared, in 1987-88, as Volume I of his How the Nation Was Won: America's Untold Story.29 His researches had focussed his attention on the break between the 1688-1689 suppression of the independence of the Massachusetts Bay Company which had been operating under a charter from the English monarchy, a break under the impact of the events leading into, and accompanying the tyranny installed by William of Orange, and the reemergence, during the middle decades of the Eighteenth Century, of what had been the legacy of Massachusetts' rich development under the leadership of the Winthrops and Mathers. Graham had located the key to the connection in the role, during the first decade of the Eighteenth Century, of both Gottfried Leibniz as the ostensible future Chancellor of Britain, and the keystone role of Jonathan Swift and his circles within the British Isles, and beyond. Before the two visitors left my office, I had heard enough evidence to agree enthusiastically to our association's support for the projected publication.

In Graham's published work, we can now read of the missing connections leading to the founding of our constitutional system of sovereign government. Again and again, there are comparable cases of the same historically singular quality of turn in events akin to what Graham unearthed. Not only are there many conspiracies in history, but very little of principled significance in known history ever occurred in another way, certainly nothing good.

Unlike the beasts which Theodor Adorno and Hannah Arendt showed themselves to be, in *The Authoritarian Personality*, and otherwise, mankind is a species based on the prin-

ciple of ideas, sometimes called "conspiracies," ³⁰ especially crucial ideas, especially scientific and cultural ideas. The issues of Leibniz versus Locke, which were also the issues of Kepler versus Paolo Sarpi's lackey Galileo, and the like, were reflections of the issue which had been posed by Nicholas of Cusa in his *Concordantia Catholica* and *De Docta Ignorantia*. These issues have been the most crucial pivot, as instances of choices, in the battles of ideas, for good or evil, and the effects of choices selected. The battle of the type which I have just described in the preceding pages, is exemplary. It is ideas, sometimes called "conspiracies," which have shaped all modern, now globally extended history of the foundations and impacts of European culture.

Cultures which do not conspire openly respecting matters of principle, tend to die, sooner or later, probably sooner, as ours has been dying over longer than the recent thirty-odd years.

Mankind, contrary to the existentialists and their like, is a cognitive species, not a beast. The human individual is normally born as more or less an innocent, and becomes a beast only when men or women, or both, choose, or have chosen for them, a course of action which leads toward such a result.³¹

In my recent *The End of Our Delusion!*, I outlined the essential features of modern empiricist ideology since the rise of Paolo Sarpi's Venice explicitly pro-irrationalist, pro-Ockham faction to power, during the last decades of the Sixteenth Century. I pointed out in that writing, that Sarpi's perception, that Venice's fight against the modern sovereign nation-state republic could not win its battle with modern European civilization for as long as the pro-feudalist faction persisted in its attachment to those relative zero-technological-growth policies of practice which are to be traced to the role of the medievalist view of Aristotle prevalent during the combined reign of the Venetian financier oligarchy and Norman chivalry.

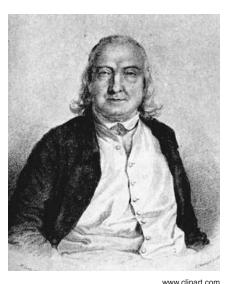
I emphasized, there, the significance of Niccolò Machiavelli's work on the matter of military strategy, as being key to understanding the issue which arose between the "old" Venetian and Sarpi's "new" Venetian factions. The need of the Venetian faction to survive, by adapting to the reality of modern scientific and technological social practices, had prompted Sarpi to promote a return to the philosophical outlook of the medieval obscurantist William of Ockham, which permitted the emerging new Anglo-Dutch oligarchy of the late Seventeenth and early Eighteenth centuries to adapt to the modern

^{29. (}Washington, D.C.: Executive Intelligence Review News Service, 1988)

Those who never conspire would be virtually flotsam carried on the shifting tides of events.

^{31.} I must allow the consideration, that we must ask ourselves, after studying the fact of the phenomenon of the surviving "preemie," how much the sixmonth foetus feels and hears of the world outside the womb. I have often recommended such precautions as, no violence in the home, and an environment of suitable selections heard from the works of Mozart, or Johann Sebastian Bach







Scoundrels in the service of Anglo-Dutch Liberal ideological interests, over three centuries (left to right): the virtually soulless traitor Aaron Burr; British Foreign Office chief Jeremy Bentham; and the Fabian Society-linked Mrs. Lynne Cheney, today.

tendencies for technological progress, without permitting a competent science practice to overturn the persisting oligarchical commitments of the rising neo-Venetian oligarchy associated with Sarpi and his followers.

The modern European civilization unleashed by the Fifteenth-Century "golden" Renaissance, had brought the modern sovereign form of republic, also known as a system of commonwealths, into being. Sarpi's view was that this new enemy, the commonwealth, could not be defeated if the financier-oligarchical interest typified by medieval Venetian usury, refused to adapt to reforms in favor of some limited use of the new ideas of practice associated with the scientific revolution which had been launched, largely, by Venice's chosen chief enemy, Cardinal Nicholas of Cusa.

There Was Jekyll and Then Hyde

As I had emphasized, in The End of Our Delusion!, what attracted Sarpi to Ockham, was Ockham's wild irrationalism. The empiricism of Sarpi, Francis Bacon, Thomas Hobbes, John Locke, and the Newtonians, did not tolerate the idea of physical science, but, instead, adopted a nominalist form of counterfeit science, one consistent with Sarpi's and Galileo's version of a modernized Ockhamite nominalism. This is the form of nominalism known in modern Europe today, both as philosophical and political Liberalism, and as the expressions of a Liberal philosophy known chiefly as empiricism, or positivism, in matters of science.

Before his degeneration, Euler had known the essentials of this historical fact very well. However, in the aftermath of the British-led witch-hunt against Gottfried Leibniz, Euler chose to go over to the perceived winning political side of that moment, to become the virtual "prize," an unprincipled turncoat against science, as a degraded, apostate, and a lackey of his newly chosen masters, the apparent Anglo-Dutch Liberal victors over the republican cause.

The cause which political turncoat Euler served in his new political career in the company of Voltaire, was the substitution of the mere reductionist algebra of the modern heirs of the ancient Delphi cult's Apollo and Dionysus, for the physical science of Archytas, Plato, Eratosthenes, Kepler, Fermat, Leibniz, and, later, Gauss and Riemann, Euler's reward for this service to the enemies of Leibniz, was to die the pitiable wreck which, in fact, he had chosen to become: a virtual used-up husk of his former service to Anglo-Dutch Liberalism.

The crucial relevance of that matter of Euler in the context of this present report, is, as I already indicated at earlier points in this present account, the issue of creativity, that same issue which applies, so very weightily, to the great crisis of all humanity expressed by the presently onrushing global financial collapse. Without restoring the principle of investment in technologically progressive physical capital of infrastructure and agricultural and industrial tangible goods, as opposed to the recent thirty-five and more years of promotion of a neomalthusian mode of decline into intrinsically usurious financial speculation, this present global civilization will not outlive the presently accelerating form of onrushing, global, breakdown-crisis. Euler's conversion into a scoundrel in service of Anglo-Dutch Liberal ideological interests, exemplifies the intellectual causes for the present threat to continued existence of civilization.

That quality of disloyalty which I see in the Euler of his own later years, is not to be regarded as preference of one nation's cause over that of another, nor of one empire over that of another, but rather, a personal moral fault akin to the nature of America's virtually soulless traitor Aaron Burr.³²

It is sufficient for our subject under discussion here, that Burr was an agent of what had been in fact the British empire of his times, not then an empire of the British monarchy, but an agent of the Anglo-Dutch Liberalism incarnate in that British East India Company which had already conquered India, and was soon to launch a private war, by that private company, against China.³³

Jonathan Edwards' offshoot Burr, chiefly a killer, a perennial and predatory ladies' man, was a scoundrel whose essential part in history was that of an agent of the British East India Company faction within the English American colonies, and the later United States. In a career which might well have been the model for the character "Scratch" of Stephen Vincent Benet's story The Devil and Daniel Webster, Burr himself was owned politically, as much as financially, by that East India Company's so-called "American Tory" faction. This was the faction which was to serve, from 1763 on, as the principal, treasonous faction of opposition to the founding and defense of the U.S.A. against that Britain dominated by the faction of Lord Shelburne. Burr's ties were directly to Shelburne's chief lackey in the newly created (1782) British Foreign Office, Jeremy Bentham. Burr the assassin, both clearly a traitor-in-fact, and one-time Vice-President of the U.S.A., became a leading asset of the British Foreign Office, the founder, in British interest, of the Bank of Manhattan, and the author of the London-controlled network which came to include Martin van Buren and van Buren's asset, the Andrew Jackson whom van Buren had inherited from a treasonous conspiratorial network of Burr himself.

In short, Burr was not merely an agent of a foreign power with which our nation had been repeatedly at war over the period from 1776 through approximately 1863. He was involved, at a relatively very high level, in substantial conspiratorial attempts to break up the United States itself.

Burr serves historians today, as a standard for comparisons with prominent, more or less treasonous scoundrels who infested our history at one time or another, from Burr himself to the more than Fabian Society-linked, highly suspect Mrs. Lynne Cheney herself today.

A Past Century of World Wars

There came a point in time, midpoint during the U.S. Civil War of 1861-1865, at which the British monarchy, through

the leadership of its Prince Consort, had come to express some regret of its association with the cause of the American confederates of British Foreign Office's Lord Palmerston. This was the Palmerston who had been trained as the intended successor of the British controller of Aaron Burr, the Foreign Office's Jeremy Bentham. The organization of what later became the conspiratorial core behind the creation of the Confederacy, had been organized, in succession by Bentham and his protégé Palmerston, employing the network of British Foreign Office agents built up by Bentham around the key figures of the faction of Aaron Burr, and of Burr followers such as Presidents Jackson, van Buren, Polk, Pierce, and Buchanan.³⁴

The assassination of President Abraham Lincoln was been organized from London, Paris, Madrid, and Rome, by the same concert of British, Habsburg, and Spanish allies deployed for the overthrow of the government, and the Nazi-like occupation of Mexico, that launched by the combined British, French, Spanish, and Habsburg allies in the military parts of that project.

The crucial point of fact to be considered, to understand the relevance as well as the validity of my argument on this matter here, is, as I have shown, repeatedly, in other publications written by me, as also work published as the work of others, the character of the British Empire which had been forged in the course and aftermath of the so-called "Seven Years War" and the 1763 Peace of Paris, an empire then crafted under the rise of the leading political role of the British East India Company's Lord Shelburne. This was the empire whose intended design was crafted, in large degree, by Shelburne lackey Edward Gibbon's The Decline and Fall of the Roman Empire. Gibbon recommended to Shelburne the model of the Byzantine Empire under "Julian the Apostate." It would appear, by and large, that that part of the suggestion to Shelburne by Gibbon, has been carried out, in the main, and also carried over, to a significant degree, into what may be fairly regarded as the currently reigning Cheney Administration of the U.S.A. today.

Over the centuries since the 1763 Peace of Paris, the Anglo-Dutch Liberal system has maintained the British monarchy as, nominally, the central figure of a virtual world-empire-in-fact: with the exception of both the U.S. Republic's leading role in the war to defeat Hitler, and during the 1945-1971 interval, even after President Franklin Roosevelt's death, until the overturn of the Bretton Woods fixed-exchange-rate system. This has not been a British Empire in the image of the ancient Roman, or the Byzantine form, but of a form of an empire under the reign of a financier oligarchy. This had been, since February 1763, an empire-in-fact, which has been modeled to a significant degree on the approximately A.D. 1000-1439 period of the alliance of the Venetian financier-oligarchy with the Norman chivalry.

^{32.} On the subject of Aaron Burr, see Anton Chaitkin, *Treason in America* (New York: New Benjamin Franklin House, 1985).

^{33.} Notably, an echo from the past of this precedent for today's so-called "revolution in military affairs" of Samuel P. Huntington: former U.S. Secretary of Defense, present U.S. Vice-President in custody of the virtual, but not virtuous Trilby George W. Bush; and, the "Middlebury Monsters," former U.S. Secretary of State George Shultz and thuggish scoundrel Felix Rohatyn.

^{34.} Cf. Chaitkin, op. cit.

The new domination of Europe by the Venetian financier oligarchy behind the successive Habsburg rule over much of the European and South American continents, led into the post-1648 resurgence to power of the new Anglo-Dutch Liberal form of Venetian-financier interests established as an expression of the legacy of Sarpi. It was the Venetian financier-colonization of the Netherlands and Britain, during the course of the Seventeenth Century, which had crafted the empire of the Anglo-Dutch Liberal form of financier-oligarchical interest, an interest which has lately dominated the world afresh, from 1971-1972, until the moment am I writing this report to-day.

From about the February 1763 Peace of Paris, and from the 1814-1815 Congress of Vienna, until the 1931 cessation of the British gold standard,³⁵ a London-centered entity, which had been, for a long time, the British East India Company, had dominated the world as a growing imperial maritime and monetary power, increasingly. This was an empire which echoed, most essentially, the Venetian legacy of Paolo Sarpi, but also, to a large degree, has come to echo, with the Anglo-American faction behind the current BAE's ongoing "reform in military affairs," the medieval alliance of Venetian financier oligarchy with its chief, crusading tool, the "private" crusader armies of the medieval Norman chivalry.

The collapse of the form of imperial power exerted specifically by that East India Company, had ended with the famous insurrection in Nineteenth-Century India; but, the essential character of the old British empire of the bankrupted, British East India Company, was continued under new costume, under the new arrangement which Prime Minister Benjamin Disraeli was privileged to deliver personally to Queen Victoria and her warrior-son, Prince of Wales Edward Albert. The British pound sterling, the British imperial fleet, and the British imperial Foreign Office dominated the world until the virtual rebirth, temporarily, of the U.S.A. under President Franklin Roosevelt.

Two World Wars, and More

A long wave of foreign-directed assassinations of U.S. Presidents, echoing the same intention as the London-directed assassination of former U.S. Treasury Secretary Alexander Hamilton by British Foreign Office agent Aaron Burr, a recurring wave culminating in the assassination of President William McKinley, put the Presidency into the hands of two Presidents who personally represented, as their respective family traditions, the infamous "Lost Cause" of the Palmerston-steered Confederacy, Theodore Roosevelt and Ku Klux Klan fanatic Woodrow Wilson.

The result of the McKinley assassination, was, at that time, a fundamental reversal of U.S. foreign policy-alignments under Presidents Theodore Roosevelt and Wilson: bringing the U.S.A. which had been close to Germany's Chancellor Otto von Bismarck, while we were against our British adversary, into foreign-policy alignment with the British Empire of Prince of Wales Edward Albert's orchestration, through his nephew, Germany's Kaiser Wilhelm II. Wilhelm II's ouster of German Chancellor Bismarck in 1890, thus cleared the way for Edward VII's preparations of that general war on the continent of Europe which erupted, officially, in August 1914.

It must be emphasized here, that the 1890 ouster of Bismarck removed the last efficient obstacle then standing, to Prince of Wales Edward Albert's orchestration of a monstrous Europe-wide war between his two nephews, the German Kaiser and Czar Nicholas II. ³⁶ It is notable that the ouster of Bismarck was followed by both the assassination of France's President Sadi Carnot and the fraudulent charges against and conviction of Captain Dreyfus, which opened the gates to effects of Lord Kitchener's victory in Sudan, and the preparations for what became the Entente Cordial alliance of Britain and France, for an intended two-front assault on Germany by the allied Anglo-French and Russian forces.

However, World War II had actually, already broken out in 1895, when the British Empire launched imperial Japan in the first phase of a long 1895-1945 war for the intended break-up of China. This alliance was also the basis for Britain's orchestration of Japan's 1905 launching of war against Russia. So, at the close of World War I, Britain and Japan were leading military allies for a plotted joint attack on the naval forces of the U.S.A. in the Atlantic and Pacific, the plot which was the genesis of the Japan attack on Pearl Harbor, which I vividly recall from a sleeping central Manhattan of the morning of December 7, 1941.³⁷ The orchestration of the so-called Russian 1905

^{35.} And the formation of the Basel, Switzerland Bank for International Settlements (BIS) of the Bank of England's agent Hjalmar Schacht et al.

^{36.} Although the German Kaiser was officially pledged to aid the ostensibly senile Habsburg Kaiser in a Balkan war against Russia, Bismarck had a secret agreement with Czar Nicholas II to prevent the German Kaiser's engagement in such a Balkan war. The Prince of Wales, who hated Bismarck's American affinities, since Bismarck's student years at Göttingen, in any case, was determined to have the Germany-Russia conflict, and thus played upon his nephew the German Kaiser to encourage the dismissal of Bismarck. That dismissal thus set the machinery of the Prince of Wales' intended World War into motion (contrary to the lies of Wilson's Lansing at Versailles).

^{37.} Silly fellows suggest that FDR lured Japan into the attack on Pearl Harbor. My personal contacts on this subject with relevant former Japan military officials who had participated in the planning of some of these operations, later, coincide with General Billy Mitchell's memory of those pro-British U.S. senior officers who had pushed for Mitchell's court-martial. U.S. military intelligence had known of the planned Japan attack on Pearl Harbor during as early as the middle 1920s. The problems on the U.S. side were chiefly from the New York financier gang who had supported the British initiative, of Montagu Norman et al., for putting Hitler into power in the first place. Under FDR's and other pressure, Britain changed sides, to resist Hitler; Japan, largely for reason of its imperial policy toward the break-up and looting of China, stayed with the intention of its 1920s military alliance with Britain for an attack on the naval forces of the U.S.A., and landed, thus, in the arms of Adolf Hitler. The origin of Japan's policy in these matters, was the British empire's

revolution, was prompted by a leading Russian Okhrana commander, Colonel Zubatov, a plot which had included the projected assassination of Czar Nicholas II, which played a key part in the Anglo-French efforts to orchestrate the Balkan wars drawing Russia's monarchy almost assuredly into the plan for war against Germany. Meanwhile, the effects of the changes orchestrated during the 1890s under Prince of Wales Edward Albert, made what is called World War J inevitable. The assassination of U.S. President McKinley brought the nephew of a leading Confederate intelligence officer, Theodore Roosevelt, into the Presidency. World War I was then inevitable.

It was similar with socalled World War II, taking into account some unintended changes, especially the unintended role of U.S. Presider

intended role of U.S. President Franklin Roosevelt.

So, immediately on news of the death of President Franklin Roosevelt, London, with complicity of the same gang in the U.S. which had plotted, with London, to bring the Hitler dictatorship to power in Germany, the Anglo-American Liberal gang which had earlier put Hitler into power, acted swiftly, through prepared contingency Harry S Truman, to destroy the Franklin Roosevelt legacy and precedent, as quickly and efficiently as feasible. The potential of a nuclear-armed World War III was, therefore, put on the table.

Obviously, our own currently reigning political class, like the corresponding fools in western and central Europe, have yet to learn what should be the obvious lessons from follies of the preceding century. We are presently standing at the virtual Gates of Hell, all over again. This time, our general taste in music really stinks! That stench seems to blind us to a most urgent, global reality. It might appear, that even sense of smell has failed, as eyes and ears before it.

Postscript: On Euler

The role of the post-Westphalia resurgence of Sarpi's neo-Venetian, Anglo-Dutch Liberal faction, and the subse-

intention to exploit Japan's potential as an aid to destroy U.S, trans-Pacific reach into China and neighboring states.



Leonhard Euler, a former student of Leibniz, broke with his mentor and went over to the enemy camp, that of Paolo Sarpi's British followers. The issue of continuing relevance today in this case, is creativity versus sophistry.

quent, particular role of science-renegade Euler and his circle in the same game, illustrates the determining function of ideas of principle which express the role of culture in pre-shaping of the known living past histories of mankind.

The most deadly among the follies expressed in the course of history, is the habit which, like the allegedly uncontrollable impulse to die among legendary lemmings, is the most tragic of all. That impulse is what is expressed by statements such as: "I'm sorry, but this is the way I am," often suffixed by a passionately neurotic clause of the form, "And, you will just have to learn to live with the fact that that is the way I am." Or, "I'm sorry if you don't like it, but this is my tradition." Or, "Please don't challenge my sincerity!" Or,

"Well, it might not have been true, but I had chosen to believe it sincerely, anyway." Or, the self-righteous ejaculation of the man walking away, if a bit shaken, by the wreckage his recklessness had caused: "Just because you had told me that I was wrong, I preferred not to believe you, so, you can not blame me for the consequences. I will not permit you to question my sincerity!" Or, worst of all, the Nazilike statement, uttered with a glint in the eyes: "I am the decider."

So, we have the category of the fellow who, still today, defends what he should have known was the malicious opportunism of Euler's adoption of what he had come to regard as advantageous frauds. Nonetheless, his sophistry is no excuse: For that which we cause, or that we knowingly permit, we are each responsible. So, this accountability is attached to the blame which is accrued to us for the malicious or other consequences of the untruthful, or other mistaken opinions we might prefer to be overheard believing: *Listen, then, to hear if the cock crows thrice.*

If you supported the belief which caused the injury, you are accountable for that much, at the least; you were wrong. If what you believed was the result of negligence of what you should have known, especially if you lied, or acted in support of a lie knowingly, but on behalf of adopted loyalty to some cause, for factitious reasons: you might be justly considered, like the renegade Euler, to have become a very bad person!

"Sorry, buddy, but this is my religion," may take you quickly, like some parsons I have known, to a timely visit to something which passes for the Gates of Hell.

Two world wars of the past century should have warned us about that.

Such thoughts as those consider only particular decisions, or lack of such decisions when properly expected of you. The worst crimes are those committed in submission to a wrong principle governing not some particular decisions, but the way you think.

Those criticisms which I make reflect what I, as your author of this occasion, have come to think about the most, that with increasing concern over the decades of my life, as far back as I could remember. Thus, I have approached more and more closely, with greater intensity of concern, the kinds of epistemological issues which have shaped the preceding elements of this present report.

I have, therefore, come to a point in our ongoing history of today, at which it is clear to me that it should be, and could be made clear to relevant others among the leaders of society, and also among the younger generation of adults coming up to today, that that time has come, now, at which the kinds of beliefs which led into the follies of our United States, and of other nations, especially those of Europe, can not be tolerated in leading positions of power and responsibility any longer today.

Above all, "democracy" may be good enough for the devil, as we have seen that clearly in recent times, as it was among the Sophists of ancient Athens; but it is a slippery slope, which turns easily into a slide into new tyrannies. What Plato and the Apostles John and Paul knew as the concept of $agap\bar{e}$, is, as the Apostle Paul writes, in his *I Corinthians* 13, and as I have defended that conception here, the only decent policy in either religion, or in government, or in art and science.

It is not sufficient to be, as it is said, "nice to people"; it is necessary to work to prompt the development of their mental powers in ways which equip them to choose the right pathway in scientific and Classical-artistic principle, the pathway of increasing the power of mankind in and over the universe, for which purpose man and woman are made as servants in the likeness of the Creator of our self-bounded universe. It is our obligation to do good.

It is anyone's failure to meet that responsibility in themselves, which is the root of all that is properly regarded as a source of evil, the evil into which European civilization's economies are now plunging.

True, there is an inexhaustible amount of knowledge, in that direction, still to be discovered, but it were inexcusable to ignore the pathway which science-apostate Euler abandoned, the route of endless discovery. Our civilization has now come to the point, where it must change in that fashion, or it will not survive as what might be regarded by us today as civilization of any kind.

Appendix

Kepler's Discovery, or the Hoofprint of Incompetence?

by Chris Landry, LaRouche Youth Movement

Since the time of Paolo Sarpi, plagiarism hasn't changed that much: It is the act of copying or stealing another person's work without attribution. It is less crude if the thief understands what the originator accomplished (i.e., if the thief is competent). In the Internet universe of Wiki-Ped plagiarists, which is now more and more dominant, a mere explanation is all a perverted mind is concerned with, and competence generally gets thrown out with the discovery.¹

Since its inception in 2000, the LaRouche Youth Movement (LYM) has been involved in a thorough investigation of the works of Johannes Kepler, C.F. Gauss, Bernhard Riemann, et al. The intention has been to uncover the true roots of modern science, making the rediscovery ourselves, of original scientific works, in order to then know how to rebuild our decaying society. We have since created several pedagogical web pages to help others understand how these fundamental discoveries were made. This work has been the result of a serious commitment to true science, which is inseparable from the political responsibility we have taken for the development of human civilization.

Recently, a website claiming to have accomplished the same work was uncovered by the LYM. This website (www.keplersdiscovery.com) is an incompetent hoax, as will be demonstrated in what follows. Here, it is important to note that plagiaristic thieves of this type, are not just mere plagiarists.

Historically, plagiarism generally was a reaction against thinkers who made true discoveries. As is typified by the work of Sarpi's lackey, Galileo Galilei, against Kepler,² the goal of plagiarizing a great thinker's work is to bury the way in which the discovery was made, providing anecdotal empirical descriptions, and thereby attempting to prevent the rediscovery of that original breakthrough. This methodology keeps humanity in the dark about how the human mind actually works.

How can you tell if you're looking at stolen goods or the

^{1.} As in Wikipedia: the reality we can all agree upon.

^{2. &}quot;What Galileo Avoided," *EIR*, Dec. 23, 2005, www.larouchepub.com/eiw/public/2005/2005_50-52/2005-51/pdf/box9_49.pdf.

real thing? To the trained mind, it's not difficult. Thankfully, the Lord has blessed us, throughout history, with a swarm of incompetents, who can't quite perform their job. There is good reason for this: They themselves don't understand what they are doing, and this is reflected in their efforts. In modern times, this is especially true, where even the most emphatic of empiricists are mere approximations of idiocy. At least Euclid was clever.

Therefore, in the service of humanity, I make a public example of the poor fool(s) who places his or herself at the service of the powers that be, leaving in their tracks "The Hoofprint of Incompetence."

The author of the present article is one of several authors of the LaRouche Youth Movement's Kepler's "Harmony of the World" website, created in the Winter of 2006 (www.wlym.com/kepler).4

An Anonymous Author

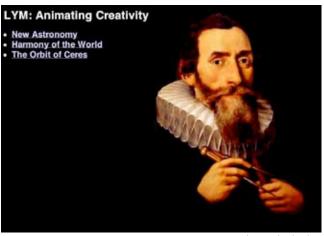
Let us examine this case more closely.

Take a look at the "identity-less" fake Kepler website section on *The Harmony of the World*.⁵

At first glance, it seems like a harmless Wikipedia entry, listing the usual bone dry "definitions" of what the subject at hand is. It is interesting to note the cooperation of Wikipedia with the fake Kepler website. Take a look at the similarly convoluted Wikipedia entry on *Harmonices Mundi*. At the bottom of that page, the fake Kepler site is linked as a "summary" of Kepler's work.⁶

First of all, this is hardly worth qualifying as a "summa-

- 3. That means, don't take it personally, Anonymous Grad Student (the person who claims to have built the fake Kepler's Discovery website—that bizarre, almost page-by-page, animation-by-animation, unpedagogical clone of the LaRouche Youth Movement's pedagogical websites on Kepler, Gauss, A. Kästner, Nicholas of Cusa, et al.).
- 4. www.wlym.com/kepler. Copyright 2006 LaRouche Youth L.L.C., for those of you who were wondering.
- 5. www.keplersdicovery.com/Harmonies.html.
- See "Further Links" section at http://en.wikipedia.org/wiki/Harmonices_ Mundi.



www.wlym.com/~animations

On Sept. 2, 2006, the LYM inaugurated a web page of pedagogical work on Kepler. On May 25, 2007, www.keplers discovery.com was registered by an anonymous "graduate student," consisting of page-by-page plagiarizations from the WLYM site—even to the point of using the identical portrait of Kepler on the opening page.

KEPLER Astronomía Mova, 1609

Introduction to Astronomy Kepler's New Astronomy Three Models Kepler's Departure Friding "Oppositions" The "Hear" Sun Twelse Observations Prolomy's "Equare" A "Valantina Hyperheals" Earth's Motion An "Investoral Species" Area-Time Principle An Etyse Constituent

Part II Recommended Books is unique among scientific discoverers in presenting not only his discoveries but also the process by which he arrives at them. Kepler's 650-page Astronomia Nova ("The New Astronomy") records the astronomer's ten-year long struggle to understand the orbit of Mars (his "warfare with Mars," as he playfully calls it, for Mars was the Greek god of war). In the pages that follow we outline the scientific problems Kepler confronted as he sought to understand the physical causes of planetary motion. The breadth of Kepler's contribution to science is often not fully recognized: Kepler discovered not only elliptical orbits and the principles of planetary motion but also universal gravitation as well.

His discoveries motivated the development of Calculus.

Readers may wish to review our <u>Beginning</u>
<u>Astronomy</u> page before diving into Kepler's
Discovery.



www.keplersdiscovery.com

ry" of The Harmony of the World.

Take, for example, the author's failure to outline (or even name) Kepler's Eight Degrees of Knowability.⁷

In the WLYM.com "Harmony of the World" web page, "Knowability" gives the reader pedagogical examples of the significance of the constructible figures. Kepler uses the degrees of knowability to demonstrate the "Nobility" of the constructible geometric figures. Knowability deals with how the side of a regular planar geometric figure (triangle, square, pentagon, hexagon, octagon, etc.) re-

42 Science EIR September 14, 2007

^{7.} For a real pedagogical example of what Knowability is, see: www.wlym.com/~animations/harmonies/site.php?goto=knowability.html.

lates to the diameter of the circle that circumscribes that shape.

This simple basic principle has implications all throughout Kepler's *Harmony of the World*, and it should be noted here: Any person claiming to know and promote Kepler's Discovery, especially his "most important" discovery, *The Harmony of the World*, should know that the fundamental geometric guiding principle which unfolds throughout the five books of *The Harmony of the World*, is what Kepler defines as the Eight Degrees of Knowability.

To further make the point, readers should work through the LYM's Degrees of Knowability page, then take up the simple task of determining the seven harmonic intervals, which are audible representations (as are all harmonic proportions) of the regular figures inscribed in a circle, and the proportions found therewith.^{8,9}

It isn't just that the basic understanding of harmony was violated. There are several other points at which the author of the fake Kepler site reveals himself as the crude plagiarist that he is. Take, for example, these statements from the fake website (www.keplersdiscovery.com/Harmonies.html), which were left totally unanswered because the thief is scientifically incompetent:

- Where did Kepler "rigorously look for the causes in the harmonic intervals"? The fake site gives no reason, whereas the WLYM website produced ample resources for a reader to discover.¹⁰
- How did Kepler "demonstrate that no smallest interval exists"? There are just declarative statements at the fake site. Take a look at the WLYM page¹¹ to see how Kepler figures this out.
- What does Kepler mean by "curvature" in musical space? The fake site only provides another declarative statement based on what that author fails to understand.¹²
- What is the "basis for the harmonic proportions"? Well, as we saw demonstrated in the Degrees of Knowability, the anonymous author gives no reason for the basis

of the harmonic proportions. It is in the degrees of knowability that the basis and order of the harmonies are defined

- Why is this important in terms of the Solar System? Again there is no answer or reason, mere declaration on part of our anonymous author. Since the author of that fake Kepler site is plagiarizing and does not understand what he is doing, he fails to recognize the significance of this point and misses it altogether.¹³
- How does Kepler discover the Third Law? Here, we find more of the same. Since the author of the fake site makes convoluted statements based on what he doesn't understand, he cannot demonstrate why or how Kepler figures this out.¹⁴
- If you notice, the plagiarist doesn't speak of an ellipse; it just pops out at the last minute. There is no discussion of why a planet speeds up or slows down, or how you measure an arc length from the Sun. 15

I would seriously doubt that the author of the fake Kepler website would begin to understand how the mathematician Carl F. Gauss determined the orbit of Ceres, because that discovery of the orbit of that asteroid is crucially dependent on Kepler's harmonic principles.¹⁶

The WLYM is in the process of rediscovering how Gauss discovered that orbit, based on a very small number of observations.¹⁷

It is through irony and creativity that the mind knows reality. You cannot know reality from your senses alone. We live in one universe, which we perceive through many senses.

Discovery of universal principles is the basis for human society. That is the basis for history as well. To know history is to know the human mind; this is true science. All great thinkers, such as Johannes Kepler, Carl F. Gauss, and Nicholas of Cusa exemplify this quality. They make history by pushing the boundary of human knowledge. Plagiarists are just washed away as mere "flotsam and jetsam" in the stream of life.

^{8.} For a thorough pedagogical work-through of the seven intervals and their relationship to Knowability see: www.wlym.com/~animations/harmonies/site.php?goto=scale.html.

^{9.} All readers of this article should actually read Kepler's work, and work through, along with the book, the LaRouche Youth Movement's pedagogicals on *The Harmony of the World*. A true discovery must come from the sovereign individual mind, and can never be explained. Never accept a faker's work, especially an anonymous faker's work.

^{10.} Stated in Section 3-MUSIC of the fake Kepler site. See www.wlym.com/~animations/harmonies/site.php?goto=scale.html for a pedagogy on this subject.

^{11.} This is a statement that was made on the fake Kepler site, Section 3-MUSIC. See footnote 10.

^{12.} This statement sounds very confused, based on what that author failed to grasp. Just see the end of his "Section 3-MUSIC."

^{13.} This is addressing what the fake Kepler site did in Section 4, titled THE PLANETS. For a very good pedagogy on this subject see: www.wlym.com/~animations/harmonies/site.php?goto=BookV.html. Work through the Book V section of the site and figure it out for yourself

^{14.} See the end of Section 4 of the fake Kepler website. For another great pedagogy on the origins of Kepler's Third Law see: www.wlym.com/~animations/harmonies/site.php?goto=prop13.html

^{15.} See the beginning of Section 4. The question of elliptical motion is a crucial part of Kepler's *The Harmony of the World*. For a pedagogical example of the nature of the ellipse, and, what is and how to measure an observed arc length from the Sun, see: www.wlym.com/~animations/harmonies/site.php?goto=chapters_3_4.html.

^{16.} At this point you should really wonder. See for yourself: www.keplers discovery.com/Gauss.html.

^{17.} On Carl F. Gauss, see www.wlym.com/~animations/ceres/index.html.