DISCUSSION ON SCIENCE WITH HELGA

Man's Original Creations

by Lyndon H. LaRouche, Jr. June 6, 2005

Foreword

Recently, my wife, Helga Zepp-LaRouche, reminded me, that Cardinal Nicholas of Cusa had emphasized that man's discovery of universal physical principles changed the universe in the sense of generating newly created agencies. It should be noted that Helga's continuing studies of the work of Cusa, which have been continued, with varying intensity, during approximately three decades, were begun during the mid-1970s, and were begun, with my emphatic encouragement, in frequent consultation with Professor Haubst of the Cusanus Gesellschaft, then the world's leading expert on Cusa.¹

In our inner-family dialogue on this matter, we were

1. Cusa had founded a home for retired clergy in his native town whose name he bears, Bernkastel-Kues, athwart the Mosel where his father had fished for crabs. For related reasons, I have often visited Cusa's still-operating foundation in Helga's company, including a well-attended 1987 celebration, on the occasion of my 65th birthday, where my now recently deceased friend, the leader of the famous Amadeus Quartet, Norbert Brainin, performed in my honor. Cusa's chapel and library are maintained up to last report, and the foundation is supported, at least in part, by the proceeds of the annual sales of its wine. Cusa is outstanding for several special accomplishments which have been proven by later developments to have been essential to the founding of modern civilization: his design for the founding of the modern sovereign nationstate (Concordantia Catholica), ending the Venetian-Norman tyranny of the *ultramontane* system; his founding of the modern experimental physical science of Luca Pacioli, Leonardo da Vinci, and of such among Kepler's followers as Fermat and Leibniz, and Leibniz's followers such as Carnot, Arago, Ampère, Gauss, Wilhelm Weber, Dirichlet, and Riemann (De Docta Ignorantia); his crucial contribution to the success of the great ecumenical Council of Florence; and, his founding of the project which inspired Christopher Columbus's voyage of trans-Atlantic discovery. Professor Haubst's own work on the legacy of Cusa has left a living record of inspired and energetic devotion and scholarly excellence.

both right. She was correct, on her representation of Cusa's argument, and I on mine. The explanation of that seemingly paradoxical point will be currently of interest among relevant members of the international La-Rouche Youth Movement (LYM) and also others; therefore, I supply the relevant explanation of the point as follows.

As I emphasize in the following pages, there are two aspects to any validatable discovery of a universal principle of the physical universe. This includes, as efficiently physical principles, those true principles of Classical artistic composition on which our association has worked over past decades, including the role of C=256 cycles in Well-Tempered, Florentine bel canto modes of musical composition and its performance. The first aspect of all validatable discovery of universal principles, is the way in which the mind of the relevant human individual discovers a pre-existing universal principle in its expression as a potential; but, then, second, we require an experimentally valid proof of that same potential, which, when discovered and also practiced by man, then serves mankind in a way which changes the universe, a new discovery of some principle which, at least implicitly, increases mankind's power in, and over the universe. Cusa's work embraced both aspects of this process of discovery, but, as Helga correctly emphasized, Cusa emphasizes the second, man in his role as a creator in the sacred likeness of the Creator. Cusa did this in a way which defines him in retrospect today, as the most significant of those Renaissance thinkers who defined the broad conceptions on which the specific achievements of modern European civilization, relative to earlier times, were premised.

Thus, the originality of mankind's original discovery of a principle, lies in the act of discovery of a uni-

versal implication of the existing universe, a potentiality which had been previously hidden from the view of mankind's knowledge. Man's acting on the basis of that discovered potentiality, changes the universe, bringing it into a new dynamic state. This, once again, confirms Heracleitus' and Plato's view, that in the universe, there is no exception to the continuation of qualitative change as the underlying ontological reality of processes.2 The universe is not a domain within which changes in principle are sometimes permitted; the universe is always being changed in this way, changing itself in this way, as Heracleitus and Plato, for example, insisted, and as V.I. Vernadsky insisted, in his development of the concepts of Biosphere and Noösphere.



Markus Norman

Lyndon LaRouche and Helga Zepp-LaRouche. "In our inner-family dialogue on this matter, we were both right," writes Mr. LaRouche, respecting their discussion of the importance of the contributions of Cardinal Nicholas of Cusa.

Thus, Helga and I were both right.

This should bring the attention of all among us present on this occasion, to the subject of the term "realization": to the subject of the way in which we should employ that term in scientific practice. That includes, of course, the subject in which I have accumulated original and otherwise notable qualities of expertise, the subject of an applied science of physical economy, as first defined by Gottfried Leibniz during his relevant work of the interval 1671-1716.

Since the circulation of my recent "Vernadsky and Dirichlet's Principle" featured in the June 3 edition of the *Executive Intelligence Review* news weekly,³ there has been accelerated attention to the subject of "dynamics" among my associates, especially the La-Rouche Youth Movement. Notably, my associates Bruce Director, Dr. Jonathan Tennenbaum, and relevant members of the LYM, among others, have accelerated their educational work on the subject of physical science, as modern teaching in economics and

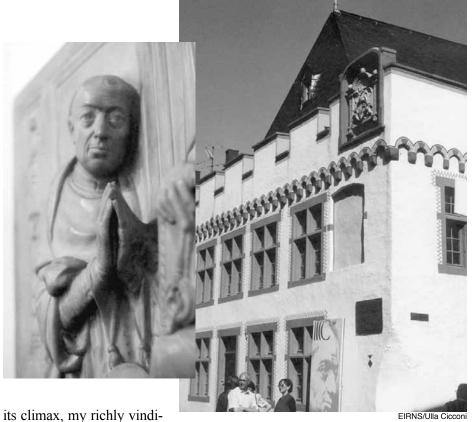
other relevant specialities must be redefined for current and future practice of humanity generally, defined from the standpoint of Riemann's Theory of Abelian Functions.

It is to be emphasized here, that throughout this report as a whole, the term "power" as employed in the following pages, is the English translation of the German term Kraft, as used by Leibniz in both his founding of the science of physical economy, and in his redefining the basis for all physical science after the work of Cusa's follower Kepler. It should be remembered, in reading the following report, that Leibniz's use of this notion of power is expressed in those notions of dynamics expressed by Leibniz's discovery and development, in association with Jean Bernouilli, of the only competent basis for a calculus, the catenary-based principle of universal physical least action. Otherwise, all of my successes, as contrasted with the failures, heretofore, of most of my professional rivals in the field of economic forecasting, have depended upon rejecting the mechanistic method relied upon in the visible arguments which had been previously presented by my putative rivals.

Lately, as the presently onrushing economic collapse of the world's present monetary-financial system reaches

^{2.} The modern form of this view of the argument of the permanence of qualitative change in principle, as by Heracleitus and Plato, is expressed in modern physical science by Bernhard Riemann's 1857 presentation of the theory of Abelian Functions.

^{3.} Executive Intelligence Review, June 3, 2005.



cated, long-standing views on the subject of economy have been favorably reassessed by many who, in earlier times, had wished to

consider my warnings as somewhat exaggerating the dangers, if not simply wrong. Thus, at a time when many in the U.S.A. and elsewhere are inclined to accept my assessments and proposals as important, they tend, none-theless, to worry all the more; they fear, that in their accepting what they now tend to admire in my work, they might tend to overlook my possible errors on related other accounts. I am therefore obliged to attempt, once again, to make the entirety of my methods and world-outlook transparent to those increased numbers of influentials and others who consider it important to know the fuller implications of my outlook, beyond what is expressed as explicitly on the subject of economy.

My referenced recent, brief discussion with Helga on the subject of Cusa's work, is therefore an appropriate starting-point for addressing such a wider range of matters.

Although I can trace the source of my discoveries in the field of physical economy to what I have often reported, earlier, as an incident at the beginning of my attendance in a secondary-school geometry semester,4 I have not yet decided, nearly seventy years later, how much this incident prompted my adoption of Leibniz's influence, and how much my already ravenous appetite for English renderings of French, English, and German philosophers of the Seventeenth and Eighteenth centuries had contributed to that statement which I had made during the course of the first hour of that semester's geometry What is certain is that, from about that time, I was, and have remained a persuaded follower of Leibniz.

What has been technically wrong with the work, and opinions of my notable rivals in the field of economic analysis and forecasting, is just that. They had taken the wrong turn at the crossroads in their choice of method. As a result of their induced preference for the meth-

ods of Paolo Sarpi's empiricism, in opposition to those of Leibniz and his predecessors back as far as the Pythagoreans and Plato, these economists' previous failures have been rooted in their preference for mechanistic methods. The result was their earlier refusal to take into account those aspects of the actual nature of mankind on which competent long-term assessments in economy depend.

These economists, so far, had previously overlooked the relevance of the view of human nature shared by Leibniz, for defining all subject-matters of scientific and artistic significance in determining the effects called "economic." Vernadsky's combined conception of Biosphere and Noösphere, when considered as an outgrowth of the heritage of Leibniz, is the most appropriate choice of context for defining the application of an

^{4.} See Lyndon H. LaRouche, Jr., <u>"Science: The Power To Prosper,"</u> **EIR**, April 29, 2005, p. 6: "Some Relevant Personal Background."

economics as I have redefined the notion of a science of physical economy for the immediate future of mankind today. Therefore, on this occasion, I turn attention here to the broader cultural implications of Vernadsky's dynamic conception of the universe and society.

1. Economy As Art and Physical Science

The most obvious indication of the existence of a higher class of fossils, those which are produced by means other than ordinary kinds of living processes, is the working archeologist's discovery of residues which could not have come into being by any means other than the agency of a specifically human intelligence. Such residues, belonging to V.I. Vernadsky's Noösphere, are to be defined as products of the application of a universal physical principle which existed *implic*itly, in the form of a potential, prior to mankind's employment of it, but which did not exist, as the residue of a practiced natural phenomenon, prior to mankind's discovery and application of the principles expressed by those archeological or comparable residues. The power efficiently expressed by intention, as evident in the successful employment of such principles, is a potentiality which may be expressed in the form of a residue of social action, but is to be regarded, more emphatically, as a residue of a principle which has come into existence as a practicable idea only within the sovereign bounds of the individual human mind which has discovered it.

All competent practice of archeology as a branch of the work of the historian, hangs implicitly on that rigorous set of distinctions.

Hence, all competent accounts of history, as the science of the history of the human species, are based on the broader application of that same, more rigorous definition of the essential principle of archeology, as I have already restated this point within my recent Vernadsky and Dirichlet's Principle. Actual knowledge of history, including archeology as a branch of a science of history, is, essentially, the history of ideas: the history of those ideas which express the specific quality of mental activity leading to the discovery, or re-discovery of either a universal physical principle, or its Classical-artistic form of equivalent. These ideas are communicable only through the act of replication of a relevant original act of discovery by the sovereign cognitive processes of an

individual human mind. These ideas generated by sovereign individual minds, are expressed in a communicable form, only through a special kind of tangible practice, practice of the type associated with the human, cognitive replication of an individual mind's experimentally validatable act of discovery of a universal physical principle.

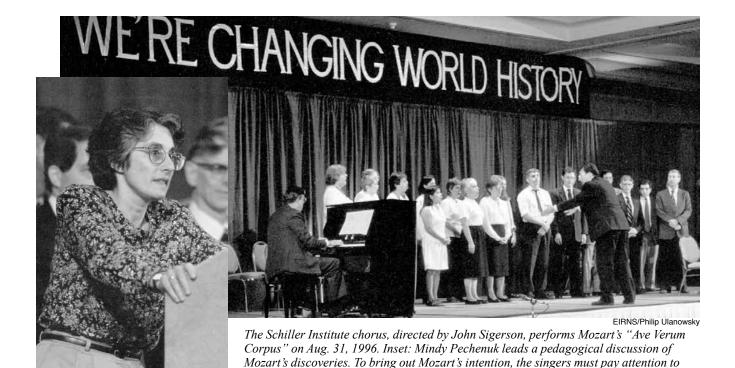
In globally extended European cultures today, there is a more or less grudging acknowledgment by modern society, of the need to apply the term "universal principle" to relevant matters in the domain of what is termed "physical science"; but, the suggestion that the same notion might be applied to the domain of art, often provokes an unpleasant facial expression, still today. Therefore, let us begin with the role of a universal physical principle in Classical artistic composition.

The Case for Music

For an illustration of this point about artistic composition, choose, first, a certain, short composition of W.A. Mozart which is suitable for treatment by a relatively small chorus, Ave Verum Corpus. It is experimentally demonstrable, that this composition could not be competently performed according to Mozart's intention simply by a formally literate, schoolbook reading of the score by the director and members of the performing ensemble. The performance requires a form of instruction which lies in something above what some might consider the formal aspects of the score, something which lies in the interaction, across, or, if you prefer, "behind" the singing voices, in the progression of the performance as a whole. "This something" is, in this case of Mozart's piece, expressed through the role of the same Lydian mode treated famously by Beethoven's Opus 132 string quartet.⁵

The distinction in quality of performance to which I am referring here, is not an effect which the relevant composer did not intend. It was precisely his intention, as a series of examples from choral and instrumental music of leading Classical composers, most notably from Bach through Brahms, demonstrates that to be the case in principle. The musical score reflects the existence of a composer's intended potential for that composition, which the performers must bring to actuality.

^{5.} See Mindy Z. Pechenuk, "Mozart's Ave Verum Corpus," Fidelio, Winter 1996. Mrs. Pechenuk directed a pedagogical performance at a Schiller Institute Conference, where the argument of her report was demonstrated in a live performance which is preserved in an audiovisual record retained to the present today.



what lies "between the notes" of the score.

Although the tools of this Classical principle are traceable by us as far back as the Pythagoreans, and to the basis for this intention expressed by the surviving fragments of Leonardo da Vinci's **De Musica**, it is J.S. Bach who created the system of well-tempered counterpoint on which all of the leading Classical composers have depended.

The systemic quality of error which the performers of such music must combat in themselves, is that created by even professional musicians and others who, demonstrably, like the notorious cases of Rameau, Fux, and their admirers, lack comprehension of the species-nature of any relevant Classical composer's intention.⁶

The same species of challenge represented in the Mozart *Ave Verum Corpus*, is presented, for a second example, by an earlier choral work, the motet **Jesu**, **meine Freude** of J.S. Bach, which presents the choral director and chorus with the same principled kind of challenge represented by Mozart's *Ave Verum Corpus*.⁷

For example, that challenge, in both of these instances, has been addressed and demonstrated by John Sigerson's direction of the LaRouche Youth Movement's rehearsals and performances of that Bach work.8 The selection of that Bach work for this purpose, was suggested by me, but endorsed by music director John Sigerson as a keystone for the East Coast development of the kind of LaRouche Youth Movement which had been developed earlier on the West Coast. This use of that Bach motet has been since continued on the West Coast, in Europe, and elsewhere. The progress of the choruses engaged in this project has been a rich lode of their expanding insights into the deeper implications of Bach's intention in this case, and a consequently growing insight into the intention of his life's work taken as a whole. Patient review of the relevant evidence available, shows that all the principal work of all leading Classical-musical composers, from J.S. Bach through

on the alleged distinction between Baroque and Classical, or the like, is worse than merely useless gossip whose influence is too often expressed in performances by musicians affected by such chatter.

^{6.} Rameau and Fux are a product of the modern reductionist corruption associated with the legacies of Paolo Sarpi and Descartes. They are, in that respect, authentic forerunners of the Romantic opponents of Bach's method, including the Carl Czerny whom Beethoven described as "that criminal" who would ruin Czerny's talented young pupil Franz Liszt. This is also a fault of Modernists and Post-Modernists, the latter including the school of Theodor Adorno's Brecht-like perversions.

^{7.} The attempt to separate Bach from Haydn, Mozart, and Beethoven,

^{8.} This is the same John Sigerson who organized and directed the project of our quite credible, mid-1980s performances of Mozart's Requiem, and who has played a leading, and progressive professional role in the vocal and other musical work of our association since then. The increasing refinement of his direction of the work with the youth and other choruses during the passage of time, is a reflection of the cumulative benefits of that continuing history.

Johannes Brahms, and great conductors, such as the late Wilhelm Furtwängler, are premised on the same attention to what "lies behind (or, "between") the notes" of the score.⁹

In providing students of music practical insight into the dynamic methods of Classical musical composition and performance, the way in which principle is expressed as a method of performance, is most readily referenced by pointing to how those examples may be managed by the skilled string quartet. Norbert Brainin described this to me, and also to relevant members of my circles of associates, as the method of rehearsal used by the members of the celebrated Amadeus Quartet, with results which can be heard from recordings by that institution. In the case of the Classical quartet, skilled performers can hear the relevant cross-voice intervals and adjust their performance in rehearsals according to the relevant dynamics of the composition. In the work of a chorus, or a larger instrumental ensemble, a director of the type which recorded examples of Wilhelm Furtwängler's directions illustrate, is implicitly required for this same purpose.¹⁰

Having each singer, or other performer come to a rehearsal with an "independent" reading of the notes in a part in the score, were often a recipe for standard qualities of artistic failures (unless the work being performed is itself already a modernist, post-modernist, or comparable abomination, whose message is a warning to the sensible member of the audience to leave the room). The relations among the individuals participating in musical performance of a Classical work in the Classical tradition of Bach through Brahms, for example, are not mechanical relations in the sense of the methods of the empiricists and other reductionists; they are *dynamic* in Leibniz's sense of that latter term of his

reproach against the incompetence of the reductionist René Descartes. They are *dynamic* in the sense of V.I. Vernadsky's argument respecting "organism," and my own argument, respecting principle, as I have presented and argued this point of both Vernadsky's and my own method in my already referenced *Vernadsky and Dirichlet's Principle*.

The emergence of modalities, such as the referenced cases of the Lydian mode, as an ordering principle in the across-voice process of development of a composition's performance (as distinct from successions of vertical chords), is an example of Leibniz's notion of that dynamic principle as Vernadsky and I have defined it: as distinct from, and opposed to a mechanical connection. This time we situate it within the domain of Classical artistic composition, rather than only physical science. In art, this has the same quality of significance as a universal principle, as the rule of the ontologically existent infinitesimal in Leibniz's catenary-cued universal principle of physical least-action, the principle which Leibniz expressed by his original discovery of that concept of natural logarithmic functions, later imitated, in somewhat castrated form, by the actively Leibniz-hating Leonhard Euler.11

In musical performance, this principle is expressed in the relations among a polyphonic passage in the unfolding of the performance in local intervals, expressed by what the unwitting member of the audience might view as seemingly very slight deviations, which that member mistakenly regards as like a chef's Romantic personal touch of seasoning added to a standard recipe. To the witting, they are associated with a special kind of *tension* which lends a sense of movement associated with what is actually the deeper meaning of the term "development." As I shall explain below, this quality of *tension* in Classical polyphony in music is associated

^{9.} The concept is congruent with Leibniz's definition of *Analysis Situs*, as this was carried forward in the work of Bernhard Riemann. It signifies the relevance of the ancient Pythagorean, *dynamic* notion of Leibniz's physical science and Bach's musical principles, as opposed to the formally *mechanistic* standpoint of Rameau, Fux, the Romantics, modernists, et al., and also the empiricists D'Alembert, Euler, Lagrange, et al. 10. As I have often, on occasion, referred to this experience, the first time I experienced Furtwängler's conducting was in 1946, in hearing a recording of his directing of a Tchaikovsky performance. It was like a "Damascus Road" experience, in which I recognized that the effect I experienced, of the "transparency" of the performance, lay in a gripping cross-voice movement throughout the performance, to the effect of the relentlessness of a compelling sense of a seamless intellectual development underlying the heard music which is heard not with the ear, but with the mind.

^{11.} The principal targets of Carl F. Gauss's attack on the incompetence of the empiricists D'Alembert, Euler, Lagrange, et al., in Gauss's own 1799 doctoral dissertation on the subject of **The Fundamental Theorem of Algebra**, were each and all representations of a cult of Leibnizhaters which had been organized as a network of salons by a Paris-based Venetian, Descartes-admirer Abbé Antonio Conti (1677-1749). Since Conti believed that a French Descartes would not sell well in London of that time, Conti used a circle he organized in London to create a cult, directed by figures such as theologian Samuel Clarke, as controllers of the figure chosen to substitute for Descartes, the black-magic hobbyist Isaac Newton. Conti's network of salons, a network organized around Leibniz-hater Voltaire, became the vehicle of a Europe-wide cult of Isaac Newton, in which D'Alembert, Maupertuis, Euler, and Lagrange were leading figures.



The celebrated Amadeus Quartet in performance. Their genius lay in playing together "between the notes," bringing out the unity of the Classical composer's idea

with those Classical expressions of *irony* which define the ironical principle of movement in poetry and Classical tragedy.

The controlling influence over this subtlety, as expressed in an acceptable performance of a Classical work, is unity of effect in the performance taken as an individual unit, a unity spreading, seamlessly, from a breath prior to the first tone, to a breath after the last. (There may appear to be "seams" in the literal structure of the score, but not in the idea which must underlie the performance of that score.) One knows that this intention has been chosen correctly as that of the composer, when the effect of the performance is that of a seamless and energetic unfolding of a valid choice of a single, unifying, underlying idea, "driving" the performance from beginning to close, producing this, a single idea, rather than a collection of musical effects. Beethoven's opera 131, 132, and 133, are recommendable testcases for showing this principle of composition and performance. Did the composition's performance "hang together?" "Did the composition as a whole move you, as by but a single, driving, truthful conception—in the sense of Riemann's representation of his relatively more advanced version of Dirichlet's Principle?"

It is of crucial importance that I emphasize here, that this conception is identical in all essentials with Riemann's notion of the application of what he references as Dirichlet's Principle, as I do in the case of my already referenced *Vernadsky and Dirichlet's Principle*. ¹² One must hear the entire performance as a single, indivisible idea. This is accomplished by focussing on the relevant composer's intention to achieve a unity of effect in the process of development of the performance, such that the sensible performers and their audiences will hear the entire composition as a seamless garment, rather than a composite of separable parts of a mere mosaic, composed to produce the effect of a mere pattern, rather than an actual idea of principle. ¹³

The genius specific of Beethoven's composition of such "late quartets" as his Opus 131, 132, and his *Grosse Fugue*, present a demonstration of that argument most clearly and emphatically; these are works of supreme genius precisely be-

cause they demonstrate the higher, dynamic principle of all Classical composition with such exquisitely intense purity of unity of effect. It is the same dynamic principle otherwise to be recognized as expressed by Leibniz's notion of his principle of universal physical least action, as an expression of what Riemann presented as his improved notion of what he termed "Dirichlet's Principle."

Clear ideas can not be distinguished as such without a rigorous regard for principle. On this account, the Classical chorus trained in Florentine *bel canto* tradition with register-shifts referenced to C=256, is necessary. ¹⁴ It is the slight adjustments in the quality of intonation needed to bring the focus upon the modalities expressed in forward motion, which are the singer's means for achieving the dynamic quality of unity of effect needed for a work such as the Mozart *Ave Verum Corpus*.

Consider the benefit such Classical musical compo-

^{12.} The <u>LaRouche Youth Movement</u> has accepted the challenge of developing pedagogy which represents the Principle as Dirichlet presented it in the relevant lectures which his student Riemann attended in Berlin, and also as Riemann's corrected, higher conception of this in his own work on Abelian Functions later.

^{13.} Wilhelm Furtwängler's recorded conducting of Franz Schubert's great C-Major Symphony, when compared with the work of his putative rivals of that time, provides an appropriate illustration of the point.

^{14.} See *A Manual on the Rudiments of Tuning and Registration, Book I: Introduction and the Human Singing Voice*, John Sigerson, Kathy Wolfe, eds. (Washington, D.C.: Schiller Institute, 1992).

sitions and their appropriate performance represent for the working physical scientist. To bridge the apparent difference this implies, shift attention slightly to the principle expressed by those modes of both plastic and non-plastic artistic composition which are to be recognized as strictly Classical in both composition and in terms of the modes of performance applicable to such compositions. The same principle expressed by the referenced Beethoven quartets is to be found underlying the principle of composition and adequate performance of Classical poetry and tragedy.

Irony: The Classical Principle in Art

Today, the word "idea" is popularly employed in a manner which is, intrinsically, functionally illiterate. The strictly Classical use of that term, "idea," limits its use to conceptions of universal physical principle, or to Classical artistic conceptions produced in accord with that same standard of precise distinction. The prevalence of what is fairly termed "the factor of slop" in the prevailing standards of instruction and related practice, in both what is called physical science, especially in mathematics as such, and, worse, in defining principles of artistic composition, has had the effect of maintaining a state of affairs which has been usefully termed, as by Britain's late C.P. Snow, a "two cultures" crisis in modern European civilization, a separation of science from art. The fault lies on both sides of the professions; the results are grave in their impact on education; often, the moral effects of this condition has been catastrophic. Here, I employ the term "idea" in its proper, strictest sense of meaning as applying to both domains.

That idea of "slop" is typified by the method of D'Alembert's, Euler's, and Lagrange's attacks on Leibniz, as they were correctly attacked for such "slop" by Gauss's 1799 paper on the subject of the Fundamental Theorem of Algebra. They asserted simply algebraic methods in a "hand-waving" sort of brushing-aside of the fact of an essential ontological difference between a mere algebra and a subject in physical geometry, such as the ontological, geometrical difference among a point, line, surface, solid, etc. These empiricists, and others of kindred spirit, use a reductionist's notion of mechanics, as Euler and Lagrange did, as a substitute for actual scientific principle. In other words, they perpetrated a simple sort of intentional fraud, the same kind of fraud practiced by the followers of Rameau and Fux, relative to the work of Bach and his followers. Today, the same type of methodological fraud is pervasive, if, happily,

not entirely so, in the domain of composition and performance of poetry and Classical drama.

Thus, the specific problem on which I ask you to focus your attention at this phase of the report, is the concept of Classical *irony*, as this is encountered as the essential principle of Classical poetry and drama. This kind of idea also appears as the concept of an efficient universal physical principle, and as this is expressed in the musical examples I have just referenced above.

Select four Shakespeare dramas chosen, on this occasion, for the purpose of illustrating that point: *Julius Caesar*, and three dramatizations locating action within a legendary society: *Lear, Macbeth*, and *Hamlet*. The first of those societies is the truthful echo of the actual, morally depraved culture of Rome of that time in world history. The cultures of the latter three societies represented by Shakespeare, are also depraved and also frankly quite mad as well. It is *that quality of historical specificity* of the relevant culture, in each actual historical (Julius Caesar's Rome), or legendary case.

With those words, we have now entered a domain densely permeated by Classical forms of *irony*.

The language on stage is from Shakespeare's England, but that speech is used to convey an ancient culture which is not congruent with the use of the English prescribed by Shakespeare; for *Julius Caesar*, it must be the actual, depraved Roman soul, using the English language for revealing the character of its true self at the time and place of the referenced events. ¹⁵ *Irony!* The principle is the same emphasis on accurate historical specificity which Shakespeare sought to convey in his account of the reign and fall of the Venetian-Norman tyranny's reign over the medieval history of England, this time applied to the historical case presented, and no other. *Irony!*

Incompetents such as the Romantic or Modernist, will stage these dramas as a costuming of action on stage which is not of the historic setting identified, but a poorly disguised reflection of contemporary English-speaking culture. Whereas, to underline the relevant, implied quality of contrast at issue here, it was pointed out to me that Schiller's poem *The Cranes of Ibykus* was crafted by Schiller through a rather exhaustive precrafting involving Goethe, Wilhelm von Humboldt, and others, with the intent to convey the richly ironical feeling of the language and mood of actual Corinth of

^{15.} For reasons I develop a few paragraphs below, there is no fault in that use of English by either Shakespeare or the modern director.





Svlvia Spaniolo

Members of the LaRouche Youth Movement in Los Angeles (left) performing Shakespeare's Julius Caesar, under the direction of Robert Beltran and (right) working on Gauss's conformal mapping. "All serious Classical art, and its production, are, like true physical science, the process of building the better future in which our descendants will live. True science, like true art, has no more compelling commitment than this."

the living Ibykus's actual time and place, but in Schiller's own German. A richness of *irony!*

It is of crucial importance for the benefit of the audience, that faithful attention, such as Schiller gave to his composition of *The Cranes of Ibykus*, be given to the intended historical-specificity. This, evokes a sense of eeriness, *irony*, which the competent staging of any of those dramas will evoke.

As Schiller emphasizes, the man from the street should leave the theater as virtually a different person than had entered a few hours before. Irony! This effect is not, like the experience of some fundamentalist parson's rant, some maudlin sort of edifying moral effect upon the audience. It is the effect on the citizen of looking over the shoulder of a history different than that of his own experience of life in his own time and place. Irony! "Why could they not see the rottenness of their culture? Could I do something about a tragic error in the culture of my own society today? What kind of a fool I would be, if I could not look at my own culture as I could now see so clearly the insanity of that other culture presented to me by that play?" Irony! He is not such a fool that he would attempt to deduce a principle for his culture from the other culture on stage.

The citizen's passion should not be mustered with the intent to change the history of that culture which pranced on stage, or to adduce a moral recipe from it; he must develop relevant insight into the qualitatively different historical specificities of his own culture. Only a weird sort of fool of a man would portray himself, on stage, or in life, as experiencing the condition of pregnancy. *Irony!*

We each dwell in a part of the larger fabric of history as a whole, in these cases, European history; the Earth is not flat, nor is any significant interval of culture in history. The culture of any place and interval has specific, dynamic characteristics, within, and with respect to differences with any larger portion of history. It is those differences—ironies!—which are the appropriate subject of the playwright's and director's attentions. The competent playwright, as Friedrich Schiller prescribes, is primarily an historian of a special distinction. Any Classical drama must be a voyage of the mind of the audience to some specific time and place in history, as it were a visit to a country where one's own language is, ironically, not actually spoken, and where habits of social interaction are ironically different. It is a sense of history from the vantage-point of this ironical quality of conscious experience of changes of quality of composition among cultures, among societies, among successive generations of even the same society, such as the typical qualitative cultural conflict between "Baby Boomers" and young, university-age adults today, which is the included subject of the broad mission of the Classical drama in general.

This brings us to the next quality to be considered.

Thus, whereas the Romantic or Existentialist sitting in the audience during the performance, imagines, in his or her simple-minded way, that he, or she, as a member of the audience is observing the behavior on stage, and is reacting to that which he, or she is witnessing: On the contrary, the playwright, director, and actors are, ironically, observing the members of the audience, and drawing conclusions about the expected and actual performance by that audience, and also about themselves! All is irony! I explain:

The orbit of the planets is not circular, but elliptical. *Irony!* Fermat demonstrated that the pathway of least action is not the shortest distance, but the pathway of the quickest time. *Irony!* Huyghens thought this pathway was defined by the cycloid; but Leibniz and Bernouilli demonstrated that it is the catenary-defined principle of the Leibniz calculus, the principle of universal least action. *Irony!*

All great playwrights, directors, and actors dealing with Classical artistry in drama and poetry have proceeded from nothing less than a controlling intimation of the essential immortality of the experienced, living human individual and his species.16 Irony! The substance corresponding to even such a mere intimation has an ontological actuality corresponding to such examples as Bernhard Riemann's representation of the correct metaphysical apprehension of the notion of Dirichlet's Principle, as Riemann carries this beyond Dirichlet's own argument, in Riemann's work on Abelian functions: Abelian functions are the expression of, literally, unbounded irony, which is itself an ironical conception. On the correct use of the term "metaphysical," as I employ that term here, I refer the reader of these lines to the comparison provided in the essential argument which I supply as the kernel of my Vernadsky and Dirichlet's Principle.

To repeat the core of that argument, I say the following here. In the scientifically correct use of the term *metaphysical*, science emphasizes the conditional validity of sense-experience, that it represents, at best, shadows of efficient reality, shadows which have been generated, as effects of the action of unsensed, but provably efficient principles upon the individual human being's sense-perceptual apparatus. Universal principles are never seen directly by the senses, but, at best, only the existence of their effects, as something undeni-

ably efficient, but which, like the concepts of the mathematical physicists' complex domain, does not itself appear as an object of sense-perception.

What is real is not that which a naive reading of sense-impressions suggests, but, rather, that, at best, that which is not directly known to sense-impressions has produced as a shadow cast upon the sensorium. That is the essence of irony! It is such irony which unites physical science and the practice of valid Classical artistic composition, as congruent features of human knowledge of man in the universe in which we exist.

It is that principle of irony which is the true principle of all composition and performance of Classical art. It is that which unites all of the work of Leonardo da Vinci as a single enterprise.

To communicate that which is true, one must rely on the irony of the developmental process of constant change which merges the domains of the mortal and immortality into a single experience. That is the highest expression of Classical art. That is the indispensable function performed by Classical artistic composition and its performance.

Life as Art: The Principle of Tragedy

So, in the work of Vernadsky, life exists, provably, as a universal principle, but, as I emphasized in the indicated location, life can not be located functionally within the relatively universal domain of abiotic processes. It acts on, and acts within the bounds of the abiotic domain, but life as such is not part of that domain, and is above it. Similarly, the Noösphere is defined by a principle of cognition which can not be located within the confines of the domain of biology as such, and is above it. References to such physically efficient principles as those, are the only sane use of the term "metaphysical," just as the Gauss-Riemann conception of the complex domain identifies the ontologically metaphysical actuality of all experienced physical processes in the universe.

This notion of physically efficient metaphysical existence, was already understood by such ancients as the Pythagoreans and Plato. It appears in Platonic and Christian theology, for example, as the notion of the immortality of an individual human personality, as a quality of the personality whose function within the Noösphere is bounded by the existence of the living person, but whose distinctive existence, as a distinct human personality, is located within the realm of a principle which does not experience biological death. Thus, in the work of Vernadsky and his relevant predecessors,

^{16.} On the record, even the English poet Wordsworth acknowledged the relevance of this topic, but without actually describing it efficiently.

only life as such can produce life, and only the principle of individual cognition as such can produce cognition.

Therefore, all truly sane persons, and societies, too, locate their primary sense of self-interest in the notion of immortality associated with the existence of human life within the Noösphere, if only as *an intimation of immortality*. The only rational use of the term "Classical" in European civilization today dates, to our best present knowledge, from such exponents of this persuasion as the Pythagoreans and Plato, and, implicitly, to their tracing of such conceptions to earlier developments within Egyptian civilization. All European Classical science and art are subjects of that view of the nature of the individual member of mankind in the universe.

Take Shakespeare's work, for example.

For the England of Christopher Marlowe and Shakespeare, since the relevant pack of Venetian scallywags—such as Zorzi ("Giorgi"), Cardinal Pole, Thomas Cromwell, et al.—had effected the judicial murder of Sir Thomas More, their modern England had taken on attributes of a horrid Venetian nightmare. The earlier liberation of England, led by Richmond (Henry VII), had launched an England which had been freed so from the long tyranny of the ultramontane forces of the Venetian-Norman partnership, and had been a blessing: the experience of the modern sovereign commonwealth. This commonwealth of Sir Thomas More's time was now gravely endangered, as, again, later, during Shakespeare's time, menaced by the emergence of a New Party of Venice in a late-Sixteenth-Century England becoming dominated, more and more, by the figure of Paolo Sarpi and such emerging prominent Sarpi agents of the early Seventeenth Century as the depraved Sir Francis Bacon and Thomas Hobbes.

For such as Shakespeare's circle of followers of Sir Thomas More, et al., there would have been no Richmond but for France's Louis XI, and no reign of Louis but for Jeanne d'Arc. That history reached back to deep layers of humanity, long before the evil which had been imperial Rome. Under the influence of such followers of Paolo Sarpi as Bacon, Hobbes, and John Locke, Shakespeare's plays were either banned, or mangled and virtually destroyed by their producers, until their legacy was rescued from a British intellectual sewer by the circles of such German founders of the late Eighteenth-Century Classical insurgency of such admirers of Shakespeare's original work as Abraham Kästner, Kästner's student Gotthold Lessing,

Moses Mendelssohn, Goethe, and Schiller.¹⁷

On the Classical stage, human history is immortal in that way, dwelling forever within a "simultaneity of eternity" as Raphael Sanzio portrays this in the Vatican Museum's *School of Athens*. It is on that stage in mankind's eternity, that the Classical drama situates both the play and its audience, just as the Aeschylus of *Prometheus Bound* situates Prometheus and mankind in the immortal struggle against the evil, implicitly satanic tyranny of the Olympian Zeus. Compare Shakespeare's treatment of Hamlet with a certain characteristic of Aeschylus' *Prometheus Bound*, and with the attempt by P.B. Shelley to reconstruct it.

The prevalent fault in ancient Greek tragedy, prior to Aeschylus' *Prometheus* trilogy and Plato's related protest against the tragedians generally, is the lack of even a prescience of an *ironically posed shadow of a remedy for the future society*, in the drama: Schiller's "Sublime." *Prometheus Bound* is an exception to this deficiency in Classical tragedy before Plato. In the accounts of the trilogy which have been supplied, Prometheus is freed from captivity and torment in the concluding, third part of that drama. Therein lies the awesome power arrayed against Zeus, a power which was already ironically implicit in the preceding *Prometheus Bound*.

In that instance, the remedy is found, not within the drama misread as the interpretation of a script. The solution lies in the mind of the audience, in that they are human, and are watching mankind's benefactor being tortured for reason of his defense of the right of human beings (of which the audience is, ironically, largely composed) to express their natural aptitude for discovering and employing beneficial universal principles. Those who remember Solon of Athens' letter to his dec-

^{17.} Abraham Kästner (1719-1800) was a leading mathematician of Eighteenth-Century Germany, a principal teacher and later collaborator of Gotthold Lessing, one of the two principal teachers of Carl F. Gauss, with E.A.W. Zimmerman, a one-time host of Benjamin Franklin, and a key part of the circle which brought the anti-Locke influence of Leibniz's New Essays on Human Understanding into the leading position it occupies in the crafting of the 1776 U.S. Declaration of Independence. Kästner played a key role in the revival of the actual work of Shakespeare in and from Germany. However, after Carl F. Gauss's 1799 doctoral dissertation, attacking the hoaxes of D'Alembert, Euler, and Lagrange, the empiricist school of Gauss and Riemann's Nineteenth-Century and later adversaries, has sought to defame Kästner, and send his memory into obscurity. It was the launching of the Eighteenth-Century German Classic by these circles, which brought the Classical legacy of Shakespeare back into that English-speaking part of the world associated with Benjamin Franklin and Percy B. Shelley. Irony!

adent fellow-citizens of that earlier occasion, have the implied capacity to recognize that the persecuted Prometheus is their benefactor being persecuted on their own account. The drama, the *Prometheus Bound* portion of the trilogy, has Constitutional implications of a quality reflected in the founding of our U.S. republic. The section from Goethe's fragmentary *Grosskopta* in which the character Prometheus curses Zeus, is a relevant reference on this point. Such irony is the secret of all the Classical poetry and drama, as composed and performed, still worthy of our attention today!

The Olympian myth expresses a condition of society in which a reigning oligarchy has reduced the conditions of life of the majority of humanity to those of wild, or tamed human cattle. Such cattle are forbidden to employ, or even to imagine the discovery of universal physical principles, such as what is portrayed in the play as the use of fire. Their knowledge of means by which the human condition of the generality of the people must be improved, is forbidden. This is called, euphemistically, the "traditional culture" prescribed for human cattle; therefore, the killing of the human slave who has acquired literacy, that done by the hand of the beast which writes the laws.

To follow Shakespeare's work properly, we must take this principle of that Aeschylus play into account: in Hamlet, for example. As Shakespeare puts the point in the character Horatio's aside to the audience, in the closing scene of the play, we must learn the lesson of the preceding events which have occurred, not in England, but on stage, lest we repeat their equal in the future. This is not said to the Scandinavian population of the drama, but, rather, to the English audience present at the performance of the play. The playing of the play itself is, on that occasion, the triumph of the author, players, and audience, over the evil which is Hamlet's rotten state of Denmark. There is no "happy ending" within that drama itself, but, access to a happy outcome for some present, or future audience which is adequately inspired by the irony of the drama they have experienced.

Thus, in both Aeschylus' **Prometheus**, or the dramas of the matured Shakespeare, Lessing, and Schiller, and the best work of Goethe, the sheer awfulness of a terri-

ble culture is used as a springboard for foreseeing what Schiller defines as the principle of *the Sublime*. The individual person must be greater than his, or her personal destiny. Aeschylus' **Prometheus** typifies that issue, as did both the real-life Jeanne d'Arc and Schiller's truthful presentation of her on stage. All Classical European drama is subject to that standard for defining its purpose and its essence.

There is no mortal "happy ending" within the reallife drama of Jeanne d'Arc as an individual; there is her actual immortality, in the self-liberation from Norman tyranny of a France inspired by her mission. She has died, as all men and women will die by one means or another; but, she has achieved immortality, *ironically*, through the manner in which she dealt with the peril which overtook her mortal existence.

The case of Shakespeare's *Richard III* brings the issue of the real-life Jeanne d'Arc into sharp focus, as Schiller does with his play.

Despite the Classical conception of man expressed within the best moments of ancient Greek culture, such as the letter of Solon of Athens, or the doctrines of immortality and agape presented by Plato, the condition of the people generally was their subjugation to a state of relative bestiality, as virtually human cattle herded by oligarchies like that of the mythical Gods of Olympus. The moral degeneration of Athens, by forms of reductionist philosophy verging from the Eleatics and others into Sophistry, the rise of the evil which was the Roman Empire, the Byzantine empire, and the ultramontane tyranny managed by the alliance of Venice's financier oligarchy and the Norman chivalry, present us a long history of anguish, an extended tragedy. Finally, in the Fifteenth-Century Renaissance, a new form of society was established on the basis of the principle of agape: the commonwealths of Louis XI's France and Henry VII's England, a new condition of mankind in modern Europe, a better condition spawned by the great Renaissance of that century.

True art addresses nothing less than subjects of kindred grandeur of spiritual capacity for good, or, failing that, for evil. Shakespeare's **Richard III** must be seen, with Richmond's virtual slaying of the old dragon of Norman chivalry, as the liberation of mankind from an ancient great evil, as the justification of the suffering of the Christian martyrs under Roman imperial oppression, from Nero to Diocletian, and as the horror which the partnership of Venetian financier oligarchy and Norman chivalry had produced as the virtually geno-

^{18.} This was set as a song by Hugo Wolf. The Hugo Wolf Society's recorded performance by the famous bass and cantor Friedrich Schorr, is a notable reference—in spite of my objections to much of Wolf's work and critical opinions otherwise.

cidal New Dark Age of Europe's Fourteenth Century.

From great Classical tragedy the member of the audience obtains nothing so much as an intimation of immortality, the immortality of the actual Jeanne d'Arc whom Schiller brings to life, by aid of Classical dramatic devices, on the stage. Or, the real-life meaning of the mission of the Rev. Martin Luther King. The object to be grasped is the immortal meaning of one's own brief, mortal existence. The question to be posed is, "What shall I do with this mortal life which will fulfill the mission of this brief mortal existence?" That is the ironical difference between human life and the awful littleness of soul expressed in Lord Chesterfield's famous collection of letters, or the misreading of Classical drama which becomes a collection of relatively petty moralizing in the Romantic's or existentialist's smothering of the presentation of a Classical drama or poetry.

The meaning of the mortal individual human life is located in the future of society. "What, dear fellow, might be the immortal purpose for which you are living as a mortal being today?" The sense of Classical tragedy impels us to hear the anguish of the past, its unrealized achievements, and to discover, if we are able to do so, the means for nourishing an outcome which the past has consigned to realization in either our present, or our future. Serious citizens think several generations, or even more, ahead. They do so not by indulging in wild fantasies, but in selecting some cornerstones to be laid today, which are a necessary step toward something of importance to humanity to be realized in the future. So, as an economist of my years, I make no policy which does not look forward to a world of today's young adults, a world of their experience a half-century—two generations—yet to come.

All great art is great precisely to the degree it expresses that kind of intention underlying the relevant action of the artist. Such is the nature, purpose, and required quality of performance of Classical tragedy and poetry. All serious Classical art, and its production, are, like true physical science, the process of building the better future in which our descendants will live. True science, like true art, has no more compelling commitment than this. So, Classical drama and poetry must be understood, and produced.

In the immortality of human souls, all find justice, the good and the evil alike, and the cowardly and merely useless, too. Such is the nature of competent science.

2. Economy As Humanism

A foolish economist measures the performance of an economy in the financial, or monetary, or, much less foolishly, the physical wealth enjoyed by either some, or all of the members of that society. The competent economist measures the wealth of the economy in the degree of self-improvement of the quality of the members of society as human. Making the same point more bluntly, it were said that the economic mission of society is to make the nation's people better than they are today. This is to be done through means employing the process of developing the people to higher levels of power in and over nature per capita. Or, we might better say, "The greatest wealth which the generation of the deceased has bequeathed to its heirs, is a society of a better quality of living people."

The opposing, popular, but wicked point of view of most contemporary courses of instruction in economics, measures wealth as Adam Smith did in an ugly, relevant passage within his notorious 1759 **Theory of the Moral Sentiments**, which I have quoted on several occasions:

"The administration of the great system of the universe ... the care of the universal happiness of all rational and sensible beings, is the business of God and not of man. To man is allotted a much humbler department, but one more suitable to the weakness of his powers, and to the narrowness of his comprehension; the care of his family, his friends, his country.... But, though we are ... endowed with a very strong desire of those ends, it has been intrusted to the slow and uncertain determinations of our reason to find out the proper means of bringing them about. Nature has directed us to the greater part of these by original and immediate instincts. Hunger, thirst, the passion which unites the two sexes, the love of pleasure, and the dread of pain, prompt us to apply these means for their own sake, and without any consideration of their tendency to those beneficent ends which the great Director of nature intended to produce by them."19

It was this book by Smith which should be recognized by relevant scholars and economists as a significant part of the background for Lord Shelburne's 1763 assignment of the same Adam Smith, to undertake tasks

^{19.} Cf. Lyndon H. LaRouche, Jr., with David P. Goldman, et al., **The Ugly Truth About Milton Friedman** (New York: New Benjamin Franklin House, 1980), p. 107. Emphasis added here by LaRouche.

of subversive operations against both France and the English colonies in North America. In carrying out that assigned mission, Smith followed faithfully the doctrine of promotion of private vices of the pro-Satanic Bernard Mandeville of *The Fable of the Bees* notoriety. Smith generously plagiarized the Physiocrats Dr. François Quesnay and Turgot in producing his 1776 attack, known by the short title of *The Wealth of Nations*, on the founding of the United States of America.

By virtue of breeding, the East India Company's Shelburne preferred the methods of the Venetian stiletto, to the costlier enterprise of frontal bayonet charges. Thus, this was the same Lord Shelburne who used as a stiletto his notorious Martinist freemasonic order associated with the circles of Voltaire,

of such as Jacques Necker, the Duke of Orléans, Count Cagliostro, Casanova, et al. which conducted the series of operations used to destabilize and overthrow the French government, through stunts such as the affair of the Queen's Necklace. It was this same Martinist stiletto which used Shelburne's British Foreign Office of his dirty-operations specialist Jeremy Bentham to launch the terrorist activities of the London-trained British agents Danton and Marat, and later Robespierre.

That was the same Martinist order, under the leadership of that Count Joseph de Maistre who crafted the personality designed for, and adopted by Napoleon Bonaparte for the latter's transformation from a Robespierre asset into the great monster whose wars, by 1815, had created a situation of subsequently ricocheting effects, from which continental Europe has never fully recovered, to the present day. Indeed, Joseph de Maistre's design for what became known later as the Napoleonic imperial model used under the rubric of Synarchism, was the basis for the launching and continuing deployment of the European financier-created model of Mussolini and Hitler, including the de Maistre-prompted persecution and mass-murder of Jews by the Nazi dictatorships during the 1922-1945 post-Versailles Treaty interval.



Lord Shelburne (1737-1805) of the British Foreign Office "preferred the methods of the Venetian stiletto to the costlier enterprise of frontal bayonet charges. Thus he used Adam Smith and the Martinists to launch subversive operations against both France and the English colonies in North America."

The net result of that brutish ideology represented by Shelburne's Adam Smith, has been the British-monarchy-sponsored myths of *both* capitalism and Marx's socialism.

The U.S. Constitutional system was never either a capitalist or socialist "economic model." It was only to the degree that European nations, such as Bismarck's Germany and Alexander II's Russia, adopted the counsel of American System economist Henry C. Carey, that continental Europe has rivalled the United States in the field of physical economy. It was always the American System of political-economy which guided President Franklin Roosevelt's transformation of an economy wrecked under Andrew Melloncontrolled Presidents Coolidge and Hoover, into the most power-

ful economy the world had ever seen, the same economy successfully ruined during the past three decades under policies more radically destructive than anything experienced under Mellon and Hoover.

In contrast to contemporary European constitutions and systems, the actual form of society which the U.S. Declaration of Independence and Federal Constitution, with its crucial Preamble, define the U.S. economy to be, is neither capitalism nor socialism, but what U.S. Treasury Secretary Alexander Hamilton, among others, defined as The American System of political-economy. What the British system, and the Karl Marx it trained, defined as "capitalism," was the British imperial form of Anglo-Dutch, Venetian-style ultramontane rule by a financier oligarchy. This was the system established by the victory of the Anglo-Dutch financier oligarchy, centered in the power obtained by the British East India Company through the February 1763 Treaty of Paris, which concluded the preceding, mutually ruinous "Seven Years War" among the powers of continental Europe.²⁰ From 1848 on, the power of the old feudal systems of Europe, such as those of the decadent Habsburgs,

^{20.} The precedent for the British imperial monarchy's orchestration, under Prince of Wales and later King Edward VII, of the mutual ruin of continental Europe through World War I.

were largely absorbed in what became, increasingly, the appendages of the Anglo-Dutch Liberal monarchical system.²¹ The power in this imperial system was located in that financier oligarchy which became known as the *Synarchist International* of the Twentieth Century, the same Synarchist International whose cabal of private bankers gave us Mussolini, Hitler, and World War II.

The European system, which credulous of the world have accepted as what they describe as "the capitalist system," is, in fact, usually the system of tyrannical rule which the private financier-oligarchical syndicates of Europe and elsewhere have exerted as a power placed legally above the authority of governments, through arrangements often described today as "independent central-banking systems." The present European Central Bank is a version of this. It was that arrangement, consolidated during the Versailles Treaty proceedings following World War I, which gave the world the Bank of England's one-time choice Adolf Hitler and all the evil which he came to represent.²² It is that same cabal, in its present form, which has brought the world now into a collapse far more menacing than that of 1929-1931, to the verge of an intrinsically bankrupt system of "globalization" which would lead the planet as a whole into a prolonged new dark age.

There have been serious attempts at establishing Presidential systems in Europe consistent with the U.S. model, as the attempts of de Gaulle under the Fifth Republic attest. However, as soon as the superior authority of some "independent central banking" system as a superior national, or international authority, is usually affirmed, the sovereignty of the nation becomes merely conditional upon the continued pleasure of the true ruling power, the reigning financier oligarchy.

The relevant point of formal confusion in opinions concerning the comparison of the American System to its usual European rivals, has been the fact that the American System does use the notion of price, and profit on sales of priced goods, as the medium within which private entrepreneurship functions. The differ-

ence in principle becomes clear once we simply put aside the notion of capitalism as the British system defines it, and replace that with the American System of political-economy. This difference is blurred only to the degree that American practice is corrupted to significant degree by the influence of the Europe-designed international financial-oligarchical power.

The essential difference, especially so when the discussion of economy is situated within the framework of culture as treated in the preceding section of this report, is that the British system is essentially, as Germany's Chancellor has recently observed, an intrinsically *amoral* system, based in fact upon the supremacy of financial usury;²³ whereas the American System of political-economy is premised upon pervasive, controlling universal types of moral considerations, upheld by those Germans and other Europeans who share belief in the higher authority of our own Constitutional principle of promotion of the general welfare, which Plato and the Christian Apostle Paul defined as *agape*. These are the considerations implied in the opening paragraph of this present chapter.

Modern Society

The clear dividing-line between medieval and modern European civilization is the impact of the process associated with the Fifteenth Century's great ecumenical Council of Florence. The U.S. Federal Constitution of 1789 is the heir of the revolution in principles of government established by that Council. The most typical of the writings defining the functional meaning of that distinction, are two works of (Cardinal) Nicholas of Cusa: his *Concordantia Catholica*, superseding Dante Alighieri's **De Monarchia** as a definition of the founding of the modern sovereign form of nation-state republic; and his launching of modern experimental science with a series of works beginning with his De **Docta Ignorantia**, and including his proposal for what became Christopher Columbus's voyages of discovery to North and Central America.

Admittedly, this Council did not establish a prescribed form of the modern state, but, rather, specified the ecumenical principles already implicit in Christianity under which the organization of peoples among sov-

^{21.} Thus the former feudalistic aristocracy of Europe and beyond was chiefly absorbed into the role of subordinates, even mere lackeys, of the "bourgeois" monarchies of Britain and the Netherlands.

^{22.} The chief instrument coordinating Hitler's rise to power was the Bank of England's Montagu Norman, whose most notable agent in this matter was banker Hjalmar Schacht. It was the German-Soviet negotiations leading toward an initial Nazi attack westward, rather than eastward, which spun some among the relevant financier circles which had brought Mussolini and Hitler into power, into a temporary commitment to destroy Hitler, before returning to deploy on behalf of fascist-like perspectives as soon as President Franklin Roosevelt was dead.

^{23.} The principle of usury has been defended against the Preamble of the U.S. Federal Constitution among some U.S. circles such as Associate Justice Antonin Scalia, defended as the same Lockean doctrine of "shareholder value" which was banned by the Declaration of Independence and Preamble of the Federal Constitution, but which was the argument made by the advocates of chattel slavery prior to 1861-1865.



"The clear dividing line between medieval and modern European civilization is the impact of the process associated with the Fifteenth Century's great ecumenical Council of Florence...." Here, a detail from Benozzo Gozzoli's "Journey of the Magi," depicting the arrival at the Council of a delegation of religious leaders, poets, philosophers, and statesmen.

ereign states might be arranged. However, the results of the findings by the Council were soon realized as the first modern European sovereign nation-states committed to the principle of *agape*.

The included outcome of these proposed reforms was the founding of the form of modern nation-state known as the *commonwealth*, which was first established in Louis XI's France, and then Henry VII's England. This notion of the principle of the commonwealth was affirmed in the first provision of the agreement to end religious warfare with which the 1648 Treaty of Westphalia opens, as presented in a more perfect way in the 1776 U.S. Declaration of Independence and 1789 Federal Constitution. The concept of "promote the general welfare," as an integral feature of the supreme principle of Constitutional law in the Preamble of the Constitution, is an expression of the qualitative distinction, on principle, between the European cultures' forms of feudal and modern society.

To assess the history of modern European civilization since those modern developments, we must fairly say that Cardinal Nicholas of Cusa's prophetic perspective for reaching out from Europe through voyages

across the Atlantic and to Asian destinations, became a long-ranging policy, as by Christopher Columbus and Sir Thomas More's England, to establish allies for these policies of the great Council in more distant regions of the planet. The combined effect of the efforts in this direction, resulted in the establishment of a system of sovereign nation-states in the Americas, including emergence of the U.S.A. as the first modern nation-state with a refined design expressing the best knowledge of all known parts of European civilization up to that time.

The U.S.A. was built by Europeans. As the case of the founding and early, pre-1688 development of the Massachusetts Bay Colony attests, the U.S.A. was not the out-

come of a blind flight of refugees from Europe, although many did come as refugees. We were built, as the case of the Seventeenth-Century Massachusetts Bay Colony attests, to establish on our shores a kind of republic which could not be created within Europe under the conditions of the efforts of the European financiers and other oligarchs to crush the achievements of the Fifteenth-Century Renaissance with the weapon of religious warfare.

With the British Foreign Office's orchestration of what became known as the Martinist order's French Revolutions of 1789-1815, we knew, as the policies of Secretary of State John Quincy Adams attest to this, that we could not survive as a nation, in face of threats of our destruction from locations such as London's and Metternich's Europe, unless we built our republic to a level of sufficient strength to defend itself against these bloody adversaries. To that end, Adams virtually created a functioning form of our Department of State, with its presently continuing tradition of a system of well-informed, thinking historians, and coupled this effort with clearly defined territorial objectives. We defined the U.S.A. thus as a continental power, a sover-

eign republic between its intended permanent northern and southern borders and from the Atlantic to the Pacific oceans. With President Lincoln's victory against the London-orchestrated pro-slavery revolt of 1861-1865, we became a powerful nation by assimilating floods of then chiefly European immigrants to settle and develop the territory of our republic.

To the degree we afforded these immigrants the opportunities to freely develop their cultural and productive potentials, these immigrants contributed to the U.S.A. what they would not have been permitted to accomplish in Europe. Thus, through policies typified by those of Presidents Lincoln and Franklin Roosevelt, the U.S.A. became the first true modern European republic, a republic premised upon a Constitution rooted in a distillation of the

greatest achievements produced by European civilization up to that time.

Once we had achieved that much, President Franklin Roosevelt pointed us toward a still broader objective, of extending the benefits of what we had accomplished thus far, to not only the American republics beyond our borders, but to establish a concordant relationship with the existing or emerging nations of Eurasia, Africa, Australia, AND New Zealand. That intention was largely aborted under that President's successor, but it remains the proper long-range strategic outlook for the U.S.A. today.

Now, that much said of modern political history as background, proceed to the principal subject of this chapter of the report. Now, go directly to the point of the paragraph with which I opened this chapter.

I wrote: "...The competent economist measures the wealth of the economy in the degree of self-improvement of the quality of the members of society as human.... [W]e might say, 'The greatest wealth which the generation of the deceased has bequeathed to its heirs, is a society of a better quality of living people.'" With that, we turn to a matter in which the principle of irony is carried to a higher, but already implied form.

Since mankind is a higher quality of existence than life itself otherwise, what, we might ask, is the natural self-interest of humanity, beyond the reach of mere biology as such? What, consequently, is the natural self-



"The U.S.A. was built by Europeans." The principles of the commonwealth and promoting the general welfare, affirmed by the Council of Florence (1431-1445), were the inspirations for the U.S. Declaration of Independence and the 1789 Federal Constitution, Here, George Washington presiding over the 1789 Constitutional Convention, as depicted by Howard Chandler Christy.

interest of the human individual? Must that natural self-interest not be an expression of that which sets the existence of the human individual apart from, as above the mere biological existence of the individual and his, or her species?

Focus upon a finer point subsumed within that argument. Since this distinction of the human species is located, in action, only in those creative-mental powers which exist only as the sovereign activity of the individual human mind, what is the universal purpose for the existence of that individual?

Since the individual expresses this unique quality, associated with Vernadsky's physical-scientific definition of the existence of the Noösphere, the only immortal purpose of human existence is the expression of that specific kind of individual sovereignty.

However, this sovereign function of the individual is not circumscribed by his or her individual creations; it includes the maintaining of the immortality of that same quality expressed by others. This means, the responsibility of the living individual to absorb, and thus preserve the discoveries of principle by others, discoveries of principle to be embodied in the knowledgeable practice of future generations.

This also means the responsibility for nurturing the physical preconditions for practice of such knowledge by present and future society as a whole.

The notion of man as a sovereign immortal being

beyond his mere biological form, is defined thus. *That is the historically defined location of all human existence.*

Do they teach actual history, so, in your children's schools? If not, can you honestly say that your child is really being educated as a human being, rather than a human caricature of someone's pet puppy? Are you really qualified to provide your child the kind of home-schooling in history, and the history of science, required of a true human being, education for immortality? Is the child's public education much better than that? Is that child undergoing the experience of actually discovering those ideas which have the distinctly human quality of irony to which I have referred in the preceding chapter here?

Look at the set of questions implied by arguments of that type from the vantage-point of our society's past and present physical economy.

Modern Economy

We may regard the evidence of the history of mankind's physical economies in two alternate ways. One, we may think of modern living mankind in terms of his or her viewing an accumulation of artefacts left as fossils of a quality specific to the Noösphere. Or, we may change to different point of view, to a three-part picture: 1.) Physical fossils of the Noösphere as such; 2.) Intellectual fossils passed down as an accumulation of surviving knowledge; and 3.) New discoveries of principles of Classical art and science as I have attacked this problem in the preceding chapter of this report. Looking at modern economy in the first way, is consistent with the currently more popular outlook on economy; looking at modern economy in the corrected, second way, in which we consider the society's acquired knowledge of physical principles, to date, as a higher kind of fossil, is the only properly acceptable way of thinking, the kind of thinking typified by modern thinkers such as Kepler, Leibniz, and Riemann, which should be considered acceptable to the principled humanist.

The policies associated with today's practice of socalled "globalization," have an established record as the intentional destruction of civilization, the intentional lowering of the standard of living of the human being, from the present level of more than six billions population, to return to a level of substantially less than one billion, which was typical of periods prior to the rise of modern European civilization. Part of this genocidal implication of "globalization" is the loss of physical improvements of the type of basic economic infrastructure. Part is the loss of the social-intellectual infrastructure which was built up under modern European civilization as a legacy of such earlier sources as the Classical Greek heritage of the Pythagoreans, Solon of Athens, and Plato. The third, and most crucial loss, is the loss of morality typified by the neo-Malthusian ideologies associated with the impact of the U.S.-based Congress for Cultural Freedom.²⁴ The very idea of progress, on which all of the achievements of European civilization to date have depended, the will to be actually human, has been subverted with already disastrous effects, even globally.

Consider the effect of a shift in point of view of humanity today, from the two-point standard of merely physical fossils as such, and man, to the three-point standard of reference, of physical fossils, and intellectual fossils in the form of both discoveries of universal physical principle and of Classical artistry, both in relationship to the living, creatively thinking individual. Think of man existing within a simultaneity of eternity, in which the past is continuing to act on the present, to thus produce the future. The most significant expression of the impact of the past upon the present and future, is the impact of the present generations' experiencing past discoveries in universal physical principle and in Classical artistic composition, as the way in which the future generations are produced.

The latter action, within a simultaneity of eternity so defined, is the true determinant of value, as a process of becoming, rather than a completed effect of the present moment to date.

This is the point of entry into a domain of the greatest irony of them all, that we are being acted upon, and acting efficiently on the future in this way. This is the irony of acting now to become better than we are now, but, while, at the same time, acting through the improvement of infrastructure, of technology of production, and through Classical artistic composition, to act efficiently upon the future of the universe, even long after we are mortally dead. This is the true standard by which the measurements of the economists are to be measured, the standard of producing more powerful human beings in a universe better suited to the habitation of such persons.

So, finally, Classical science and Classical art represent the process of production of improved human beings, beings of increasing moral, as much as physical power, in and over the parts of the universe which our species inhabits. To become truly human, we must learn to think, thus, ironically.

^{24.} Better named, since existentialist 1968, as "The Congress for Cultural Fornication."