

KIEV PODOLYNSKY CONFERENCE PAPER:

The Principle of Mind

by Lyndon H. LaRouche, Jr.

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*SYNOPSIS: Academician Vladimir Ivanovich Vernadsky, and his contemporary, Albert Einstein, situated the summation of their greatest scientific achievements within that Riemannian concept of **dynamics** which is traced, formally, in modern science, from Gottfried Leibniz's 1690s resurrection of that concept of **dynamis** known to the Classical Greek of the Pythagoreans and Plato. As Einstein emphasized, the relevance of this for the presently known foundations of competent modern science, is expressed in that uniquely original discovery of the general principle of gravitation by Johannes Kepler, as in Kepler's **The Harmonies of the World**. When our attention is turned to include the subject of certain related, deeper implications concerning the human mind, implications which are prompted from within Vernadsky's treatment of the Noösphere, a certain, implicitly very important, but presently still controversial question is posed.*

That subject is to be identified as a topic within the framework of a unified field theory. Albert Einstein posed the question, and Academician Vernadsky, whether one presumes that he knew it, or not, supplied a crucial clue which leads in the direction of the solution. That is the subject here.

INTRODUCTION:

Vernadsky & Economics

Our subject in this report is mankind as such, rather than man considered as a product of either an inanimate principle, as the most radical among contemporary leading positivists do, or, those who consider man and his development as essentially contained within a branch of an animal form of existence. The Noösphere, as that conception was developed in a uniquely fresh, and qualitatively distinct way, as by Academician Vernadsky, must be recognized as the containment of the universe, including the actual abiotic domain and "animal kingdom," by the independent, superior universal physical principle expressed as the willfully cognitive, creative powers of the developed human mind.

Therefore, although the present report is a scientific paper, we must recognize that it is man whose actions for development of the planet as a whole, contain the process of development of both the inanimate domain and the Biosphere, the latter treated, like the work of physical science as such, as domains subordinated by the expression, or lack of expression by mankind. Therefore, our subject here must express a departure from those conventions of taught science which have, heretofore, misjudged mankind from either the van-



Academician V.I. Vernadsky (seated), with students at Moscow University, 1911. *The contributions of Vernadsky (1863-1945), especially his precise ontological distinctions among the abiotic, biotic, and noëtic domains, contain the clue, LaRouche writes, “to an at least partial, preliminary step in finding an answer to the question of a unified field theory.”*

tage-point of methods which presumed man to be defined in his development as to have been a subsumed part of an inanimate process, or from the pathetic presumption that mankind is contained as a product of the domain of merely animal natures.

Man dwells within the domains of the abiotic Solar system and the Biosphere, but it is mankind which changes those systems through willful development superimposed by mankind’s own development. It is not the environment which determines society, but mankind, which, for better or for worse, induces those changes which define the destiny of the abiotic domain and Biosphere alike. So, in that specific sense, it is human social behavior, as driven by the actions of human individuals, which reigns under the authority of that Creator who has given to mankind the assigned obligation to reign in service to His Likeness.

Therefore, here, where the subject is mankind as it actually exists, a mere devotion to the goal of competence obliges us to employ methods of investigation and related argument, which locate the human species in its actually distinctive form of existence. That is to say, the willfully creative powers unique to mankind as outside, and above all that is merely abiotic, or merely animal.

The practice of physical science is therefore, essen-

tially, a subject of the science of physical economy as I define the essential aspects of the content and outlines of that subject in these pages.

Therefore, the Method:

Johannes Kepler did not exaggerate in affirming his debt to those philosophical foundations for modern European science, which had been provided by the work of Cardinal Nicholas of Cusa, as also by such notable followers of Cusa as Leonardo da Vinci. Cusa’s crucial relevance for all modern physical science,¹ is emphasized in the sharpest terms, when attention is focused on the combination of the opening two paragraphs and the relentlessly ironical, concluding sentence of Bernhard Riemann’s revolutionary 1854 habilitation dissertation.

The importance of these matters of the fundamentals for all modern science, has been, often, variously ignored, or evaded, because of the hegemonic influence of the empiricism which the followers of Paolo Sarpi have continued to impose on most of modern European scientific dogma, since the savage, usually lying attacks on the work of Gottfried Leibniz by the Liberal followers of Paolo Sarpi. These were the attacks which were concentrated from the beginning of Europe’s Eighteenth Century, onward, and have continued until the present day. The importance of that fact is made clearer, by attention to the related details of a sometimes brutal, systemic conflict between the opposing forces.

This, for example, had been the root of the conflict between Albert Einstein and his adversaries from among the modern logical positivists, that since the time of the attack on Max Planck launched by the German-speaking devotees of the mechanistic perversions of Ernst Mach, during the 1914-1917 period of general warfare in Europe. This same conflict was intensified in its echoes in the campaigns energized by the even far more radical forms of aberrations introduced by that faction of Bertrand Russell which has tended to dominate the academic side of the general discussion of

1. I.e., *De Docta Ignorantia*, 1440.

scientific method since the 1920s Solvay conferences.

All of these considerations converge on a common topic within the framework of my specialty, which is, unfortunately, the rarely known science of physical economy, as I identify the principal expressions of the relevant, underlying connections in this report.

The relevant features of Academician V.I. Vernadsky's world-outlook in such matters of scientific method, have been best represented, pedagogically, by his method of experimental approach to the ontological definition of the Biosphere which was provided by him, as in his relevant definitions of the relevant matters of physical chemistry since the middle of the 1930s. So, Vernadsky's precise, ontological distinction of living matter from pre-biotic states, that as an expression of a universal physical principle of life, is now accessible to professionals familiar with the relevant method of Bernhard Riemann.

Therein lies the clue to an at least partial, preliminary step in finding an answer to the question of a unified field theory.

The related matter of what Vernadsky addressed, as that is presented by me here, is the comparable, qualitatively more advanced, but relatively less developed dis-

tinction, that of *human life*, the qualitative, functional distinction of the culture of the Noösphere, from the merely living. I approach that distinction, here, from the standpoint of a Riemannian, dynamic comprehension of the nature of those same, specifically human, creative powers, which are expressed by qualitatively progressive development in the medium of certain realized discoveries belonging to the subject of the science of physical economy. The latter are those same discoveries which define the potentiality for the intended increase of the productive powers of labor in societies, per capita and per square kilometer. This is a power qualitatively far beyond the power expressed by the Biosphere.

The exemplary case of current economic practice which I reference for this purpose, here, is what has been, to present date, my own, presently unique success in forecasting not only the timing, but the unique nature of that presently ongoing, global economic-breakdown crisis which erupted during the last days of July 2007.²

2. See the international LaRouche PAC webcast of July 25, 2007, where this uniquely successful forecast of the present process of an unfolding breakdown-crisis of the world financial-monetary system, was delivered publicly, to an international audience.

Ukraine Conference on Podolynsky, Vernadsky

The Vadym Hetman Kyiv National Economic University will host an international scientific conference on "Physical Economy: Research Methodology and Global Mission of Ukraine," on April 9-10, under the auspices of the President of Ukraine and the Ministry of Education and Science. The gathering is co-sponsored by the university and the Sergei Podolynsky Scientific Society. Lyndon LaRouche's paper was prepared for this event.

Sergei Podolynsky (1850-91) was a Ukrainian investigator of economic and social problems, and their unity with energy and technological processes. His most important work in this field was the monograph "Human Labor and Its Relationship to the Distribution of Energy" (1880).

V.I. Vernadsky, among other leading scientists of Ukraine and Russia, promoted and continued his work. The core of Podolynsky's concept was that man can resist entropic processes, and that human labor is the key anti-entropic factor. He considered the malthusian theory of arbitrarily limiting population growth to be the equivalent of the dissipation of energy in physics.

Podolynsky's ideas were blacked out in the Soviet Union until 1991, when they were revived by Pobisk Kuznetsov, the influential Candidate of Chemical Sciences who later became a close collaborator of Lyndon LaRouche. On Kuznetsov's initiative, the above-mentioned monograph was published in 1991, for the first time since its original release. Prof. Taras Muranivsky (1935-2000), who for many years was the leader of the LaRouche movement in Russia, also promoted Podolynsky's work. See, for example, his speech at an *EIR* seminar in Germany, "Let Us Unify Morality and Economics in Russia, Ukraine," *EIR*, May 7, 1993.

My emphasis here is on the matter of principle, as the science of physical economy serves to illustrate this point, that the abiotic, the Biosphere, and the Noösphere, must be considered as being, respectively, ontologically distinct categories, but, nonetheless, like a man and his familiar dog, systemically interacting, physical phase-spaces. It is to be emphasized, as Vernadsky did, that as there is a sharp division of the products of the abiotic domain and those of the living, and there is, comparably, a sharp, uncompromisable division of a generality of mankind from the merely animal. From the standpoint of a science of physical economy, my standpoint, all three of these phase-spaces coexist as qualitatively differing, but coherently interacting phase-spaces of a single universe. This situates the subject of this report within the bounds of a notion of a universal principle of harmonics, rather than particles interacting kinematically, as proposed according to the modern reductionists' empty, a-prioristic, Cartesian, or kindred types of what are methodologically both reductionist and a-prioristic misconceptions of space and time.

The presentation submitted here, is also a reflection of the repeatedly demonstrated, unique success of my method of long-range physical-economic forecasting, as demonstrated, most emphatically, in this present time when all my putative professional rivals, and important governments, had either failed to foresee these developments, or had presented opposing policies which were not merely incompetent, but whose effect has already been disastrous for all of the presently existing nations of this planet at large. Even still today, most of the notable figures in government and the economics profession, have not yet acknowledged the very clear, conclusive evidence, of a global, physical-breakdown-crisis (no mere "recession," no mere "depression" like that of both 1929 and October 1987 in the U.S.A.), a crisis which is presently built into the processes which are, still now, immediately threatening the future of the present world physical-economic system, unless the presently operating monetarist systems are scrapped and suitably replaced, very soon.

Therefore, I begin the body of this presentation with a chapter containing a crucially relevant statement respecting the method employed in Kepler's discovery of the general principle of gravitation of our Solar system. That will be the beginning of the questions placed before us here; the answer, bearing on the unified field theory, will come at a later point in this report, when the ground had been prepared, at the close.

I. Sense-Perception vs. Cosmic Conception

Since ancient times in Mediterranean culture, European civilization, in particular, has been dominated by the influence of a piece of sophistry expressed, as by *Euclid's Elements*, in the form of so-called *a-priori* presumptions of so-called "self-evident definitions, axioms, and postulates. The essential feature of those viciously silly presumptions, was the view that sense-certainty respecting time, space, and matter, based on blind faith in the senses, defined the real universe. So, on this account, over the span since the opposition to the ancient Pythagoreans and Plato, by such as Aristotle and Euclid, until the work of Cardinal Nicholas of Cusa, only a relatively few, outstanding, Classical opponents of Aristotelean and related *a-prioristic* forms of reductionist methods, such as Eratosthenes of Cyrenaic origins, and, with certain limitations, the famous Archimedes of Syracuse, had typified a genuine body of physical science.³

Although the revival of actual physical science in modern times was accomplished, chiefly, by the initiatives of Filippo Brunelleschi, and Cusa, the actual founding of a practiced modern science was accomplished by the actually original discovery of the great follower of Brunelleschi and Leonardo da Vinci, by Johannes Kepler's discovery of universal gravitation in his *The Harmonies of the World*. This was the premise employed, as by Gottfried Leibniz, for the still ongoing process of freeing physical science from the later, modern a-prioristic, reductionist Liberalism of Paolo Sarpi follower Rene Descartes and Descartes' empiricist followers of Europe's Eighteenth Century.

In Johannes Kepler's reaching the essential conclusion of his *The Harmonies of the World*, his presentation of his own, uniquely original discovery of what is, still today, the only competent, actual general principle of gravitation in circulation in scientific circles, Kepler had focused attention on the crucial irony of efforts to

3. Nicholas of Cusa refuted the systemic, reductionist error of Archimedes, respecting Archimedes' presumption of the quadrature of the circle (and parabola). This had led, through the work of Leonardo (on the catenary-tractrix matter), into the work of Kepler, which, in turn, led into Leibniz's uniquely original discovery of the principle of the calculus, and the revision of that discovery by Leibniz, based upon the work of Pierre de Fermat, which was carried out by Leibniz's collaboration with Jean Bernouilli in defining a universal physical principle of least action.

Cusa, the Common Good, And the Equality of Man

These words of Cardinal Nicholas of Cusa (1401-64) were quoted by Helga Zepp-LaRouche in a speech on May 6, 2001, at a Schiller Institute conference in Germany. The full speech is in EIR, July 6, 2001.

Human beings have built cities and adopted laws to preserve unity and harmony, and they established guardians of all of these laws, with the power necessary to provide for the public good....

All legitimate power arises from elective concordance and free submission. There is in the people a divine seed, by virtue of their common equal birth and the equal natural rights of all men, so that the authority—which comes from God, as does man himself—is recognized as divine, when it arises from the common consent of the subjects. One, who is established in authority as representative of the will of all, may be called a public or common person, the father of all, ruling without haughtiness, or pride, in a lawful and legitimately established government.

While recognizing himself as a creature, as it were, of all of his subjects as a collectivity, let him act as their father, as individuals. That is the divinely ordained marital state of spiritual union based on a lasting harmony by which a commonwealth is best guided, in the fullness of peace toward the good of eternal bliss.



It is important to emphasize, that Kepler, inspired by Cardinal Nicholas of Cusa's founding of the method of a modern physical science, had come to recognize, implicitly, that, contrary to *a-priori* presumptions of Sophists such as Euclid, or the modern Rene Descartes, or the empiricists generally, that the mere evidence of the senses does not account *directly, in any instance*, for the relevant principle of organization of the universe we inhabit. Sense-perception, such as the human faculties of sight, hearing, feeling, taste, and smell, are to be recognized as being no better authorities than in their serving as sources of important "instrument readings," readings which do not, themselves, contain the principle of action by which the actually perceived physical effects known as sense-perceptions are organized.

The readers should keep those thoughts in mind throughout the unfolding development within this report. This, as will be apparent at the close, is that the crucial point which must become clearly understood, as to what I am now proposing here as a provisional conclusion, is necessary, which will be summarized in the final point to be presented in this report as a whole.

In order that we might be clear, in the matter of the distinction of a human brain, which appears to reflect a more developed outgrowth of the category of animal brains, the noëtic function exhibited by the human brain does not appear specifically in the animal brain as such.

correlate the reductionist's quasi-visual image of physical space-time with that harmonic conception which has been repeatedly proven, since, to be a key to defining a single principle of self-organization of the Solar system as a whole.⁴

4. Sir Isaac Newton had simply plagiarized the relevant formulation which had been presented in the already published work of Johannes Kepler, and used the sophistry of "I don't make hypotheses" as an attempted cloak for his flagrant plagiarism. The fraudulent character of Newton's claims was demonstrated by the Ecole Polytechnique's Au-

gustin Fresnel, who, defended by the celebrated Dominique Arago, demonstrated the systemic character of the incompetence of Newton's entire method, in the crucial matter of the radiation of light. There never was any actual evidence for the myth that Sir Isaac Newton discovered the principle of gravitation.

What the biological significance of this difference is, as a matter of physical processes, has not been established; but, we are nonetheless obliged to accept the absolutely overwhelming evidence that that systemic distinction exists. The existence of man's knowledge and use of discovered universal physical principles, is sufficiently, persistently conclusive evidence of an absolute, ontological distinction of this function of the human mind from the animal brain.

Thus, contrary to the a-priorist dogma of *Euclid's Elements*, or that of Rene Descartes, the discovery of true physical principles, is an action specific to the matured, specific cognitive powers of the human mind, not of the senses as such. *In fact, all discoveries of universal physical principles, such as Kepler's uniquely original discovery of the presently known universal physical principle of universal gravitation, have been prompted by empirical evidence that there is a vicious, incontrovertible contradiction among two or more types of sense-perceptual evidence.* The experimental demonstration of the discovered principle, thus proves the existence of the true knowledge which defies sense-certainty. This systemic quality of distinction of the mind from the senses, which I emphasize here, is the essential clue which prepares the way for what will be presented as this report's conclusion.⁵

The action specific to scientific creativity, occurs, like classical poetical irony, at a certain point in experimental efforts that, at that point in the effort to discover a true principle by sense-experience, at which our way forward appears to be barred by systemic contradictions, such as between two notions of sense, such as those of vision and the contrasting notion of hearing, as for Kepler in the case of his uniquely original discovery of the principle of universal gravitation; so, a systemic contradiction appears ironically among two or more

5. Thus, the Eighteenth-century empiricists, such as Leonhard Euler, who followed the mystical dogma of the systemic irrationalist Paolo Sarpi, denied, and that hysterically, the existence of the reflection of the efficient gap in sense-perceptual deduction which is the Leibniz infinitesimal. For them, universal physical principles do not actually exist outside the limits of naive sense-certainty.

Kepler's Delight

From Johannes Kepler (1571-1630) on the joy of creative discovery, in his Harmonices Mundi, Book V. For work by the LaRouche Youth Movement on Kepler, see www.wlym/~animations.



Now, eighteen months after the first light, three months after the true day, but a very few days after the pure Sun of that most wonderful study began to shine, nothing restrains me; it is my pleasure to taunt mortal men with the candid acknowledgment that I am stealing the golden vessels of the Egyptians to build a tabernacle to my God from them, far, far away from the boundaries of Egypt. If you forgive me, I shall rejoice; if you are enraged with me, I shall bear it. See, I cast the die, and I write the book. Whether it is to be read by the people of the present or of the future makes no difference: Let it await its reader for a hundred years, if God Himself has stood ready for six thousand years for one to study Him.

modes of sense-perceptions, as it appeared in the course of Kepler's composition of his *The Harmonies of the World*.

Examine that crucial-experimental case.

In that work by Kepler, the challenge of finding a possible discovery of a true universal principle, was posed as being the relevant remedy for a crucial kind of "ontological teasing" of the discoverer's mind. That typifies the kind of distinctions which express that irony, which points, as in the discovery of gravitation by Kepler, toward those cognitive powers of the human mind, in which a discovery of a general principle of science is required, outside of sense-perception *per se*, in order to present a solution for that specific riddle, the riddle which only the creative conceptual powers of the human mind, alone, can and must solve.

Hence, the fundamental contradiction between, on the one side, the ontologically infinitesimal, a concept which underlies the foundation of Leibniz's discovery

and development of the principle of the calculus, against, on the other side, the relevant Eighteenth-century devotees of the cult of empiricism's Abraham de Moivre, D'Alembert, Leonhard Euler, Lagrange, and, later, Laplace, Augustin Cauchy, and also those founders of the absurd dogma of "a law of entropy" concocted by such as Rudolf Clausius and the mere mathematician Hermann Grassmann.

The crucial point at this stage in the report, is that the role of human thinking individuals in the universe, is not merely a subject of the Earth we inhabit, or even peculiar to our Solar system. As Kepler, Fermat, Leibniz, Riemann, Vernadsky, and Einstein approached a certain point in succession, rather than consider man as a subject of that environment, as presented, almost "blab school" style, in the customary classrooms' notion of the Solar system, we must accept the evidence that the Solar system is a subject of the human creative power for change, a power which is to be considered as the innate potential of the human individual mind.

From this vantage-point in crucial experimental investigations, as typified by the case of Kepler's uniquely original discovery of gravitation, we are impelled to regard universal physical principles so defined, not as fictional, as did the devotees of positivists such as Bertrand Russell, such as Professor Norbert Wiener, John von Neumann, and the followers of the Cambridge school of systems analysis. We must recognize their *a-priori* notion as a delusion, perhaps as defective, or merely as misguided, as what the radically reductionist followers of Ernst Mach and Bertrand Russell implicitly presume, still today.

On this point, again: the ontological paradoxes arising within the domain of sense-perception, as those paradoxes which proved crucial for Kepler's uniquely original discovery of universal gravitation, are to be regarded as the useful shadows which must be considered as candidates for being treated as the mere shadows cast by that potency which has been acquired as knowledge, naturally, by the powers of creative insight given to the human individual mind, powers which have been, and are demonstrated to be efficiently real in their experienced effect, but whose essential quality of existence lies beyond immediate direct access by the mere "meter-readings" of sense-certainty as such.

Those notions of reality, as met in the work of both physical science generally, and in the specific science of physical economy, are notions which are distinct, ontologically, from particularized sense-perceptions in

themselves. They express the notion of *dynamics* which Leibniz re-introduced to modern European science, formally, during the 1690s, as in his modern resuscitation, during that decade and later, of the notion of the essential role of a *subsuming* principle of *dynamis* associated with that ancient science of Sphaerics adopted by the Pythagoreans. The richer exploration of this notion of dynamics came with the essential discovery by Bernhard Riemann, as outlined in all essentials within his 1854 habilitation dissertation.

This is also the same notion of dynamics featured, summarily, as a true principle of artistic composition and social systems, in that most exciting, concluding paragraph of Percy Bysshe Shelley's *A Defence of Poetry*.⁶ The role of dynamics as the characteristic feature of the creative process in Classical artistic composition, warns us that a competent physical science and a competent expression of Classical modalities in Classical artistic work are each subsumed by a common, higher principle. Competent physical science treats man's concentration on forms of existence lower than the human species'; whereas, Classical artistic composition applies the same cognitive prowess to treating mankind itself as the subject.

So, as Albert Einstein emphasized this in his famous Riemannian appreciation of that uniquely original discovery of the principle of gravitation by Kepler, and as Gottfried Leibniz had already defined the infinitesimal of the calculus in a way which was contrary to the Eighteenth Century empiricists; so, Leibniz, Riemann, and Einstein, for example, had treated true universal physical principles, in succession, as *not* being *embodied* within the confines of mathematical formulations.⁷ Rather, the true principles of physical science are of the type of experimentally validated solutions, properly known as principles according to the method of, typically, Cusa, Leonardo, Kepler, Fermat, and Leibniz, which, once uncovered, have the apparent, initial effect of appearing to bound, rather than simply connecting, as if mathematically, the observed points-in-motion which are phenomena actually generated by a discover-

6. The argument to this effect is summarized in the concluding paragraph of Shelley's *A Defence of Poetry*.

7. E.g., two opening paragraphs of Riemann's 1854 habilitation dissertation, and, most emphatically, the concluding single sentence of that dissertation as a whole. So, J.C. Maxwell, when confronted by the evidence of his dishonesty respecting the history of science, replied with the sophistry, that his tribe would consider no evidence which did not agree with the *a-priori* assumptions "of our own."

able universal principle.

These essential facts, bearing on matters of universal physical principle, can not be effectively uncovered and demonstrated except from the standpoint of practices specific to the human mind, such as Classical artistic composition, or a science of physical economy. To know what moves the relatively lower domain of physical science, we must proceed from the qualitatively higher standpoint of social processes of mankind, as being the standpoint of discovery of the principles of specifically human knowledge, rather than those mere subjects of human behavior, other than the specifics of human behavior in human history as such.

Man is not a subject of what is customarily regarded, today, as the “physical universe;” all actual knowledge of that universe is a matter of the attempted, conscious mastery of that universe by mankind. It has been the attempt to treat mankind as, axiomatically, a subject of the animal kingdom, or, worse, as today’s radical positivists do, as a subject of the abiotic domain, which are standpoints which are premised on the assumed primacy of phase-spaces inferior to what Vernadsky’s work defines as the Noösphere. It is the submission to the ideas, whether refined or crude, peculiar to an ontologically lower phase-space than the Noösphere, which characterizes the fundamental error in all which has been generally accepted as “principles of economy” in society thus far.

Thus, if we adopt the radically positivist view of the universe adopted by the followers of Professor Norbert Wiener at the Massachusetts Institute of Technology’s RLE, or the notion of the computer and the brain, or the more radical of the premises of the idiot-savant devotees of Bertrand Russell, John von Neumann, and “Silicon Valley,” we dehumanize mankind, and, thus, not only exclude life as a universal principle, but, similarly, deny the principle which, in fact of practice, places humanity outside both the abiotic domain and also beyond our comprehension of what are merely the lower forms of life.

For the purpose of defining the essentially underlying practical principle of a competent modern science, the notion of *principles* which I emphasize here, is also

Leibniz on ‘Happiness’

Gottfried Leibniz (1646-1716) was the philosophical father of the American Declaration of Independence (see Philip Valenti, “The Anti-Newtonian Roots of the American Revolution,” EIR, Dec. 1, 1995). Rejecting the Lockean view of happiness as “the utmost pleasure we are capable of,” Leibniz wrote, in his New Essays Concerning Human Understanding:



I do not know whether the greatest pleasure is possible.

I believe rather that it can grow ad infinitum. . . . I believe then that *happiness is a lasting pleasure*; which could not be so without there being a continual progress to new pleasures. . . . Happiness is then, so to speak, a road through pleasures; and pleasure is merely a step and an advancement towards happiness, the shortest which can be made according to the present impressions, but not always the best. The right road may be missed in the desire to follow the shortest, as the stone which goes straight may encounter obstacles too soon, which prevent it from advancing quite to the center of the Earth. This shows that it is *the reason and the will which transport us toward happiness, but that feeling and desire merely lead us to pleasure.*

to be seen, in retrospect, as typified by the case of Kepler’s uniquely original discovery of the universal principle of gravitation. This was the same argument which Gottfried Leibniz had derived from his own consideration of Kepler’s work, in his own presentation of the conception of a calculus of the *ontologically* efficient (rather than *merely mathematical*), infinitesimal notion of the universal physical principle of the calculus.⁸

8. Hence the deliciously ironical concluding sentence of Bernhard Riemann’s 1854 habilitation dissertation. This is what confronted me, in my experience in secondary school and university programs, in the form of the essentially lunatic policy of treating analytic geometry as not merely a prelude to a course in the differential calculus, but basing the principle taught in presenting what was claimed to be the Leibniz calcu-

Hence: that which should have been read by scientists as the startling effect of the already referenced, concluding sentence of Bernhard Riemann's 1854 habilitation dissertation.⁹ Hence, we have Einstein's conception of Kepler's uniquely original discovery of the principle of universal gravitation, a conception of gravitation as bounding an intrinsically finite, but not externally bounded universe.

In the modern reductionists' view of the universe, it has been sense-certainties, which, for them, bound their choice of an actual, or merely supposed universe which the wretched Rudolf Clausius, Hermann Grassmann, Lord Kelvin, and Maxwell had misconceived as being universally entropic in principle.¹⁰ Contrary to such reductionists as those, we have the alternative of the true science typified by the work of Kepler, Fermat, Leibniz, Riemann, and Einstein; for the latter, as in Leibniz's *ontological, rather than empiricists' mathematical* notion of the "infinitesimal," it is the adduced, anti-entropic universe, which, ostensibly, "self-bounds" the behavior of the objects of sense-perception *dynamically*.¹¹

What I have just described as the anti-entropic view of these matters, is clearly suggested by the consideration of the record of anti-entropic development of orders and species of living organisms, and, in a parallel, but different modality, in the role of scientific and technological progress in the increase of the potential relative population-density of progressive currents in the self-development of human society. That anti-entropic view of these matters becomes much more interesting, when we will have taken into account the specific quality of difference in modalities of anti-entropic self-development, of living plant and animal species versus mankind, as of the Biosphere as such: when this difference is situated in the contrast of lower forms of life to the evidence of the driving principle expressed by the increase of the potential relative population-

density among various cultures of the human species, the Noösphere.

It is the implications of Academician Vernadsky's development of the specifically Riemannian types of ontologically qualitative distinctions of the abiotic, the Biosphere, and the Noösphere, respectively, each and all from the common standpoint of experimental physical chemistry, which then point in the direction of, not a solution for the question posed by the notion of a unified field; but, towards a much needed, working understanding of exactly how we must define that which we have yet to know in that matter, beyond bare essentials: an understanding of the nature of the subject itself, rather than a completed systemic view of the matter.

To find even that partial answer to the question so posed, we must first explore the troubling presumption which has customarily stood in the way of understanding not the answer to the "unified field conception," but the question which points the way out from today's prevalent confusion, into the needed direction.

What Is Human Nature, Really?

From the standpoint which I have just identified, the function fulfilled by the expression of the actually creative, expressed power of the developed mind of the human individual, a mind which is, so developed, to be considered as immortal in principle, relative to the merely mortal, living human body as such. That mind is to be viewed in terms of the qualitative distinction which separates the specific nature of the human individual's *relatively immortal* mental potential, as that is to be contrasted to the case for individual types of animal life.¹²

This view of the human mind, when examined in light of the mind's power to generate efficient, revolutionary discoveries of physical principle, is mysteriously, but undoubtedly distinct from the heretofore prevalent notion of the mortal body. This crucial distinction of the human mind's characteristic potential, as contrasted with the mere animal mortality of the beasts, confronts us whenever we consider the way in

lus, on the absolutely contrary principles permeating that Cartesian folly. Later, I discovered that the blame for this hoax could be traced to the empiricist follies of Abraham de Moivre, D'Alembert, Leonhard Euler, Joseph Lagrange, Laplace, Augustin Cauchy, et al.

9. Ibid.

10. Essentially, Grassmann was merely a mathematician, a fact which was shown most dramatically in the experimentally proven, simplistic falsehood of Grassmann's attack on the electrodynamics of Riemann.

11. As will be noted later within this report, the question of "bounding," as treated by Albert Einstein, presents us with the most startling, and crucial issue for today.

12. It is clear, from this vantage-point, that the creative human mind, when engaged in actually creative work, is immortal. This is apparent in the respect, that the ability of members of society to re-enact the discovery of an efficient principle of action, as in Classical poetry, drama, and music, as in physical science, represents an efficiently acting factor in shaping the future of the civilization, although the discoverer of that principle may have been long-since deceased. I am confident that Moses Mendelssohn, like Plato, would agree.

which discoveries of conceptions of efficient principles, of either Classical artistic composition, or physical science, continue to outlive their putative creators in a manifestly efficient way, by efficiently continuing, post-mortem action of the discoverer (such as the modern Filippo Brunelleschi, Nicholas of Cusa, Leonardo da Vinci, Johannes Kepler, Pierre de Fermat, Gottfried Leibniz, Bernhard Riemann, Max Planck, Academician Vernadsky, and Albert Einstein) of any such principle upon the future, anti-entropic development of the human species.¹³ These human figures are justly treated as typical of our species' immortals, in that they define a functional notion of the continuing existence of a physically efficient, spiritual immortality of such an individual, when that person is otherwise deceased.

To restate that point, we must ask ourselves, speaking of the matter of ontology, wherein lies that which is the power of a certain, delimited type of idea which continues efficiently, as the existence of an efficient universal principle, when the mortal body of that once living human minter of that idea has died. What is that willful power of such efficient expressions of human creativity over the universe, which is not found among the individuals of those lower forms of life? What is the principled nature of the systemic difference between, on the one side, those willful acts of human discovery of universal principle, which were forbidden by the truly evil Olympian Zeus and his pro-malthusian followers, as in the account of Aeschylus' *Prometheus Bound*, and, in contrast, on the other side, to the unwitting mode in which biological evolution has occurred, efficiently, among orders and species in forms of life other than human?

The ontological paradox so posed becomes, thus: *Can there be the effect of a physical change in the universe caused by an action which is not usually to be distinguished as specifically "physical" in its source of efficiency? This question, which arises for modern science only in the setting of contrasting human to both denizens of the domains of animal and inanimate behavior, is the pivotal question underlying this present report as a whole.*

Is it not the case, therefore, that the customary notion of *physical* is at fault here? This does not signify that the idea of an equation of *physical* to *efficient*, is wrong. It is a case of a reductionist's notion of efficiency, which

leads to a misreading of what we ought to intend to say by use of the term "physical" in what is purportedly a "scientific" way.

Or, should we not state the case as follows: that the opinion of that misguided person who regards sense-perceptual experience as being intrinsically real, is expressing a wrong opinion which is often to be seen as an obstacle to recognizing the true nature of the universe which underlies those mere "meter-readings" of perception which are, in fact, as human knowledge, merely "data-like" effects of "instrumentation"? What is the singular foot which has produced the perceptible footprint; and, much more relevant, the perhaps, two or four feet which have produced the ontological quality of that succession of footprints of which the experimental, evidentiary trail left by the presently unseen feet, is evidence.

Vernadsky's Universe

Once we have put those questions to ourselves, we are properly impelled to improve our appreciation of the work of Academician V. I. Vernadsky in a very specific way. In the case of the category of the Biosphere, we are treating the principle of anti-entropic currents of biological evolution as a principle of creative change in the physical universe at large. In the case of the Noösphere, the impacts of implicitly anti-entropic ideas of physical principle, assume, in effect, a role comparable to that performed by the universal principle of life in the domain of the evolutionary development of the Biosphere. However, we approach that subject with a crucial, specific quality of difference from what might be considered as conventional opinions. *These two conceptions of universal principles among the living processes within our universe, must be examined with respect to the ontological quality of the contrast of human creativity to the specific principle of organization of, respectively, both the Biosphere and the abiotic domain of that same universe.* The noëtic quality of mankind, contrasted with that of the Biosphere otherwise, and of the abiotic domain, are, respectively qualitatively different categories of developing types, essentially interacting types of qualitatively distinct qualities of processes. This, I regard, as the most essential of the relevant achievements already realized in the work of Academician V.I. Vernadsky while he was still living among us.

Such are the implications of Albert Einstein's presentation of the implications of the notion of discovery of universal principles of physical science. Such are the

13. This occurs as a matter of principle only in the special case of a true, universal principle.

indicated issues posed by the crucial evidence supporting Academician Vernadsky's presentation of his conception of the Noösphere.

Without putting the leading accomplishments of those essentially, historically contemporary figures into this perspective, as essentially interactive currents of the advances achieved by that generation in its time, my own, most deeply underlying achievements as uniquely successful work in economic forecasting would not have been possible.

The crucial consideration which is not developed in Einstein's published work, we meet in the way in which Academician Vernadsky employed a true principle of physical chemistry to define three ontologically distinct qualities of the Earth's composition: the abiotic, the Biosphere, and the Noösphere. What is to be emphasized, as I do here, is that we must see the implications of Vernadsky's achievement on that account in the following way.

In the "history" of our planet itself, as Vernadsky's work implies such a history, the crucial experimental evidence, is the progressive change in the composition of the planet as a whole, in terms of changes in the relative total mass of the planet's principled composition, that of abiotic, Biosphere, and Noösphere. The total mass of the planet remains in the same general range, but the shifting division of its proportions into new ratios of abiotic, Biosphere, and Noösphere, shows that the power of the planet to influence the Solar system as a whole, requires study of the evidence to the effect, that the abiotic mass is decreasing relative to the Biosphere as Vernadsky defined it, and that the Biosphere is decreasing relative to the net effects of human creative activity, the Noösphere.

It that sense, life is more powerful than the abiotic, and the creative powers of the individual human mind are a more powerful force within the universe than the principle of the Biosphere.

The obstacle to grasping the crucial implications of such evidence as that, is, chiefly, the presumption, as implied in Aeschylus' portrayal of the evil of the Olympian Zeus and his "malthusian" oligarchical lackeys, the false assumption, as by the depraved Eighteenth-century opponents of Leibniz, and such as the Nineteenth-century hoaxsters Rudolf Clausius and Hermann Grassmann, that the universe is organized according to a general rule of "entropy."

It was the toleration of this fraud of "universal entropy," the fallacy of the so-called "law of energy,"

which stood in the way of comprehension of the deep implications of Academician V.I. Vernadsky's greatest achievement, that for the benefit of all mankind. Academician Vernadsky's *implied, but not explicitly stated* achievement *on the visible record*, on this account, becomes clear when we take into account, that from the standpoint of the uniqueness of my success in forecasting in my practiced speciality, the science of physical economy, the evidentiary implications of the currently onrushing, accelerating general physical breakdown-crisis of the physical economy of our planet as a whole.

What is crucial, to that specific effect, in the achievements of Academician Vernadsky, is that these have coincided precisely with what had been those of President Franklin Roosevelt's commitment to physical-scientific progress in the domain of a science of physical economy, as his policy was later opposed under the leadership provided by the British-led, fascist opinions and policies of such among Roosevelt's vicious, pro-fascist adversaries as John Maynard Keynes and President Harry S Truman.¹⁴ The latter, regressive policies were those pro-fascist commitments of Roosevelt's immediate predecessors in the office of President, and were, once again, the wrecking of his successful reforms, a wrecking unleashed beginning immediately on Roosevelt's death. This regression, which was launched immediately by Truman with President Roosevelt's death, a degeneration, that launched by Truman, which has now been demonstrated in the result shown as the presently onrushing general breakdown-crisis of this planet as a whole. We are on the verge of a threatened, rapid collapse from a world population-level of over six-and-a-half billions human souls, to a rapid descent toward less than two billions, or, perhaps even worse.

The difference in direction, which has accounted for all of the progress in productive powers of labor in modern European civilization and its extension, on the one side, and the willful lowering, at an accelerating rate, of the potential population under the conditions introduced by the Truman administration, and, most emphatically, the 1968-2009 interval to date, must be regarded by intelligent and sane leaders of society today, as expressing the brutish lack of morality among the oligarchical and related cults of neo-malthusianism

14. It should be noted that there was never an S, nor true honor, in Harry S Truman.

President Franklin D. Roosevelt's casket moves down Pennsylvania Ave. in Washington, D.C., as residents mourn the nation's loss, April 14, 1945. No sooner was FDR dead and buried, than the British and President Truman moved to crush his achievements and his vision of the future.



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cian Vernadsky, the proper meaning of a “unified field” will appear to “the witting” among us. It appears as a suitable outgrowth of the fundamental achievement of a great

advanced by those depraved creatures known to us as the so-called “globalizers” and “environmentalists.”

By witnessing what is precious, but which we are rapidly losing, we know the degraded quality of those outlooks, practices, and policies which we have permitted to occur in implicit defiance of the Creator since the death of President Franklin Roosevelt. That is what we must defend. We must defend that against the unwillingness of those responsible, both leading financier and other ruling circles, to submit to the clear evidence, of the existence of mankind, as built into that design of the human personality, a design which sets mankind apart from the beasts. What we must defend is the miraculous quality of immortality of the individual human personality given to willing mankind. What we must defend, is that which we, especially citizens of our United States, must defend, and make that the world's practiced policy, as the heritage of the two most notable, great U.S. Presidents, Abraham Lincoln and Franklin D. Roosevelt, had intended.

Once we have taken that evidence into account, as in examining the successive accomplishments of Riemann and Einstein against the background of the referenced, principled scientific achievements of Academi-

follower of Nicholas of Cusa, Johannes Kepler, who prepared the way with his uniquely revolutionary discovery of the principle of universal gravitation, as in his derivation of the general principle of gravitation in the course of his *The Harmonies of the World*. Might we not say, on that account, that the followers of the cult of that silly plagiarist Sir Isaac Newton, on this account, are virtually satanic, at the relative best, implicitly so?

At this point, we must shift our attention, temporarily, to some important indications to consider from within the work of pre-Sophist, Classical Greek scientific and related thinking. Term these features of the following chapter of this report, the “moral implications” of our subject in this report as a whole. If we were tempted to doubt that, then consider the awful effect on the fate of all mankind on this planet today, the threat to human life in the mass presently represented by the reductionist argument of the followers of a Sir Isaac Newton who, in fact, discovered nothing at all. When Newton was challenged to explain how he had happened to “re-discover” exactly the formulation for a law of gravitation which had been presented in Kepler's *The Harmonies of the World*, Newton could only at-

The 'Narrowness' of Britain's Adam Smith

From Smith's 1759 *Theory of the Moral Sentiments*:

[S]elf-preservation, and the propagation of the species, are the great ends which nature seems to have proposed in the formation of all animals. Mankind are endowed a desire of those ends, and an aversion to the contrary. . . . But . . . it has not been entrusted to the slow and uncertain determinations of our reason, to find out the proper means of bringing them about. Hunger, thirst, the passion which unites the two sexes, the love of pleasure and the dread of pain, prompt us to apply those means for their own sakes, and without any consideration of their tendency to those beneficent ends which the great Director of nature intended to produce by them. . . .

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 much more suitable to the weakness of his powers, and to the narrowness of his comprehension—the care of his own happiness, of that of his family, his friends, his country.



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II. The Moral Implications

Since the appearance of the subject of the human species, as a species qualitatively distinct from all other living species, the subject of the identity of creativity and morality, which I have posed afresh in the preceding chapter, defines the essential characteristics which distinguish the Noösphere from all other known forms of existence. Among all living creatures, the actual subject of morality exists systemically only for the human species. It has been *the prevalent failure to take this aspect of scientific creativity (per se) duly into account*, as being essential for science, which has been the chief reason for the prevalent incompetence shown by the relevant governments and other institutions which have brought this planet as a whole to the present condition, a condition of the worst danger to mankind since Europe's exemplary experience with what was called the Fourteenth Century's New Dark Age.¹⁶

A crucial aspect of this presently menacing failure, has been a widespread disregard, by both governments and also the majority of the governed, generally, of the consequences of the failure to recognize the essential interdependency between, on the one side, successful national economy, and, on the other, an efficient passion for truths of that quality typified by the indispensable role of morality in valid discoveries of universal physical principle. I mean a universal physical principle such as by means

of the morality expressed by Johannes Kepler's uniquely original discovery of the principle of universal gravitation in physical science.

Human creativity, as I have already identified it, on

tempt to conceal his fraudulent claims by uttering sullenly, his silly "I don't make hypotheses."¹⁵

15. Cf. Georg Cantor, under the title of his (1897) *Beiträge zur Begründung der transfiniten Mengenlehre* [Cf. Philip E. B. Jourdain translation (1915): *Contributions to the Founding of the Theory of Transfinite Numbers* (New York: Dover Publications, 1953, 1955).] Cantor was a skilled amateur violinist and a brilliant descendant of the Josef Böhm who did such wonderful service to Beethoven in the performance of Beethoven's late string quartets, and who founded the school of performance for the violin which Norbert Brainin of the Amadeus Quartet represented. Cantor was an able violinist from a family which maintained that tradition of method of performance, but was quite literally "brainwashed" by one of the most monstrous operations of targeting of this type, that done by circles linked to British pro-Satanist cults linked to Bertrand Russell and his circles. The hideous appearance of

"Hypotheses non fingo" of Isaac Newton under the book's title provides an ugly bit of evidence of the torture to which the persecuted Cantor was being subjected.

16. Herewith, this report will have adopted the convention, that the creative powers of physical science and Classical artistic composition are identical in the respect that both are products of the same creative potential of the individual human mind. The difference to be recognized is, in the one case, physical science, the creative powers of the mind are applied to man's action on nature, whereas, in the other, it is the same creative powers applied to the subject of man.

the one side, as in the preceding portions of this report and, on the other side, *morality*, properly conceived, are to be considered as uniquely, and essentially associated, as integral features of the expression of what is actually *a principle of human goodness*, a principle which is explicitly contrary to the damnably empiricist immorality expressed, typically, by Adam Smith in his *Theory of the Moral Sentiments*. In the matters of human behavior, including scientific behavior, competent science is never morally neutral.¹⁷

Morality is located essentially in the mustering of the potential creative powers of the human intellect, as in physical science and Classical modes of artistic development, to increase the power which is located within the individual human personality, the power to continue the anti-entropic form of fruitful and ever more abundant physical-scientific and related progress of mankind, within and over the universe.

The root of that distinction is to be located in the way in which morality is defined by the essential distinction between man and beast, in the distinction of *the specifically human implications of fundamental scientific and Classical artistic creativity*, as *Johannes Kepler's uniquely original discovery of the principle of human creativity exemplifies creativity*.

Without the affirmation of that assigned role of creativity, there is no true creativity, and no truthful and efficient expression of public morality. Without that affirmation, the relevant society lacks both true morality and its correlative, the correlative which is a wont

John Locke and the Pursuit of Property

John Locke (1632-1704) has somehow gained the reputation as the intellectual father of the American Declaration of Independence, yet nothing could be further from the truth. The Declaration's transcendent appeal to the defense of "life, liberty, and the pursuit of happiness" comes not from Locke, but from Leibniz.

Locke's major political treatise, the 1690 "Essay Concerning The True Original Extent And End Of Civil Government," argues that "government has no other end but the preservation of property."

In Locke's formulation, man "seeks out and is willing to join in society with others who are already united, or have a mind to unite for the mutual preservation of their lives, liberties, and estates, which I call by the general name—Property.

"The great and chief end, therefore, of men uniting into commonwealths, and putting themselves under government, is the preservation of their property, to which in the state of Nature there are many things wanting."

On this basis, Locke—whose 1669 Constitution for the Government of Carolina codified slavery—justified human bondage, by insisting that a person without property has no rights at all:

"These men having, as I say, forfeited their lives and, with it, their liberties, and lost their estates, and being in the state of slavery not capable of any property, cannot in that state be considered as any part of civil society, the chief end whereof is the preservation of property."



17. Notably, this notion of human goodness was a matter of explicitly defined principle by the Winthrops and Mathers who were notable leaders of the pre-1688-89 Massachusetts Bay Colony. It was the suppression of that Colony's freedom, especially under William of Orange, which opened the way for the corruption which took control of New England under the reign of the faction associated with both the Anglo-Dutch East India Company and such hired ideologues of that Company as the corrupt and evil John Locke of slave-trade notoriety and Adam Smith. On the subject of contrary views, see the brilliant study, a true scientific breakthrough, by the late H. Graham Lowry, in his *How The Nation Was Won: America's Untold Story* (Washington, D.C.: Executive Intelligence Review, 1988).

for true creativity. It is this function of true creativity which must be recognized, if the idea of the principle of creativity itself is to be understood with scientific competence.

Such are the implied moral, and also scientific distinctions of the manner in which Academician V.I. Vernadsky introduced the concepts of Biosphere and Noösphere to modern physical science.

Thus, some lack a sense of happiness as Gottfried

Leibniz's definition, of "Life, Liberty, and the Pursuit of Happiness," was made central to the U.S. Declaration of Independence. That definition is to be read as expressing a quality of passion required in all scientific work. What we might call "work," otherwise, is no better than poor in essential quality, and certainly lacks the true quality of human creativity. Herein lies the essential fault of so-called Anglo-Dutch Liberalism, a fault which is tantamount to evil, as the U.S. Declaration of Independence implicitly recognized the policy of John Locke, Hume, and Adam Smith as being evil. Evil is the exclusion of, or merely indifference to the good; morality, so defined, is essential, on the condition that its appropriate passion is competently defined scientifically. Dostoyevsky's richly ironical portrait of the evil inherent in the character of the Grand Inquisitor, is a relevant, and also penetrating insight in defining this connection.¹⁸

There can be no competence in science, when science, treated in its function as human behavior, does not take this matter of morality identified by Leibniz, as being in explicit opposition to that which is expressed by the evil of the pro-slavery dogma of John Locke, prominently into consideration, as I do here.

The following, personalized comments

'A Defence of Poetry'

From the essay thus-named by Percy Bysshe Shelley (1792-1822):

[W]e live among such philosophers and poets as surpass beyond comparison any who have appeared since the last national struggle for civil and religious liberty. The most unfailing herald, companion, and follower of the awakening of a great people to work a beneficial change in opinion or institution, is poetry. At such periods, there is an accumulation of the power of communicating and receiving profound and impassioned conceptions respecting man and nature. The persons in whom this power resides, may often, as far as regards many portions of their nature, have little apparent correspondence with that spirit of good of which they are the ministers. But even whilst they deny and abjure, they are yet compelled to serve, the power which is seated upon the throne of their own soul. It is impossible to read the compositions of the most celebrated writers of the present day without being startled with the electric life which burns within their words. They measure the circumference and sound the depths of human nature with a comprehensive and all-penetrating spirit, and they are themselves perhaps the most sincerely astonished at its manifestations: for it is less their spirit than the spirit of the age.



18. Fyodor Dostoyevsky's character, the Grand Inquisitor, was clearly a notion specific to Russian culture, but, from my standpoint, has a curiously inherent truthfulness all its own, from any European cultural standpoint. The existence of the Roman Empire's Pantheon is the key to imperialist management of its victims through fomenting internal religious and related conflicts, as Sykes-Picot does in Southwest Asia today. Such is the image of the false god who rules over the contending forces, such as conflicting religious beliefs, in society, ruling by pitting one set of duped subjects ferociously against the other. Thus the Grand Inquisitor is the false prophet, created by the Empire, by the Satan, such as the British Empire today, who rules by pretending to be a true agent of Jesus Christ. The Spanish Inquisition and the religious warfare of 1492-1648 in Europe, are an illustration of this point. Thus, my distant relative, the legendary Lizzie Borden, "took an axe and gave her mother forty whacks, and when she saw what she had done, she gave her father forty-one." Whether that deed was done by the actual Lizzie Borden herself, the legend, as in many cases, tells the story of the jingle itself, albeit whether the actuality of the tale lies within the truth, or only in the teller. Such remains the ambiguity of Dostoyevsky's tale.

are therefore relevant to the account of the subject of science as addressed in this report.

At my age, and with my experience in life, I can testify to the relevant fact, that I have come to know the relevant associations toward which I have just pointed here. I know this both sweetly and bitterly, as relevant, wise old men and women do, and, I can say this, confidently, of both the bitter and sweet experiences of my life to date. The evidence to be considered on this account, is abundant; we live amid a rich experience of the fact, that the world in which we have recently lived, especially during the recent four, or more decades, until now, has been predominantly mean-spirited, and has been even actually wicked most of the time.

The goodness which one may experience in the presence of known works of Academician V.I. Ver-

nadsky, is a sample of a case which points to happy exceptions. True goodness, as in the work of Cardinal Nicholas of Cusa, or his follower Johannes Kepler, or the experience of the mind of Gottfried Leibniz, Bernhard Riemann, of Albert Einstein, or works of Academician Vernadsky, is made clear to us when we do recognize it, often with something akin to tears of joy, as the experiencing of some exceptional moment of the goodness associated with a true discovery of principle.

It is of material relevance here, as distinct from mere illustration, that I have often referenced English poet Percy Bysshe Shelley's *A Defense of Poetry* on this matter of such a congruence of science and morality, as reflected in matters of politics, law, and Classical poetry and drama. This is especially the case, in the summation of that work of his, in its concluding, rather long, scientifically crucial paragraph, during which Shelley summarizes the conception of the relationship between human goodness and the power of the human creative imagination. Here, in good physical science, as in great Classical poetry, we encounter a certain quality of passion, as this is associated with great Classical artistic and scientific compositions, compositions which show themselves, by their expression of creativity, as being inseparable qualities of passion for good.¹⁹

That is to say, in a different choice of words, that without the association of that certain feeling of goodness associated with what the Classical Greek of the Christian Apostle Paul adopts by the name of *agapē*, there probably never was a creative conception which was not engendered by a concomitant experience of that presence of *agapē* which the Christian Apostle Paul, and, later, Johannes Brahms, famously portrays in Paul's letter to the *Corinthians*, and in J.S. Bach's *Jesu, meine Freude*.

We may be certain, that if this quality of experience is not experienced, a truly creative scientific, or Classical-artistic act had not occurred.

19. Thus, in music, J.S. Bach, and such among his prominent followers, as Joseph Haydn, Wolfgang A. Mozart, Beethoven, Franz Schubert, Robert Schumann, and Johannes Brahms, represent, in their method of composition, a devotion to truth lacking in such representatives of the Nineteenth-century Romantic school of the student of "that criminal Czerny" who, as Beethoven warned, corrupted the physically talented Franz Liszt, who turned out to be actually an evil forerunner of the London-created Adolf Hitler cult. Twentieth Century trends in popular musical practices tend toward the outrightly evil, trends which, like contemporary university programs, become habits which actually, like flatulence at the dinner table, tend to destroy attention to cognitive powers and morals among the ranks of the habitually credulous.

So, to recapitulate that point, it is of proper relevance to the subject of this report, that creativity, as I have illustrated that principle in the previous chapter of this report, can not be separated from a specific quality of human goodness which is rooted in a compelling, and impelling, passion of the individual creative human intellect. Such was the difference between the creative Leibniz and the Eighteenth-century followers of the intrinsically evil Abbé Antonio Conti, Voltaire, D'Alembert, Leonard Euler, Joseph Lagrange, et al. So, the quality of creativity can be readily identified in the known creative work of Academician V.I. Vernadsky, as in poet Shelley's *A Defense of Poetry*, or Beethoven, Mendelssohn, Schumann, and Brahms, as distinct from the Romantics. In my own experience, it is impossible to place goodness and creativity in separate categories of motive and experience.

This principled kinship of creative scientific impulses and true morality, is no coincidence. This relationship is illustrated by reference to widely known, ancient Classical Greek works of outstanding significance. This relationship is, as I indicate here, not only an essential correlative of actual scientific creativity, but the passions expressed in true artistic and scientific creativity are essentially of the same quality, and this can be demonstrated from the artistic beauty expressed in the generally known creative-scientific work of Academician V.I. Vernadsky.

However, the following qualifying observation must be added, that in order that morality not be attributed to the slovenly emotions of Romanticism, or to the likeness of arbitrary rules or conventions either of law or custom. The passion for the kind of truthfulness expressed in the form of what are actually creative impulses, as I have identified creative impulses in the preceding chapter of this report, is, as I know this, an integral part of any truly creative action, whether in art or physical science.

Whenever morality, defined as I have just indicated, leaves the premises of scientific practice, there is a bad smell throughout the premises.

Therefore, in concluding this present interim chapter, I must now emphasize that connection to be made here in approaching the subject of the principal object of this report in the following terms.

The Prometheus Principle

For the sake of such needed emphasis, consider a few relevant pages from Classical Greek history. Note,

first, Aeschylus' *Prometheus Bound*. However, also note, that the great Classical tragedian Aeschylus gets to the heart of the matter, through the implicit contrast between the quality of optimism expressed in the *Prometheus Trilogy*, when that work is viewed with reference to that contrast provided by contrasting the tragic stink of the Homeric *Iliad* and the humanist optimism of the *Odyssey*.

The genius expressed in the composition of the *Iliad* is its great, ugly, but truthful paradigm of tragedy *per se*: The most evil gods and demi-gods whisper into the ears of their playthings, the human characters of the drama, and those foolish people then act under control of a consequent impulsion to destroy themselves and one another, accordingly, as in the tragic case of a world which tolerates British imperialism, still today: most notably, the Fabian variety of what is virtually imperial fascism, of today.

Those predominantly evil gods, especially the followers of the fictional Zeus, express a principle of evil *per se*. To the extent that the whisperings of such "gods" and "demi-gods" shape the judgment of their lawful prey, the people of that culture are, in general, controlled by that influence upon them. That is the only true principle of all Classical tragedy. Just, so, Shelley, in the concluding paragraph of his *A Defence of Poetry*, identifies the ruling dynamic as the determinant of a good or evil outcome of the behavior of the great majority of the population generally.

Thus, when our subject of discussion has shifted from the abiotic and animal domains, where there is neither guilt nor innocence, to the domain of the Noösphere, science and morality appear in their essential parts as differing facets of the same subject-matter. That



Nations destroy themselves by failing to heed the Promethean principle of scientific discovery, subjecting themselves instead to the evil of the Olympian Zeus: The gods forbid human creativity! Shown, Prometheus, a painting by 17th-Century Flemish painter Jan Cossiers.

specificity is lodged in those powers of human individual creativity which are the categorical distinction of our species, the human species, from all other creatures.

It is therefore important to recognize, that Bernhard Riemann's 1854 habilitation dissertation, especially respecting its opening two paragraphs and the concluding sentence, is both a most rigorous expression of the fundamental principles of physical science, and also a statement of the true morality located in its expression as the creative aspects of the human practice of physical science.

When those principles are adopted, in opposition to both empiricism and reductionism generally, those principles come to represent a force (a *dynamic*) which influences the behavior of a society to an effect which is counter to the influence of such "Olympian" powers of evil as Sophistry in particular, and reductionism in general.

It is essential to recognize, that, contrary to the silly opinion of our modern romantics and kindred varieties of so-called experts, a true tragedy is never an exhibition of the personal failure of one or several characters on stage. A true tragedy is the failure of a culture in which an element of evil grips a people so strongly that those people are rendered unable to resist self-inflicted suffering and ruin by their own willful choice, that not so much because of anything as much as their currently adopted own customs, such as the terribly tragic influence of the irrationalist cult of so-called "environmentalism" today. The shackles which are the acquired customs of a people, prevent such fools from breaking free of the evil influence of either the imagined pagan gods, or, the equivalent expressed in the form of a reigning culture of an entire reigning class of people, who say, in effect, like Shakespeare's Hamlet, "If I do

this, it will destroy me and my society; but, I must do it, because my people's reigning culture demands it of me." He is saying, "I must honor our pagan gods, lest the faithful worshipers of those idols destroy me, as punishment for my disobedience to the will of their gods!"

So, since the so-called Seven Years War, from which the Anglo-Dutch Liberals' private empire emerged victorious as an imperial tyrant over Europe and beyond, in February 1763. It has remained so, ever since, to the present day, in the form of the British monarchy and Commonwealth as being such an imperial tyrant of financier-oligarchical power over money and over the living human bodies which money or comparable temptations could buy, that during most of world history from then to the present moment in A.D. 2009.

There was a relatively brief interval, with the U.S.A.'s joining Britain as an "uncomfortable ally," during the period of that war-time alliance, and until U.S. President Nixon's 1971 destruction of the fixed-exchange-rate system, in which the U.S.A. was nominally "top dog" in the Anglo-American arrangement of 1941-1971, but that vanished, essentially, in the ruins caused by the Anglo-Saudi oil-price swindle of the 1970s, and the continuing ruin of the U.S.A., to the present day, by implementation, under U.S. Presidents Carter, Reagan, and George H. W. Bush, of policies launched by David Rockefeller's and Zbigniew Brzezinski's Trilateral Commission.

That form of empire reigned so, through the whispers from the imagined evil gods and demi-gods in the likeness of the tragedy of the *Iliad*. So, in the later tragedies crafted by Aeschylus, Shakespeare, and Friedrich Schiller, mankind has often made a great fool of itself, as this is shown in the *Wallenstein Trilogy*, through the



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Today's British Empire is emulating the methods of the Roman Emperor Flavius Claudius Julianus, aka, Julian the Apostate (r. 361-363), who played the many religions enshrined in the Pantheon (shown here) against one another. Julian is depicted here on a Roman coin.

folly of its status as the prey of a commitment to evil expressed in the form of the compulsions of prevailing, ruinous, national or comparable customs, customs modeled on the legendary banning of human creativity by the Olympian Zeus of *Prometheus Bound*.

Thus, as Edward Gibbon, the author of *The Decline & Fall of the Roman Empire*, advised his master, the British Empire's Lord Shelburne, to emulate the practice of the Roman Emperor known as Julian the Apostate, by such means as playing the religions of a virtual imperial-British Pantheon against one another. In this manner, the nations of Europe, as elsewhere, have repeatedly ruined one another in wars among themselves, the virtual victim-members of a British-run Pantheon, in virtual Roman-arena-style gladiatorial battles fought for the sadistic amusement and greater glory of their common oppressor, the so-called British empire. They fought as fools, as in the Napoleonic wars fought for the glory of the British empire, or the Twentieth Century's so-called "World Wars" and "Cold War," always to ensure that the British Empire, so called, remained the Venice-style financier-imperial

power of inherently predatory, Sarpian Anglo-Dutch Liberal power. There, in that and kindred examples, we encounter the true, spiritual origins of all great tragedies.

It is that type of tragedy, the typification of all true Classical tragedy, including the Homeric *Iliad*, that it is the foolish collective passions of cultures which induce those cultures to ruin themselves, or to put themselves, again and yet again, at the feet of a tyrant who has ruined them by his, or her manipulation of their devotion to silly, habituated passions.

Such was the case of the joint actions designed to crush Germany, initiated by Britain's Prime Minister Margaret Thatcher, with support of U.S. President George H.W. Bush and France's President Francois Mitterrand, in the Fall of that Wall which had divided Germany. Germany was ordered to destroy its economy, piece by piece, for the convenience of that British empire which has remained the dominant, actually imperial force in shaping world policy ever since.

To destroy people is already a crime; to induce a people to destroy themselves, as the influence of the British empire has done, in case after case, over recent centuries, as by such tricks as promoting the British drug traffic, is among the greatest crimes, as in the exemplary, British-steered pushing the Nazi Adolf Hitler into power in Germany, and supporting Hitler, in fact, until Britain's French fascist ally of the moment had assisted the relatively weaker military force, the Wehrmacht, in overrunning an actually superior French national military force.²⁰

20. It is important that we emphasize, at this point in the account, that, the British empire, acting once again in the custom it had practised in the "Seven Years War," once again sought to preserve its empire by organizing wars among intended, manipulated victims, such as the nations of continental Europe. So, London has the primary war-guilt in the preparation, during 1890-1914, for organizing a new "Seven Years War," which came to be called today, "World War I." So, London created Adolf Hitler's regime, with the intent of using Germany to destroy itself in war with the Soviet Union—all this in the tradition of the "Seven Years War." However, the German institutions, were not disposed, even with London's tool, Hitler, in the saddle, to have Germany embedded in an echo of Napoleon Bonaparte's disastrous invasion of Russia, while a French military force, then superior to that of Germany, was at Germany's rear. This little problem was solved by the installation of a fascist government in France itself, one which manipulated superior French forces, to disarrange themselves in such a fashion as to bring about Germany's successful "Blitzkrieg." The British leaders, such as Winston Churchill, who had created the fascism of Mussolini and Hitler, had become fascist. The collapse of France now

It is that type of induced, habitual moral self-degradation of peoples and nations, which has been the greatest curse of humanity throughout historical times, the habitual self-degradation which has permitted the habit of empire to dominate known history in such a fashion, from ancient to present times..

It is the same in the domain of modern science, where the pure evil epitomized by the influence of Paolo Sarpi on the modern perception of science, religion, and politics, has brought European civilization repeatedly into a mire largely of self-inflicted degradation, through service to wicked passions such as those which orchestrated the evil reported in the *Iliad*'s accounts. It is that corruption, typified by the authorship of Paolo Sarpi, and typified in practice by the examples of the origins and continued influence of what has come to be called "The British Empire," which has made a great fool of European and other civilization during most of modern history leading into and beyond the February 1763 Peace of Paris.

It is by the lack of adherence to those passions which are the expression of true creativity, that nations acting according to the injunction of the Olympian Zeus of *Prometheus Bound*, bring suffering upon themselves. What, and where, then, are those passions, speaking ontologically?

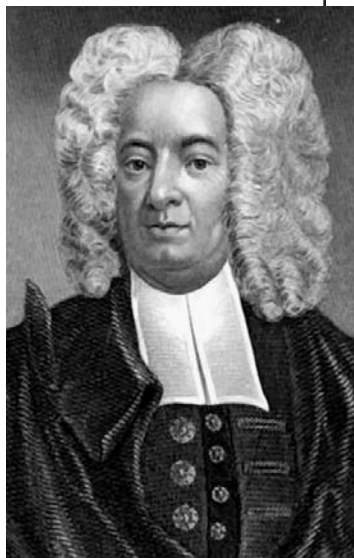
III. The Model Case of the Historical Dynamics of the U.S. Constitution

There is a great folly expressed in contemporary academic and related notions of scientific method, the assumptions to the effect that "hard" physical science must not be mixed with the sentimentalities of morality and culture otherwise. Contrary to such popular silliness respecting the nature of physical science, when the subject of science is human behavior, all of those considerations of a demonstrably systemic nature which affect man's development, or lack of development, of policies and practice of means to advance the discovery and realization of the means of both maintaining and

placed the evil, but also foolish British in the embarrassing position of running to the same President Franklin Roosevelt whom they had wished to destroy, to rescue Britain from the fruit of its own imperialist folly.

The Quality of 'Goodness'

Cotton Mather (1663-1728) was the direct political heir of the republican founders of the Massachusetts Bay Colony. The following is from his 1710 work, "Bonifacius, An Essay Upon the Good, that is to be Devised and De-signed, by Those Who Desire to Answer the Great End of Life, and to Do Good while They Live." See H. Graham Lowry, How the Nation Was Won, and "Cotton Mather's Leibnizian Conspiracy," EIR, Dec. 1, 1995.



Government is called, the ordinance of God [and thus] it should vigorously pursue those noble and blessed ends for which it is ordained: the good of mankind.... Rulers who make no use of their higher station, than to swagger over their neighbors, and command their obsequious flatteries, and enrich themselves with the spoils of which they are able to pillage them, and then wallow in sensual and brutal pleasures; these are, the basest of men....

It is an invaluable *honor*, to do good; it is an incomparable *pleasure*. A man must look upon himself as dignified and gratified by God, when an opportunity to do good is put into his hands. He must embrace it with rapture, as enabling him to answer the great End of his being [emphasis in the original].

increasing the relative potential population-density of mankind are an integral part of physical science, a part which can not be separated from the purpose of science for the mankind which is the only source of the maintenance and development of the human species.

The case of the politically motivated promotion of the fraud of so-called "global warming" is a case in point. There is no difference in principle between that ugly practice of a delusion today and the subject of Aeschylus' *Prometheus Bound*. This is otherwise illus-

trated by the role of the relevant quality of human passion in the process of discovery of universal physical principles. Science is never what some foolish people describe as "objective;" it is essentially an act of passion, a passion of the most enduring span and quality, as in the case of each relevant individual person. It is a passion which assumes a virtually life-long grip on the sense of identity and passions of the relevant individual, as my own devotion to the development of a more adequate science of physical economy attests. More significantly, it is a form and quality of passion which transcends the lives and deaths of successive generations of devotion to a specific mission. This is illustrated by the fact that all competent modern science is traced through the passion of Cardinal Nicholas of Cusa, from the mid-point of Europe's Fifteenth Century to the present day. It is illustrated by the fact that that modern physical science is a reflection, as if a rebirth of the same principles under way during the lifetimes of the Pythagoreans and Plato. Mankind is, in essence, essentially immortal.

The difference between man and beast lies in the quality of consciousness which is the medium through which valid physical science and Classical artistry find immortality in the succession of generations of a pro-scientific culture

The effects of the kind of systemic stupidity which a cultural phenomenon such as modern empiricism produces, and represents, are not, essentially, as much a lack of human potential in the person of the empiricist, as a crippling suppression of the person's ability to call upon creative capabilities which had existed naturally in all healthy human individuals, but which have been crippled to an effect compa-

rable to the former sometime practice of binding the feet of very young Chinese girls.

That contrast between the virtue of the human species and the dynamic influence of leading evil imposed as the accepted custom among a people, is the proper definition of a principle of tragedy.

The great Classical Greek dramatist Aeschylus caught the flavor of this in his *Prometheus Trilogy*: the ruling, evil God, the Olympian Zeus, forbade the summoning of the mortal person's innate power to make

In the Footsteps Of Cotton Mather

Benjamin Franklin (1706-90) was Cotton Mather's most distinguished protégé, wrote the late H. Graham Lowry (*EIR*, Dec. 1, 1995). Deployed by Mather into political warfare for the first time, Franklin brilliantly managed an "undercover" role which led to his move to Philadelphia in 1723, at the age of 17.

More than 60 years later, Franklin wrote a letter to Cotton's son Samuel, who had proclaimed the Declaration of Independence from his own pulpit in Boston in 1776. "I remember well both your father and grandfather," Franklin told him, "having heard them both in the pulpit, and seen them in their houses." Franklin reported that Cotton Mather's *Essays to Do Good* had "an influence on my conduct through life; for I have always set a greater value on the character of a doer of good, than on any other kind of reputation; and if I have been, as you seem to think, a useful citizen, the public owes the advantage of it to that book."

Of course, Franklin approached the matter of *goodness* with his ascerbic wit, writing in *Poor Richard's Almanac*: "Serving God is doing good to man, but praying is thought an easier service, and therefore more generally chosen."



Library of Congress

command of the Olympian Zeus induces, is not of the one-at-a-time variety; it is systemic, as in the case of those adolescent boys of the ruling class of Sparta, who trained themselves for war by hunting down and killing unarmed helots for sport. The problem is not individual; it is systemic; it is, like a religious belief, dynamic. The members of society enforce obedience to that condition in one another, even when they themselves are the victims of the injustice which they voluntarily bring upon themselves in this manner.

Take the case of the origins of the United States of America. Trace that history clinically, from the time of the early phases of settlement of what came to be called "New England" by the Mayflower colonists and the Massachusetts Bay Colony. Treat this transfer of what were, initially, largely volunteers migrating from the Netherlands and England, for what it actually is, as a case of a cultural transformation of a part of a population, the adoption of a newly created culture out of some of the population from a pre-established culture. The same kind of effect, "the North American colonization effect," can be studied in patterns of migrants into what became the U.S.A., from Germany, Italy, Eastern European cultures, and so on, and on. The phenomenon to which I am pointing, is an instance of the principle of dynamics as it operated, in this case, in a specific cultural domain.

So, a different society operated to a different effect, in producing the effect of Spartan youth training themselves to assimilation into their society's cultural paradigm, through "play," by hunting down and killing helots.

Similar stereotypes of cultural determination of dynamics are characteristic of the process, for good, or for evil, of societies' populations generally.

In the case most relevant to the point of this report, the essential characteristic of the American colonists, was their systemic rejection of the legacy of the European feudal, or feudal-like aristocracy. Consider the essential features of the true history of the way in which the indicated development in the North American colony occurred.

The beginning of the social process leading into the

fire. The inborn potential of the young Chinese girl was to walk as girls would normally walk without such restraints; the capability has not been taken away from the victim's human nature; it has been crippled by being part of a morally crippled culture.

What I have just said can be regarded as an argument which moves in the direction of stating the truth, but it is a crippled kind of truth, like the poor Chinese girl who is reaching adulthood with the crippling habit of bound feet. Induced stupidity of the type to which the

establishment of the English-speaking U.S.A., was a series of sequels of what is known in European medieval history as the Fourteenth-century "New Dark Age," a breakdown of the existing monetarist culture, dominated by the Venetian monetarists who managed the European chivalry. The beginning of both modern European cultures and also North American culture as a by-product of that, emerged in a process of the attempted reorganization of the Western and Eastern branches of the Christian church culminating in the A.D. 1439 great ecumenical Council of Florence. This effort had a mixed outcome. While the first modern nation-states emerged as a product of the Fifteenth-century Renaissance, in Louis XI's France and Henry VII's England, the remnants of medieval feudalism, led by Venice's monetarists, struck back, using savage and prolonged religious warfare over the interval 1492-1648.

In the meantime, a leader of the mid-Fifteenth-century Renaissance, the same Cardinal Nicholas of Cusa who personally launched modern European science, recognized that that Renaissance's goals were being ruined by the radiating effects of Balkan and related wars triggered by the fall of Constantinople. Cusa projected a campaign of transoceanic voyages to establish new allies for the cause which had been represented by the Renaissance. About A.D. 1480, a Genoese sea-captain, then in the service of Portugal, became acquainted with papers representing the work of Cusa. Between Columbus and Cusa's surviving collaborators in Italy, the trans-Atlantic voyage proposed by Cusa was adopted as a goal. In 1492, that mission was carried out.

The initial colonization was from Spain, and a bit later Portugal ventured into what would become known as Brazil. Meanwhile, throughout the Sixteenth Century, the periods of monstrous religious warfare grew worse. The Council of Trent came and went, and in the wake of that a new proponent of continued religious warfare came to the fore, the Venetian Paolo Sarpi. In this setting of the very late Sixteenth Century and early Seventeenth Century, the significant French- and English-speaking colonizations in North America emerged.

What followed was, from one viewpoint, a complex, chiefly trans-Atlantic process, out of whose manifold details only a few leading dynamics need be considered in this present location. The most crucial events of the period between the A.D. 1620 Plymouth settle-

ment and the American victory against the British Empire, were, apart from that American victory itself, the establishment of today's continuing British Empire from the period of that so-called Seven Years War which established London, in February 1763, as the capital of an implicit Anglo-Dutch Liberal, London-centered, world-dominating maritime empire, which set the principal European victims of that Seven Years War, such as France and Russia, into motion of what became, in European eyes, a credible cause for the support of those European powers eager to check the imperial appetite of their richly hated Anglo-Dutch imperialist neighbor.

There were chiefly two positive outcomes of this alliance against the Anglo-Dutch tyranny. One was the defense of continental Europe against the Anglo-Dutch Liberal empire, a defense led by the support of many among the crowned heads of Europe. The other was the establishment of an utterly new form of sovereign nation-state, the U.S. republic.

This pattern, set by the conflict of 1763-1789, continued over the interval until the death of President Franklin Roosevelt in 1945, and continued, albeit with increasing complications, over the interval until the suppression of the independent states of continental Europe through a process initiated by Britain's Prime Minister Margaret Thatcher in complicity with the rabidly Anglophile U.S. President George H.W. Bush, and France's President Francois Mitterrand. This was a process which came to assume the type of former Prime Minister Tony Blair's frankly fascist repudiation of the 1648 Peace of Westphalia and his promotion of a cross between imperialism and a Tower of Babel called "globalization."

The essential feature of this centuries-long process, from the general European break-down-crisis of the Fourteenth Century, through to the present time, had become the emergence of a pattern set by the successes of the American Revolution and the U.S. defeat of the British Empire, under the leadership of President Abraham Lincoln. It was the defeat of the British Empire's launching of a war of intended destruction against the United States. The waves of immigration from Europe, into the U.S. and the U.S. economy, during a period up to the end of what had become known to the English-speaking world as "World War II," represent a history which had defined a consolidation of the social character of the United States' political-economic system and of the social characteristics of the great majority of the U.S. citizenry.

Ostensibly, the entry of the U.S.A. into the war

against Nazi Germany, Japan, and the London-made fascist regime in Italy, was a great defeat for that pro-oligarchical fascist wing which London interests had built up within the thus-morally corrupted U.S.A., a British instrument centered, during President Franklin Roosevelt's time, in the fascist Liberty League from which such morally depraved present-day creatures such as British-trained Amity Shlaes are descended. The death of President Franklin Roosevelt was a setback, tending to push developments in the U.S.A. and the United Kingdom of Fabianism back to the pro-fascist variety of Anglo-American trends of the Theodore Roosevelt, Woodrow Wilson, Calvin Coolidge, and Herbert Hoover, and American Liberty League times.

All that much said, and necessarily so, we have now entered a time in which only a U.S. resumption of the direction it manifest under President Roosevelt could make possible a likely victory of the peoples of this planet over the Europe-centered imperialist campaign of this present period of a general, planet-wide, economic breakdown-crisis.

The most significant danger, that we might not defeat the Anglo-Dutch Liberal (e.g., Fabian)-led effort to establish the form of world empire called "globalization," is that we fail to rescue the world from this combined threat of a global fascist empire and breakdown-crisis because we fail to grasp the conception of dynamics, a failure implicit in a lack of mobilization around the conception of a dynamic, rather than Cartesian design of the relevant social process.

It is not any particular physical power of the U.S.A. which makes the U.S. crucial in this matter; it is the dynamics of the U.S. character, the deeply inbred contempt of the true republican for the presumed authority of any sort of social institution which caters to oligarchical traditions.

IV. What Is Reality?

From what I have written in this report thus far, it should be clear, that the great intellectual issue confronting both scientific and popular opinion today, is the issue of which is real: science, or sense-perception? Is reality what we identify as the images of sense-perception; or, is it not the fact, that sense-perception is merely the shadow which reality casts on the imagination of the primitive mind?

Is it not the case, as I have already emphasized in

the preceding sections of this report, that we must communicate in a language which references our sense-perceptual experience, not because those images express reality as such, but because truth lies only in the human mind's seemingly miraculous capacity for decoding the messages of sense-experience in such a way that our minds see the reality which sense-perception as such can not see. In other words, we must believe in what our minds must "see," rather than believing that sense-perception is efficient reality in and of itself.

In other words, the name of "science" should be limited to the reality which casts sense-perceptions. This is the truth of the matter, not only for what we identify as physical science, but for the ironical aspect of that which artistic creativity casts as the ironical forms of sensory expression of Classical artistic composition. In this connection, we encounter the essential equivalence of science and Classical artistic composition. As I have written above, what we know as competent physical science pertains to man's relationship to the subject-matters of the domain of the abiotic and the Biosphere; Classical artistic expressions pertain to the essential relationship of the creative faculties through which human relations as such are expressed in an ironical mode comparable to that of physical scientific practice.

The cultivated mind is, therefore, a reflection of the process of going over from seeing the real universe as a mere shadow called sense-perception, to locating one's sense of identity habitually in such a way as to see science as real, and sense-perception as shadow.

The summary argument which I have just now supplied, thus, is not essentially novel. All great Classical artists and scientists are distinguished from popular outlooks in some significant degree of approximation of thinking in this way. We call such artists and scientists as "geniuses;" but, in fact, it is minds so developed which are truly normal, and persons still imprisoned in emotional attachment to sense-perception as such, who have, so far, fallen short of realization of a truly human sense of personal identity.

It is the power to see the creative personalities of the past as immortal persons who, in their fashion, can still communicate to us, whereas we can merely respond to what they have imparted to an immortal effect. That is to say, that where an issue of principle from the past is posed, we must attempt to relive what transpired in the mind of a deceased thinker, or we



EIRNS/James Rea

Classical art and scientific work by the LaRouche Youth Movement in Germany. Left, the LYM chorus sings Bach's "Jesu, meine Freude," at a Schiller Institute conference on Feb. 21, 2009; below, investigating the principle of the catenary at a LYM cadre school in Berlin. The women are constructing a model of Brunelleschi's marvelous dome on the Cathedral of Florence.



EIRNS/Helene Möller

must recreate, in our own mind, the array of circumstances under which they acted in some relevant past time and setting.

The crucial issue, is this sense of the immortality of the creative human individual. This is a sense of we, ourselves, also living, presently, in that same domain with those relevant immortals from the ranks of the departed.

In this respect, the great majority of the presently living population live still in a state of mind which, at best, is the false dawn of what the human mind is intended to become in its true maturity of development. That is to emphasize that mankind presently, except in what are still relatively rare cases, inhabits this dusky side short of the dawn of true humanity.

On this account, it is the impassioned effort of many to resist the demands which the cause of true, creative humanity requires, which accounts for most of the stupidity and even outright evil predominating among nations and their peoples still today. So, we already rely, in those societies, on a relatively healthy moral condition of culture contributed by the influence of the exceptional individuals among us, such as our Benjamin Franklin, Franklin D. Roosevelt, or Albert Einstein. We could not progress as far as we have, in even the best cases of national experience, without such exceptional geniuses; but, the failure of society generally to rise to a comparable standard of typical personal development,

remains the greatest source of danger to civilization as a whole.

Until mankind generally, has passed over, from seeing reality "as through a glass darkly," as the Apostle Paul spoke, to locating ourselves in the reality for which sense-impressions are merely shadows, we are in danger from the backwardness of mistaking our sense-impressions for reality, rather than seeing sense-impressions as merely the shadows of reality. Science and Classical artistic life are good, and the contrary, such as today's popular cultures, are bad *per se* in respect to their tendency to cause populations to debase, even bestialize themselves, as fascists do, as the violent existentialists of 1968 did, that to the ruinous effects on the culture of the world as a whole, today.

Creativity as I presented its case here, is not merely an advantage, it is the only pathway up from the prevalent bestiality of the world today, to that which the leaders of mankind must, urgently, become, in the hope of averting a prolonged, planetary new dark age today.