EXECTION 2018 Creativity & Economics

COMMENT ON JAMES GALBRAITH PAPER:

Good Progress, But More Is Needed

by Lyndon H. LaRouche, Jr.

April 7, 2009

I include the title of Professor James K. Galbraith's "A Biophysical Approach to Production Theory" 1 as part of my characterization of that piece's role as a significant, timely step upward in treatment of the subject of political economy among today's shrinking minority of actually competent professionals in this field. His argument represents an important breakthrough, although it does not yet touch the more challenging domain on which I have focused in two relevant pieces on the crucially relevant subject of my Kiev Podolynsky paper, "The Principle of Mind," and the more recent reflection of the implications of that former paper, in "A New World Currency As Fraud."3

That error of omission in Professor Galbraith's argument on which I focus my remarks here, is its lack of attention to the most essential features of those approaches to the subject of the causal features of economic processes, which lie within the domain of the creative principle as such, causes which must be addressed if there is to be any safe escape from the presently onrushing general collapse of not only the U.S.A.'s, but

the world economy.

In this way, the most crucial issue, the subject of, "what is actually human creativity?" is omitted from his argument. This omission is consistent with the currently accepted practice of Professor Galbraith's presumably leading rivals in that profession today. That omission is the topic on which my attention is focused

There could be no particular reason to consider Professor Galbraith's omission of that crucial point as scandalous, since the subject of **creativity as such** does not actually exist as a usual topic in any part of higher education today. I am thus, so far, a unique authority in this subject of economy, one who has already had unique success as a forecaster in exposing the error of practice responsible for the presently most crucial national and world economic crisis: the prevalent, vicious error of assuming that real economic processes could be treated as being essentially a subject of statistical analysis of monetary, or other functions. Professor Galbraith has implicitly recognized a needed correction for a key aspect of this problem, as the very title of his piece emphasizes. He intends to adopt a biophysical, rather than monetary basis for economy; but, despite that excellent intention, he has overlooked the crucial issue involved, that of creativity, properly defined, as such. I explain.

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^{1.} Jing Chen and James K. Galbraith, working paper at the University of Texas, January 2009. See http://en.scientificcommons.org/39674255

^{2.} EIR, April 3, 2009.

^{3.} EIR, April 10, 2009.



Economists for Peace and Security

James Galbraith's cited work, while omitting the principle of dynamics

James Galbraith's cited work, while omitting the principle of dynam (versus neo-Cartesianism), as it pertains to human creativity, nonetheless, "yearns toward solutions for precisely this problem."

The Question Before Us Now:

To wit: Whether some among us might have become deeply immersed in the issues of an actually physical science of economy, or not, today's most crucial issue, the issue of the role of creativity, will not begin to become clear to them, until they have been struck by a sudden realization, that the character of the currently accelerating, present world breakdown-crisis, requires that they must now address the remarkable relationship of a science of physical economy, as I do here, to that specific conception of the universe expressed in the stunningly precise, opening chapter of the Biblical **Book of Genesis**.

Therefore, as I shall emphasize here, the question

addressed by economists ought to be: What is the experimentally validated meaning which should be assigned, by science, to the practical use of that universal term, "creativity"?⁴

The issue here is the overwhelmingly practical importance of the need for a rigorously scientific definition of the term "creativity" as employed in that Biblical text.5 The source of the most commonplace failures in mankind's steering of its own societies, is that avoidance of the substance of creativity ("fire"), an avoidance which is demanded by the so-called "environmentalists" today, as it was by the pro-Satanic figure of the Olympian Zeus of Aeschylus' Prometheus Bound. The evidence of that deliberate use of "fire," which was banned by that Zeus, and by Britain's Prince Philip today, is the same crucial evidence which enables us to distinguish the archeological presence of ancient mankind, from that of ancient apes. Without locating the study of economic processes in that distinction, no intended effort to define the systemic difference between an animal habitat and an actually physical economy could succeed.

For the physical scientist as such, the most crucial aspect of this distinction which I have just emphasized, is mankind's creative role in the history of the increase of the potential relative population-density of the human species, an achievement which occurs only in the human species, and which is recognized only when this achievement is viewed in light of a search for an actually physical sense of the efficient meaning which must be attached to the term "creation."

When we were to recognize that point, as emphasized by me here, we are then implicitly obliged to shift the emphasis in the practice of economy, from today's customary teaching and practice of what is called economics, to that systemic distinction which is specific to that valid, physical-scientific notion of human creativity, the notion which provides us that same essential distinction of man from beast which is expressed as Academician V.I. Vernadsky's distinction

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^{4.} E.g., Nicholas of Cusa, De Docta Ignorantia.

^{5.} For example, the attack on the Aristoteleans of his time by the great contemporary and friend of the Christian Apostle Peter, the Hebrew figure, Philo of Alexandria. I refer to Philo on the subject of the principle of creativity, that as an ontological state of being, *per se*.



The "specific conception of the universe expressed in the stunningly precise" opening chapter of Genesis, bears a remarkable relationship to the science of physical economy. Shown, the "Creation of Man and Woman" ("Adam and Eve"), panel from the "Gates of Paradise," by Lorenzo Ghiberti (ca. 1450), Florence Baptistry.

of the Noösphere from the Biosphere.

In that unfolding process of inquiry, the essential, delimiting features of the combined role of physicalscientific and Classical-artistic progress, in increasing the potential relative population-density of the human species, compel us to shift our emphasis, away from the misleading notion of man as ostensibly an inhabitant of the domain of sense-certainty, as in the subhuman standards proposed by such followers of Paolo Sarpi as John Locke, Bernard Mandeville, Adam Smith, and Jeremy Bentham. We are impelled to choose a notion contrary to their own, that of their merely negative distinction of man from the beasts, such as the quality of literate speech, to that of an affirmative view of the importance for our planet (and beyond) of the existence of that specific type of the human individual, the human type which is exemplified by the development of the creative scientific, and also Classical-artistic mind. The

Creator represented in **Genesis** 1, committed neither error, nor Divine frivolity, in creating man and woman in His likeness.

The prevalent modern error made on this account, today, is that attributed to the founder of modern, Anglo-Dutch and related philosophical Liberalism, Paolo Sarpi, whose followers emphatically denied any knowledgeable reason for human existence. The evidence for this is shown by the examples of the Liberal advocacy of human chattel slavery, by John Locke, and by all the Eighteenth-century devotees of that particular depravity known as the radically hedonistic doctrine of Anglo-Dutch Liberalism, as expressed by such as the Cartesian Abbé Antonio Conti, Voltaire, Adam Smith, and Lord Shelburne's utterly depraved British Foreign Office creature, Jeremy Bentham.

The type of the actually creative human individual scientist or Classical artist, is, in fact, the true exemplar of a faithful expression of the standard which distinguishes the human individual from the rel-

ative bestialization into which commonplace leading and other members of Trans-Atlantic society have fallen, fallen into those all too commonplace, degraded standards of personal moral and intellectual achievement, commonplace in European cultures, in particular, still today. The effect of falling into that kind of Liberal self-debasement, is expressed by habits typical among people whose creative potential has been more or less stifled by a cult-like worship of so-called "practical" considerations, thus converging upon what is typical of the quality of behavior found within the bounds of the animal kingdom, or as some theologians put the point, "the Old Adam."

In contrast to that depravity, I proffer the distinction permeating two recent writings of my own, where this crucial urgent consideration of the subject of creativity is addressed in a relatively deeper way: My Kiev Podolynsky Conference paper, **The Principle of Mind**, and, also, the more recent A New World Currency As Fraud.

On this account, Professor Galbraith's work already represents a significant, relative breakthrough in the needed direction, in a direction which leads beyond what might be fairly considered as the limits of the usual leading level of practiced competence among academics and others today. Nonetheless, the idea of such a breakthrough implied by Professor Galbraith's recent writing, does not yet reach far enough to touch its implied objective; it does not locate the actual subject on which what might be considered the true secret of economic science depends: *the recognition of the subject of a truly positive, creative principle*. That distinction is my essential subject here.

A Customary Error

It is useful for me to illustrate that point, at least in part, by reference to a most relevant kind of relative uniqueness of my own early intellectual achievements in this matter. I trace my own accomplishment on this account, to the youthful circumstances, during my first, adolescent experience of the opening session of a class in plane geometry, a session during which I summarily, and correctly rejected the *a-priori* presumptions of what is called Euclidean geometry.

Simply said: at that time, and ever since, I refused to accept a doctrine of "self-evident" *a-priori* principles. Such was my vocal classroom and related rejection of naive sense-certainty, an argument which I had premised upon my knowledge, then, of the elementary physical-geometric issues of the contrast between the intrinsically, ontologically fraudulent, a-priori notions of mere geometry, as in the case of the Aristotelean method of Euclid, and my standpoint, that of physical-geometric design of ostensibly self-supporting structures.⁶

As Bernhard Riemann emphasized, in the opening two paragraphs, and closing sentence of his 1854 habilitation dissertation, the customary source of modern classroom errors in this matter, is assertion of belief in the *a-priori* presumptions of a naive misconception of the function of sense-perception, as illustrated by what I have already indicated, here, as the case of belief in a

Euclidean geometry, or by similar follies.⁷

That presumption by the modern reductionists, such as the empiricists and positivists of today, causes the kind of usually lasting damage to the young mind, which I had observed, then, as now, as most commonly blocking access to knowledge of the experience of creativity among both educated, and science-illiterates such as our contemporary malthusians, among the relevant majority of such believers, in the world, still today.

That same vicious error, is still the prevalent failure among those who are often regarded, mistakenly, as paragons of our nations' economic and related policyshaping. It is those same, widely believed, faulty ontological presumptions, which have been most significant in promoting the customary incompetence of what is usually taught and believed among our so-called educated classes.

It is the treatment of the senses of, chiefly, sight and hearing, as they are often mistakenly deemed as ontologically self-evidently real, in the sense of a-priorism, which must be the target of emphasis in our attacks on the follies of today's pathetic, popular forms of educated and other opinion.8 As I have emphasized in locations published earlier, it is only to the degree that we fail to recognize that the functions of each of our sense-organs are limited to that of instrumentation, in the sense of the comparable usefulness of scientific instrumentation of experimental investigations, that we will recognize that we must be enabled to take the indispensable step further, toward competent scientific investigation of those creative processes of the human mind which, contrary to the always paradoxical evidence of sense-perception as such, express the actual nature of that efficient existence of universal physical principles which is exemplified by the example of Johannes Kepler's uniquely original discovery of a principle of universal gravitation, as in his The Harmonies of the World.

Such considerations are the essential requirement of any competent approach to an efficient science of physical economy. That consideration is the crucial, correctable omission in the referenced work by Professor Galbraith.

My relevant observations on this crucial problem of today's economists, are as follows:

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^{6.} Two such a-priori assumptions have been most disastrous in their effects, absolute space and absolute time. However, these two cases illustrate most prominently, the broader problem of axiomatic views of sense-perception generally.

^{7.} Those portions of Riemann's habilitation dissertation are to be recognized as echoes of the principle of Nicholas of Cusa's **De Docta Ignorantia**, and, also, of Filippo Brunelleschi's adoption of the principle of the catenary as the physical-principled solution for the crafting of the cupola of Florence's *Santa Maria del Fiore*.

^{8.} ibid.

I. The Subject Of 'Entropy'

The crucial issues to be considered now, include the following:

The essential characteristic of today's modern academic and comparable opinion, is its prevalent, intellectually stagnant, academic view of scientific and ar-

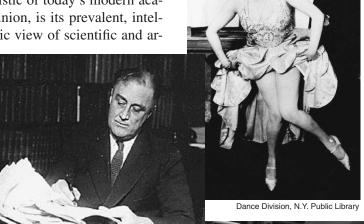
tistic composition. I refer to the fallacious assumption met, typically, in the return to the decadence of a globally extended adoption of that mistaken practice of political economy, as in European civilization and beyond, a decadence which has been crucial in shaping a typical shift, intellectually and practically downward, in relative emphasis since death of U.S. President Franklin Roosevelt.

That was the moment after President Roosevelt's death, when the dastardly Harry S

Truman replaced Roosevelt's adopted Bretton Woods policy for the post-war world, replacing President Roosevelt's policy by the overtly fascistic doctrine which had been concocted by John Maynard Keynes, as Keynes' doctrine had been presented earlier in such locations as his own original, 1937, Berlin edition of his *General Theory*. So, our culture abandoned the beautifully bright colors of creative expression,

for the monotony of Keynesian intellectual grey. Such was the pedigree of the implicitly fascist-leaning, monetarist dogma of John Maynard Keynes which was introduced by President Truman, on April 13, 1945, the morning after President Franklin Roosevelt's death, and which has cursed us ever since.

During the course of that troubled time, between President Franklin Roosevelt's first inauguration and his death, the economy of the United States had emerged from the bleak moral and economic deca-



FDR Library

Under the FDR's leadership, "the economy of the United States emerged from the bleak moral and economic decadence of the 'flapper age," to an achievement of a degree of sheer physical economic power, which astonished the world. The "Roaring '20s" (as above) came to an abrupt end, with the Crash of '29; FDR's industrial mobilization. as in the photo of the Willow Run bomber plant (below), brought the nation back to sanity, and readied it for the war.



National Archives/Ann Rosener

dence of "the flapper age," which had been the prevalent mood, top down, of the time of the Coolidge and Hoover Administrations. Under the onset of Franklin Roosevelt's leadership, there had been, contrary to the specifically pro-fascist hoaxes and included lies of the London-trained, American Enterprise Institute's associate Amity Shlaes of today, directed against President Franklin Roosevelt's achievement of a degree of an accelerating development of sheer physical economic power of our United States, an achievement which had astonished the world up to

the moment of that President's death.9

Since then, still today, some honest historians of one type of qualification or another, such as Professor Galbraith, had described Franklin Roosevelt's apparently miraculous achievement fairly, a view which some among us have presented as their honest account of the phenomena typical of that process. However, phenomena are symptoms, not causes. Virtually none of those whose work has been visible to me, has shown us the actual identity of either that actually efficient principle, or that lack of principle which has been responsible for that pernicious result of the prevalent, fraudulent beliefs of today: results which some among them have described, if only as a matter of fact. Nonetheless, their descriptions have enjoyed some, regrettably significant degree of accuracy. Yet, even among these latter sources, so far, the nature of the creative principle involved, has escaped attention in what they have written.

So, Percy Bysshe Shelley warned us, implicitly, of the relevance of Leibniz's principle of dynamics, as in the astonishingly insightful, concluding paragraph of his A Defence of Poetry. So, later, a more powerful restatement of Leibniz's notion of dynamics was provided by aid of Lejeune Dirichlet's influence on the creative genius of Bernhard Riemann. So, on the contrary, among most of us, still today, we have the persistence of a silly reductionism typical of René Descartes and his Eighteenth-century followers, a fault which prompts credulous professors in science to deny the specific nature of that dynamically extended power, the principle of dynamics, which sometimes lifts a people to a state of creative accomplishments which seems, then, to stand above and outside the reach of their individual natures. Such a contrast between neo-Cartesianism and dynamics, exactly as Shelley describes this, defines the prompting of our happier fate under President Franklin Roosevelt's dynamic influence. The power, is a surge of true human creativity. Many embraced that experience at that time; however, the essential physical principle

driving such achievements was usually not yet understood, even in those happier times.

The omission of this happier consideration posed by Shelley's A Defence of Poetry, has not been an accidental oversight, even in the accounts among those relevant economists exhibiting an inclination for truthful historical accounts. The trouble here, on this point, lies, chiefly, with the latter's submission to certain, subsuming, systemically reductionist considerations, assumptions, however fatuous, which are tolerated, as in lip-service, even by professionals who often do not actually believe them, but who accept those notions which pass for relatively popular, even obligatory academic and related professional opinions. Such is the defective opinion on the subject which is commonplace among both the putatively learned and illiterate alike, respecting economy, in particular, and science in general, today.

Professor Galbraith's referenced piece yearns toward solutions for precisely this problem, but he has not yet found what, to his credit, he clearly seeks.

Some Negative Factors

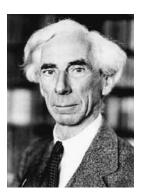
To sum up what I have written here so far: I refer, with special emphasis, to that pathological, reductionist streak which is dominant in both the scientifically illiterate popular opinion on that subject, or, also, in the varieties of modern opinion-shaping derived directly from the systemic fault of either the sophistries of Aristotle and Euclid, or, from the modern influence of the philosophical Liberalism of the avowed follower of that medieval William of Ockham, whose scheme was resurrected as the adopted prophecy of what became known as the modern Anglo-Dutch Liberalism of Paolo Sarpi and his followers.

Within the circles of the Eighteenth Century, Anglo-Dutch Cartesian opponents of Gottfried Leibniz from among the Liberal followers of Paolo Sarpi, there were such as Jean D'Alembert, Leonhard Euler, and Joseph Lagrange; their leading followers of the Nineteenth and Twentieth centuries, who were such as Pierre-Simon Laplace, Augustin Cauchy, Rudolf Clausius, Hermann Grassmann, Lord Kelvin, and J. Clerk Maxwell; and, still later, the more radical varieties of positivists, typified by Ernst Mach and Bertrand Russell. The later degeneration, since the close of the Nineteenth Century, is typified by the influence of the legacies of H.G. Wells, the avowedly pro-satanic witchcraft of Russell's sometime crony Aleister Crowley, and the pompous frauds

^{9.} Shlaes' proliferation of outright lies is already notorious. Her affinities, still today, to the baldly pro-fascist assumptions of the enemies of President Franklin Roosevelt's revival of the U.S. economy during his time, are also obvious motives for her fully witting frauds. The element of apparent "sincerity" otherwise locatable in her fraudulent representation, is a product of the same motive which has guided that pro-fascist element of British Eighteenth-century Liberal's moral degeneracy typical among President Obama's controllers identified by both Lawrence Summers, and the pack of implicitly treasonous, moral and intellectual degenerates lately exposed by **Time** magazine.

There is a direct line of degeneration from the 16th-Century Venetian Liberal Paolo Sarpi (top left), down through the radical postivists, typified by Bertrand Russell (center), his crony, the satanist Aleister Crowley (far right), and further down, to today's "lost generation," of victims of MySpace, Facebook, killer computer games, and similar escapist cults. Below: The LaRouche Youth Movement campaigning vs. MySpace, Los Angeles, November 2007.









to the present time, most emphatically since Spring 1968.

The problem, here, is not that those nations' leaders were not capable of thinking about the underlying principles of economy; the problem has been that they have discovered that it is not helpful to their careers, or their personal influence otherwise, to risk becoming disliked among their peers, or putative patrons, by taking actual issues of competence in observed physical principle

which appeared as such outgrowths of the influence of Bertrand Russell as the hoaxes of "information theory" and "global warming."

Since the Eighteenth Century, the legacy of Liberal opinions concerning both popular science generally, and economy in particular, has come, like a great tidal wave fallen upon us, to dominate an increasingly decadent, post-Franklin Roosevelt, virtually post-modern European culture. The influence of those downward trends in both science and popularized morality, has come to ensure the relevant, relative impotence of Europe's governments' economic culture since World War II,

into account in their adopted theses.

Thus, the distinction of the cases of those modernist Aristoteleans and Liberals whose dogma and essentially failed practice I am emphasizing here as examples of contemporary corruption, is their implied devotion to that *a-priori* principle upon which each of those two contending, philosophically reductionist systems is premised, if each otherwise differs in a slightly different way from the other. The underlying essence of their assumptions, is *that same suppression of the fact of the innate quality of human creativity*, which was demanded by the character of the pro-Satanic Olympian Zeus pre-

sented to us in Aeschylus' **Prometheus Bound**. Although those two persuasions, that of Aristotle and Paolo Sarpi, have differed among themselves, they are each, otherwise, merely different varieties of the same general, viciously systemic, pro-Satanic error: modern radical expressions of, chiefly, "materialist" or positivist *reductionism*.

We should understand the widespread influence of reductionism today, as a symptom of a popularly induced lack of insight into those great principles within which the particular moments of experience of truly human life are contained and shaped. The incoming waves of history are experienced; but, the true meaning of the powerful movement of intellectual motion throughout the space of our existence, is not conceived by today's popular opinion in any meaningful way.

The ideas and motives expressed as such trends in political decision-making of nations, are moved like chaff on the waters of incoming and outgoing tides; the believers sometimes think, even carefully, about their immediate situation, but, as in all important accounts of Classical tragedy, it is the tides of generally accepted opinion which decide the direction of what they delude themselves into believing, are determining the actual outcome of their individual choices of local movements. Just so, have powerful nations often been doomed by devotion to what they have willfully, and mistakenly conceived to be their urgent interests.

They see their own willful choices of movement, but pay little attention to the great tides of history which have consigned them, as in the present moment, to their tragic destinations. It is thus, that it is the rope of what they delude themselves into believing in as it were their own free will, which hangs them, or like the foolishly self-doomed King Louis XVI and Marie Antoinette, sends them to the gibbet.

The usual source of that lack of competent insight, is the arbitrary, reductionist presumption, that sense-certainty defines "physical." Whereas, the human senses are comparable to man's synthesized, experimental forms of scientific and comparable instruments. It is the specific power of the human mind to "read" those instruments as being merely useful instruments, which is the key to real knowledge, just as Johannes Kepler's uniquely original discovery of the principle of gravitation governing the Solar System illustrates that fact.

It was the form of reductionism introduced by the author of modern Liberalism, Paolo Sarpi, which rejected the unique fact of the originality of Kepler's actually original discovery of a general principle of Solar gravitation, both maliciously and fraudulently, which is the symptomatic key for understanding the underlying, radically reductionist assumptions of the social systems of that so-called "oligarchical principle" which reigned in the cultures of the ancient West-Asian imperial systems. This scandalous fraud against Kepler by the modern Liberals, serves today as the most typical manifestation of incompetence among the relevant professors of science in universities still today. This is only a new form of the same oligarchical principle which had underlain the imperial systems of West Asia and Europe, in particular, from such ancient times as the evil of Babylon, until the presently continuing British Empire's world domination under such pro-Satanic villains as Britain's Prince Philip and his pro-Satanic World Wildlife Fund of today.

It is fair to speak of a factor of "scientific imbecility" respecting essentials, in shaping the ruin of the culture of nations since the death of President Franklin Roosevelt. This is a widespread trend in social and intellectual imbecility whose origin is typified by such followers of Aldous Huxley's cult as the implicit 1984 of Aldous Huxley's youthful crony in ergotamine or ergotamine-like withdrawals, as the financier-controlled dupes of "Orwellian" organizations of the "lost generation" represented by such as MySpace, Facebook, "killer computer games," and similar masses of neo-Flagellant, "escapist" cults of today.

For reason of that influence of such latter philosophical illiteracy, we now experience those commonly underlying forms of the modern European philosophical Liberalism, such as the varieties of the empiricist and positivist methods, especially the systemically, viciously immoral methods associated, earlier, with the plagiarist Adam Smith¹⁰ and the insatiably evil Jeremy Bentham, or the Giammaria Ortes who virtually created Thomas Malthus out of almost less than nothing. Consider, with special emphasis on this point: their monstrous predecessors in today's dogma of such as the

^{10.} Adam Smith's explicitly anti-American, 1776 **The Wealth of Nations**, was largely a plagiarism of the work-in-progress of A.R.J. Turgot. The real Smith is found in Smith's earlier writing, his 1759 **The Theory of the Moral Sentiments**. Smith was closely associated with the same David Hume whose influence was shown in another of his protégés, Immanuel Kant.

slave traffic's John Locke and the frankly pro-Satanic Bernard Mandeville. Consider the present-day descendants of John Locke, Bernard Mandeville, Adam Smith, and Jeremy Bentham, such as the virtually pro-Satanic cult which bores from within the Barack Obama Presidency, a cult built around such as that Daniel Kahneman and Amos Tversky whose immoral, virtually Satanic influence, is shown in the doctrinal roots of that mercurial temperament whose wicked influence on that President, was exhibited so vividly during that President's recent itinerary in London and on the continent of Europe.

Defeat Economic Entropy!

The potential changes in the relative population-density of a habitat of the Biosphere, are delimited by what are commonly referred to as the implications of the existing "ideological" climate so inhabited. With the human population, it is absolutely different. Mankind has the power for willful increase of its potential relative population-density, without any fixed limit, that accomplished through willfully crafted, characteristically anti-entropic physical changes in the condition of its environment. Thus, in that specific sense, where habitats within the Biosphere bound the potential population of participating species, human beings bound the biosphere they inhabit, willfully, whether by creating new conditions, or neglecting the urgency of doing so.

Said otherwise, although the momentary potential of the human population is affected by the principled implications of its habitat, mankind is capable of willful changes in that potential. The relationship between the two, Biosphere and Noösphere, is determined by the self-development of the Noösphere, not by the Biosphere as such.

This superiority of mankind is typified for all modern society by Johannes Kepler's uniquely original discovery of a principle of organization of our Solar System which is known to us as his principle of universal gravitation, as being the organizing principle of that Solar System.

As the universal physical principle of life bounds the abiotic domain, so the noëtic powers of the human mind, as typified, as if specifically, by Kepler's uniquely original discovery of the principle of gravitation, bound the existence of the subsumed Biosphere. So, mankind enters, as Philo warned the Aristoteleans, into the boundless domain of our Creator.

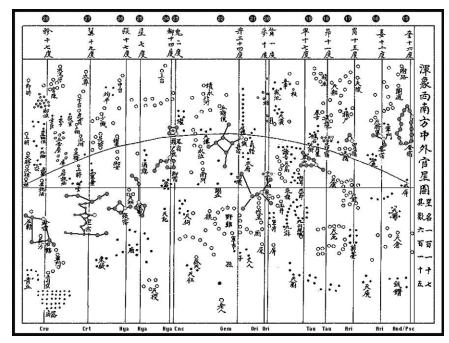
II. Human Creativity As Such

Some ground-rules for the present chapter's following, interim discussion must be supplied for the benefit of the anticipated range of readers of this report. The issue of creativity, as this is posed, implicitly, by the referenced piece by Professor Galbraith, must be situated in the following general terms of historical reference.

It is fair to say, up to the state of knowledge at the present time, that we do not know, presently, exactly how long what can be fairly identified as mankind, has existed on this planet, nor how many waves of what may be considered as actually the equivalent of scientific revolutions have come and passed prior to the span of the current equinoctial- precession cycle of approximately 23,000 years, as this principled cycle is traced to the calendars of the Vedas, or the complementary case of the related 100,000 years of the surge of relatively greater glaciation prior to that now breaking out on this planet. The empirically adducible fact of ancient calendars of such magnitudes, correlates with the means by which ancient cultures, especially ancient maritime cultures, could have developed known ancient calendars.

We know, for example, that the foundations of the Classical Greek scientific culture from the time of the Pythagoreans and of the circles of Plato, continued to develop, in the aftermath of the close of the Second Punic War, and up to about the times coinciding with the deaths of Eratosthenes and Archimedes; we know that modern European scientific culture began with the appearance of the coincident genius of such as Filippo Brunelleschi and Nicholas of Cusa.

We also know of relevant "dark ages," especially those during which a crushing of an earlier relative renaissance had been imposed by an oligarchical culture of the type which Aeschylus featured in his **Prometheus** Trilogy, and Diodoros Siculus in his own chronicles. The revival of what became modern European science, which sprang afresh from the ancient roots of the science of the Pythagoreans and Plato, and centered on the great ecumenical Council of Florence during that Classical Fifteenth-century Renaissance, provides us today with the cardinal reference-points from which we have been able to adduce the most prominent of the characteristic flows and ebbs of known ancient through modern European cultures' advances and catastrophes since that time.



The idea of universality, LaRouche writes, "is a product of a regular practice of astrogation by some ancient maritime cultures whose practically verifiable footprint is known to us through ancient stellar calendars," such as that reproduced here, from China.

The most important features of that span of what we know as ancient through contemporary European history, center upon the conflicts between what is called "humanist" culture, such as that of the ancient Pythagoreans and Plato, and the contrary societies premised on the oligarchical cultures which took the form we recognize from the aftermath of the Peloponnesian War and both the death of Alexander the Great, and the close of the Second Punic War. So, Raphael Sanzio portrayed the conflict between the creative Plato and the anti-creative Aristotle in his own representation of the notion of a simultaneity of eternity, as in his The School of Athens.

Against that background, so sketched, the question which I pose here so, is: if our sense-perceptions were merely the equivalent of "instrument readings," as physical science has proven, conclusively, that they are, how do we escape the grip of the contemporary delusion of many today, the opinion that we, as human beings, are, ourselves, merely products of some factory which produces mechanical instruments? How do we escape the grip of that delusion, the delusion that we are like the victims of horde-like, virtually brainless cults such as "MySpace" and "Facebook," or some killer variety of computer game? Or, that we are merely, like the

imaginary denizens of dope-addict Aldous Huxley's imaginary world, as like lemming-like monsters of medieval "Flagellant cults," or like something spawned as if in the satanic pits of California's "Silicon Valley"?

What, in other words, is the meaning of the name of "the human soul?" Or, in other words, what was really evil, as Philo of Alexandria spoke justly against the theology of Aristotle, or, as I recognized, already in my adolescence, when I rejected Aristotle's follower, that hoaxster Euclid?

Thus, on precisely this account, the great difficulty which a majority among those of contemporary cultures experience in efforts to achieve true creativity in physical sciences or Classical artistic composition, is, in the first instance, the need to sense the actuality of the creative impulse, often named as creative "insight" into universal physical principles, which

is natively unique to the human individual among all known living species, but is a capability which has been more or less energetically suppressed in today's usual rearing of the majority of new-born individuals, as, more emphatically, in the typical methods of mass-education of the young in a post-Franklin Roosevelt world, most emphatically since the ominous Spring of 1968.

Consider the following illustrations.

Some Pathetic Cases Which We May Know

There are some, respectively rather well-defined types of personalities which have succeeded, in some notable degree, in overcoming the conditioning which still blocks the majority of the population from access to a sense of the reality of a universe in which sense-perception is merely a needed instrument, rather than being the content of the identity of the human individual. More often, in the recent half-century or so, the blocks to such progress have been overwhelming, and increasingly so.

A typical example of the problem which arises in that setting, is the case of the man, a professional, for example, who may be considered as insightful in the practice of a profession, but who is a silly, sometimes a proverbially "hen-pecked" fool in his or her family set-



Among those "pathetic cases," who have lost a true sense of the reality of the universe, are those unhappy husbands and wives: "They do not see the other as seen by them as that other might wish..." Goya's commentary: "Can't anyone untie us?" ("Caprichos," 1799).

ting. That is, in his, or her profession, he or she is, as we say, "insightful." In the more frequent case of such persons, the talent they exhibit as a professional, or comparable forms of insight, is something which is familiar to them as what they know from peeking "over the fence," as distinct from the dullness of their ordinary life otherwise. Insight may be a shadowy skill which they have acquired, as if borrowed, but is not in their apparent nature, a skill which they may regard as their personal property, but which is not embedded in the passions of their sense of the identity of their simple human soul. Such is the case of that successful executive, or professional in the laboratory or office, who may be also a mewling, pathetic creature, or pitiable tyrant, in the homely setting of family life.

Such, in the not distant past, were the Liberal wives

of successful professionals, who were loyal to their husband's professional status, but may have tended, sooner or later, to "cheat on him," perhaps sexually, or merely by a grey sense of contempt for him, in his role as a mere husband. So, the husband of the same union may reciprocate out of comparable motives. They do not see the other as seen by them as that other might wish, if they do this only in his or her fantasies of what they imagine should be the case. The professional psychoanalysts made careers in dealing with such foolish persons found among the so-called "professional" or "business" "classes."

This problem was aggravated, in the U.S.A., for example, in the methods of "mass education" adopted during the post-World War II mass-iversity educational programs. Education was a trolley-car ride, with each stop a distinct destination with little relevance to any other. Instead of arriving at an actual discovery of a principle, an essentially formal, pre-scheduled result was prescribed. Much of that which was taught, was either simply false, or even, often, absurd, but, the principle was that the trolley-car must arrive at the scheduled stop, on time, even if the destination were meaningless.

Education in the post-Franklin Roosevelt world was degraded, more and more, into a matter of "let it happen to you." Under the aggravating conditions of the strenuous "national security" regulation of the post-World War II beliefs of student and professional alike, education was not an experience of knowing, but an existential trial, not by fire, but prescribed conformities.

It was strikingly typical of this effect on the upper middle class of suburbia during the 1950s, that the sales of ready-mix for baked goods and the like benefitted from the seller's withholding the milk and eggs from a ready-mix, with the intended, and achieved effect of persuading the housewife of the upward-moving middle-class hubby, that it was her pretty hands which supplied a prescribed ingredient for her handsome hubby and pretty children, rather than having that same ingredient forced upon her by the will of the firm which prescribed, and supplied the already completed ready-mix. The existentialist opinions typical of the family households breeding the future "68ers" of the Baby-Boomer generation, were like that.

It was not some remarkable act of prophetic genius, which guided George Orwell's hand in writing his **1984** design for today's "68ers" and the kooks of the neo-Flagellant cults of MySpace and Facebook. The element of apparent prophecy in Orwell's piece had been pre-

scribed in advance by that circle dominated by H.G. Wells, avowed Satanist Aleister Crowley, and Bertrand Russell: a trio which had, effectively, brainwashed Aldous and Julian Huxley, together with George Orwell, that with the help of ergotamine, in the script of H.G. Wells' The Open Conspiracy and the script of Things to Come. The essence of this "predestination" by Liberal brainwashing, was supplied in Europe by the brainwashers of the post-World War II Congress for Cultural Freedom, and the cult of "information theory" concocted by such pathetic acolytes of Bertrand Russell as Professor Norbert Wiener and John von Neumann. So, the soul-less zombies of Silicon Valley were spawned not exactly of such awesome stuff as "dragon's teeth," but in some families one must make do with what one has become.

The post-Franklin Roosevelt world designed by the existentialist followers of John Maynard Keynes, the Nazis' Professor Martin Heidegger, Heidegger's sometimes lover Hannah Arendt, and by the circles of Bertrand Russell, was imposed by methods of cultural warfare designed, by intent, to reduce the ruling "68ers" and their offspring of our time, to something in the nightmarish likeness of the Flagellants of Europe's Fourteenth-century "New Dark Age."

The cases of the dionysian cult-formations typified by MySpace, Facebook, and killer "video games," typify the intended result of this process of moral and intellectual degeneration of a targeted stratum of victims displayed in the contemporary attire of what is actually an echo of the "Flagellant" hordes of Europe's Fourteenth Century "New Dark Age." Aleister Crowley passed himself off as the Lucifer of a Satan cult; H.G. Wells and Bertrand Russell were his adopted co-thinkers. Today, the fact of the actual ownership of these cults, by certain billionaires, such as the world's leading drug-pusher, George Soros, is the obvious symptom of the intention which steers the way, toward the ends, in which those foolish, modern dionysian cults of willingly useless young people are being controlled.

The London-orchestrated circles of perverts, the socalled "behavioral economists" associated with the predatory, Mephistophelean Larry Summers and his Faustian Timothy Geithner, prey upon precisely those types of induced mental illness induced in what is classed by convention as the credulous upper twenty-percentile of the income-brackets of our population. Whereas, the remainder of our population is increasingly enraged by that which that proverbial, foolish upper twenty percentile embraces. Such is the source of the collapse of President Barack Obama's current popularity, as a President who hears only the praise he wishes to hear from that shrinking minority of "thieving magpies" which remain, temporarily, his supporters.

Mathematics or Science?

In reaching the conclusion of his masterful discovery of the principle of universal gravitation, in his The Harmonies of the World, Johannes Kepler recognized that neither the notion of vision, nor the harmonics of hearing, sufficed to account for the dynamic organization of the known components of the Solar System. Implicitly, Kepler's conclusion from this evidence was that the real universe is not that represented by the faculties of human sense-perception; however, once that fact were understood, it were feasible to generate the image of a subtended state of a general, mathematical form of expression respecting the motions of which the Solar System were apparently composed. Such was: Kepler's general formulation as simply copied, as farce, by those idle courtly plagiarists who instructed the silly "black magic" dabbler Isaac Newton in this matter.

The case for Kepler was recapitulated, centuries later, by Albert Einstein. The fact of the matter is that the principle of universal gravitation governs the Solar System as a process, but it is that principle which determines the adduced measurements, contrary to Paolo Sarpi's Liberalism, rather than the other way around. In other words, the universal physical principle (of gravitation, in this case) bounds the virtual shadows cast as the adumbrated, calculable set of relative orbits.

From these considerations, Kepler made two historically crucial observations which he presented to "future mathematicians." One proposal was for the discovery of a notion of an infinitesimal calculus; the second, for a general rule for physical-elliptical functions. The first of these prescriptions was solved, with unique originality, by Gottfried Leibniz, initially during 1676, in a manuscript delivered to a Paris printer at the time of his departure from Paris; the second was resolved, to a large degree, during the adulthood of Carl F. Gauss. In the meantime, Leibniz's original discovery of the principle of the calculus, was perfected, by included reference to the work of Pierre de Fermat, done in collaboration with Jean Bernouilli, defining the notion, traceable from Cusa's follower Leonardo da Vinci, of a "catenary-related," universal physical principle of least action.

During the last few years of Leibniz's life, the avowed Cartesian, the Paris-based devotee of René Descartes, Italian Abbé Antonio Conti, had launched an attack on Leibniz, begun in defense of Descartes against Leibniz's 1690s exposure of the pitiable incompetence of Descartes' notions of physical science. Conti, who continued this campaign against Leibniz until his own death in 1749, was supported by the notorious Voltaire. Together, this pair, Conti and Voltaire, organized a network of salons throughout Eighteenth-century Europe, claiming to show that they had successfully defamed the work of Leibniz.

The most notable of these Eighteenth-century hoaxsters, included France's Abraham de Moivre, D'Alembert, Leonhard Euler, Joseph Lagrange, and sundry others. The same frauds were perpetuated in similar spirit and form by two British assets of French denomination who were lifted up to power inside France through the effects of the interventions by the occupying British authority over France at that time, the Duke of Wellington. The founder of the great Ecole Polytechnique, Gaspard Monge, was expelled from that institution, on British orders, the program of education of future scientists was outlawed, and his associate, one of the greatest scientists and military strategists of that time, Lazare Carnot, the candidate to be the President of France after Napoleon's ouster, was sent into exile, and did not return to France, until in a time when his body was brought from Germany, with great honors by Germany and France alike, to be entombed, by his grandson, the scientist and President of France, Sadi Carnot, as a national hero.

Napoleon Bonaparte had served as the British Empire's most convenient, if unwitting strategic asset, in subjecting all of continental Europe to a prolonged new version of the same old "Seven Years War," like that of the wars either conducted, or orchestrated by London's unwitting asset, Napoleon Bonaparte, which accomplished the British Empire's reign over continental Europe, from the Congress of Vienna, until the aftermath of the U.S. defeat of the British Empire, both at Appomattox, and in Mexico.

However, in the department of physical science, the two greatest threats from science, the threats to what became the empire of Lord Shelburne's British East India Company, in February 1763, remained the post-humous reach of Kepler, and that direct adversary of the faction of William of Orange, Leibniz. Thus, from the defeat of the English patriotic faction associated

with reign of Queen Anne, until the Nineteenth-century rise of the influence of Alexander von Humboldt in science, Leibniz's was the intellect whose influence the Anglo-Dutch Liberals' empire of William of Orange regarded as its most deadly adversary. It is the British imperial effort to defame the work of Leibniz, especially his uniquely original discovery of the calculus, which remained the central issue of scientific controversy in European and trans-Atlantic civilization until the new threat to London's ill-gotten pretense of scientific practice, a scientific threat represented by such figures of the circles of Alexander von Humboldt as Carl F. Gauss, Lejeune Dirichlet, and Bernhard Riemann.

This concisely stated, foregoing set of background considerations, respecting issues of scientific method, are the key topics which must be brought into view to show the origin of, and solution for the remaining difficulty in Professor James Galbraith's approach to the subject of a science of physical economy.

So, the opening two paragraphs, and concluding single sentence of Bernhard Riemann's 1854 habilitation dissertation, brought forth a new era of scientific achievement upon our planet. Albert Einstein and Academician V.I. Vernadsky are the rallying points for this present European scientific cultural tradition of such as Nicholas of Cusa, Johannes Kepler, Pierre de Fermat, Gottfried Leibniz, Johann Sebastian Bach, Abraham Kästner, Moses Mendelssohn, Friedrich Schiller, Lazare Carnot, Wilhelm and Alexander von Humboldt, Carl F. Gauss, Lejeune Dirichlet, and Bernhard Riemann.

Science has become mankind's comprehension of the lower forms of existence in this universe, the abiotic and the Biosphere. Classical artistic composition in the following of the like of Leonardo da Vinci, J.S. Bach, Moses Mendelssohn, Gotthold Lessing, Friedrich Schiller, and Percy Bysshe Shelley, has become the higher domain assigned to man's, and the Creator's consideration of man.

Competent economic science is the expression of those creative processes which are all of these combined as one.

The 'Infinitesimal'

The great fraud which the Eighteenth-century followers of Paolo Sarpi conducted against Gottfried Leibniz, assumed the form of the allegation summed up by the hoaxster Leonhard Euler, who sought, fraudulently, not to actually disprove, but merely to ridicule Gottfried Leibniz's notion of the "infinitesimal."



"Science has become mankind's comprehension of the lower forms of existence in this universe, the abiotic and the Biosphere. Classical artistic composition ... has become the higher domain assigned to man's, and the Creator's consideration of man." Here, Leonardo da Vinci's studies of an old man deep in thought, and the movement of water (ca. 1513).

The origin of what led to Euler's attempted defaming of Leibniz, had been the attack on Leibniz's uniquely original discovery of the calculus, the attack led by such defenders of René Descartes as the pair of promoters of fame claimed for such fools as René Descartes and Isaac Newton, by Abraham de Moivre and D'Alembert. All among these latter became prominent Eighteenthcentury followers of two leading Leibniz-haters of that time, Abbé Antonio Conti and Voltaire. This pair's attack on the Leibniz calculus was their presumption that the infinitesimal of the calculus was merely fictional, "imaginary." Euler, who had become a prominent member of the network of continental European "salons" mobilized for the purpose of seeking to defame Leibniz, had contributed a new approach to treating this alleged "imaginary" principle of the Leibniz calculus.

To present the matter as neatly as might be desired by these scoundrels, the notion of the Leibniz "infinitesimal" was a by-product of Johannes Kepler's defining the universe in the outcome of his **The Harmonies of the World**, the location of his uniquely original discovery of the general principle of universal gravitation.

There were two leading aspects to the issue posed. The first aspect is traced to the relatively ancient debate over the quadrature of the circle and parabola, as in the work of Archimedes. This issue had been settled, at least implicitly, by Cardinal Nicholas of Cusa, who correctly insisted, contrary to Archimedes, that the circular perimeter is not generated by quadrature. The importance of this distinction for physical science was shown in fresh light in Kepler's proof of the principle of "equal areas, equal times," as in his The New Astronomy. The proof acquired the more profound implications, bearing upon the subject of this present report by me, in Kepler's actual, original discovery of the universal principle of gravitation, in his The Harmonies of the World. That latter discovery, as emphasized by Albert Einstein, is the most important discovery effected in modern science since the work of Filippo Brunelleschi's discovery of the universal physical principle underlying the catenary and Nicholas of Cusa's De Docta Ignorantia.

Here, in this first instance, we encounter the notion which supplied the basis for Leibniz's approach to the notion of the infinitesimal (of action) as ontological, rather than Euler's willfully fraudulent, "straw man" notion of a simply mathematical magnitude.

The second aspect appeared in the general solution for the harmonic ordering of the Solar System as a whole, in Kepler's **The Harmonies of the World**. Here, the demonstration that the composition of the Solar System is harmonically determined, involved the ironical juxtaposition of a concept of a visual space within a harmonic determination of space as a whole.

In this second instance, the idealized image of the contrast between two ontologically asymmetrical senses is crucial: two instrumentations of the experienced empirical evidence. Thus, the result is the ironical contrast of two "instrumentations" ("senses"), rather than an interpretation of a consistent sense-experience. Thus, the human mind has escaped the bounds of the illusory blind faith in sense-perception, that in that sense, and in that degree.

This bounding of physical space-time by a universal, thus-discovered, and measured characteristic of the physical space-time of the Solar System, defines the universe as physically self-bounded by the relevant discovered principle, a principle which is not bounded in the sense that naive blind faith in a mere mathematical formula suggests to some, but which bounds that effect which can be measured. At a later stage of scientific progress, as Einstein emphasized for the case of relativity, this discovery by Kepler, when seen, as by Einstein through the physical geometry of Bernhard Riemann, and seen, also, similarly, by V.I. Vernadsky, becomes a key source of insight into the most awesome characteristic of the nature of what can be attained by the efforts of the human individual mind.

It is a mind made in the likeness of the Creator.

III. Economy & Art As Dynamics

The emergence of higher forms of life happens lawfully; but, the evolution of mankind to higher qualities of its existence, however, is not only lawful, but willfully intentional. The result of the latter is what is to be called human creativity. The means for that gain supported by that which is called "science," is to be called, in the sense of Friedrich Schiller, and of Percy Bysshe Shelley's A Defence of Poetry, as "Classical Art." This includes that higher branch of science known as "history" and "Classical artistic composition" as I have emphasized the relevant distinctions of this approach.

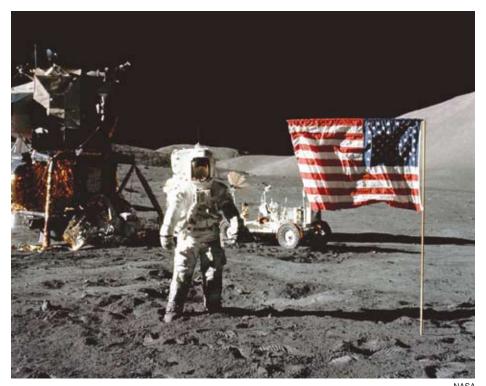
The essential nature of any act of discovery of a universal physical principle, such as Kepler's discovery of universal gravitation, is that that discovery lies, **onto-**

logically, as by definition of principle, outside the bounds of any previously known experience. Thus, to the degree, as in "mathematicalized" expressions of physical science, that we have been able to describe the state of affairs prior to the discovery of a new, true universal physical principle, that the act of discovery of the new principle lies, contrary to both the Aristoteleans and the Liberal followers of Sarpi, in a new domain, beyond any possible, previously extant mathematical-physical expression in experience. Science may sometimes point out the likelihood of such a discovery, but the discovery so indicated must then be made.

As Kepler had demonstrated implicitly, in his The Harmonies of the World, the discovery of a new physical principle of the universe has a double feature. It bounds the universe, as if it were, from a mere mathematician's standpoint, a container of the relevant business (e.g., the universe), in the relevant aspect; but, at the same time, its efficiency in the very largeness of its finite universality, finds an echo in its influence expressed in the infinitesimal. Any view of the infinitesimal which does not reflect this reciprocity of that doubleness of its expression, but thinks of the infinitesimal as merely a mathematical notion, as de Moivre, D'Alembert, and Euler did, is to be classed as an act of childishness, or, worse, fraud. Fraud is perfectly clear in the case of the Leonhard Euler who actually knew better, and who was therefore more a reflection of moral corruption than simple ignorance in the matter.

This is to emphasize, that the usual remedy for a state of an economy experiencing an existing, or threatened state of decadence through attrition, is a qualitative breakthrough which introduces a relatively strong impulse of commitment to investment in fundamental scientific and Classical-cultural breakthroughs. Notably, looking back to the sharply downward plunge of the economy from U.S. Fiscal Year 1967-1968 onward, the greatest of the errors in policy made by the U.S. government at that juncture, was cutting the investment in the science-driver aspects of the space program. To that point, it was demonstrated, already during the early through middle 1970s, that the U.S. economy gained a fairly estimated ten cents of physical value for each penny invested in the science-driver aspects of the space program.

The marked decline of the U.S. economy during the 1964-1968 interval, was not only the devastating eco-



The greatest of the errors in policy made by the U.S. government, leading to the sharp downward plunge of the economy from 1967-68 onward, was cutting the investment in the science-driver aspects of the space program. Here, astronaut Jack Schmitt on the Moon, during the Apollo 17 mission, Dec. 11, 1972.

nomic effects of the fraudulent launching of the long, wasting war against Indo-China, in 1964, but of the closing down of the efforts which had been made by President John F. Kennedy against the Wall Street gang's already intended efforts to de-industrialize the U.S. domestic economy.

There have been chiefly two, self-inflicted causes for the long decline of the U.S. economy toward the current state of decaying rubble, since Fiscal Year 1967-68. One was the terror-stricken capitulation to the control by London and Wall Street, over economic and social policies, shoved down the throat of the U. S.A. under the impetus of John J. McCloy and others of the "Warren Commission," since the assassination of President John F. Kennedy. The other, worse effect, was the neo-malthusian impact on policy-shaping supplied by the rampage of the anti-science, dionysian cult of the notorious Mark Rudd and kindred rioting "68ers."

These leading facts respecting the economic trends, downward, in the U.S. economy since 1963, illustrate the fact that it is physical-economic and related social

policies, not matters of financial and related statistics, which have made the difference between boom and bust throughout the course of U.S. history since Appomattox. It has been the incumbent trends in physical-economic policies, since 1968, which have been the determining features of trends in the U.S. economy since March 1, 1968.

Looking back to earlier history, including ancient history, we have the related considerations.

History in the Longer Term

Insofar as available known records go, the relevant idea of universality is a product of a regular practice of astrogation by some ancient maritime cultures whose practically verifiable footprint is known to us through ancient stellar calen-

dars. Such are the evident antecedents for what is known by the name of the ancient *Sphaerics* which the Pythagoreans and others traced, implicitly, to such ancient traditions as that of the great pyramids of Egypt.

All competent traces of relevant ancient European science reflect such very ancient, long-ranging roots of ancient transoceanic maritime cultures, on this account, as from the last great period of glaciation. The content of that knowledge passed down to us today has that specific footprint. The Vedic and other ostensibly Asian traditions, such as those addressed by Bal Gangadhar Tilak, also have the crucial features of a maritime-culture's basis. Leibniz back-traced kindred features in the ancient astronomical tradition of China.

That notion appeared formally in modern European mathematical science. Here, therefore, as I have often emphasized this point, in the matter of creativity, poetry supersedes mathematics in physical science. Here, in this irony, we are confronted with the great principle of both science and Classical artistic

composition, to which Percy Bysshe Shelley points in the concluding, summary paragraph of his **A Defence of Poetry**.

The principle to which I have thus referred, in this beginning of the closing chapter of this report, was not new at the time Shelley wrote that piece. Indeed, there is a very strong suggestion of the influence of, most notably, Friedrich Schiller, but also the German Eighteenth-century Classical renaissance associated with the leadership of the great mathematician of that time, Abraham Kästner, and Kästner's young associates such as Gotthold Lessing and the German Classical Renaissance associated with such outstanding figures of art and science as Moses Mendelssohn, Goethe in his best moments. Friedrich Schiller and members of Schiller's circles such as Wilhelm and Alexander von Humboldt. England's Keats and Shelley, Sir John Herschel (the son of Sir William), and the Charles Babbage, of computing machinery fame, Babbage, who, during the period Wilhelm von Humboldt was still living, became a part of the Berlin circles of Alexander von Humboldt, Humboldt's protégé Lejeune Dirichlet, and their mutual friend Felix Mendelssohn.11

Poetry again! The physical-economic and related trends in the real economy of peoples and nations are determined by the human will's role in shaping of the development of related universal principles which

shape the evolution, or devolution of peoples and their cultures. These developments act as physical causes. However, those physical causes are steered by the effects of the social-cultural processes through which the willful choice of course of action, and crafting of institutions and cultures of society bring about the adoption of policies of cultures through will or negligence.

To create a qualitatively new physical-economic, or related condition of mankind, we must proceed through



Fusion Energy Foundation

The Fusion Energy Foundation (FEF), with which LaRouche was prominently associated, had played a leading part, during the 1970s, in the design and development of the Strategic Defense Initiative (SDI). In this photo from November 1974, LaRouche is in discussion with scientists of the FEF.

those mechanisms provided by the innate, developable, noëtic potentialities of society. Here, in this way, Classical poetry, such as music composed and performed according to the principles discovered by Johann Sebastian Bach, precedes mathematics.

It is not just any sort of idea which governs such effects, but, rather those specific qualities of ideas which shape the relevant policies of social and physical practice.

Thus, the present trends toward "globalization" and emphasis on so-called "soft energies," ensure the accelerated collapse of the planet as a whole into the early arrival of the worst "dark age" in the known history of all mankind. The root of that mass-suicidal policy ostensibly adopted by the current U.S. Obama Adminis-

^{11.} These circles of Alexander von Humboldt were closely connected to the circles of the American Society of the Cincinnati associated with James Fenimore Cooper, and Cooper's close, high-ranking connections in Europe, and with the great-grandson of Benjamin Franklin, the scientist Alexander Dallas Bache.

tration, has two principal sources. First, the policy is that of the British Empire, as the policy is adequately typified as to origin and nature by the policies of genocide explicitly demanded by Bertrand Russell and Prince Philip today.

If those policies are not defeated immediately, humanity as a whole is inevitably doomed to an already accelerating general breakdown-crisis of the planet as a whole. Continuing those trends now, would be the greatest moral crime ever perpetrated by any government or concert of governments in all known history; that consequence has now become the most immediate threat on the planet today, a threat worse than general thermonuclear warfare, and the authors of such a continuing policy would be rightly judged to have been the worst criminals in all known history of mankind to date. You can not be an advocate of "free energy" policy and consider yourself a loyal and decent member of the human species.

'Energy-Flux Density'

The impact of some revolutionary developments in physical science during the late Nineteenth and early Twentieth centuries, has led to the abandoning of the categories of "chemistry" and "physics," and their replacement, at least on the frontiers of scientific progress, by emphasis on the topic of "physical chemistry." Inside the U.S.A., one of the leading, most fertile currents contributing to this effect, was that of Chicago University Professor William Draper Harkins, a standpoint adopted by an association, formed during the 1970s, with which I was prominently associated from its beginning, the same Fusion Energy Foundation (FEF) which had played a leading part in the design and development of the Strategic Defense Initiative (SDI).¹²

The most immediate implication of the continuing, leading role of physical chemistry in locations such as the U.S.A. and the Soviet Union (later Russia and Ukraine) had been the emphasis by a prominent Soviet physicist on adopting the working concept of "energy-flux density," a concept of the implications of physical chemistry for the function of the Periodic Table in the age of physical bio-chemistry, the field in which Russia's V. I. Vernadsky has contributed a dominant role in the history of modern science today in both the Russian and Ukrainian Academies of Science.

Speaking frankly, any person who promotes a socalled "free energy" policy identifies himself, or herself, as an idiot in scientific matters, and a very reckless and therefore dangerous idiot in the effects of his, or her babbling on the subject of "energy policy" today. The issue is not a remote one, but absolutely elementary, and presently a most immediate threat to all mankind.

In physical chemistry, as in the presently more elaborated features of the Periodic Table, the term "energy-flux density" is crucial. What is called "work" is not accomplished in a measure by calories, but "energy-flux density:" calories measured in terms of cross-section of application per square-centimeter of cross-section of flow per second. In other words, "energy-flux density" implicitly measures "the power to do work." All physical-chemical and related reactions are to be measured not in calories, but in power to do work, as power to do work is fairly stated in the modern Periodic Table's view of the physical bio-chemistry of "energy-flux density."

Any person, whatever their professional title, who denies that, is either simply pathetically ignorant, a liar, or a systematic embodiment of fraud. If he, or she influences U.S. national policy, his apparent stupidity might be judged a criminal fraud out of respect for the fact of his merely foolish or malicious lies' effects on the design and implementation of public policy.

ment of his proposal for the SDI. Had Andropov not rejected President Reagan's own proffer, Russia, and also all of Europe, would have been a much happier place to live than it has become since the end of the Gorbachov regime. The looting of all Europe, including Russia, launched under Prime Minister Margaret Thatcher's regime (with the complicities of U.S. President George H.W. Bush, and France's de-Gaulle-hating President of that time) would never have occurred, and the looting of Russia by thugs such as the circle of cronies of Larry Summers would not have occurred.

^{12.} The organization was shut down in the late 1980s under what was subsequently ruled to have been a "fraud upon the court" conducted by a corrupted U.S. Department of Justice's "Get LaRouche" operation. The SDI was created by my initiative, and adopted by the highest rank inside the National Security Council (NSC), in a negotiation which I conducted, in cooperation with the NSC, with the Soviet government. The negotiation was broken off by the new General Secretary of the Soviet Union, Yuri Andropov, and virtually outlawed by United Kingdom asset Mikhail Gorbachov whose government demanded my "elimination," during the 1986-1987 interval. The attempt by the U.S. Department of Justice to "eliminate" me in 1986 was an echo of British asset Gorbachov's demands. The fraudulent myth of "Star Wars" was first uttered publicly by Senator Ted Kennedy, in a press event on the evening of the same day as President Ronald Reagan's TV announce-

This general view is modified, qualitatively, only by the relevant distinctions among the abiotic, the Biosphere and the Noösphere.

Any competent physical-economist of today thinks, and shapes policy from the standpoint of the role of energy-flux densities within the domain of practice of bio-physical chemistry as defined implicitly by the work of Academician V.I. Vernadsky. The opinions of others are simply incompetence—at their very best.

'Geo-Biochemistry'

As I have already made this point in a variety of publications, including those to which I referred at the outset of this report, the crucially relevant notion which is central to this present report, is the view of the term "creativity" which is presented by examining the relations among the three cardinal elements of composition of Planet Earth under the circumstances of the evolution of the planet by the respective increases of the ratio of the mass and activity of the respective Noösphere, Biosphere, and abiotic components of the mass of the planet as a whole.

In the relevant general, model case, the Biosphere is increased, as a ratio of Biosphere to total mass of the planet, whereas the Noösphere is increased relative to the mass of the Biosphere. Thus, the planet is becoming increasingly biotic in respect to the combination of living processes and their specific residues, and the ratio of the total mass of the planet, per capita per square kilometer of surface-area, and in sheer relative tonnage, is increased relative to the Biosphere-component.

Creativity, as typically defined by physical-scientific and related progress, per capita and per square or cubic kilometer, is the dominant trend of the planet's, and, so, implicitly, the Solar System's existence.

More significant, the existence of the noëtic powers of the human individual is the typical determinant of the character of Creation as a whole. It is the expression of the Creator's intention for mankind, just as Philo of Alexandria rebuked the implicitly Nietzschean "God is Dead" doctrine of the Aristoteleans of his time, and the followers of the British Liberal ideology of Paolo Sarpi's followers on this same point.

'What, Then, Is Science?'

Why must we recall the Mark Rudd of 1968 and later as a fascist? Indeed, many of the rioters of 1968

and later were also fascists, including those associated with what had been traditionally socialist organizations in the time of an earlier generation. The answer to such a question is that although many of these groups were associated with frankly anti-fascist associations, which were committed to the benefits of scientific and technological progress in the physical standard of life and freedom of expression, and to the improvement of the conditions of work and life of the present households and their offspring; whereas the fascist organizations were explicitly committed to the end of progress, were usually anti-labor and anti-farmer in respect to traditions of earlier generations, and were, in fact, echoes of the ancient cult of Dionysos and of its modern Nietzschean and kindred variants.

For example, the Nazi association of the 1920s, as led openly by Hermann Göring, was what would be termed "environmentalist" today. The Nazi storm-troopers of the 1920s and 1930s, thus, found their echoes in the insurrectionary "green" surges within Germany during the 1970s and 1980s. The same was true in Italy of that time, and in certain "ultra" existentialist formations in France.

It is notable, that had certain among the existentialists of the 1920s and early 1930s, such as Theodor Adorno and Hannah Arendt, not discovered that Jewish recruits did not have career prospects within the Nazi Party, they would have joined their intimate friend and colleague Martin Heidegger in the ranks of the Nazi Party. What Adorno and Arendt came to represent inside the U.S.A. during the late 1940s, and in their affiliation to the frankly fascist European Congress for Cultural Freedom, was frankly the branch of fascism from which the *squadristi* of the 1980s anti-nuclear-power rioting in Germany were derived.

Fascism is, in principle, the product of the doctrine of the Dionysos of the Temple of Apollo at Delphi, and dionysian as in the sense of that syphilitic prototype known as Friedrich Nietzsche.¹³

^{13.} Implicitly, the Fourteenth-century European Flagellants are an expression of a continuation of dionysian cult-formations; the MySpace cult's own postings identify it as dionysian. The cult formations associated with British intelligence and drug-pushing agent George Soros are categorically pro-Satanic, dionysian formations. Prince Philip of World Wildlife Fund notoriety, and his close associates are frankly pro-satanic dionysians, as was Prince Philip's former colleague, the former Nazi Prince Bernhard, and as were the infamous trio of the 1920s and 1930s, H.G. Wells, the Satanist Aleister Crowley, and Bertrand Russell and the latter's pro-Satanic cult-followers. Actually, the cult of Apollo was never any better.

Such matters as these must not be viewed mechanistically. We must not simply compare the form of a belief in one part of long-ranging history with another in a nominalist fashion. Like the history of languages themselves, humanity has very long since abandoned a merely biological type of identity for human beings of certain cultures and their cultures. What can be traced as an evolutionary process within strains of language-cultures, and cross-cultures, are the embeddings of the history of mankind's cultural experience as echoed in the evolution of customary associations of language-cultures.

The evolution of language-cultures and their residues has taken the place which some might assume otherwise as biological evolution. This is a good thing, and also a bad one, as the continued influence of that center of evil, the Delphi cult, or the cult of Aristotle or Euclid, attests. The most notable implication of this consideration, is that it is in the domain of a language's development of its poetry that society fights out the choices of ways of thinking which shape mankind's manifest policies of choice in acting upon the physical domain we inhabit.

So, the anti-Classical tradition spun out of, specifically, the Anglo-Dutch empiricism of the globalized, modern British imperial system, is, still today, the principal source of moral decadence within the population of, for example, the U.S. living generations of today. Thus, it is inevitably the case that the role of the Classical poetry of Shakespeare, Schiller, and Shelley, remains among the most crucial subjects of attention bearing on the way in which the people of the United States, or Europe, for example, shape the predetermined trek-line of developments now.

It is, therefore, the principle of Classical irony, as expressed in the tradition of Johann Sebastian Bach, as also Classical literature, poetry, and painting, in which the most typical expression of the human creative process is to be located, if and where it actually still exists. Thus, does Classical poetry determine the pathways to competent science.

It is within these domains of needed practice of inquiry, that the keys to successful, or deplorable choices of policy of practice are determined. Thus, for example, it is from observing the syntax and kindred peculiarities of our English-speaking population in the U. S.A., that we can locate the reasons for the respective self-destructive and hopeful choices of national policy of practice.

For example, the lack of Classical irony of the type illustrated by Percy Shelley's **A Defence of Poetry**, is the key to acquiring a competent English-language comprehension of the implications and advantages of the revolutionary contributions by Bernhard Riemann and his followers such as Max Planck, V.I. Vernadsky,

"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...."

—Percy Bysshe Shelley, In Defence of Poetry (1821).

and Albert Einstein. No mere mathematics could replace the function of a Classical mode of use of modern language on this account.

In education, the stubborn adherence to what has become a conventional use of the American style in use of the English language, as in the dismal moral and intellectual effects of so-called popular musical diversions, has a destructive effect on the functions of the human mind and its moral sense which no amount of mere university education could otherwise defeat. It is the resistance to the function of Classical irony in scientific as much as literary communication, which is the chief source of the moral and intellectual rot which grips our republic, and its national policy-shaping on all issues today.

I would anticipate that the moral aspect of the cultural literacy of Professor James Galbraith's argument, has considerable relevance for appreciating the value of his efforts on behalf of adducing the creative roots of a much needed correction in U.S. shaping of economic policies today. Just as, as my wife reports expertly, a preference for Friedrich Schiller, in the German language, has in European culture today.