

BERNANKE EXITS NOW!:

National Banking

by Lyndon H. LaRouche, Jr.

December 4, 2009

Queen Elizabeth II's Commonwealth address of this November 27th, was the death-rattle of the present world monetary system. The crisis of European Union member Greece, now signals the threatened early doom of that Euro system set into motion by the combination of Britain's Margaret Thatcher, her President François Mitterrand of France, and her lackey of that moment, U.S. President George H.W. Bush. Presently, in the meantime, the U.S.A., if it is to survive, will have scrapped the entire package of policies associated with the Presidency of Barack Obama, so far, and will, in that way, have averted the plunge of the entire planet into an immediately threatening, prolonged new dark age for all mankind.

At the same time, the U.S.A.'s joining in the process of extending the agreement reached between Russia and China, during this October just enacted, would provide the conditions for wiping the present world monetarist scheme from the surface of this planet. This would be accomplished by agreements initiated by the four powers of the U.S.A., Russia, China, and India, accords reached through agreements establishing a virtually world-wide, fixed-exchange-rate credit-system, accords which would mean the effective eradication of the international monetary system which is presently the gravest threat to all mankind.

Therefore, the U.S. Federal Reserve System, which has been virtually bankrupted by the "bail-out" measures of 2007-2009 to date, must now be put through a reorganization in bankruptcy conducted according to the Glass-Steagall precedent which is deeply embedded in the U.S. Federal Constitution itself.

The result of applying such a reform more generally, will mean the assimilation of the husk of the sick U.S. Federal Reserve System into a virtually "Hamiltonian" national banking institution, which mediates relations



It is time, LaRouche writes, for Fed chairman Ben Bernanke to pass into quiet retirement, “while the salvagable remains of the ruined Federal Reserve System, are transferred to national-banking functions which are based on the precedents of the First and Second National Banks of the United States.”

of U.S. commercial banking, nationally and internationally, with the Constitutionally prescribed credit-creating functions of the U.S. Government. The qualified officers from the districts of the present Federal Reserve System, will usually be invited to continue their very valuable function as a part of the new vehicle of “Hamiltonian” national banking.

With those emergency measures of reform, quickly put into place, as if over-night, a flood of constitutionally created, long-term Federal credit, will provide the impetus for launching great infrastructure programs, programs whose natural by-product is re-establishing our United States as, once again, a great leader in the creation of science-driven, agro-industrial power of the respective sovereign nations of the newly composed, in-

ternational, fixed-exchange-rate credit system.

In the process, Federal Reserve Chairman Bernanke will pass into quieted retirement, while the salvageable remains of the ruined Federal Reserve System, are transferred to national-banking functions which are based on the precedents of the first and second National Bank of the United States.

Consider the following process of history thus leading to a virtual day after tomorrow. Consider some critical problems which might seem to most to be mere details.

With the developments centered on British Queen Elizabeth’s Commonwealth address of November 27, 2009, the world as a whole has reached the end of the existing global, political-economic system. The general breakdown-crisis which had been threatened already in the developments of July-September 2007, had now entered an actual, global breakdown-phase, a phase which was merely triggered by the bankruptcy of the world’s current dirty-money trading center, Dubai, that week. The British Queen’s ugly threat at the November 27th meeting, has in effect, launched the presently ongoing breakdown-crisis which is presently escalating throughout the trans-Atlantic parts of the world, and threatening the rest.

That presently onrushing breakdown-in-progress will be, unless stopped, a virtual re-enactment of Germany’s 1923 breakdown-crisis, but one enacted on a virtually global scale. While the recent October agreements between China and Russia, are, in fact, the first needed step on the pathway to the planet’s possible recovery under an emerging fixed-exchange-rate credit-system, the situation of a western and central Europe under London’s Euro shackles, would be virtually hopeless, unless the current British imperial stranglehold on that region is brought to a sudden end, and the nations of western continental Europe permitted to resume their former status as sovereign nation-state republics.

What faces western and central Europe, and the entirety of the Americas, right now, is an onrushing general breakdown-crisis of the trans-Atlantic monetary-financial and physical-economic system, all caused by the role of the British Empire’s recent hegemony over that policy-shaping of the trans-Atlantic community,

which also menaces the broader planetary society.

To understand the present crisis, we must consider it in the light of the history of Europe since the factors which caused the eruption of the Peloponnesian War. That is the span of the history of specifically European imperialism as it emerged from the decline and fall of the once-mighty Persian empire.

While the presently onrushing monetary breakdown-crisis is unique to modern European history since the Fourteenth-century “New Dark Age,” that Fourteenth-century “New Dark Age” must be recognized as having been only an earlier phase of approximately comparable breakdown-crises which have recurred throughout the span of European maritime history since the infamous Peloponnesian War. Unless that viewpoint were adopted, the roots of the presently threatened, planet-wide “new, dark age” could neither be understood, nor civilization saved.

Therefore, the worthy witting ones will join us now in examining the history of the European, maritime-based imperialism. It must be recognized as presently, nominally centered in London’s role in the so-called British Empire; but, it must be also recognized for its relatively earlier expression in the presently continuing legacy of medieval Venice’s orchestration of what became known as the Fourteenth-century “New Dark Age.”

Therefore, now proceed as follows.

The victory of the maritime allies of ancient Greece over the efforts of the essentially land-based, imperialist Achaemenid Empire’s repeated aggressions, was, unfortunately, followed by the folly of what is known as the maritime form of monetary imperialism expressed by the Peloponnesian War. Since that time, the globally extended Mediterranean monetarist system, as typified by the cases of the Roman Empire, Byzantium, the rise of the imperial monetarist role of Venice, and of that British Empire first established by the February 1763 Treaty of Paris, and now in its presently so-called Commonwealth manifestation, has been the chronic, moral disease of what is to be recognized as a Europe-centered, essentially world-wide, economic civilization, from that time until the present day.

The original effort from within modern Europe,¹ to



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free itself from this monetarist form of imperialist oppression, occurred as a by-product of that Florence-centered, mid-Fifteenth-century Renaissance, whose principles were typified by two keystone writings of Cardinal Nicholas of Cusa, his **Concordancia Catholica**, which defined the essential principle of the modern European notion of a system of respectively sovereign nation-state republics, and his **De Docta Ignorantia**, which supplied a comprehensive initiative for the development of modern physical and related science, and of Classical art.

Sadly, the subsequent, Venice-orchestrated subversion of that great modern Renaissance’s treaty-partner of Cusa’s time, Constantinople, and the degeneration of affairs brought about through the wars fought in the aftermath, fostered aggressive decadence within the domain of what had been the Great Renaissance. This state of affairs provoked Nicholas of Cusa to propose explorations across the oceans, seeking, thus, to bring the best fruits of European and Mediter-

1. The great exception to this generality, *from within medieval Europe*, is the case of France (and much of Germany) under the great foe of Byzantine imperialism, the true nation-builder and universal genius and diplomatic ally of the Abbasid Caliph Haroun al Raschid, Charlemagne: a relevant topic, but for treatment on another occasion. The ecumenical

goals of Cusa’s **De Pace Fidei**, as adumbrated by the peace between Charlemagne’s France and the Caliphate, were ruined for the time, through operations by imperial Byzantium, ruined so not long after the deaths of Charlemagne and the great Abbasid Caliphs.

anean civilization to distant continents, this with the intent of fostering a common effort for promotion of the common just aims of mankind which had been recognized in Cusa's **Concordancia Catholica, De Docta Ignorantia, De Pace Fidei**, and related other ecumenical writings.

The trans-oceanic mission so proposed by Nicholas of Cusa, was adopted, later, by a Genoese sea-captain in the Portuguese service, Christopher Columbus, approximately 1480 A.D. In A.D. 1492, Columbus gained the support needed for his intended voyage to reach the opposite shore across the Atlantic, at approximately the position within the Americas indicated on the map supplied to him by Cusa's circles.²

Unfortunately, Columbus' intended cultural mission was spoiled by the superimposed political authority of the corrupting Habsburg dynasty, a reactionary dynasty, which was then in the process of digesting the remains of the former royal power in Spain. So, the wonderful intentions among the settlers in the Spanish-speaking American settlements, were spoiled, by the overreaching power of the Habsburg corruption.

For that, and related reasons, the realization of the intent of Cusa, and of the Columbus who followed him, was not secured in any durable degree until the succession of the Plymouth landing in North America, and the founding of the Massachusetts Bay colony under the leadership of the Winthrops and Mathers. Although the progress of Massachusetts was spoiled, from 1688 on, by the effects of England's James II, and of that William of Orange who sowed the seeds of Anglo-Dutch imperialist efforts to crush that North American intention expressed by the New England of the Winthrops and Mathers, the active political and scientific influence of Gottfried Leibniz, on the ground in an England under Queen Anne, secured the heritage of the original Winthrops and Mathers as expressed in the leadership supplied by the emerging role of Benjamin Franklin.

The rise of the role of Benjamin Franklin on this account, was shaped by the patriotic Americans' reactions against that February 1763 Peace of Paris which concluded the so-called "Seven Years War," and which es-

tablished the British East India Company as the British Empire in fact. The political consolidation of that Company's political power over the United Kingdom and beyond, was conducted by the Lord Shelburne, who not only defined the doctrine of a British Empire in his time, but who established the British Foreign Office to which Jeremy Bentham had been assigned then, as continued later, under Bentham's protégé Lord Palmerston, as being the mechanism of empire, according to ancient Roman precedents, from 1782 onward, to the present time.

During the relevant interval of A.D. 1763-1782, the independence of the new American Republic of our United States had been enabled to secure its victory, through support from major forces of Europe led by volunteers such as France's Marquis de Lafayette and by nations, as by the Empress Catherine of Russia's fully witting role in the establishment of the institution of The League of Armed Neutrality.

However, unfortunately, at the same year our victory was secured on the fields of battle, in 1782, Shelburne divided the nations of the American war-time alliance, the U.S.A., France, and Spain, against the British empire, into respectively separate peace negotiations with Britain. The effect of that division among the U.S.A. and its allies, was to prove disastrous, especially for a France under a King and his brother-in-law who were to be driven to virtual madness by the Chatham House-steered operations of Jeremy Bentham's freemasonic, intelligence operation, called "the affair of the Queen's necklace," a scheme which had targeted the Emperor Joseph's sister, Queen Marie-Antoinette. The reactions to this Eighteenth-century freemasonic warfare, as reactions by both the Emperor Joseph II and Louis XVI, produced that foolishness on their own part which led to the rise of the Jacobin Terror, and to the tyranny of virtual puppet-Emperor Napoleon Bonaparte, a clever man who was used, like a witless puppet-on-strings, by the incumbent British-Habsburg interests, as their means to create that state of ruin throughout the European continent which would bring that continent under the temporarily shared British-Habsburg domain, during the time of Prince Metternich's great power (approximately 1812-1848).

This aspect of the French Revolution has proven itself to be a disaster for continental Europe then, and, as the subsequent blunders of Thomas Jefferson illustrate the point, had a nearly catastrophic effect on the young United States republic, internally, as out-

2. Columbus had received a map of the globe, sent to him from his correspondent and Nicholas of Cusa's associate and follower, Paolo dal Pozzo Toscanelli. The size of the Earth was supplied to the circles of Toscanelli from the work of the Eratosthenes who had discovered the size of the Earth. However, because of assertions about the size of Asia, by the Venetian circles of Marco Polo, Toscanelli's map showed the Atlantic coast of North America as the coast of China.

wardly, at that time.³

Thus, we had the American revolution, which had actually begun in 1763, against the form of British tyranny at that time. This was an American reaction, then, to the new oppression which the British East India Company introduced to the American colonies in the immediate aftermath of the 1763 February Peace of Paris. In fact, from that moment, to the present day under ruinous practices of President Barack Obama, the internal political life within what became the United States was divided, at that time, and ever since, to the present day, between the patriots, who resisted the predatory British East India Company, and the opposing faction of those Americans who have supplied those accomplices of that British Empire which were typified by the traitor, and Bentham agent Aaron Burr, and by the Wall Street gang, from the time of the Judge Lowell of 1763 notoriety, American scoundrels to the present day, who continue to be the principal beneficiaries of the looting of the United States Treasury by such as Alan Greenspan's and Ben Bernanke's gang.

So, the first decisive blow against our then young, victorious republic, came with the succession of the French Revolution of 1789 and the ruin of the European continent through those subsequent Napoleonic wars, an ironical process of wars which established the imperial power of the British Empire, at the ruinous expense of all continental Europe, through the time of the Congress of Vienna. That irony of Bonaparte's role as a great fool, through the Napoleonic Wars, is to be recognized, still, today, as an echo of that earlier "Seven Years War" which had established the empire of the British East India Company in 1763. The later World Wars I and II, a series which actually began with the British ouster of Germany's Chancellor Bismarck and the subsequent assassinations of France's President Sadi Carnot and the U.S.'s President William McKinley, are notable outgrowths of the British imperial, "grand strategic" policy of practices shaped in the set-

ting and aftermath of that Congress of Vienna.

So, a Bismarck who had been out of office since 1890, aptly warned that a new, British world war being organized by the son of the doddering Queen Victoria, Prince of Wales Edward Albert, would be a new "Seven Years War." But for U.S. President Franklin Roosevelt's political victory over Britain's Wall Street "cousins," that creature which had been, originally, Montagu Norman's one-time puppet, the Adolf Hitler whose regime had been so much admired by Britain's John Maynard Keynes in 1936, would have reigned over continental Europe, and perhaps the larger world besides, for some extended period of time.

Under President Franklin Roosevelt, as, notably, in his role in shaping the 1944 Bretton Woods conference, for as long as he lived: Roosevelt carried forward his avowed intention for the post-war world: to rid the world of Winston Churchill's beloved "empire," to free the captive nations held under European imperialist reign, and to promote their development as part of that which the President foresaw, while he still lived, as a post-war "United Nations Organization" of respectively sovereign, free republics, throughout the planet.

Keynes as an Evil Man

With the death of President Franklin Roosevelt, what had been his perspective for the post-war world, was changed, under Churchill admirer and U.S. President Harry S Truman. Under the nasty toady of the decadent British imperialist faction, Truman, the empires of the world, such as those of the British, French, and Dutch, were re-established for a time, some, still, in fact, to the present day, as under the shackles of the British Commonwealth.⁴

There was another crucial aspect of the change from Franklin Roosevelt to Wall Street's choice, Harry Truman, an aspect which is of crucial importance for understanding the origins of the crisis which plagues our United States in this present moment of its terrible, existential crisis. That was as follows.

Most among those who have examined, more care-

3. Putting the role of Lafayette in these matters to one side, the relevant candidate for election to become President of a post-Bonaparte France, was the scientist and military genius Lazare Carnot, who had, earlier, led republican France to victory over the occupying foreign powers, and was the only legitimate candidate for President of a post-Bonaparte France, but who was not only replaced at the orders of the occupation regime of the Duke of Wellington, but was exiled from his own country, to die, greatly honored, in Magdeburg, Germany, and ultimately interred with great honors, under the title of "The Author of Victory," by common action of France and Germany, in the Invalides, in a place near to a friend of mine, resistance hero Marie Madeleine Fourcade.

4. In tracing the internal history of the British system, it is important to recognize the distinction between biological and cultural traditions, the distinction between the "begats" of what is merely chronicle, and historical principles, among the ranks of leading families and broader circles, as between those of Presidents Theodore and Franklin Roosevelt. Historian H. Graham Lowry understood this very well. i.e., **How The Nation Was Won** (Washington, D.C.: Executive Intelligence Review) 1987.



World Bank

FDR acted to blunt the attempt by the “notably evil” John Maynard Keynes, shown here addressing the Bretton Woods conference in July 1944, to impose his monetarist influence on that gathering; however, with Roosevelt’s death, Truman adopted Keynesian economic dogma, in violation of the U.S. Constitution.

fully, the case of John Maynard Keynes in his roles as, variously, person and economist, could not honestly deny that the relevant, essential elements within him are to be recognized, still today, as extremely perverse, even, in some respects, plainly evil. The outcome of that mixture is best recognized through taking into account both the content, and the intent expressed by his publishing of his noted **General Theory of Employment, Interest, and Money**, first, in a German edition addressed to Nazi admirers of what Keynes recommended for “totalitarianism,” in his Preface dated September 7, 1936. Keynes, like Bertrand Russell, was truly a notably evil man of that time.

President Franklin Roosevelt had been implicitly clear on the fact of this noxious character of Keynes. The President acted in the briefly successful effort, at Bretton Woods, to ensure that Keynes’ monetarist influence should not be tolerated within the United Nations design for a post-war world economic system. However, immediately on the death of President FDR, President Harry Truman joined both Winston Churchill and Keynes in forcing a Keynesian interpretation on the policy-shaping of the U.S. and world economy, while Truman, at the same time, supported Churchill’s return to colonialist forms of imperialism, to the extent the current traffic seemed willing to bear.

What survived of Franklin Roosevelt’s economic

policy then, was, most notably, the admission that the world economy could not survive the arrival of peace, without the establishment of a U.S. dollar as the pivot of a post-war fixed-exchange-rate system. Even the British Empire was compelled to accept that, *temporarily*.

So, in brief, there was the temporary replacement of Roosevelt’s intention for a fixed-exchange-rate credit-system among nations, by a fixed-exchange-rate, dollar-denominated monetary system: Roosevelt’s legacy was stripped of its strategically crucial, real, *physically principled* content, by the loutish President Truman and his fellow-ideologues.

Later, through the freedom to unleash a more radically pro-British policy, obtained through the assassination of President John F. Kennedy,

there came the combination of the prolonged Indo-China war, and the subsequent role of British Prime Minister Harold Wilson, who employed a Schumpeterese “creative destruction” swindle for the wrecking of the productive basis for the British home economy, and also using consequent manipulations of the price of Pound Sterling for setting up the Vietnam-war-torn U. S. dollar for the crisis of January-March 1968.⁵ The U.S.A. under Richard M. Nixon, unleashed the wrecking-job which was then accelerated under an inept President Jimmy Carter, and which led, since the post-1987 installation of Federal Reserve Chairman Paul Volcker’s successors, Alan Greenspan, and his successor, Ben Bernanke, into the ever-worsening, savage ruin of the U.S. economy, up to the present moment I write here today.

By Summer 2007, the successive stages of ruin of the U.S. economy under the corrupting influence of the post-October 1987 successions of Chairmen Greenspan and Bernanke, had already led the world to the verge of a general breakdown-crisis of not only the U.S. economy, but also that of South and Central America and western and central Europe, all, still to this present today. At a point, two decades later, in my July 25, 2007

5. Cf. Joseph Schumpeter, **Capitalism, Socialism and Democracy** (1942).

international webcast, I identified the world as being on the verge of a general, potentially hyper-inflationary, breakdown-crisis of both a hopelessly bankrupt U.S.A. of that moment, and, also, the European set of economies now under the tightening dictatorship of Britain's imposition of the colonialist characteristics of the Euro system.

It happened just as I had forewarned.

At that point in 2007, I located the leading edge of the general breakdown-crisis now in progress, as being a collapse, like that of Weimar Germany 1923, of a July 2007 bubble ready to "pop" at its most vulnerable points. Such had become the relationship between a wildly bloated home-mortgage market and the banks lured into that thus out-of-control, monetarist bubble. I proposed the immediate introduction of what I named a "Homeowners and Bank Protection Act of 2007." This act which I had presented, had it not been blocked through actions by such obvious pranksters as the wildly bellowing, and reckless Representative Barney Frank, would have stabilized the situation and permitted rather straight-forward, systematic measures of financial reorganization-in-bankruptcy for bringing the mess under control.

As due, in part, to the frankly hysterical efforts of that perverse Barney, the housing bubble of Summer 2007 was not only permitted to rage, unremedied, to the present day, but his swindle has been a leading factor in the prompting of measures, of a type called "bail-out," which have created a hopelessly hyper-inflated condition in the trans-Atlantic community generally, at the present time. Only a Glass-Steagall-like process of transforming the U.S. monetary system into a U.S. credit system, could now rescue the U.S.A. as a nation, from a presently looming plunge into prolonged "dark age" conditions.

So, the point of degeneration of the present world international monetary system, has now reached the point, especially in the trans-Atlantic community, roughly comparable to the condition of the then isolated Weimar Germany of the late months of 1923.

Now, only sweeping measures, tantamount to what could be called a "Glass-Steagall" conversion of the world money-system, from a floating-exchange-rate *monetarist system*, to a fixed-exchange-rate *credit-system*, could avert a presently onrushing collapse of the world economy into a breakdown-crisis comparable to that of the Fourteenth-century, so-called "New Dark Age."

In any competent effort to understand the presently

onrushing, planetary monetary breakdown-crisis of the present moment, the case of 1923 Weimar Germany is to be considered for study in its own light, still today.

Therefore, consider how the British Empire's initiatives turned the end of World War I, intentionally, into the beginning of World War II, and, then, possibly, a condition tantamount to a potential, planetary "World War III." An approach to designing the needed recovery, made by me, "The Triple Curve," is now required for preventing something akin to the latter outcome.

Since I am the inventor and developer of what has become known as "The Triple Curve" method in forecasting, much of what I have to report on relevant scientific matters, must be stated in the first person singular, as originating as my professional experience and knowledge, rather as some mere journalist's often merely sophistical commentary on what "other authorities," mostly highly fallible ones, have written.

I. The "Triple Curve"

I had been a follower of Leibniz since adolescence, devoted then to what has been shown to have been my valid opposition to the teaching of *a-priorist* Euclidean and Cartesian geometries. That choice was made by me, at that time, on the premises of what I had adopted, then as an adolescent, as a notion of a physical, rather than merely abstract geometry, which I did, chiefly, from study of ongoing construction at the Boston area's Charlestown Navy Yard. During the post-war 1940s, this same conviction of mine came to assume the form of a commitment to resisting those radically reductionist presumptions respecting economy, the which were expressed for me, beginning 1948, by such devotees of Bertrand Russell as Professor Norbert Wiener and John von Neumann. By the beginning of 1953, this had led me to the point that I had gone over, completely, to the standpoint of Bernhard Riemann's 1854 habilitation dissertation on the matter of geometry—*physical geometry!*

From that point on, my work in the field of a science of physical economy has progressed accordingly. I had applied this vigilantly, during the 1950s and later, to my work as a management consultant, including a successful treatment of the inherent folly of the then onrushing crisis in current retail and wholesale automobile marketing, a crisis which had been orchestrated into coming into being, throughout a network of franchised automo-

bile dealerships, of the 1950s. That latter study, as extended by me to include other, similar patterns of “hard commodity” marketing at that same time, was the combined set of efforts which enabled me to spread that 1956 forecast of a U.S. February-March 1957 recession, a forecast which I circulated as a policy perspective among my own business and related circles, which occurred with a resulting, large degree of certainty, precision, and success.

Subsequently, beginning mid-1958, and continuing into 1960, I crafted the probable option of a probable long-term general crisis, that if the existing system continued during the closing years of the 1960s. It occurred, for reasons which I had forecast, in 1971.

I have employed that same method of forecasting, albeit with a certain successive refinement, as from green bud to ripe apple, since that time. The system which I have employed has never failed me, in itself, whenever I have applied it.⁶ The celebrated case of my December 2, 1971, Queens College debate with an associate of the notorious European Congress for Cultural Freedom’s Sidney Hook, Keynesian Professor Abba Lerner, is a crucial illustration of the point, the development which put my method of economic forecasting on the world map, so to speak.

I had challenged the leading academic economists of the U.S.A., from September of 1971 onward, challenging them to present a champion to defend their cause against my charge that they had proven themselves “quackademics” in their refusal to face the reality of what had become the oncoming consequence of President Nixon’s breaking the fixed-exchange-rate system. My own forecast, spread during the earlier years and months, thus became a landmark event in the record of modern economic forecasting, since that Queens, New York, debate, up to the present time. Certain among those professional and other political opponents of mine had decided to accept my challenge. So, it happened that, on December 2, 1971, Abba Lerner suffered what turned out to be, for him, a devastating defeat in that debate with me, his own fault, and, that of my opposition from among the offended academics and

relevant press who were either present, or during the period immediately following that celebrated event, who chose to defend their own reputations, by virtually pretending that I had never existed.

For my part in that debate, the issue was my knowledge, that the Keynesian policy expressed in the state of affairs established by the formation of the Bank for International Settlements (BIS), had been the key 1931-1933 factor in the Liberal faction’s bringing Adolf Hitler to power in Germany, at the close of January 1933. This same concern prompted my attention to the 1923 Weimar inflation as a reference point for my teaching of the keys to understanding contemporary types of economic crisis, as I did in my practice of the late 1960s and beyond.⁷

The parallels and differences, between the Weimar hyperinflation of 1923, and what I have repeatedly foreseen and warned against, as the presently ongoing, world economic breakdown-crisis, provide what is perhaps the best classroom sort of insight into the nature of the causes and presently ominous effects of the presently ongoing world economic crisis.

The Weimar 1923 case is the best choice of example, precisely because it is the relevant simpler, real-life case, on which to base a presentation of those principled elements of the Weimar 1923 crisis which are, otherwise, not quite so simply identified in the present, world-wide case. Nonetheless, while the Weimar collapse is a much simpler case for study, the Weimar inflation does contain all of the principled “laboratory” elements which must be recognized in approaching the more complex problem of the same species of world-wide crisis hitting the planet now.

For example:

The crucial features of the pattern represented by the Weimar hyperinflation, as such, are but three: 1.) Monetary inflation at rates persistently exceeding 2.) the growth, or decline of financial throughput through the marketing of consumable forms of essential commodities, chiefly physical commodities, and, 3.) combined with the decline in the physical output of the economy, per capita, measured in terms of physical, rather than money values.⁸ The “Triple Curve” which I have em-

6. It is in the nature of a good student, to skip over numerous opportunities, if he or she is not convinced that he or she is able to present a case competently at that time. My own successes have been limited by me to cases in which I was confident that I had made the right discovery. I skipped over numerous opportunities during my earlier years in practice, but not the really big cases, which, fortunately, are always easier to master, by the nature of the matter: the evidence is relatively “bigger.”

7. That study was crucial in defining my rigorously correct use of the term “fascist” in the context of the present U.S. crisis.

8. Like Johannes Kepler’s method of discovery of the principle of universal gravitation, as in his **The Harmonies of the Worlds**, any competent discovery of any universal physical principle depends upon showing the lack of any general extendable deductive consistence between

ployed, from January 1996 onward, to show, by mid-Summer 2007, that the planet had now entered a breakdown-crisis, illustrates the case. Since my broadcast warning of July 25, 2007, the rate of monetary inflation (1) has soared, while the rate of collapse of the economy itself has accelerated (2), especially since the inauguration of President Barack Obama, while the physical economy has been driven to a rate of virtual collapse, under Obama, a collapse which is presently running ahead of the collapse of that President's and the U.S. Congress's declining popularity. In the same interval, employment in useful activities (3) has collapsed, with the hardest impact on those strata of employment which had represented the relatively greatest per-capita value.

Notably, about the time I uttered my July 25, 2007 webcast report, the second of the three curves, the financial curve expressed in the terms of trade and production, had spun downwards, and has continued to do so, that at a presently accelerating rate, since that time: the infallible signs are, other facts considered, that a general breakdown-crisis of the planet is still presently in progress, that at a currently accelerating rate. The British Queen's brief Commonwealth address of November 27, 2009, not only coincides with the new, more critical, phase-downshift in the world economy generally, but had the effect of worsening the global situation, that at a presently accelerating rate.

Now, compare the case of the "Triple Curve," as I sketched it for its first publication, in January 1996; then, about 2000; then, since 2007.

In the first of these three instances, in 1996, I had presented the Triple Curve, publicly, as a forewarning of the way in which the present patterns in the U.S. economy were leading toward severe, qualitative, rather than merely quantitative, economic deterioration. By 2000, that forecast had reached a point of corresponding to the effects of that year's collapse of the inflationary, already bloated "Y2K bubble," and the thus looming threat of a future, global breakdown-crisis. In July 2007, and onward, it corresponded to the immediate outburst of that kind of global breakdown-crisis of the planet's present form of monetary-financial system which I had forecast in 2000-2001, an echo, on a grand scale, of what had struck down Weimar Germany in 1923.

the evidence of two contrasting modes of sense-perception (e.g., sight and hearing for the case of Kepler's discovery). The fuller appreciation of this was provided, later, by Albert Einstein's distinction between the general principle of gravitation and the bounding of the universe gravitation reflected by a principle of a finite, but unbounded universe.

FIGURE 1

LaRouche's Triple Curve

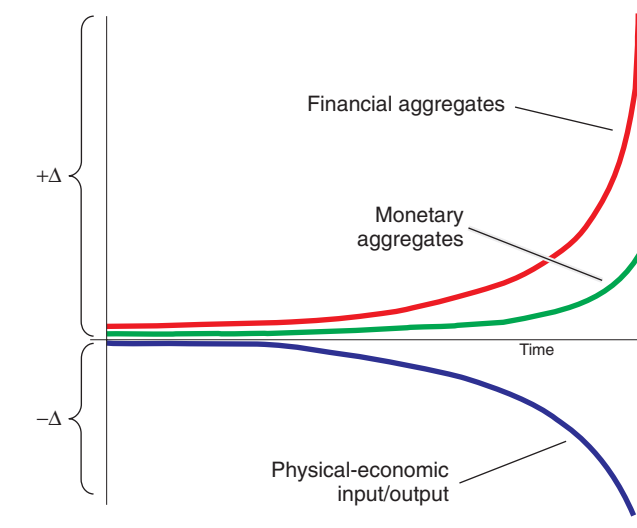


FIGURE 2

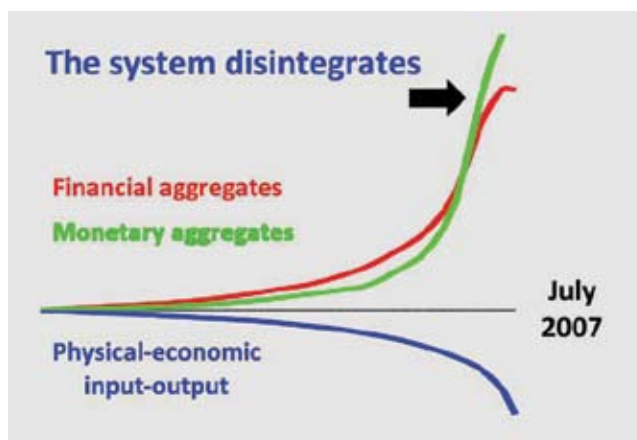
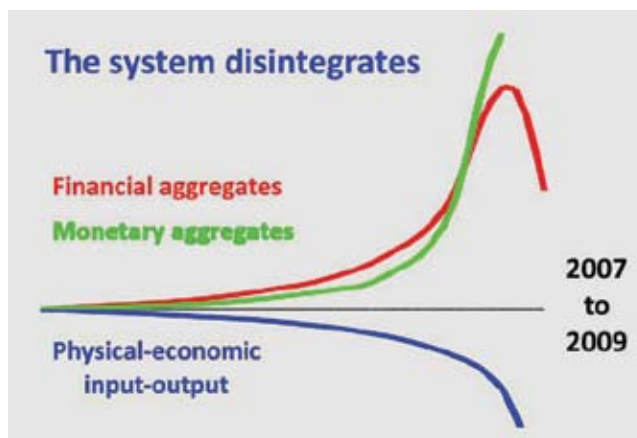


FIGURE 3



We must abandon all statistical forecasting associated with using customary financial accounting as a measure of performance of the presently greatly weakened economy. Statistical forecasting in economy, as has been used, is always systemically in error when used as a tool of serious economic forecasting. It is wrong because it is based on axiomatic-like, monetarist assumptions, which are inherently, viciously false respecting medium-to-long-term economic developments.

Failures of economies come chiefly as a fruit of lack of needed emphasis on investments in scientific-technological progress, in, chiefly, both A.) the form of the increase of the energy-flux density used to drive technological progress, B.), the needed increase in physical-capital intensity, for both production and relevant basic infrastructure, and, C.) the investment in the increase of the scientific-discovery-impelled, increasingly energy-intense, productive powers of labor, rather than matters of monetary and financial investments as such.

Any monetarist sort of refined statistical treatment of the economy which is not utterly wrong, might be apparently right occasionally, if only temporarily, and, even that, only in some usually questionable reading of “local” patterns, patterns which are ultimately, irrelevant, because the assumptions to which the partial data presented correspond, are either irrelevant, or simply wrong, that as a matter of fallacy of composition, when reconsidered from a broader view of the real (e.g., physical) economic process as a whole.

Those three considerations suffice to provide us with a general indication as to how and why Europe and the Americas as wholes have been in a continuing, increasingly steep wave of net declines, in physical terms of productivity, per capita and per square kilometer, over the entire interval since the time of the U.S. main entry into the post-John F. Kennedy, 1964-1968 build-up of the U.S. entry into the 1965-1968, phase of the Indo-China war. It can be said of the effect of this change from Kennedy’s policy, that the effect of that on the U.S. economy, can be summed up: as with President Obama’s own health-care policy, where the physician was needed at that time; Obama, has, like Adolf Hitler earlier, deployed the health-care measures of such as poisoners and grave-diggers, instead. The arguments on health-care measures, copied from Adolf Hitler’s war-time doctrines, and copied on the initiatives of the administrations of British Prime Minister Tony Blair and virtual Blair devotee Barack Obama now, present

us with a disease, which, if continued, the relevant regime could not outlive, and which could precipitate the world at large into the darkest sort of planetary “New Dark Age,” one worse than that orchestrated in Fourteenth-century Europe by Venetian manipulations of the monetary policies of that time.

Actual productivity in financial economies, is to be measured, physically, in per capita and per square kilometer terms, that for entire economies.

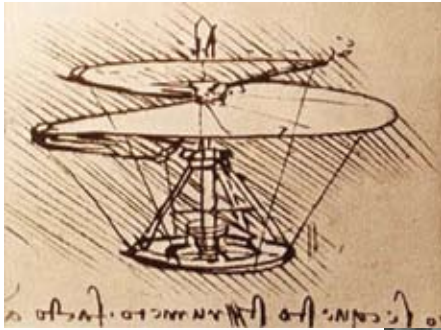
Measurements for this purpose, must be based on recognizing that all economies, when treated as physical economies, must be measured from the standpoint of a base-line of appropriately relevant types of standard entropy. If you are doing tomorrow, what you did yesterday, you are already in trouble today; there is a constant factor, although not a constant value, of depletion relative to that required rate of estimated, physically anti-entropic rise of productivity per capita and per square kilometer. Without the effects of advances in realized scientific progress, the forces of attrition take over, as has been the case for the downturn in the trans-Atlantic community of nations since the ouster of Germany’s Bundeskanzler and sometime de Gaulle ally Konrad Adenauer, the assassination of President Kennedy, and the undermining of France’s President Charles de Gaulle.

This requirement of science-driven advances in potential relative population density, means a required, continuing, scientific-discovery-based rate of increase of energy-flux density, per capita and per square kilometer, as time passes. Without that factor of increasing “energy-flux density,” technological progress, and economic advances in productivity, can not be sustained.

Hence, all so-called “traditional” or “zero growth” societies, are already in the process of dying, and, probably, already rotting, as in Europe under the tyranny of the British-controlled “Euro” and its Wall Street accomplices, now.

That means, that reliance on solar collectors and windmills, is the energy-policy equivalent of something even much worse than “fools’ gold.” Nuclear power, and synthetic high-density fuels produced by it, are what must become the minimal standard of increasing energy-flux density for all national economies today and beyond. Contrary policies are certifiably, clinically insane, and also mass-murderous in their effects.

Without a constant factor of anti-entropic change of nations’ policies, a form and quality of change which must be comparable, in physical terms of practice and effects, the economies decline. Any existing statement



EIRNS/Eric Thomas

For the Renaissance genius Leonardo da Vinci (1452-1519), science and art were one; in his scientific drawings, he showed not only how man could fly, as in his drawing of a "helicopter," but how he could "walk on water."

of physically defined political-economic culture which does not effect qualitative improvements in the philosophy of practice of the equivalent of an increase of the "energy-flux density" of the society's production, per capita and per square kilometer, is an inherently decadent culture. The effect of such advances can be measured in physical terms; however, the creative powers of a culture are located, not in the mathematical domain of physical science, but in the role of development of Classical forms of artistic composition which are, as the case of Albert Einstein's violin attests, the form of discoveries in the domain of Classical artistic composition and practice.

For trans-Atlantic European culture, there has been a long-term trend of cultural decadence, with physical-economic effects, since the death of President Franklin Roosevelt, and the setting of the course of post-World War II world history along lines then symptomized by the Churchill-Truman interval's radical changes in already launched, long-term trends in physical-economic and cultural orientations in policy-shaping. The process of attrition set into motion for the post-war world, thus,

has been the underlying trend in world economy generally during this lapse of time.

This characteristic threat of entropy in all social cultures of mankind, pertains to a feature which is absolutely unique to the human species as a species. It is the specifically human characteristic of human creativity, which permits the growth of the human population to reach levels which would never be reached but for the expression of the creativity which is unique to the members of the human species, and which distinguishes the human species as inhabitants of a noösphere, rather than the biosphere.

Mankind is the only known living species whose existence, since the discovered fire-sites of the early "Stone Age," is based on the intentional use of fire. Man's progress, even our species' continued existence, depends upon those increases in the energy-flux-density, as well as the quantity of the qualities of fire on which the continued existence of the

population's level, and quality of existence depends.

The Olympian Zeus which Aeschylus portrayed in his **Prometheus Trilog**y, is the expression of the real-life Satan, a gentleman whose followers are likely to be encountered among the current co-thinkers of President Barack Obama and the currently reigning generations of the British Royal House.

This is shown, for example, by the fundamental nature of the categorical difference between the characteristics of human societies and contrasting cases of any animal's or plant's ecology. That distinction of man from beast, vegetable, and rock, is, as a matter of fact: *that the distinguishing characteristic of mankind, ecologically, is human beings' consciously motivated, individual scientific and Classical artistic creativity.*

An Economy of Art & Science

The trouble to be confronted at this point in the report, is, that not only is the term "creativity" widely misused, that most of the time; but, even in physical scientific practice, the taught notion of the power of creativity is usually, wrongly assumed to lie within the



Ricardo André Frantz



Courtesy of Pennie Sabel

The characteristic of actual scientific creativity, is that expressed by Filippo Brunelleschi's use of the catenary to make possible the construction of the cupola of Florence's Santa Maria del Fiore. Shown: Brunelleschi looks up, from his nearby perch, at his creation (interior); inset: a cutaway, showing the ribbed construction beneath the dome, made possible by use of the "hanging chain" (catenary).

(e.g., the use of the relatively least-action physical curve, the catenary-tractrix, as a principle of construction); Johannes Kepler (the uniquely original discovery of a general Solar-systemic principle of gravitation); Pierre de Fermat (least action); Gottfried Leibniz (the calculus, the modern conception of modern dynamics); Abraham Kästner (non-Euclidean geometry); Carl F. Gauss (seemingly everything); the brothers von Humboldt (masters of the organization of Classical education and physical science); Lejeune Dirichlet (the role of the imagination in physical science); Bernhard Riemann (all competent modern physical geometry); Max Planck (the access to the principles of microspace, contrary to the followers of Ernst Mach and Bertrand Russell); Academician V.I. Vernadsky (the respective principles of the Lithosphere, the Biosphere, and the Noösphere); and, Albert Einstein (the essential interdependence of Classical art and physical-scientific creativity).⁹

True science is originally located outside the bounds of

domain of a physically inert function of Euclidean or quasi-Euclidean mathematics of monetary or financial transactions as such —or, worse, mathematics traced to Euclidean geometry, or to the more radical forms of taught contemporary reductionism such as the very radical positivism of devotees to the worship of the infinitely evil Bertrand Russell.

The characteristic of actual scientific creativity, is that expressed by Filippo Brunelleschi's discovery of the use of a *physical* curve, the catenary, to make possible the successful construction of the cupola of Florence's *Santa Maria del Fiore*; like Nicholas of Cusa's discovery of the fundamental principle of competence in modern science in his *De Docta Ignorantia*; Leonardo da Vinci

deductive method. It lies within what can be best identified as the functional domain of the Classical artistic imagination, such as the relevant work of a Dante Aligh-

9. Brunelleschi's use of the catenary as a universal physical principle of construction, as for crafting the cupola of Florence's **Santa Maria del Fiore**, is to be matched to Nicholas of Cusa's pointing out the systemic fallacy of Archimedes' reductionist doctrine of the quadrature of the circle. The error by Archimedes is ultimately comparable to the use of that fallacy of the notion of quadrature which was already implicit in the Aristotelean presumption expressed by **Euclid's Elements**. In nature, only physical curves exist, as shown by Cusa's follower Johannes Kepler, in deriving the notion of "equal areas, equal times" in his **The New Astronomy**. Here we meet the crucially revolutionary importance of both the opening two paragraphs and concluding sentence of Bernhard Riemann's 1854 habilitation dissertation.

ieri, Cardinal Nicholas of Cusa, the latter's followers Leonardo da Vinci, Raphael Sanzio, and Johannes Kepler, Rembrandt, and Johann Sebastian Bach and the domain of Classical counterpoint typified by such faithful followers of Bach's discovered principles of well-tempered counterpoint as Haydn, Mozart, Beethoven, Schubert, and so on, or, great poets and Classical dramatists such as Gotthold Lessing, Friedrich Schiller, John Keats, and Percy Bysshe Shelley.

The image of physicist Albert Einstein with his violin, has crucial-experimental significance on this account.

*Effective science and Classical art are united in their great practitioners' intuition of the fact that the human powers of sense-perception do not provide us a direct representation of the experienced reality, but are in the nature of shadows which reality casts upon the mere senses. We must adduce the real object, which is an unseen object, from the patterns among the shadows, as Johannes Kepler shows in his uniquely original discovery of the general principle of gravitation in his **The Harmonies of the Worlds**. The case of Helen Keller also illustrates this point with a certain nice-ness.*

The work of the true scientific and creative Classical artist, is to decode the signals of sense-perception, by experimental methods of exploration of those relatively extreme instances in which deduction from sense-perceptual certainties collapses, as with the case of both Kepler's uniquely original discovery of a general principle of universal gravitation, in his **The Harmonies of the Worlds**; Fermat's discovery of least action; Leibniz's uniquely original discovery of both the calculus itself and the higher principle of universal physical least-action; and, what Lejeune Dirichlet and Bernhard Riemann developed out of the foundations prepared by Kästner's student Carl F. Gauss, which are typical of this.¹⁰ All among these were the fruit of the work of Nicholas of Cusa's **De Docta Ignorantia**, and, it must also be said of the work of the ancient Archytas, Plato, and Eratosthenes earlier.

These considerations which I have sampled immediately above, have been selected as crucial illustrations of a matter of principle; this point must be understood, if a science of physical economy is to be competently recognized, and addressed for practice. It is human in-

dividual creativity as such, as I have just pointed out, on which any competent notion of an actual science of economy must be premised. Crucial is the fact, that all creativity, including that of physical science, lies essentially within the domain of the individual's Classical-artistic imagination, as the case of Albert Einstein's violin might suggest, and also Lejeune Dirichlet's influence on the work of Bernhard Riemann. A scientist who lacks a maturing of the intellect in Classical artistic composition, is systemically crippled in some fashion which will show itself in his or her practice, as I have often seen, sooner or later.¹¹

The "Triple Curve" Was Born

I emphasize the fact, that my "Triple Curve" pedagogy was crafted in that form during the closing months of 1995, and was first introduced publicly, in that way, during January 1996, as the theme of the launching of my campaign for the Democratic Party's Presidential nomination.

The immediate purpose of these actions was twofold. First, to present my method of economic forecasting, as a matter of the choice of method by which the adopted policy of our republic, and of civilization more broadly, should be shaped. Second, to present the conclusions to which that process must lead in action. Third, to educate the leading intellectual edge of the citizenry to the effect, that these matters of forecasting are made reasonably intelligible to a significant portion of the leading, actually creatively thinking strata of our population.

My problem as a public forecaster, has been that the U.S. population had not been competently informed, a shortcoming of such a degree that our citizenry, generally, had usually misunderstood our world's existential quality of national crises at that occasion. This deficiency, which is widespread among economists, in particular, has been, more often a product of willful mis-education, than lack of education. Often the person, such as one with some sense of machine-tool design skills, has been able to illustrate my point from experience, but such competence has been lost, more and more, during the recently past, post-war generation. I have deemed it necessary to attempt to force at least a part of

10. The opening two paragraphs and concluding sentence of Bernhard Riemann's 1854 Göttingen habilitation dissertation, are sufficient to identify the point.

11. "This leads us thence into the domain of another science, the domain of physics, whose nature the present proceedings" [on the subject of mathematics] "do not permit us to enter." Bernhard Riemann, in the concluding sentence of his 1854 habilitation dissertation.

the population to reach the level of insight into our now onrushing national crisis, the level needed to make our citizens aware of the danger to them and to our nation, at that juncture.

In January 1996, when I first introduced the Triple Curve publicly, we were already on the verge of the outbreak of a major, virtually existential, international financial-economic crisis, a crisis which became more and more visible in its effects, as I had forewarned, during the remainder of 1996 and 1997, and into the Spring and early Summer of 1998. Then, in Summer-Autumn 1998, that crisis against which I had warned since early through middle 1996, hit with great force, as being a crisis of exactly the type which I had presented as on the relatively short-term horizon, in 1996. So, that particular phase of the economic crisis, which was already a major phase of such developments, hit during the late Summer of 1998.

In September of that year, U.S. President Bill Clinton had intended to deal with what he recognized as this new economic disaster, by launching a quest for an intended new financial architecture.¹² The impeachment drive unleashed against him during that period, had, rather obviously, wickedly malicious purposes, and enjoyed deep political roots within the ranks of those determined to allow no interference with their crowd's presumed special self-interests, such as the crowd represented by the devotees of New York's Wall and London's Threadneedle streets, who were already continuing the process of increasingly wild-eyed financial speculation of that type which has led into the disas-



U.S. Treasury

Following the outbreak of the Summer 1998 phase of the economic crisis, President Clinton and his Treasury Secretary Robert Rubin (shown here in May 2006), openly discussed the possibility of establishing a "new financial architecture." At that point, the impeachment drive was unleashed against the President.

trous great "bail-out" swindles of 2007-2009 to present date.

Similarly, the suppression of my own 2007 Homeowners' and Bank Protection Act, by those associated with U.S. Representative Barney Frank, has led the U.S.A. into what had been threatened to become an immediate form of terminal breakdown-crisis, back in July-August 2007; but, since developments associated with figures such as Senator Christopher Dodd and Representative Barney Frank, "Wall Street" ideologies have become a kind of intellectual bubonic plague of U.S. economic practice, up through the present date.

It is the continuation of that wrecking of the most essential features of the U.S. economy, which has been destroying this nation, and creating the great suffering of our people, under

the errant leadership of the foolish fanatic called President Barack Obama.

President Obama's Culpability

As the ugly fraud recently exposed as being perpetrated at Britain's University of East Anglia underscores, what scientists who are honest and competent already know, is that there is no truth in the assertions made by the present Barack Obama administration on the subject of "Global Warming." The entirety of the politically top-down claims by prominent circles on the subject, is, scientifically, demonstrably not only a witting fraud, but a program designed for a form of intentional mass murder throughout the planet which is far greater, in either relative or global terms, than the crimes of the Adolf Hitler regime, a crime which deserves the condemnation of those who promote this swindle, and relevant remedies for that supplied by the nearest available instruments of due judicial and related action by responsible governments.

In fact, when the facts and the related consequences of that "global warming" hoax are taken into account, the policies of support for the British monarchy's proposed global genocide echoed by the U.S. Obama ad-

12. In 1996, I was the featured guest and reporter at the Moscow meeting of a "blue ribbon" body of Russia's economics elite. The consensus produced by that meeting was intended, among other notable consequences, to present proposals for a new turn in U.S.A.-Russia economic cooperation. Had that been adopted, the Russian bond crisis of 1998 would have been avoided. Shall we say that Vice-President Al Gore was not particularly helpful during the final term of his position as U.S. Vice-President.

ministration, are sufficient grounds for summary impeachment and even criminal proceedings against those whose complicity in supporting this massive crime against humanity reaches to approximately the level of offensiveness of the criminal proceedings of the Nuremberg trials. The falseness of the claims of the sponsors of the official “Global Warming” hoax, go far beyond such populist lunacies of past world history as “flat Earth” ideologies; they represent the intention, as shown by Prince Philip’s advocacy of the “World Wildlife Fund” goal of reducing the planet’s human population from the presently estimated level of 6.7 billions persons, to two or less, which is the greatest, and most evil crime imagined among the ranks of governments, in the history of contemporary civilization.

Thus, if we are to believe the stated intentions of the perpetrators of this proposed mass crime, such as the British monarchy’s Prince Philip and his relevant accomplices, the remedy posed by their bad behavior is not punishment of criminals after the fact, but requires proceedings in preventive actions, such as their summary removal from political authority, actions based on evidence of the efficient intention of the neo-Malthusian ideologues to produce effects which constitute massive crimes against humanity, crimes which, in this instance, are, by their nature, far worse than anything which the Nazi regime had attempted to accomplish.

It is my included, and repeatedly stated concern, to avoid an impeachment of a sitting President, such as this present one, as far as can be allowed. The case of the closing period of Ku Klux Klan fanatic President Woodrow Wilson’s incumbency comes to mind. Adolf Hitler was more witting, and, therefore, more culpable than the intellectually deficient, often witless President Obama; but, the general welfare and continued existence of the republic, our own or others’, require that any continuation of Obama’s follies be prevented, and, otherwise, rapidly reversed.

This requires all reasonable effort to induce the President to accept constraints which assure conditions under which he could be, safely, allowed to continue to occupy the position to which he has been elected by what was, in retrospect, a then greatly misinformed majority of our 2008 electorate. But, there is a limit to the amount of willful folly and incompetence which the Creator Himself should be asked to tolerate in such a case. Ouster is to be avoided, if possible; but judiciously peaceful removal from a position of authority, is the alternative to the remedy which the follower of France’s

excellent Louis XI, England’s Henry VII, was compelled to deal to Richard III.

Although the purpose of this present report is essentially scientific, the moral problem is posed, most poignantly, by the sheer magnitude of the malicious effects of the fault shown in the person of this President, in his intentionally murderous health-care policies, the effects of his economic policies otherwise, and his complicity in a program of intended genocide, called “environmentalism,” by leading elements of the British monarchy and others. The fraudulent doctrine of “global warming,” which has shown great influence over the current U.S. President, can not be left unmentioned in defining the essential implications of the agenda of national survival presented to the citizens of our republic now.

II. Inside the Credit System

Some among us may fancy, that we are very busily occupied with the process of getting ahead during our present life-times, that in ways which do not demand changing their habits of life or work presently, or, for some, perhaps, not during the time of a generation or two of our progeny in times to come. Contrary to such tendencies for backwardness, a successful future for our society depends upon well-planned choices of several generations’ duration of imaginative forms of successive, progressive changes in development of our societies’ missions and programs, that commitment made during our lifetimes.

The principles which should govern our choices of pathways of progress, especially science-driven economic progress, represent commitments for today which should be chosen for their consequences, chosen as pathways of progressive development of our society, of ourselves, and also of mankind as a whole, over the course of no less than several future generations.

The goals and missions to be chosen on that account now, should be based on achievements to be attained by about the close of the presently young century, and should represent an adequate choice of forward planning for what must become the future condition of the generations of mankind we are bringing into being. That should be done through aid of the choices of goals for achievement at each stage of our life’s career.

Therefore, in brief, the needed view of modern physical science for anyone today, is implicitly defined by



NASA

"The needed view of modern physical science for today," suggests LaRouche, "is implicitly defined by the foreseeable mission for human beings' first successful steps on, and safe return from, the surface of Mars." Shown: an artist's rendering of collecting samples on a future mission to Mars.

the foreseeable mission for human beings' first successful steps on, and safe return from the surface of Mars. Thus, the feasibility of putting functioning robots, and the like, on the surface of Mars, or, in qualified habitations slightly beneath that surface, is already a demonstrated accomplishment. Round trips to the surface of the Moon are an accomplished, and technically repeatable event. The notion of man landing on Mars and having a safe return to Earth, is also an obvious mission; but, in the matter of manned transport between Earth-orbit and Mars-orbit, there are scientific challenges of a practically principled nature yet to be settled.

So, the typical, so-called "white-collar Baby Boomer" might presume that, apart from appetites for novel entertainments, it were sufficient to base current national policy-shaping on simply, and foolishly, projecting a future for our society based on no more than a slightly improved expression of the customs and technologies in use today, or for our planet for the next few years, or even decades ahead.

Look back in history, even since the discovery of the American continent, or perhaps the landing of the Pilgrims and the Seventeenth-century progress within the Massachusetts Bay colony; we should recognize, so,

that successful economies and cultures for the next generation, or two, then, were those which devoted their shaping of present policies according to the foreseeable, qualitatively improved goals which must be reached several generations or more ahead, if society were not to decay under inevitable forces of attrition. We must abhor an attrition which would become the result, if the leaders of a society did not base today's policies of practice on attaining the new, more advanced habits to be established a half-century or more ahead.

So, we had already reached the time, about two generations ago, in which competent policies for Earth's several generations ahead, were based, then, on the assumption that the practical meaning of a successful economy was already a clear-headed commitment to a future economy based on mankind's exploration and development of nearby Solar space.

Unfortunately, the impulse for progress was arrested at that point, by the rising influence of the so-called "Baby Boomer" generation. In effect, with that upsurge of existentialism within a large portion of the student bodies of certain leading universities, something partaking of an existentialist evil in the tradition of such as Friedrich Nietzsche, Martin Heidegger, Hannah Arendt, Rachel Carson's hoax of 1962, **Silent Spring**, and the "One Dimensional" Herbert Marcuse, took over what passed then for the so-called liberal-minded, and often also draft-dodging "intellectual class" of that age-group.

Already, we should have recognized, back then, that a sound contemporary economic policy, is based on essential elements of infrastructure whose half-life is two generations, or longer. Instead, in the U.S.A. today, there has been no *net* replenishment of essential, basic economic infrastructure since about 1967-68. We are, thus, about two generations into an economy ruined by our indifference to the need for progress. So, in effect, there has been no *net* physical progress in the U.S. economy in more than forty years, despite computer technology, and despite the brief period of manned flights to the Moon, about four decades ago.

Therefore, the problems of future manned travel be-

tween Earth and Mars so indicated, oblige us to define the practical principles of scientific progress in a fresh way. Simply said: regular manned travel between Earth-orbit and Mars-orbit, requires a physically relativistic mode of transport between the orbits of the two planets, and, almost certainly, significant progress in continuing the revolution in the relativistic approach to a radical degree of progress in that physical science of the Noösphere which had been launched by Academician V.I. Vernadsky. How far, or fast might we intend to go, in accelerating a manned craft, that our attempts will endure the relevant kinds of stresses produced for man, craft, and the relevant physical space-time, within a relativistic space-time medium? Plausibly, it would require a helium-3 fuel's mode of propulsion to test that latter point appropriately—in an unmanned vehicle.

Now, the principles which beg for their own discovery on these accounts, are forced upon our mission-oriented attention by the notion of manned travel between Earth-orbit and Mars-orbit; the same principles imply a leading quality of discoveries back here, on Earth itself, in the meantime. We may rightly say, that as Vernadsky created the physical-scientific categories of the Lithosphere, Biosphere, and Noösphere, his accomplishments were the fruit of revolutionary changes in the competent meaning of the name of “science” during those times, as applicable to all already explored domains of practice then. Emphasis on that fact is of crucial significance in the present situation.

That latter fact will bring our attention to the matter of a competent understanding of the actual meaning of the term “dynamics,” the subject of the following chapter.

In the meantime, the required design for that Mars mission carries with it that kind of revolutionary action in a qualitatively new direction, but a direction which is already applicable to a science of physical economy today, here on Earth, and, also, on our Moon, a challenge which must be faced before the challenge of manned, safe-return flight to Mars, perhaps several generations ahead, has been refined for then current practice.

To progress to that point of achievement, there must be a process of, broadly based, accelerating progress in development all along the way.

The kind of principle which such thoughts pose to us, now, is not new in and of itself. Notably, Gottfried Leibniz posed the relevant issue of scientific method, by exposing the outright frauds in the principal works

of René Descartes, and, implicitly, those by the cult of Sir Isaac Newton as well, as that was done by him, in essentials, during the course of the 1690s. This task is to be defined as a matter of the issue of method which Leibniz identified as *dynamics*. The subject of *dynamics*, so situated, is our crucial topic in this report.

Whereas, the term “dynamics” itself has been used in various ways since Leibniz introduced it in demolishing the claims to scientific competence by both René Descartes and the Eighteenth-century European behaviorists;¹³ and, whereas, the word “dynamics” is often employed, usually carelessly, the proper meaning of term itself, whether in physical science or art, is rarely invoked in a competent way, in modern practice to date.¹⁴

As I shall show here, after having set forth the following matter of essential background discussion, the fact that we must now view the mission-orientation of the world's national economies of today from the standpoint of the needed process of preparatory steps of accomplishments required over approximately the coming two to three generations of those recently born since the beginning of this present, new century, requires our clear understanding of the specific quality of principle which must ensure that the intentions which we adopt today, will actually be relevant steps toward reaching the goals required to guide us through the remainder of the present century successfully. That principle, properly conceived, is named “dynamics.”

The following set of qualifying remarks on that work of Leibniz is notable in the following terms of reference.

What Are Scientific Principles?

The scandalous aspects of the work of modern apologists for the hoaxes perpetrated by René Descartes, obtained the premises for such apologists' argument, through the influence of the Venetian irrationalist Paolo

13. E.g., Gottfried Leibniz, *Specimen Dynamicum* (1695).

14. The fraudulent claims in defense of the follies of René Descartes, the fraudulent British claims that Isaac Newton had discovered gravitation, and that Isaac Newton had discovered the calculus (of which Newton himself had actually no understanding), are chiefly fraudulent claims often referenced to, today, which had been circulated by the Venetian ideologue Abbé Antonio S. Conti and his “Sancho Panza,” Voltaire, against Leibniz, after the news was received that Leibniz had just died. In principle, the frauds of the Eighteenth-century devotees of Isaac Newton were essentially echoes of Cartesian reductionism by such as de Moivre, D'Alembert, Leonard Euler, and, later, Laplace and Augustin Cauchy, all following the schematic argument of the avowed Cartesian, Antonio Conti.



Apollo Project archive

Like the Olympian Zeus, who tortured Prometheus for bringing fire (science) to mankind, the imperial assault on modern forms of “fire,” e.g., the space program, have brought us to the brink of a new dark age. Shown: Apollo 15 blasts off in a fiery blaze, July 26, 1971.

Sarpi, the putative ideological author of the A.D. 1618-1648 Thirty Years War, and the principal founder of what was to become known as the Seventeenth- and Eighteenth-century British philosophical Liberalism of such prominent, and also evil notables of those times as Sir Francis Bacon, Thomas Hobbes, John Locke, Adam Smith, and Jeremy Bentham. That evil of Liberalism is what has sometimes been termed “behaviorism.”

The essential distinction of behaviorism, is identified with sufficient clarity by Adam Smith, in his 1759 **Theory of the Moral Sentiments**, and also by Lord Shelburne’s utterly depraved lackey, Jeremy Bentham. Those authors are echoed in the explicitly fascist character specific to the immediate circles of such “behaviorist” elements of President Barack Obama’s inner circles within government as Rahm Emanuel and his brother, Dr. Ezekiel Emanuel, Peter Orszag, and those co-opted, “outside” elements typified by Larry Summers and Timothy Geithner, within Obama’s own present government. The essential characteristic of this combined set of circles is shown in its starkest colors by the President’s own health-care policy, which, like the followers of Friedrich Nietzsche and the Frankfurt School existentialists, makes no functional distinction, excepting the habit of talking, in policy of practice, as between human beings and the beasts.

I emphasize: that radically reductionist characteristic of such Liberals, such as the Eighteenth-century haters of a deceased Gottfried Leibniz and his calculus, is that they show no awareness of those creative powers of mind which distinguish the human individual, and also society, specifically, from the beasts. Those empiricist followers of Paolo Sarpi claim no actually given moral reason for their own existence, except to react to the fact that they do apparently exist. They know only what they believe that they experience, and the way in which they believe that they are reacting to it. Whether there is anything right or

*wrong in this, they do not know; they simply accept, as Smith vowed in his **Theory of the Moral Sentiments**, whatever direction their sense of pleasure or pain, and ignorant lust proffers.*

Thus, they have no more compunction than Adolf Hitler, or Britain’s Prince Philip, or former U.S. Vice-President Al Gore, in advancing the Obama health-care or comparable policies for deep “culling the human herd.” For them, as for Adolf Hitler, whether in word or only in practice, the human individual is like a beast: “it” has neither recognized soul, nor inherent right to life.

To understand the modern origins of such as those errant, Liberal ideologies, still today, we must examine the post-Renaissance interval of conflict between the modern Aristoteleans and the Ockhamite followers of Paolo Sarpi, the interval, most notably, of A.D. 1480-1648. These issues remain as of crucial importance in the field of physical science today, for the following, principled reasons.

Both currents of the “right-left” division between the neo-Aristoteleans and the followers of Sarpi, were rooted in a common, reactionary commitment to the attempted eradication of the science associated with mid-Fifteenth-century geniuses best typified by Filippo Brunelleschi and Nicholas of Cusa. The Aristoteleans

were devoted to efforts to turn back the hands of the clock to fond memories of the Roman Empire, or, medieval feudalism, whereas, Sarpi's Liberalism has produced its recurring modern leanings toward what is to be rigorously defined as the particular form of backward fanaticism called "fascism," as typified now by the Nazi-like health-care and related social policies represented by the behaviorist elements, and also Larry Summers, of the Barack Obama administration, so far.¹⁵

To understand these social phenomena of Liberal behaviorism, and their relevance for remedial treatment by science today, we must recognize that that dynamic in modern European civilization, which both the Aristoteleans and Sarpian reject, in their expressed view colored by an existentialist's fear or horror, was, and remains what is, for them, the frightening effect of the promotion of a scientific and Classical artistic culture of the type which emerged from the circumstances of the famed, great ecumenical Council of Florence. They hate the certainties of reason, such as those of Classical artistic composition and physical scientific progress; those hedonists hate that which they fear would block their attempted realization of their blind, bestial preference for lust.

Consider the hatred against the follower of the Florentine republican follower of Leonardo da Vinci, Niccolò Machiavelli, as by the adherents of both the otherwise mutually contending modern Aristotelean and Sarpian tendencies from the late Fifteenth through Eighteenth centuries leading into the horrors of the French Revolution and Napoleonic wars. They express hatred against those policies whose practice fostered the science-driven technological and related cultural revolution which had sprung up through the influence of the Golden Renaissance of Cusa et al.

What the Habsburg dynasties attempted to crush, as if in anticipation of Schumpeter's "creative destruction," had been the form of a contrary, revolutionary development in the domain of national cultural-economic-military practice, a cultural effect which even Habsburg-led great forces of imperialist brutishness could not sweep decisively from the fields of battle. Sarpi, who succeeded by freeing himself and his fol-

lowers from the traditional ideological and practical constraints of Aristoteleanism, thus emerged to triumph in introducing the form of imperialist force which, among other notable effects, created the conditions for the imperial triumphs of Anglo-Dutch, Sarpian Liberalism up to the present date. The modern Aristoteleans had hated, and attempted to destroy the practice of science; the followers of Sarpi worked, as the cases of Descartes and the Newtonians show, to destroy science from within, back then, and up to the present day.

Viewing that modern historical process from the standpoint of the teaching and practice of modern European science now, we are reminded of Aeschylus' **Prometheus Trilogy**, in which the Satanic figure of an Olympian Zeus forbade the use of "fire," a use of forms of fire such as nuclear-fission and thermonuclear fusion, a use of fire which separates the human species, essentially, intellectually, morally, and otherwise, from all lower forms of life. Such are the presently reactionary policies of the current British monarchy and many other governments, and, so far, the case of the U.S. Obama administration.

The most important point to be emphasized here, against the background of the immediately foregoing summaries, is that the reductionist presumptions of both the Aristotelean standpoint expressed by the *a-priori* assumptions of Euclidean geometry, and of Sarpian empiricism, reject, equally, the notion of the existence of actually knowable, universal principles of experimental science.

In practice, the Aristoteleans banned knowledge of efficient kinds of principles, in favor of those prescribed social conventions of behavior, in which the practice of mere statistics came to be substituted for actually scientific thinking, even to the present day. The Sarpian accepted the advantage, over the Aristoteleans, of the privilege of innovation in technology, but as in the case of the Liberals' fraudulent attacks on Johannes Kepler and Leibniz, there were attacks by them which were efforts to deny the existence of knowable actual principles comparable to Albert Einstein's emphasis on the authority achieved by Kepler's uniquely original discovery of the principle of universal gravitation. Those attacks embody a scientifically foolish denial of Kepler's unique contributions to the foundation of a competent modern science, a denial which pollutes the minds and mouths of a majority among putatively learned, sometimes screaming, academic sages up through the present day.

15. I.e., the current health-care policies of the United Kingdom and our United States, among others are copies of the Adolf Hitler regime's 1939-1940 mass-murderous policies, known then as "Tiergarten Vier," to be recognized now as the health-care policies of former British Prime Minister Tony Blair and the current U.S. Barack Obama administration.

So, even during my own adult lifetime, many leading scientists had frothed at the mouth in their knee-jerk-like defense of the hoax which attributed the original discovery of gravitation, which had actually been made, uniquely, by Kepler, to the foolish black-magic fanatic, Sir Isaac Newton.

This puts the required emphasis on Einstein's adducing the related, Riemannian implication of the existence of an always finite, but unbounded (i. e., anti-entropic) principle of *creative* self-development, accomplished through aid of man's action of discovery, as inherent in the universe: *man and woman, as in Genesis 1, in the image of the Creator.*

Modern Dynamics

According to Gottfried Leibniz, writing in the concluding decade of Europe's Seventeenth Century, in his revival of the ancient Grecian notion of *dynamis*, also known by the modern European name of *dynamics*, he was prompted by the evidence showing the viciously systemic scientific incompetence permeating the work of René Descartes, and, hence, of Descartes' offensive followers to the present day. This, of course, means the same Cartesian method which the Venetian Abbé Antonio S. Conti copied as a model for what were presented by Conti and his accomplice Voltaire as the doctrines associated with the English Black Magic fanatic Sir Isaac Newton.

This discovery of *dynamics*, by Leibniz, was traced by him to the crucial-experimental demonstration of a principle of "least action" by Pierre de Fermat.¹⁶ How-

16. This action by Leibniz, begun near the close of the Seventeenth Century prompted the reformed version of the original Leibniz calculus which had been presented to a Paris publisher in 1676. The enhanced version is known as the universal physical principle of least action, whose crafted articulation is associated with the collaboration of Leibniz with Jean Bernouilli. There was never any basis for crediting Isaac Newton with the discovery of an actual calculus. The later claims for a "Newtonian" calculus were presented by an also failed attempt by the Eighteenth-century accomplices of Abbé Antonio Conti and Conti's associate Voltaire. These included Abraham de Moivre, D'Alembert, Leonhard Euler, Euler's protégé Legendre, and the pair of Laplace and Augustin Cauchy, et al. The origin of the Leibniz calculus was chiefly



The revival by Gottfried Leibniz (left), at the end of the 17th Century, of the ancient Greek notion of dynamis, or dynamics, in opposition to the scientific incompetence of René Descartes, and black magic fanatic Sir Isaac Newton (below).



ever, modern dynamics as introduced by Leibniz, was, at the same time, a faithful echo of the ancient Classical Greek and related notion of *dynamis*. These notions of physical science, are, essentially, antithetical to purely formal geometries such as the perversion crafted in the name of Euclid, and also Archimedes' erroneous notion of the quadrature of the circle and parabola.

The best contemporary presentation of the ontological implication of Leibnizian *dynamics*, was by Albert Einstein's defense of the role of Kepler's uniquely original discovery of universal gravitation. Einstein's praise of Kepler featured two most crucial points by him. First, the uniqueness of Kepler's discovery of the principle of gravitation, as in **The Harmonies of the Worlds**, and, secondly, the related point, that the universe is finite, but not bounded. To appreciate the depth of Kepler follower Leibniz's definition of modern dynamics, the following comments on Einstein's insight into Kepler must be considered here.

the influence of the discoveries of Johannes Kepler expressed in Kepler's **The New Astronomy**'s rejection of quadrature as a claimed principle of curved surfaces and of a general principle of gravitation in **The Harmonies of the Worlds**. The latter was also the origin of the development of elliptical functions by the contemporaries of Carl F. Gauss.

The most essential underlying distinction of both Kepler's discovery, and Einstein's treatment of that discovery, is that sense-perceptual evidence represents nothing better than the shadow which the actual, unsensed universe casts upon the human powers of sense-perception. The relevant function of the human mind, is to adduce the reality which corresponds to the changes adduced from a reading of the shadows.

So, in Kepler's uniquely original method of discovery of the general principle of gravitation encompassing the considered subjects of the Solar system, the crucial character of the evident contradiction between the visual sense of the system, as through the naked eye and telescope, is juxtaposed with the contradictory harmonic composition (i.e., hearing) of the organization of the system's motion. Neither sense contains the principle of gravitation in itself; it is the proof of the systematic nature of the contradiction between the two notions of sensing, which provides insight into the true organization of the universe as a system.

This discovery by Kepler echoed his preceding discovery of the principle of the opposition of the planetary orbit of Mars to that of Earth, Kepler's emphasis on the rejection of the notion of the generation of curved motions such as the quadrature of the circle, as rejected by Nicholas of Cusa, and also that of the ellipse. Thus, both Filippo Brunelleschi's use of the physical principle of the catenary as the principle of design of construction of the cupola of Florence's **Santa Maria del Fiore**, and Cusa's rejection of a Euclidean ("a-priorist") notion of the quadrature of the circle, typify the role of non-Euclidean formal geometry as characteristic of the physical geometries, as that point is illustrated by the Leibniz-Jean Bernoulli crafting of the anti-Euclidean principle of universal physical least-action.¹⁷

Hence, Kepler's uniquely original discovery of

the principle of gravitation.¹⁸

Einstein added an explicit statement, by him, respecting a second, still higher principle. He added to Kepler's own explicit discovery of universal gravitation the conception, that: *the universe is finite, but not bounded*. Einstein restates, thus, the universal physical principle of anti-entropy. In effect, the universe is, in effect, constantly reinventing itself on a yet higher level of existence.

In short, the notion of a "second law of thermodynamics" is essentially a mere piece of bunk which was concocted in known history as a by-product of the so-called "oligarchical principle" which Aeschylus illustrated in his **Prometheus** trilogy: as that principle of evil expressed as the prohibition of mankind's use of "fire." This is the notion of banning of fire as expressed by the character of the drama's Olympian Zeus and also as the doctrine of the curiously evil Apollo-Dionysos cult of Delphi.¹⁹ Or, to put the point more simply, man is the only known living species which is distinguished by nothing as much as dependency upon the intentional use of the same fire expressed by life's dependency on the function of the radiant Sun, as expressed by chlorophyll.

All competent modern physical science is expressed, most notably, by the foundations which Bernhard Riemann's 1854 habilitation dissertation supplied to the revolution in modern physical science, as typified by the subsequent work of Albert Einstein and Academician V.I. Vernadsky, in establishing a body of science premised upon the general principle of anti-entropy, a principle which is reflected in Einstein's emphasis on the "unbounded" universe of Johannes Kepler.

Otherwise, there are three most commonplace expressions of the role of the anti-entropy of a thus-unbounded physical space-time, that within the domains marked out by the work of the Riemannians Einstein and Vernadsky. In the lithosphere and biosphere, a universal principle of characteristically unwitting anti-en-

17. I.e., as "anti-Euclidean," rather than the merely "non-Euclidean" geometries of Nikolai Lobachevski and Jonas Bolyai. All competent physics is expressed by natural anti-Euclidean curvatures and their derivatives, as in the case of Kepler's equal areas, equal times, and Brunelleschi's use of the catenary as a principle of physics. Kepler's discoveries, which echo the thematic rejection of a-priorism in Cusa's **De docta ignorantia**, should be recognized in the opening two paragraphs and solitary concluding sentence of Bernhard Riemann's 1854 habilitation dissertation, and also Leibniz's 1690s attack on the principled fallacy of those anti-scientific presumptions of Descartes which have been carried over into the systemic features of the work attributed to Newton.

18. All attempts to replace Kepler's discoveries by pro-Newtonian neo-Euclidean statistical mathematics, belong to the same general category of physical incompetence as the Euclidean geometries from which modern positivist concoctions in mathematics, such as those of Ernst Mach and Bertrand Russell were derived.

19. It is therefore most notable that the early-on positivists Rudolf Clausius and Hermann Grassmann should have prompted Lord Kelvin et al. to propose the absurd dogma known as a "second law of thermodynamics." Defender of **Genesis** 1, Philo of Alexandria's denunciation of the Delphi cult-linked Aristotle is relevant in the domain of Judeo-Christian theology.

tropy prevails in such expressions, as evolutionary development of types of inanimate and living species; in the noösphere, it is expressed as the conscious expression of the human individual will.

It is the willful aspect of the creative powers of discovery of matters of principle, unique to the individual human mind, which defines the quality of human knowledge which that mind's powers generate as the discovery of principles underlying the manifestation of systemic distinctions such as Kepler's **The Harmonies of the Worlds**. This is a creativity which exists only among human individuals, not in lower forms of life. Yet, it would appear that the human mind is, biologically, merely a higher form of evolution of the brain-system's function than that of the higher apes.

In the presently following paragraph, I concentrate attention on the nature of the distinction of the creative powers of the human mind presented by the characteristically distinctive type of behavior of the healthy state of a member of the human species. The following several paragraphs situate that part of the discussion.

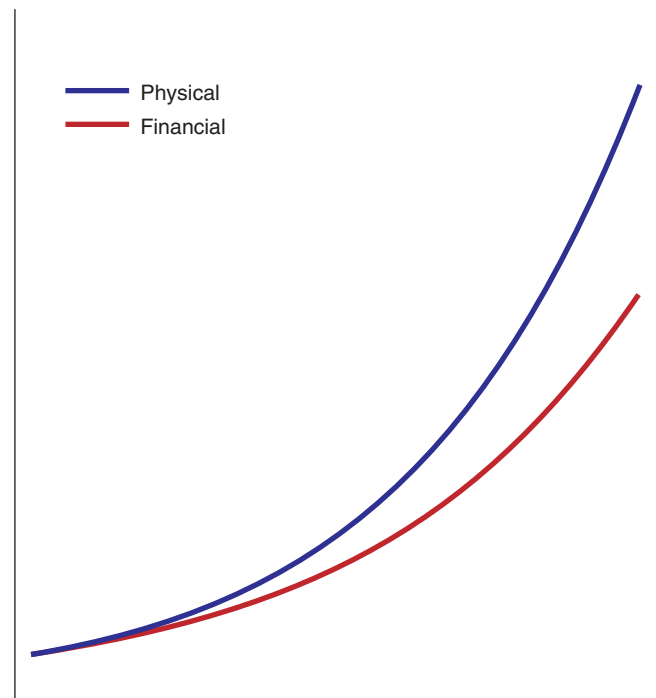
The question is thus posed: is human creativity a product of the function of the evolution of the brain, or, is it the case, that that development of the human brain, as distinct from that of apes, provides a medium which has an appropriate resonance, as a tool, for the creative cognitive functions?

On that account, there is very strong, if presently unsettled evidence in favor of the latter presumption. In the meantime, what is already clearly demonstrated is that the connotations of the customary empiricist notion of "sense-certainty" have no actual claims to the science of human individual creativity, but have a great deal to do with the functional notion of creativity which we are obliged to adduce from the relatively immortal role of competent physical science and from consideration of the efficiency of Classical modes in artistic creativity. In fact, all truly valid scientific creativity, such as that shown by Nicholas of Cusa and Kepler, depends upon the prompting carried over from Classical artistic modes of creativity, such as Classical modes in poetry and music, rather than mathematical-physical functions as such.

The considerations which I have summarized in the immediately preceding paragraphs, have crucial physical significance in any competent efforts to understand those characteristics of a science of physical economy which implicitly underlie the function expressed by the historical features of either the "Triple Curve" charac-

FIGURE 4

The 'Dual Curve' Function



teristic of a monetarist system, or the alternative "Double Curve" of an approximately global fixed-exchange-rate credit-system (with the monetary system removed).

Having said that much up to this point, let us now focus on the subject of that passion for the conquest of the unknown, which drives the creative impulses of what we should recognize as Classical art and science.

III. Dynamics: The Passion for the Unknown of Nicholas of Cusa

The most poisonous among what might be the adopted, moral failures of the modern classroom's, or comparable views on the subject of the nature of discoveries of either physical or Classical-artistic principles, is the assumption that *claimed discoveries of universal principle* might be treated as secretions of deductive thinking.

The fact is, that, just as the chemical composition of the array of chemical elements and isotopes of the Solar planetary system, reflects the generation of higher ranking elements of the periodic table of chemistry, higher



NASA, JPL-Caltech, SINGS Team (SSC)

"All net progress in human existence is a product of breaking through every level which could be adduced from the earlier state of the relevant part of the universe, progress defined as that which has been born, like the mind of a child, from the domain of the previously unknown." Shown: NGC 1097, a spiral galaxy with a central eye.

than those which are reported from observation of the body of the Sun itself, so, creativity exists only "outside" the domain of what had existed under what had been known as preceding, *reductionist* states of local nature. Similarly; all net progress in human existence, is a product of a practice of breaking through every level which could be adduced from the earlier state of the relevant part of the universe, from progress defined as *that which has been born, like the mind of a child, from the domain of the previously unknown.*

That is not yet sufficient. Exploration can mean either discovery of a previously unknown principle, or, simply, the useful recognition of a principle which had already been not only known, but, whether consciously known, or not, was already a functioning part of the social processes at work. The distinction is that recognized by the friend of the Christian Apostle Peter, Philo of Alexandria, who denounced the Aristoteleans' inhuman denial, contrary to **Genesis** 1:26-28, of the Creator's power of continuing creation, as extended to the powers and duties of mankind.

The standard, anti-Platonic, Aristotelean teaching, which was attacked by Philo, was the false notion that the universe is a fixed creation, such that even the Creator could not modify the universe, once it existed. The relevant facts are, principally, the following: a.), that, could that reductionist teaching be assumed to true, then, b.) neither the Creator, nor man, would have had the power to act upon the established universe once it were created. There are two theological comments to be emphasized in that connection.

First, obviously: whose will would run the universe then? Satan's? Dostoevsky's legendary story within the story, concerning the Grand Inquisitor, perhaps? Or, contrary to Aristotle, is creation a continuing process of transition to the generation of successively higher states of being for humanity itself, as for the universe otherwise? In the latter case, does this not correspond to the case, as the famous scientist and follower of Bernhard Riemann, Albert Einstein, emphasized his reading of Kepler's uniquely original discovery of a universal principle of gravitation, that the universe, while *finite*, is nonetheless *unbounded*?

A related consideration, is the conclusion which is a not untypical rabbinical proposition, that God's decision on when to send the Messiah, is not pre-set, as if by a fixed schedule of a railway time-table. That is also good physical science.

Therefore, we must trace the source of Einstein's appreciation of Kepler's persisting genius on this point, through examining a certain, crucial contribution by a great follower of Kepler, Gottfried Leibniz. Consider the implications of Einstein's identification of Kepler's universe, as "finite but unbounded," as that is to be defined in the light of Leibniz's definition of modern *dynamics*.

Thus, the existence of the universe is a *process of continuing creation*, as Albert Einstein emphasized in defining Johannes Kepler's discovery of a general principle of Solar-systemic gravitation: as describing a reflection of a "finite but unbounded," and, therefore, *inherently anti-entropic* composition of our universe as being explicitly contrary to that fraudulent "Second Law of Thermodynamics" which was promoted by

such rascals as physicist Rudolf Clausius, the mathematician Hermann Grassmann, and Britain's Lord Kelvin.

The question thus placed before us here, is: "How are such conclusions as my own here, as expressed in the form of a general law of the universe, applicable to the human condition?" The answer to such questions, was already supplied in such ancient locations as the ancient European physical science of *Sphaerics*, whose principle was known as *dynamis*. That was the principle of *dynamis* from which all competent physical science is derived, a principle expressed by that name of the *dynamics*, which Gottfried Leibniz has adopted for all competent modern science and Classic art, now.

We proceed, then, as follows.

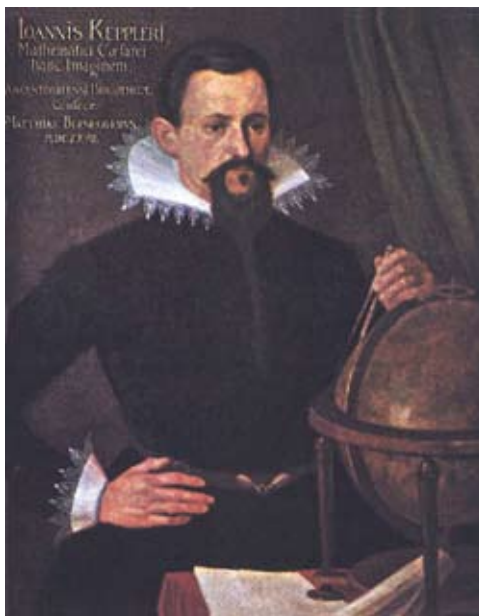
Specimen Dynamicum

For the informed layman, among the most convenient, presently published arguments from Gottfried Leibniz's own writings to that effect, we must include that which has been presented by a contemporary editor Leroy Loemker under the title of "*Critical Thoughts on the General Part of the Principles of Descartes*,"²⁰ a Leibniz writing which Loemker has dated to 1692.

For my own part, I consider Leibniz's argument there, first, in the light of experimental physical science, and, second, as the notion of *dynamics* is extended to the principles of human behavior, as this was done by Percy Bysshe Shelley in the concluding paragraph of his own **A Defence of Poetry**.

That matter is the core of the subject which encompasses the principal subject-matter of this, my present paper, in its entirety.

These remarks are to be read, courtesy of that same editor, as in company with Leibniz's 1695 **Specimen Dynamicum**, and as also other writings by Leibniz on the same matter, all during that same concluding decade



"Kepler's discovery of the orbit of the planet Earth, and, his uniquely original discovery of the general principle of gravitation in the Solar system, are typical of the dynamics of modern physical science."

of the Seventeenth century, and beyond.²¹ From out of these and related developments in Leibniz' work as a follower of Leonardo da Vinci, Kepler, and Fermat, Leibniz made crucially important contributions to the freeing of modern science from those vestiges of systemically fraudulent Euclidean formalism, and, also, freeing the teaching of science from related corruptions represented not only by the reductionist traditions of both Aristotle and the followers of Paolo Sarpi, but also their own Seventeenth-century follower René Descartes. It was the critical aspect of Leibniz's scientifically crucial demonstration of physical principles, as he had emphasized this in experimental physical proofs which had led into his adoption of the principle of *dynamics*, a Leibniz

discovery which was later expressed by Albert Einstein's defense of the genius of Johannes Kepler, as in Einstein's own characterization of the universe discovered by Kepler as being "finite and yet unbounded."

These considerations are not confined to experimental mathematical physics; they are matters of the function of human creativity, functions which lie, essentially, more within the subtler domain of the functions of Classical artistic composition and performance than mathematics as such. They are matters of universal principle, a subject which does not exist within the bounds of mathematics, but are to be found only in those processes which bound mathematics, but which

20. Leroy E. Loemker, **Gottfried Wilhelm Leibniz: Philosophical Papers and Letters** (Dordrecht: Kluwer Academic Publishers, 1989).

21. This work of Leibniz leading into his original Paris, 1676, discovery of the calculus, owes much to his close Paris association with Christian Huyghens, under the patronage of France's Jean-Baptiste Colbert, with large obligations to works of Leonardo da Vinci, Johannes Kepler, and to that Pierre de Fermat's discovery of the principle of universal least action, which led to the establishing of the principle of universal physical least action, which was done with the collaboration of Jean Bernouilli. The prompting of Leibniz's development of the calculus itself was, as acknowledged by Leibniz himself, due to the prompting of one of two explicit proposals for such a development presented by Johannes Kepler. The first such challenge by Kepler was met by Leibniz; the second, the development of the notion of elliptical functions, was accomplished by the contemporaries of Gauss.

are not expressed within it.

Such was Leibniz's restoration of the ancient principle of universal, dialectical, physical science, *dynamics*, which I emphasize as being then known to the ancient Classical Greeks, but appearing now in its presently known form as the universal principle of modern *dynamics*. This means *dynamics* as the underlying principle of all competent expressions of modern physical science, and also representing the distinction of Classical artistic composition, such as that of Classical poetic metaphor, and also the general functions of human, as distinct from the systemically bestial behavior of such expressions of reductionism as the intellectual moral and scientific depravity of modern existentialism, such as that of the post-World War II European Congress for Cultural Freedom and the so-called "Frankfurt School."

Kepler's discovery of the orbit of the planet Earth, and, his uniquely original discovery of the general principle of gravitation in the Solar system, are typical of the dynamics of modern physical science.

The consequence of any thorough exploration of the implications of that, is that that principle of creativity which underlies all valid discoveries of science, is located not in deductive forms such as formal mathematics, but in the principles of creativity specific to the domain of Classical artistic composition, as the latter consideration is presented in Percy Bysshe Shelley's **A Defence of Poetry**, particularly in the summation which Shelley presents as his concluding paragraph of that work. Our included, necessary subject in this present report is congruent with the point of universal principle presented by Shelley in the concluding paragraph of his **A Defence of Poetry**.

As I have emphasized in earlier writings published on this subject, *the existence of a universal principle, such as Kepler's uniquely original discovery of universal gravitation within the Solar system, can only be identified by the force of a collision between the implied effects of two, or more, contrasted, conflicting readings of sense-perceptions.*

Before resuming this discussion of Einstein's role here, we are obliged to choose this point in the report to treat the matter of the fact that a paradoxical contradiction among two or more qualities of sense-perception is required to locate the effects of experience in the real universe. This brings us to the crucial implications of Leibniz's use of the terminology "Specimen Dynamism."

Our sense-perceptions are not explicit representations of reality. They are, as I emphasized repeatedly in relevant published writings, merely a kind of "meter readings," rather than what the meter readings, like sense-perceptions, represent. The cause of what is "real" in the universe is not interactions among mere meter-readings. However, man's predicament, is that our species' access to knowledge of the actual universe on which we are implicitly acting, and which is acting upon us, is not direct. However, while our meter-readings do not act efficiently upon the real universe, the universe does act upon our meter-readings. Here lies the remedy for our lack of any direct knowledge of the universe otherwise.

Thus, take as an illustration, the fact that Kepler's uniquely original discovery of the universal principle of gravitation occurred as an ironical contrast of the reading of the Solar orbits premised on sight, with the ordering of the relationship among the planets' relative motions according to the sense-perceptual brain-function underlying *the idea of hearing, harmonics*, defined virtual "points" of contrast between the notions of the functions of sight and hearing.

This contrast showed that neither of two sets of sense-perceptual-linked experience defined the ordering of the planetary orbits within the Solar system. Therefore, there existed, in fact, no simply mathematical solution for the paradoxical margins of apparent error of observation. This paradoxical quality of the situation defined a control over both of the sets of sense-perceptual conjuncture, a principle of the universe, which lay outside the domains ostensibly expressed by the mere mathematics of sense-perceptual imageries.

The principal current obstacle which prevents the typical modern reductionist from being able to understand such conceptions of actual, experimental physical science, is the explicitly irrationalist doctrine of Paolo Sarpi and such among his followers as the Adam Smith of his **Theory of Moral Sentiments**, which excludes, and that militantly, the existence of knowable universal principles.

Hence, for Einstein, the Solar system, when considered as a system, is a case of the visible bounding of (sense-) perceptions by the invisible reality which has no organ through which to speak directly to mankind. We say, therefore, that the situation is "bounded" by an efficient function which is not directly visible to the senses, but whose effect is an efficient demonstration of that unseen object's efficient presence as a

physical principle.

So, the Solar System, as a system, is bounded by an efficient principle which, in and of itself, is not directly accessible to customary sense-perception.

This leads to a second layer of paradoxes.

That fraud of Aristotle, is what is embodied in the notion of a Euclidean geometry as a system distinct from the proofs of an efficient physical science, a feature of Aristotelean ideology carried over, in effect, into the modern neo-Ockhamite dogma of the followers of Paolo Sarpi.

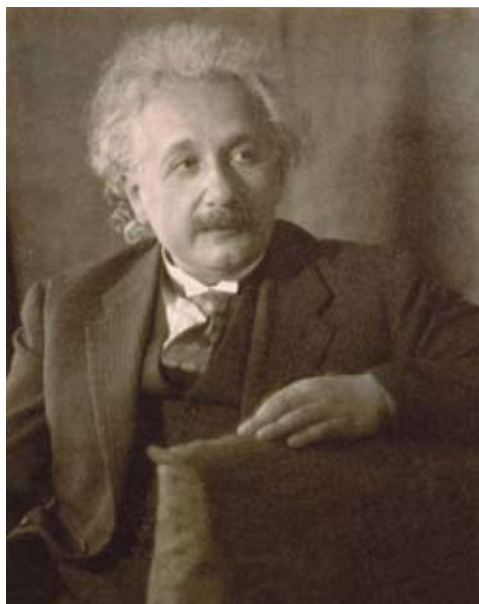
Einstein's Universe

That much said in preparation for the principal subject at hand in this present chapter of the report, now turn to Albert Einstein's own treatment of the subject of Kepler's discovery of universal gravitation, as essential for grasping the relevant, but often overlooked implications of Leibniz's discovery, and definition of dynamics. Focus on Einstein's characterization of Kepler's general principle of gravitation as defining a "*finite, but not bounded*" universe.

There are two points made by Einstein in that fashion.

First, Einstein says, that the Solar system discovered by Kepler defines an ontologically "finite" universe. Second, Einstein adds, that, nonetheless, that universe is "not bounded," which is to say, without "external limits," and, also, implicitly, without the permitted existence of "other universes." That is to emphasize, that what does not affect our universe, does not exist for anything, or anyone, at any past, present, or future time, in this universe of ours.

I must emphasize the just-stated point, that that latter distinction also means, that there are no efficiently existing universes other than that which we inhabit as our own. The obvious question is: "What is that which prevents our universe from being bounded?" The answer to the latter question is best supplied from the vantage-point of a science of physical economy. I mean, that effect of mankind's physical-scientific revolutions



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For Einstein (1879-1955), "neither space nor time, is an independent dimension in and of itself, or combined: We dwell in relativistic physical space-time, in which mankind's discovery of relevant qualities of experimentally demonstrable universal principles, is expressed as relativistic physical space-time."

which have generated newly "discovered," truly universal physical principles.

In Einstein's terms, this means that neither space nor time, is an independent dimension in and of itself, or combined: we dwell in *relativistic physical space-time*, in which mankind's discovery of relevant qualities of experimentally demonstrable universal principles, is expressed as relativistic physical space-time. This signifies "Riemannian physical space-time;" it means a universally anti-entropic, physical space-time, with a science of economy to match.

This latter feature is not a likeness of the matter of the stuff which used to be dropped off at the door with the morning's milk-delivery. It signifies the Riemannian physical space-time specific to the physical universe of such as

followers of Riemann as Einstein and Academician V.I. Vernadsky.

The best view of this marvelous feature of mankind's place in our universe, is shown by the role of that effect of increase of energy-flux-density, the which is expressed as higher qualities of the equivalent of "fire," a notion which was given the name of "increased energy-flux density," as in the deliberations of those such as the Fusion Energy Foundation, during the course of the 1970s and 1980s.

The same kind of progress, from relatively lower, to relatively higher states of being, or action, is met in the upward evolutionary ascent of biological forms, through stages of biological evolution, into the realm of modern mammals such as the human species as considered only biologically. Life as it exists at any point in physical-space-time, is a finite domain, but, by virtue of what were usefully identified as Riemannian evolution, is not a bounded domain. The expression of a generalization of this kind of process, is increase of an effect corresponding to a notion of universal anti-entropy as a law of the universe.

With mankind, however, the power of the human mind to generate discoveries of principle, provides the

human species, uniquely, with the means to effect willful forms of efficient changes of principle within the universe. Hence, the evidence compelled Academician V.I. Vernadsky to make what was ontologically, a systemically Riemannian distinction between the existence of the Noösphere and the Biosphere.

Such experimental and related considerations, suggest a universe of the known Lithosphere, Biosphere, and Noösphere which is, inclusively, intrinsically anti-entropic: which is to say, a universe whose intrinsic form of existence is the direct opposite of anything resembling the dubious doctrine called by such names as “a law of universal entropy,” or a so-called “Second Law of Thermodynamics.”

The spectacle of a Riemannian notion of the self-development of the universe, created through the contrasts generated by such systemically anti-entropic processes, defines the “unbounded” characteristic of an always, endlessly finite universe, as Albert Einstein had read Kepler.

A Science of Physical Economy

When we employ the term “physical economy” in the sense I have identified it here, thus far, “physical” refers, not to the cause of the action of change to a higher principle, but, to the physical effect expressed, as a change, within physical-space-time. This effect is to be measured, ultimately, as a change in the potential relative population-density of a subject, as “subject” is typified by the case of a nation, society, or region. That relevant change of viewpoint from within the individual human mind, identifies the generator of any competent discovery of a universal physical principle, a principle which actually occurs as a phenomenon of that domain of metaphor, like that of Classical artistic composition, in respect to which the active principle of action is situated.

This is to emphasize human intellectual action of a form consistent with the idea of a discovery of, or improvement of the notion of a principle of human actual creativity. This is coherent, as a form of action, with the Classical notion of metaphor.

This argument amounts to the same thing as saying, that all actual human creativity occurs, as an activity, in the domain of the Classical artistic mode of creative irony, such as the action of Classical poetic and musi-



As expressed by the Apostle Paul, in I Corinthians 13, sense-certainties are not the substance of the universe, but rather, shadows cast by the universe on the human sense-perceptual apparatus. Shown: Rembrandt van Rijn, “St. Paul at his Writing Desk” (1629).

cal-contrapuntal metaphor in the tradition of the founder of all competent musical composition, Johann Sebastian Bach, rather than being a product of the formalities of mathematics.

I have often argued, therefore, that it is the failure of those who are fanatically attached to the foolish notion that mathematics as such is the legislator of the process of generation of discoveries of universal physical principle, which tends to drive specialists, especially so-called “positivists,” in such a profession, insane. The followers of Ernst Mach, even of David Hilbert, are already a menace in this sense; the followers of the more radical Bertrand Russell, tend to be the worst, morally, as otherwise.

This problem of deductive formalism, as typified by the Aristoteleanism of Euclidean geometry, can be efficiently understood only from the vantage-point of viewing mathematical-scientific creativity as a fruit of that quality of creativity which we are to associate with

the same Classical artistic culture associated with Leonardo da Vinci, Raphael Sanzio, and Rembrandt, or Johann Sebastian Bach, Wolfgang Amadeus Mozart, Ludwig van Beethoven, and Friedrich Schiller. In other words, as located within *the domain of what is rigorously definable as a role of metaphor within the practice of Classical modes of the creative imagination.*

The relevant task is the selection of the experimental demonstration which demonstrates the efficiency, or not, of the conjecturable principle.

To be clear on this point in this present location, permit me to repeat the argument which I have delivered, earlier this year, on the subject of a science of physical economy. I interpolate the following, crucial observation on systems of what pass for scientific thought. The relevant systems can be reduced to four types: 1.) Crude notions of sense-certainty (“naive materialism”); 2.) Aristoteleanism, including Euclidean schemes; 3.) The quasi-Aristotelean, empiricist moral “indifferentism” of Paolo Sarpi, as identified in an applied form by Adam Smith in his A.D. 1759 **Theory of the Moral Sentiments**; and, 4.) Platonic method, as best typified in its modern form by the Riemannian physics of Albert Einstein and Academician V.I. Vernadsky.

These four systems of thought are to be seen from the perspective provided, solely, by the opening chapter of the Biblical **Genesis**, and may also be read, on a deeper level, for reasons I shall explain, once again, in purely scientific terms, as in relevant earlier among my publications, as expressed here in the Christian Apostle Paul’s **I Corinthians 13**.

In saying this, here and now, we are, implicitly, referencing the inherent fallacy of naive sense-certainty. Sense-certainties are not the substance of the universe, but are shadows cast by the universe on the human mental sense-perceptual apparatus. Substance does exist, indeed; but that is not what sense-perception actually “sees.” Rather, we interpret the shadows cast by reality, as sense-perceptions, and must, then, reconstruct in our minds the efficient, image-like notion which has cast the perceived mere shadow of efficiently physical reality.

All valid human creativity, as in the instance of the discovery and proof of universal physical, and also Classical-artistic principles, is located, in this way, within the ontological domain of the imagination. The indispensable key to this insight, lies in the recognition of the fact, that that form of the imagination is not the

unreal experience, but, as in the characteristic ironies which define the essential character of all great Classical poetry, precisely the contrary. It is the imagery of sense-perception which is the fantasy, a fantasy in the sense that sense-perceptions are not usually unreal, but that their value lies in their role as the shadows cast by reality, shadows whose actually real objects of reference lie in a domain beyond the direct reach of sense-certainty considered, mistakenly, in and of itself. It is a domain which we, especially through working through both physical experiment and Classical artistic exploration of sense-experiences, are able to prove, in practice, as being the object which produced the shadows cast as sense-perceptions. This view of the role of the imagination is the true content of what is competently named as being “science.”

Here, for example, lies the essential, systemic difference between modern empiricism (as of Sarpi, Descartes, Adam Smith, et al.) and scientific knowledge. We believe in a knowledgeable, efficient reality which is susceptible, by the human mind, of what we find it convenient to define as proven “matter;” but, that in which we believe is not a matter of the naive individual’s blind faith in sense-perception. This is the essential principle of the Leibniz calculus.

The same point is to be extended to the generality of scientific work, beyond the reach of direct sensory access to experience through experimental methods. Mankind supplements the sense-faculties by the use of instruments, such as scientific instruments, such as microscopes, electron microscopes, and so on. These synthesized instruments are analogs of the function of sense-perceptions as such, which are devised to reach into the realms of the very small, very large, very distant, and also very dangerous. The methods of science as extended to the use of such instruments, are derived as extensions of our mastery of the “de-coding” of those shadows called sense-perceptions. Thus, in science, as, for example, in such beautiful modern cases as some of those provided by the work of Pasteur, Einstein, and Vernadsky, we touch the intention supplied by the Creator to the mind of man; we discover the meaning of mankind’s nature in a deeper and more powerful way than ever before.

All of this is, of course, something of which the pathetic, poor President Barack Obama knows nothing pertaining to the nature and intended destiny of mankind in general, or the individual human soul otherwise. Those who cause the death of human beings as a matter

of alleged convenience, as President Obama's so-called "health care" policies have done, have not the slightest conception of the nature, and natural rights, of the human being.

I have so repeated, thus, a crucial point I have made to kindred effect on some earlier occasions. All truthfully competent, human knowledge is a product of the imagination, as I have described the limits of the function of sense-perception immediately above. Yet, the developed powers of that imagination are our only access to actual knowledge of either the real universe which we inhabit, or of the true purpose of existence of the individual personality, that on the condition that he, or she can reach the state of practicable knowledge of one's true, proper destiny in one's own life's work.

Thus, the greatest scientists and Classical poets are the true theologians, since they dwell within that domain of the mind of which they speak. The image of Albert Einstein's relationship to his violin, points in precisely that direction. So, in this way, valid science is an expression of Classical artistic composition.

Evil & the Imagination

Admittedly, there are bad religions, and also powerful religious convictions which have nothing to do with the matters of the Creator. I refer, thus, to the concept of human immortality. I speak of the individual's most compelling, inward conviction associated with the sense of an immortal role of the individual personality within a range of time long beyond one's demise as a mortal creature. I speak of a living builder of the future, better condition of future mankind, as the creative poetic powers of bold physical-scientific progress speak to the future in which the deceased mortal man or woman lives by virtue of intended effect, as now, as by the intention which lives on, as still an efficient power for the actuality of change, within the deceased scientist, a persisting conception which is capable of extend-



EIRNS/Ali Sharaf

The discoveries of great Classical artists, such as Johann Sebastian Bach (1685-1750), live, even millennia after the death of the discoverer. Shown: statue of Bach, St. Thomas Church, Leipzig, Germany.

ing the habitat of man to include that of a future Mars.

Think so of great scientific-revolutionary discoveries. The evil of Britain's wicked Prince Philip's promotion of global genocide, is to be seen as an expression of one who acts as something less than human, as man reduced to the passions and intentions of the quality specific to the beasts. He talks; parrots do. He has passions; so do the jackals and hyenas. He is attached to some creatures of his breed, but, so does the badger who just slaughtered the inhabitants of that henhouse.

So, think of scientific principles, whose discovery lives even millennia after the death of the discoverer. Think of great Classical art, such as that of Leonardo da Vinci, Raphael Sanzio, Rembrandt, Johann Sebastian Bach and his followers of the great Classical school, all of whose work, of each of those, will continue to inspire when all of today's intellectual pollution with the trash of so-called popular

sexual entertainments, and evil abstinences, alike, have passed on, at last. It is only when we have attained, within ourselves, a sense of an identity lodged within a simultaneity of eternity, that we are truly, fully human.

It is only when we, each, as living mortal human creatures, can live our lives as in a moment of a permanently immortal experience of our intention in being part of mankind's role in the immortal universe, that we can become truly happy with the mission of an admittedly brief experience of being alive.

It is when we have escaped the illusions associated with the imagination of space, matter, and time as entities, to see ourselves as we are designed to become, eternal travellers in physical space-time, and are enabled to locate our realization of happiness in our mission, that we have begun to be truly happy. Therefore, I say, "On to Mars!" The mission which you have helped to make attainable, can never be taken away from you.

Think of those great minds of what we know as the Classical Greek of Plato and his relevant predecessors, a past which lives within all the achievements of European civilization today. Think too, of the evil of past times, whose effect has yet to be removed from our legacy.

Think about the concept of national banking within those terms of reference.

Science & Morality

The essence of progress, is investment in the improvement of the future. This requires a state of mind, like that manifest as the state of mind of the leading settlers of the Plymouth settlement in what became known as Massachusetts, and in the Massachusetts Bay Company under the leadership of the notable Winthrops and the Mathers, until the time of the catastrophic roles of England's King James II and William of Orange.

The progress contributed in such cases as those settlements, had two, complementary features. One, was the great improvement, as through aid of the establishment of a credit system, rather than a monetarist system, which impelled the rate of physical, scientific, and social improvements within the territory and among the population of Massachusetts at rates far beyond those realized within England during the same lapse of time. What showed itself to have been the greatest part of the accomplishment bequeathed by the Seventeenth-century colony to the future United States, was not only the physical gains promoted through the Massachusetts credit-system of scrip, but the embedding of an intention whose persistence produced the greatest reform experienced by the world since that time, the establishment of the constitutional form of the institutions of our United States.

To state this case in convenient, but not in the misleading terms of reference to today's required policy-shaping, we have the following points to be made on background.

The essential, formal fraud of Aristotle and his followers, was summarized by great intellects such as Philo of Alexandria. Aristotle's fraud is fairly summarized as being premised upon presumptions which were, in turn, premised implicitly upon blind faith in sense-certainty.

This fact is most clearly shown by the case of the corrupted restatement of previously established concepts of geometry by Aristotle and his follower Euclid, as in the latters' attacks on the earlier, actually compe-

tent, leading Greek science of such as Archytas (e.g., the constructive duplication of the cube) and Plato. There is no case of a valid mere description to be adduced from a geometry based on Euclid, which was no better than being part of a compilation of corrupted descriptions of what had been, previously, actually legitimate discoveries made by others, that through the time of Plato.

The *a-priori* assumptions of Euclid, are the viciously false distinction of all the commonly taught, so-called plane and solid geometry. The derivatives of such reductionist teachings in mathematical physics, are best noted as being intrinsically false in the way identified by Bernhard Riemann in the opening two paragraphs, and concluding single sentence, of Riemann's 1854 habilitation dissertation. That dissertation is premised, throughout, on the revolutionary principle on which all competent currents in modern science, respecting fundamentals of method, have been subsequently premised, as by Albert Einstein and Academician V.I. Vernadsky.

My own special authority in this matter, is derived from what has persisted as the still virtually unique competence of my work as an economic forecaster, in which I have expressed the reflection of the underlying physical principles of the known universe within the domain of *a science of the role of specifically human creativity's role within the social processes of a physical economy*. At the present time, there neither is, nor could there be any previously, or contrary, available assessment of the principled roots of the presently ongoing, virtually terminal breakdown-crisis in process throughout the planet considered as a whole, except assessments cohering with my "Triple Curve" method of forecasting.

My own use of "The Triple Curve" as a representation of the essential specific, social features of a monetarist form of world or national economies, thus illustrates the definition just supplied here by me.

The origins of those widely accepted, but incompetent academic presumptions which I have attacked, are not to be treated as if they were products of science, but, rather, are products of the intrusion of a certain, irrationalist form of social prejudice into the domain of the teaching of science by academic and related institutions. These are institutions which are themselves the virtual serfs of those financier-oligarchical institutions which reflect the control over nations and their taught doctrines exerted by a globally ruling monetarist oli-

garchy. The professor of that type says, implicitly, if not out loud: “Personally, I am a scientist, and, privately, I might concede that your objection is interesting; but, my acceptance in my position within the institution I serve, depends upon grabbing my forelock whenever the financiers watching my own career, might be lurking within, or passing by my laboratory or classroom.”

Such lackey-like, professorial, or comparable qualities of behaviorism, are also found among elected political leaders once they reach the premises of the U.S. Congress.

That much said, to push the tainted customary ritual patter of the frightened professor out of the way. For at least this moment, let us presume that we are freed to consider the actuality of the role of the creative imagination in the progress of man. For this moment, let us go up, not like “the bonnets of bonnie Dundee,” but up from the brutish likeness of the apes.

What is creativity? Albert Einstein’s celebrated comment on the achievements of Johannes Kepler, makes the crucial point by identifying a universe which, as Albert Einstein emphasized, is both finite and yet unbounded. The proper name for that point is *dynamics*, as Leibniz had defined it. Turn attention, once more, to Einstein’s notion of the finite but unbounded.

IV. The Prospect Before Us

*This chapter’s principal topic here, is, again, the subject of the part played by **dynamics**, in opposition to the cult of pure evil represented by the symbolic figure of Isaac Newton and the fraud perpetrated in his name, not only in respect to the physical processes of economy, but also the cultural ones.*

The destiny of the world for the decade immediately ahead is, admittedly, presently uncertain; but, as in all the great, existential crises of mankind, either mankind will choose what I foresee as a present way of escape from a great dark age, or, this time, as the threat at the Copenhagen climate conference has shown, global society will experience a catastrophe beyond the belief of the living, that for a relatively long time to come.

Presently, there is still the option for civilization’s survival; I defend the only course of action, miracles aside, which I could foresee as preventing mankind from collapsing into a prolonged new dark age throughout this planet.

Only self-doomed fools will not accept that option. Unfortunately, there are a lot of such fools out there today! They suffer the delusion that, despite all current evidence to the contrary, their chosen way of life will somehow see them through even the presently onrushing, gravest folly in all of the world’s modern history

Today, the world remains within the grip of the still onrushing, terminal phase of the present world breakdown-crisis. To defeat this danger, we must understand the relevant nature of that crisis, and the possible remedy which it has become my honor to proffer: we must abandon the presently customary doctrines of practiced political-economy, in favor of an approach rooted in the concept of *dynamics* introduced to modern Europe by Gottfried Leibniz. To this end, two aspects of *dynamics*, as defined by Gottfried Leibniz, must be taken into account: both *physical dynamics* as Albert Einstein applied that method to Johannes Kepler’s discovery of the principle of gravitation, and also the *social dynamics* illustrated by Percy Bysshe Shelley in the concluding paragraph of his *A Defence of Poetry*. Ultimately, both are to be recognized as one.

First, review some essential definitions.

When Albert Einstein presented his view of Johannes Kepler’s discovery of the general principle of gravitation, in his **The Harmonies of the Worlds**, he introduced two leading qualifying observations. First, as I have emphasized in an earlier chapter, that the success of Kepler’s uniquely original discovery of a general principle of gravitation defined a *finite universe*. Second, that *that universe is not bounded*.

There is a third observation, made by me, that the knowledge shown in this matter, both by Kepler and by Einstein, was necessarily subjective, which is to signify the human mind’s creation of the image of those two concepts, a finite universe, and an unbounded one, which are, when combined, an expression of the power of the human mind to know the nature of the universe it observes, and on which it must act. This is not merely knowledge, it is a form of action which is, itself, the principal driver of upward physical-economic development. *The essential productivity of the human species, is not located in the arm, but in the actions of the mind.*

That is a matter of *dynamics*, as Leibniz defined the modern use of that term. It is also the same *dynamics* whose meaning was expressed by Shelley in the concluding paragraph of his **A Defence of Poetry**. In that



The "Grand Inquisitor," as rendered in Giuseppe Verdi's opera "Don Carlo," is a figure of frankly Satanic evil, whose character is also embodied in the Spanish Inquisition's expulsion of the Jews, and in the guillotine of the French Revolution. Shown: "The Inquisition" (1816), by the Spanish artist Francisco de Goya.

closing portion of that work, Shelley has made a crucially important contribution to the understanding of what is to be generally considered as the *dynamics* of the subjective universe of God and man.

To illustrate the challenge before us, I have viewed Dostoevsky's fable of "The Grand Inquisitor" as a case of the challenge to be met on the subjective side of *dynamics*, as I treat Dostoevsky here. Dostoevsky expresses a significant view directly contrary to that of the humanist's optimism with which Shelley concluded his **A Defence of Poetry**, a contrast which helps to clarify the matter of the choices presently before us.

Leibniz has defined the crucial notion of *dynamics* as pertaining to a kind of physical space-time, in a view which is entirely contrary to the arbitrary, Euclidean presumptions of René Descartes. Physical space-time has an active characteristic, a universal principle of least action. So, Kepler, who reflects Nicholas of Cusa, and whose work is reflected in the work of Leibniz, had already defined an active principle of space-time, rather than action in empty space. So, Albert Einstein read the conclusions of Kepler's finite physical space-time, and saw the anti-entropic bias of an unbounded universe in a fashion coherent with the dynamics of Leibniz.

Whatever ironies presently lurk behind Dostoevsky's famous fable of "The Grand Inquisitor," my own view of the presently still existing options for mankind as a whole, presents us with the only decent outcome presently available to the world at large.

Despite the repeated evidence of the relatively unique validity of my forecasts, especially since the developments of August through December of 1971, the world has mainly drifted in the same direction, toward chaos which was, in fact, signaled by developments associated with the administration of a U.S. President Richard Nixon, in a pattern of worsening conditions from August 1971 through, and beyond October 1987. Looking back to the process as it has unfolded since the assassination of U.S. President John F. Kennedy, since that time, the United States and the United Kingdom, have led the world into a pathway of economic and subsequent cultural

failures of the trans-Atlantic community of nations. The physical-economic evidence of this extended decline toward worse, and worse, since that time, is beyond reasonable objection as to fact.

When I look back, personally, to the now more than eighty-seven years since my own birth, when I reflect on the record of the 1920s, and then the years of the U.S. Presidency of Franklin D. Roosevelt, the facts of history since the fateful April 12, 1945, show me, that with the death of that President Roosevelt, the direction of world history has been dominated, speaking in the sense of global dynamics, by a certain, so-called Anglo-American, monetarist interest, centered in the royal city of London, which has maintained its trans-Atlantic grip on the direction in this planet's affairs up to the present moment. Any examination of the trends, leading with actually physical-economic trends, since the assassination of President Kennedy, shows a pattern in both morals and economy which has been generally downward.

There is nothing which should be mysterious about either those facts, or respecting the physical-economic and related global trends which those facts reflect. The world, the trans-Atlantic world most notably, has been gripped by a process of so-called "creative destruction," which was expressed most sharply by the process of "creative destruction" so shamelessly carried out under British Prime Minister Harold Wilson. So, since the death of Franklin Roosevelt, there has been a trend which had been more clearly established since the assass-

sination of President Kennedy and the acceleration of the collapse of the economy of both the Harold Wilson's United Kingdom as the U.S.A. under the resonant, catalytic effects of the Warren Commission actions.

The application of my completely vindicated "Triple Curve" function, shows that there has been a long wave of net decline of the U.S. economy, a decline first expressed most clearly, in the erosion of long-term rates of depletion of existing investments in basic economic infrastructure since the turn of the mid-1960s.

This present phase of a downturn, which is centered in the trans-Atlantic economy since the mid-1960s, has not been a spontaneous effect of some arbitrary intervention, but a reflection of the essentially consistent trend of trans-Atlantic policy-making under U.S. and British political-economic domination by Wall Street and London since the trend was set by President Harry S Truman and Winston Churchill following the death of President Franklin Roosevelt. In other words, we are dealing with what is called, euphemistically, the globally powerful, political forces typified by the same London-New York financial establishment which reacted to the U.S. economic crisis of Summer 2007 with the "bail out" of, most notably, the proverbial "Forty Thieves" of London and Manhattan, since, most emphatically, the relevant cases of Presidents George W. Bush, Jr. and Barack Obama.

The crucial point to be presented at this present moment, is that only a replacement of that present political leadership which is controlled by the presently still hegemonic financier interests, will make it possible to redirect the political policies of, especially, the trans-Atlantic community, in such a fashion as to rescue civilization from the presently immediate threat of a sudden, chain-reaction collapse of the world's economic and social systems into a "prolonged new dark age."

Thus, all the presently visible options for a foreseeably decent future outcome of the presently onrushing world economic-financial crisis, contrary to what I have identified as a pathway to urgently needed remedies, have already shown themselves to be worthless.

The Remedy at Hand

So, during the course of this present calendar year, a presently small, but significant, increasing number of prominent thinkers from around the world, have come to realize the unique competence of my own time-tested method for relatively long-range economic forecasting. I mean the method of the so-called "triple curve," a

conception which I developed to portray the dynamics of economic crises under the present world monetary system, in the neatest, efficient way.

In fact, on this account, already, repeatedly, all contrary views of economy contrary to my own, have failed, that miserably. In fact, to take into account even earlier relevant experience, the superiority of my method of forecasting was already presented in a celebrated debate between me and the internationally prominent Keynesian, Professor Abba Lerner, at New York's Queens College, nearly two generations ago, on December 2, 1971.

The importance of that fact for the purposes of the subject of this present report, is that "economic value" is an expression of a specific, unique distinction of the human personality from that of the beasts. How we treat mankind, and the proper choice of value which is to be presented as *ontologically* unique to mankind, is at the root of any sane conception of either the world's economy as such, or of those notions of value which should be associated with the very idea of economy.

To restate that point: this notion of mine of economic value, underlies what, in today's retrospect, has been a spectacularly successful approach to economic forecasting, an approach which points, specifically, to those creative powers of the individual human mind which are lacking in any other presently known form of life in the universe than mankind. Those values are essential, and therefore moral ones respecting their consequences, are values bearing on the requirements which must be satisfied if there is to be a timely increase of the innate, moral powers of that human creativity, on which not only the increase of productivity, per capita and per square kilometer, depends, but also nothing less than even the mere maintaining of a constant level of the productivity so measured.

The Force of Entropy

The idea that economic value is securely determined by the action of some sort of financial "market," has now been demonstrated to have been worse than nonsense.²² What we must produce, is not financial prof-

22. The actually profitable period of the 1945-1963 economy is to be credited, largely, to the benefit of a policy of "fair trade" pricing, rather than "free trade." It was the changes in policy which took over after the death of President John F. Kennedy, including the Indo-China war, which started the decline launched with increasing force under Presidents Nixon and Carter, and continued as a trend ever since. "Free trade" is "Flea trade."

its—although we certainly do not object to an increase of profits from worthwhile industries, but, rather, properly restated, mankind's relatively increasing power, per capita and per square kilometer of land-area. That is a goal which must be reached through the selection of that balance of assortment of those products and means of production which yield a condition of mankind's continually increased productive powers, such as those which are to be measurable in the increased number and improved quality of the persons produced and sustained.

True profits are only those magnitudes which represent an improvement in the condition, and the power to exist, of mankind.

This scientific method which I have employed as an economist, includes a sense of the required balance among portions of effort represented by the categories of types such as:

- 1.) basic economic infrastructure as a whole portion of a society's effort;
- 2.) the production of the means of production;
- 3.) production of the means represented by human consumption;
- 4.) the maintenance and development of the personal and group levels of creative productivity in science and Classical forms of art represented by the impacts of Classical modes in artistic culture and education. Competition among products, otherwise, is of no more than marginal significance respecting the outcome for mankind as a whole.

The relationship among these categories is systemic and "organic," not additive, and neither additive nor statistical in Fisher's sense.

The principled feature of this assortment of efforts, is the required general increase of the creative (e.g., *noëtic*) powers of the individual human mind.

That combined achievement requires a relationship between freedom to innovate, and the increase of the productive powers of labor per capita and per square kilometer. There must be both freedom of choice and complementary constraints upon any wildly arbitrary notion of freedom, constraints imposed by the requirement of advances in the potential relative population-density, and of the individual life-span of the human personalities in society as a whole. Economies are defined, functionally as "organically top-down," as Gestalts, in the same sense that a living person can not live as a collection of individual parts. All contrary views are a proven delusion, especially when we consider the

fact of the ongoing collapse of the world's economy, especially the presently London-dominated, and doomed, present form of trans-Atlantic economy.

The possibility of realizing those aims which I have just specified, depends upon the development of an increase of the creative productive power of both the individual and the society, each as functionally integral, rather than as interacting parts, that to such effect that, increases in productive power which is, when combined: *is the intention of production, the increase of the creative powers of the society and each among its living members, and of its outcome as a progress in numbers of such individuals, and in the quality of the individual human life.*

The Farce of Evil

In considering the role of rates of productivity in society, we must take into account the role of a conception associated with the issues of Aeschylus' famous **Prometheus** Trilogy, in which the reigning, evil Olympian Zeus, a forebear of the present monetarist tyrannies of the so-called "environmentalists" of London and Washington, forbids man's knowledge of the efficient use of fire, a ban supported through aid of such frauds as the currently rabid "Global Warming" hoax. This stupefying of the mass of the population, which is a condition which the British empire has led in undermining the productive powers of labor, and standards of culture and living throughout most of the planet, has the associated effect of inducing relative bestiality in the mental life of the populations subjected to such impositions.

On that specific account: the infamous, real-life Spanish Grand Inquisitor put on stage by Giuseppe Verdi's **Don Carlo**, was a figure of frankly Satanic evil, as his image, as a man of evil, is recalled in the role of the guillotine in the French Revolution. The Grand Inquisitor, that man of evil, destroyed men's souls, by suppressing the creative activity of their minds, and aided this brutalization of men and women by reducing them to a state of relative bestialization, like that of slaves and serfs. This sense of the matter is recalled yet again, with a shudder among the witting, in recalling the cult of that infamous Spanish Grand Inquisitor which was echoed in the real-life case of that Joseph de Maistre who echoed the image of the Grand Inquisitor, by projecting the figure of that executioner associated with the spirit of the guillotine.

That "Grand Inquisitor" is to be recognized as the antecedent of the London and Wall Street financial-po-

litical ideologues of today. Consider the following points.

On that matter, the references to de Maistre within my **The Children of Satan**, speaks for itself, still today.

To locate those images of **The Children of Satan**, today, within the bounds of the real world's outstanding memories of awful historical experiences, the appropriate reference to be made, respecting the principle expressed by the Grand Inquisitor, is reference to the crucifixion of Jesus Christ and such among the leading apostles as the Peter and Paul who were also murdered by the authority of Roman Emperors. That occurred as part of a series of murders which had begun, in Biblical terms, with that of John the Baptist under Herod. It was a slaughter which was continued with the crucifixion of Jesus by Pontius Pilate, which was done, in reality, on the specific authority of Roman imperial law of the Roman Emperor Tiberius then seated on the Isle of Capri. This was the Tiberius who was considered to be Pontius Pilate's putative father-in-law under the peculiarities of the Roman imperial system at that time.

Similarly, there is today's attack on sanctity of human life, led today by the British monarchy's Prince Philip, as by, formerly, the pagan Roman emperors against the Christians. Such is the initiative of British Prince Philip's accomplices, from around the world, against great masses of human beings throughout the world, today. This means, presently, the threat expressed by the frankly pro-Satanic, anti-scientific, so-called "Global Warming" hoax.

That hoax by Prince Philip is certainly not to be blamed on Edward Gibbon's suggested precedent, the case of the Byzantine Emperor Julian the Apostate. However, it does, in fact, match the advice, on the subject of that Julian, presented to Lord Shelburne by Gibbon, the author of **The Decline and Fall of the Roman Empire**.

Look into the case of that Julian, not as a charge against Julian, but as a named pretext for the kind of action which has been actually launched as a pro-genocidal policy, by the presently incumbent British monar-



Today's attack on sanctity of human life, led by Britain's Prince Philip, who wishes to eliminate billions of human beings, recalls the pagan Roman emperors' persecution of the Christians. Shown: Rembrandt, "Christ Presented to the People" (1655).

chy's consort, Prince Philip of World Wildlife Fund notoriety. This echoes the earlier Venetian operation behind the wickedness of another particular variety, by England's King Henry VIII. Before that Henry VIII, there had been the related event of the expulsion of the Jews from Spain by the Grand Inquisitor, the expulsion which inaugurated what was to become that later, great escalation of systemic religious warfare throughout 1492-1648 Europe, as spread mightily by the effects of the conversion of Henry VIII.

Today, a vast scheme for planet-wide genocide, that intended, avowedly, to eliminate something in the order of billions of persons, has now been launched as a new initiative initiated from Britain, under Prince Philip and former British Prime Minister Tony Blair, all of which has been a crime done with shameless openness, by the promoters of the Copenhagen Summit, with mass murderous support for Blair's cause from the very foolish U.S. President Barack Obama.

Do not blame Julian the Apostate for any of this. The complicity of the scoundrels associated with this neo-malthusian orgy, is an included reflection of the behavior of those who defend the memory of such ugly precedents as the case of the Spanish Grand Inquisitor's expulsion of the Jews, long before Adolf Hitler, and of

the policy governing those rituals of execution, which recall the figure of Joseph de Maistre. All of these are ongoing horrors echoed as ongoing in the present moment of global existential crisis, and, as echoed, as Dostoevsky implies, by the fabled figure of the pro-Satanic Grand Inquisitor, as presented in **The Brothers Karamazov**.

So, I devote this chapter of this report, chiefly to the subject of the principles of Classical artistic composition, the use of those principles as a device of attempted forecasting of oncoming history, as some contemporary Russian mystics have done, with or without success. The truth which that mysticism has sought to mimic, comes into view, once more, with its crucial role in science, and in politics, as in religion.

To appreciate the nature of the currently incumbent British monarchy's role in perpetrating an attempt at what now threatens to become a far greater crime against humanity than had been done by the Adolf Hitler regime, we should re-examine precedents such as the Habsburgs' Spanish Inquisition, as also the policies of genocide attempted by the promoters of the Copenhagen summit, as essentially lunatic, homicidal products of the reign of the current term of the implicitly doomed British monarchy.

Consider what must be conceded to be the Satanic quality of the enormities of the evil openly presented by leading circles from among the proponents of the so-called fight against actually non-existing "global warming," such as the openly stated goal of reducing the world's population, rapidly, from a presently estimated 6.7 billions persons, to three, even two, or even less, as a policy of the currently incumbent British monarchy and its accomplices.

Such links of the evil of the old Spanish Inquisition to the evil of the present scheme for the Copenhagen Summit, are to be found in the same Venetian monetary oligarchy which gave Europe the pro-genocidal "New Dark Age" of Europe's Fourteenth Century, or the launching of the Spanish Inquisition, and of the Sixteenth-century Venetian religious conversion, by the Venetian agent Francesco Zorzi who was the marriage counsellor of the sex-crazed England's Henry VIII. It had been Venice's role in the marriage counselling of Henry VIII, which was key to setting off that great expansion of the religious warfare which reigned throughout the 1492-1648 interval, and, is the key for today, for understanding the scheme for global imperialist genocide promoted by that British drug-traffic-promoting

scheme which is presently associated with same interests as Prince Philip's pro-genocidal policies for the World Wildlife Fund.

Although that 1492-1648 religious warfare, was run initially by the older, pro-Aristotelean Venetians, and the later phase under the younger generation led by the Liberal Venetian faction of Paolo Sarpi, the continuing differences between those two philosophically reductionist factions, were chiefly a matter of choice of different methods for different circumstances, rather than of their relatively slight, net differences in intended social effects.

The same essential, medieval Venetian tradition in these matters of steering a monetarists' imperialist system, the systems of ancient, feudal, and Anglo-Dutch Liberal imperialism, have remained essentially unchanged to the present day, even when the immediate strategy and tactics of practice differ significantly in details of the continuing imperialism's current design. The system is the principle of maritime imperialism typified by the Roman and Byzantine empires, a system of the successive European imperialisms actually in existence since about the time of the Delphic horror known as the Peloponnesian War.

The crucially important issue in such matters, is expressed for the predators representing that same old European tradition still today, as the need of design of methods for maintaining the imperial monetarist system of a traditionally maritime form of that of a Mediterranean maritime empire, to an intended world empire based originally in the Atlantic. Methods are altered in important details, but the common goal, called monetarist imperialism, remains ultimately the same from ancient Delphi to a modern Keynes, and beyond, today.

The matters which I have just presented as illustration, up to this point in this chapter, serve to present a much-needed image of the background on which the present world struggle for, and against civilization is being fought.

When Reality Seems Mystical

To degrade men and women to the degree they embrace an imposed intellectual self-degradation as "our way of life," or, "our native culture," is to greatly undermine, if not obliterate their ability to express a naturally human inclination for productive forms of creativity, as in physical science and Classical modes of participation in art.

Earlier in this report, I had already repeatedly emphasized the point made during the Summer of this year, that sense-perception provides the person with a shadow of reality, not its substance. The substance of creativity lies within the creative powers of the mind, when they are not suppressed in favor of so-called “popular opinion.”

That report’s message is therefore demonstrated by emphasizing the difference between one of our senses, such as hearing, which affords us a different image of what is sensed, than another of our senses, such as sight. We should compare that sort of discrepancy among the functions of our senses with the discrepancy among differing images which have been crafted, scientifically, for showing some of the composition of the phenomenon of the Crab Nebula. The functional reality of an object of the human senses, is, similarly, composed of the contradictions among the senses, or among the differing types of instrumentation, respecting the same object under consideration.

The case of Helen Keller has been, and should be frequently considered, still, as illustrating the principled nature of the paradoxical character of the usual blinded belief in raw sense-perception. In fact, from a functional standpoint in science, nothing in the universe is actually “self-evident.”

So, at an earlier point in this report, I had emphasized the fact that a naive popular opinion has frequently adopted a wrong choice of relative values, such as destructive opinions attributable to the effect of respectively contending notions of shadow and substance. The mistaking of the shadows which are cast by reality, for objects regarded as matters of sense-certainty, usually pertains to matters which have been mistreated as being the embodiment of the real world, rather than what they are actually, merely a shadow cast by reality, rather than being its substance.

When the attempt to interpret metaphor or kindred Classical artistic expressions, is degraded, itself, to an attempt at a “simple,” literal meaning, those agencies which are actually the efficient causal factor in shaping the reality of great historical events, are relegated into the gloomy shadows of what the naive, ordinary, superstitious believer’s superstition accepts as what is called, childishly, “sense-certainty,” or prefers to regard as mysticism. I have referred to this irony at several points above, as within fairly numerous published writings earlier.



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“As the case of Helen Keller shows, even a meager sense-repertoire can be used, ironically, to expose the fallacy of naive sense-certainty in general.” Shown: Helen Keller (1880-1968), reading.

This popular type of error of judgment which I have blamed here, tends to occur because the human mind itself, lacks any biological organ by means of which to experience the real world *directly*. So, we are obliged to rely upon the shadows, called sense-perceptions, or called “ironies,” as typified by the concept of metaphor, which are essentially in the likeness of “instrument readings,” rather than the relevant, but unseeable reality as such. As the case of Helen Keller shows, even a meagre sense-repertoire can be used, ironically, to expose the fallacy of naive sense-certainty in general.

So, as the case of Helen Keller illustrates, the commonplace error of interpreting the evidence of merely sensed experience as primary, is to treat the sense-experiences as such as if the senses were in immediate, one-to-one correspondence with reality, rather than as being merely “instrument readings.” The needed alternative, is to treat clusters of sense-perceptions as expressions of what are termed “ontological paradoxes,” as that was typified, implicitly, by the Classical Greek, pre-Aristotelean method of what was termed “Sphaerics,” as well illustrated by Kepler’s use of the contradictions be-

tween sight and sound in his discovery and proof of the principle of universal gravitation.

When I addressed this problem of the illusions and delusions of habits of sense-certainty, in works published during the past Summer, I presented the reader with a certain contrast between sense-perception, as a Type A experience, and the, proper, functional experience of the object of sense-perception as provided by a function of Type B, a function which is an expression of the cognitive functions of the mind.

I explain.

Archytas & Plato

To understand *Sphaerics*, it is to be sought, as from among long periods of glaciation, in a long-time experience of trans-oceanic navigation, as in periods of such maritime cultures' reliance on the development of an astronomical science for navigation, as, for example, up through the lifetime and work of Eratosthenes. From this came a practice of astronomy echoed by the great models of discoveries such as those of the known Archytas, Plato, and Eratosthenes, and others, which employed a method of adducing the principled characteristics, as did Johannes Kepler later, underlying observed stellar and planetary displays, rather than a mere copying of raw records of such observations. So, the attempt to organize this knowledge according to the preliminary presumption that the universe is either spherical, or might be assumed to be conditionally so, produced a later corrected way of thinking based on provable principles of action, rather than, as the silly reductionists use merely accumulated facts of sense-perceptual experience in statistical forecasting and otherwise. It was the leap from the idea of spherical functions, to elliptical ones, as the significance of the latter, and of the related implications of the Leibniz calculus, became understood through the prompting of the work of Johannes Kepler, which is to be understood on this account.

Such is the implied origin of the notion of a finite, but unbounded universe, as this was employed by Einstein, instead of something silly, like a Euclidean one, to present the great achievement of Johannes Kepler. The extended application of that lesson from astronomy, as obviously it must have been developed by trans-oceanic maritime cultures,²³ is the relevant "foot-

print" of the origins of what can be named as the scientific method based on the evidence of universal modes of action. So, in this context, the idea of "Creation" corresponds, experimentally, to the effect of recorded, qualitative changes, such as those of the famous Equinoctial Cycle associated with the name of Plato, in the organization of the changes in stellar arrays considered in the light of the experienced long cycles of the Earth's planetary system.

Since mankind does not sense the real universe's organization directly, we rely upon crucially ironical sorts of unique effects appearing within the domain of sensed experience, to define those points in experience when the otherwise hidden reality lurking behind the screen of sense-perception, reveals itself. The methods employed by Johannes Kepler for his discoveries reported in his **The New Astronomy**, and, in his **The Harmonies of the Worlds**, illustrate the point.

These kinds of crucial events afford us the means for looking at the experienced shadowland-universe of simple sense-perception as if from the top-down, rather than the bottom-up. In this way, we are enabled to adduce the intervention of principles, as this notion was presented in a more thorough way by Bernhard Riemann, in his 1854 habilitation dissertation.

This view is similarly expressed in viewing the behavior of man and society in terms of the deeper principles of human behavior, a conception which is directly opposite to the relative brutishness of the general world-outlook of the modern empiricists (a.k.a. "behaviorists") such as John Locke, Adam Smith, and Jeremy Bentham.

What I have often cited as the concluding paragraph of Percy Bysshe Shelley's **A Defence of Poetry**, is a most relevant case in point, in presenting the argument just expressed here, immediately above. So, my writing here has returned, at this point, to the subsumed issues of Percy Bysshe Shelley's **A Defence of Poetry**, to the physical substance, in its effects, of Gottfried Leibniz's *dynamics*.

A related social phenomenon of dynamics was widely witnessed in the U.S.A. during the recent month of August, as an outpouring of very angry, ordinary U.S. citizens turned out to lambaste the hateful behavior which their Congressional, elected representatives had shown during the preceding, approximate half-year under the rapidly declining popularity of the addled President Barack Obama.

It was not so much what those citizens said, as what

23. A Ulysses could have spanned the distance between the Mediterranean and the Caribbean in approximately the same lapse of time expended by Christopher Columbus's first voyage.

they meant by saying it, which was the message to be understood by those who heard.

Those events of August were, in fact, literally ominous. Neither the Obama Administration, nor, with rare exceptions of more courageous figures, few among the majority among Democratic Party members of Congress, heeded the actual message of those ominous warnings delivered from the population this past August. The meaning of those popular outbursts of August has not gone away; they are passing through what may be fairly considered to be a succession of political metamorphoses.

Like official Paris of July 14, 1789, up to about the present moment, most of the relevant, presently reigning powers in the U.S.A., or in western and central continental Europe, just don't get it. They are still turning reality inside-out, still mistaking the superficial appearances in which they choose to believe, for the real, "deeper" forces of the history of actual ideas at work.

The Remedy: Leibniz on Dynamics

Social phenomena of that ironical character express the role of *dynamics*, as Leibniz defined that for physical science, in his exposure of the fraud of Cartesian method, during the 1690s. This is the same notion of dynamics expressed, as I have noted, above, by Albert Einstein's use of the notion of "finite, but not bounded," to identify the most crucial features of Kepler's **The Harmonies**. The use of this concept of dynamics by Leibniz, and of his followers in the department of physical science, is rather well known for those who choose to investigate the subject. Its greater importance, in the department of Classical approaches to social science, is, unfortunately, only weakly represented in relevant academic and comparable circles today.

This approach to the concept of dynamics taken so by Einstein in physical science as such, is key for solving the paradoxical nature of the ignorant person's stubborn belief in sense-certainty. From this point in the chapter, on, in this present chapter, I shall return repeatedly, and implicitly always, to the theme of that notion of dynamics as it applies to both the domain of physical science, and the science of the human mind.

More on the subject of communication: it must be recognized, that the ugly, virtually treasonous violence which Philippe Egalité orchestrated at the site of the Bastille, was a real-life conspiracy expressed by the then current handiwork of London's Lord Shelburne and his lackey Jeremy Bentham, a development which

had been in progress since the separate peace-negotiations with the U.S.A., France, and Spain, which Shelburne began in 1782.²⁴ However, the processes which controlled this succession of developments, was not located within the bounds of the popular sense-perceptual appearances of that period's process of gigantic upheavals which were already spanning the planet in the large. The reality of the process was recognized only by the few operating, as if from above, such as the evil plotter Jeremy Bentham, as if directing from within the shadows, behind the scene.

All of the principal wars in the generally known history of this planet, have, similarly, taken a turn which caught most of the principal participants by surprise, governments included. Behind the scenes, backstage, so to speak, there were grand conspiracies in operation, conspiracies to be recognized as if from the shadows, as if from the corner of one's eyes. These plots, like that of President Obama for Afghanistan, now, will generate complexities.

That customary form of expression, as if from the shadows, of what are called such "conspiracies,"²⁵ is illustrated by the cases of the general warfare which has dominated the world over the entire span from the ouster of Chancellor Bismarck in 1890, to the present folly of a silly President of the U.S.A.'s commitment to an enlarged war in Afghanistan. Bismarck was not deceived, at a time when most preferred to be self-deceived. Thus, the launching of what became two successive intervals of world war during the past century, had to wait until the obstacle Bismarck had been dumped, and, a bit later, until both France's President Sadi Carnot and U.S. President William McKinley had been successfully assassinated, the latter action which enabled the bringing of the

24. The crucial facts are, summarily, the following. In the manner of all the usual British imperialist strategy to the present day, the intention behind the siege of the Bastille was to provoke a war between France and the forces associated with the greatly angered brother of Queen Marie Antoinett, the Habsburg Emperor Joseph II, who was responsible for the foreign military forces deployed then on French ground. The immediate intention to this end, was to destroy the influence of the circles associated with the Marquis de Lafayette. "Philippe Egalité," who had paid for and armed the mob for this occasion, was already allied to a relevant faction of British freemasonry working under the direction of the British Foreign Office whose "Secret Committee" was headed by Lord Palmerston's Jeremy Bentham. This is to be viewed as an expression of that same strategic approach used by the British to orchestrate that "Seven Years War" which had been used to establish the empire of the British East India Company in the 1763 Peace of Paris.

25. People who do not believe in the existence of efficient conspiracies are to be called either "morons," or, simply, "dupes."

scoundrel and British asset, Vice-President Theodore Roosevelt, into that executive mansion which he rechristened as “The White House.”

Bismarck had understood this strategic reality in his time; now, already ousted from his post, he had warned that the great war which the Prince of Wales and later King, Edward Albert was orchestrating at that time, was to become a virtual “new Seven Years War,” an echo of the method used by the British East India Company to acquire a great empire, through playing the crowned heads and populations of continental Europe in a commonly ruinous conflict, as, similarly, ancient Greece, manipulated by the monetarist Delphi cult of Apollo-Dionysos, had ruined what had been its great maritime power, in the fraternal conflicts of the Peloponnesian War. So, similarly, imperial Rome, once allied with the priests of the Mithra cult, had reigned for several centuries, like ultimately self-doomed Byzantium after it.

So much for the pompous pretext of debating the issues which allegedly caused developments such as World Wars I and II, or kindred forms of conflicts, like two wars in Iraq organized to entrap two silly Bushes, successively, into the fires set by the Sykes-Picot game wardens in the British playground of standard targets such as Iraq.

So, as in the case of a silly President Obama’s playing British puppet once again, in Afghanistan, the nations and peoples play the part of self-doomed fools duped by the British empire, again, and again, and again; they do so, because, essentially, they are duped by mistaking mere, arranged sense-perceptions, as by former, lying Prime Minister Tony Blair, for realities. They mistake what they tend to regard as mystical, dark forces, such as the foolishly mis-attributed causes for so-called “World War One,” for what should have been plainly obvious to any person, such as former Chancellor Bismarck, of a truly sound mind. It has been the same with those follies of those silly fellows who believe, as poor Joseph Stiglitz appears to have done, in the matter of putatively monetarist reforms.

Images in Russia

It should be considered as not necessarily an arguable issue of fact, that the very idea of competent policy-shaping, including economic and social policies, is a matter of forecasting.

Therefore, proceed now for a moment, with a significant reference to a seemingly mystical, sometimes

Russian method of forecasting developments in real-life history, as by reading patterns of what have been publicized imageries as signs of trends.

Some years back, I spent much of an evening in Moscow, auditing a remarkable piece of what first seemed to be witchcraft, with its succession of images as presented, on a large screen, to an audience, by a notable political figure there. On reflection, I compared that with the methods of forecasting developments employed by a noted, highly respectable professional other Russian figure rather well known to me. On reflection, in reviewing a number of similar presentations of an eerily psychoanalytical quality, delivered by Russian forecasters, I was able to decode the significance of such Russian practices from the standpoint of my own experience in the U.S.A. and some cases in western Europe, and elsewhere.

That practice expresses its underlying roots of relevance for a domain this side of the merely mystical. Reading such ideological footprints is not, in itself, an irrational practice although, I warn that such Delphic methods of soothsaying do often, as in the case of Midas, lead to foreseeably tragic errors of judgment, especially if observed credulously. The method of patterns of imageries, properly employed, may be useful, even crucially important; but the effects of a Delphic worshiper’s lack of actually creative insight, as in the case of Midas, should warn us against stubbornly credulous worship of the careless imagination, as such folly is widely prevalent in the present moment of crisis in world history.

That method, while spooky in appearance, does have a potential when in competent hands of, for example, some relevant psychoanalyst. Some of the practice which I have witnessed, is either weird or clearly blundering; but, there are aspects of this practice which I can illustrate, rather simply, as follows.

It is considerations such as these which I have just arrayed for you up this point in the present chapter, which account in large degree for the otherwise seemingly mystical powers of grand-scale and other forecasting, manipulations using a method comparable to what appear to be fantastic imageries, such as the notorious practice of attempts at financial forecasting, or even wars, according to the rise and fall of the length of ladies’ skirts, or kindred devices as the pornography expressed as the alternately hiding and exposing, temporarily, of those sundry regions of ladies’ flesh, or British ladies’ “limbs,” territory which had been so flagrantly

exposed, as by the riotous “68ers,” at some earlier time, or, we also have the cases of the widths of the brims of certain ladies’ hats.²⁶ At its best, this practice relies on the principle of metaphor, a principle of Classical artistic composition which is indispensable in actually competent processes of scientific discovery. The messages are delivered by flashing series of images, rather than prose or poetry. As in the practice of metaphor, the key to this practice is “changes” in the process of the imagi-

“Man proposes, but God disposes.” In the end, it is what man does to develop society, or neglects, which punishes even great powers for reason of their conceits. In the end, it is what mankind does to the universe, which punishes the insolent and arrogant.

nation, as in the role of symbolism in the practice of psychoanalysis.

The risk incurred in the use of such symbolic methods, is that the person using such practices often tends to depart the real world, when he or she fails to take into account the way in which the real world runs into conflict with what should be taken into account as critical changes in real-world experience which contradict, or threaten to contradict the forecaster’s presumptions.

Certain ostensibly mystical Russian methods of forecasting go to this same point. However, many such forecasters are more likely to fool themselves, in the end, with such Delphic stuff, as the fabled Midas was deceived by the reality he overlooked, in the course of adopting what he ostensibly regarded as his own cleverness.

“Man proposes, but God disposes.” In the end, it is what man does to develop society, or neglects, which punishes even great powers for reason of their conceits. In the end, it is what mankind does to the universe, which punishes the insolent and arrogant. The presently onrushing doom of the British monarchy’s empire, and

virtually anyone who supports its current policies, is an excellent example of this principle. Take the case of physical economy, for example.

The principle on which the ultimate success of human economic-forecasting practice depends, is the principle of physical anti-entropy, which demands that economy be premised on a commitment to the effects of a general dedication to anti-entropic inventions, such as increase of the relative energy-flux density of the sources of heat-power employed.

In contrary cases, the imperialists of history, like such presumably fictional figures as the self-doomed Olympian Zeus of the **Prometheus** trilogy, have always based themselves on what was known to the ancients as “the oligarchical principle,” which may be fairly identified as a policy of “keep the duped stupid,” such as the policy known as “environmentalism” at the present moment. Since man’s survival depends upon the use of higher energy-flux densities of power by societies, a so-called “green policy,” such as that promoted by the British monarchy and its dupes today, means the vast destruction of any culture foolish enough to accept British Prince Philip’s nonsense.

The susceptibility of populations to such lunacies as that, has its root in the vast popularity of that belief in “sense certainty” typified by such as the followers of Newton in education and public policy today. Believers in sense-certainty should not put their lives at risk by pretending that they can competently prophesy. *Their minds are not competently developed for such subtle enterprises.*

Admittedly, once the truth of such fetishistic expressions of “doll house” mysticism, is taken into account, the expressed silliness shown popularly in such matters, should be taken as a warning sign of seemingly hidden, but plainly visible, ongoing developments have been misread by most as expressing a deeper and darker set of implications. It is really a matter of dynamics, as the concluding paragraph of Shelley’s **A Defence of Poetry** speaks.

The case presented by Shelley, there, corresponded to the power of a certain optimism, exerted as from above, upon a large portion of a population. After the Jacobin Terror of the French Revolution, and then Napoleon Bonaparte, a contrary dynamic prevailed in the Europe which had, largely, rallied with optimism in solidarity with the American War of Independence.

The optimistic phase was engendered, chiefly, by the American Revolution, but the historical optimism

26. Back during the 1950s, in the U.S.A., there had been a downshift from cake-mix which required only the addition of water, to cake-mix which withheld one or two ingredients, such as eggs or milk, so that the lady of the house would “feel” that she had shown appropriate personal care for the well-being of the other members of the family household.

was largely engendered by a relatively few, whose inspiration of one another caused a shift in the dynamic of a certain part, or even nearly all of the society in general. It is those senses of the situation which a certain Russian forecaster's reliance on adducing patterns among images depends, as a key to a shift in such effects as mass-psychology of the eerie qualities which Shelley attributes to the optimistic upsurge he references in his **A Defence of Poetry**. In dealing with creative persons operating in an environment of crisis, creativity, rather than presumably predictable scenarios, comes more or less decisively into play, in which case there are no symbolic patterns to trace. For example: really smart generals, like Frederick the Great, liked to do what no one would have anticipated, which is the way Frederick won a great battle which he entered considerably outnumbered. In such a case, the chosen action must be competent, on the condition that it was not predictable by any opponent who was too well schooled for his own good on that occasion.

That dynamic influence shapes the direction of history during relevant portions of society during such a period. In such periods it functions as an organizer of the way in which trends are organized, in the sense that Leibniz employs dynamics as the name of the image of the role of universal physical principles in physical science. So, Napoleon, early in his career as a commander, won a crucial battle by having a relative handful of his cavalry create the appearance of a full force of dreaded French cavalry charging out of a virtually unpassable swamp.

Thus, for example, the original Constitution of the U.S.A. was an expression of a dynamic principle which pivoted on the fundamental conception of law expressed by the crafting of its Preamble.

Therefore, review, as briefly as allowable here, a point which I have developed at relatively great length in materials of mine published during the past Spring and Summer months of this year. Much of world history since, has depended upon that action. As follows.

British Ideology: A Case in Point

As soon as he was assured that Gottfried Leibniz had actually died, the Venetian schemer, and devout follower of René Descartes, Abbé Antonio S. Conti, sprang into action, taking his sort-of "Sancho Panza," Voltaire, in tow. Conti's intention had been to establish the dogma of Descartes as the content of official state religion of both France and England, but he had recognized that Descartes' ill-deserved reputation of being a

French patriot, stood in the way of peddling the same cult under Descartes' name in England at that time. Being a Venetian, and therefore a scamp at heart, Conti's choice of a fool to play the part of an "English Descartes" was an academic specialist in black magic mumbo-jumbo known as Isaac Newton.

To bring off that particular swindle, Conti devoted the remainder of his life, 1715-1749, to orchestrating a network of continental European, anti-Leibniz salons around the weak-witted Newton—perhaps with some of the same spirit shown by the fellows who set up the worship of a baboon in women's clothes, in a church taken over for such then typically British sorts of solemn entertainments.²⁷

The visible pioneers in crafting Conti's religious cult around Newton, were a pair of French apostles, a French Protestant Abraham de Moivre and his associate Jean le Rond D'Alembert, whose contribution to creating a British anti-Leibniz cult was misnaming the Leibniz calculus as a cult of what de Moivre had suggested be considered "imaginary numbers." The most important among the places of worship of this strange Newton cult were developed in Berlin, that around a renegade from Leibniz's circles, the actually talented, but not at all nice Leonhard Euler. The Newton cult, and its German outgrowth, Hegel predecessor Immanuel Kant, experienced tough German resistance for as long as Moses Mendelssohn and his friend Gotthold Lessing were both still alive and active; but, it was the horrifying developments of the French Revolution, despite the period of collaboration between Schiller and Goethe, which lost the young U.S. republic the international factor of security which had been provided, earlier, by the combination of the French and Spanish allies and the friendship which had been provided by the League of Armed Neutrality.

It was the 1812-1815 Congress of Vienna, and the ouster of Lazare Carnot and Gaspard Monge, which unleashed what became those corrupting effects of British influence which led into the persisting erosion within the ranks of science, and a rise of the decadence marked by the succession of positivists such as Ernst Mach, and then the much wilder and nastier extremes of the Bertrand Russell cult, which have led into the shoddy condition prevalent in the teaching of science today.

Now, that much said on background, we turn atten-

27. The baboon escaped one night, still somewhat attired, but not unnoticed, and so another novel British religious sect was scratched.

tion to the matters of *dynamics* as such, and the relationship of the principles of dynamics to the presently crucial issue, for all mankind, of the proper practice of national banking.

Economic Value & Banking

The fact of the matter is, that the specifically anti-monetarist, American system of political economy, was born as a development which occurred within the Massachusetts of the Winthrops and Mathers during the period immediately preceding the awful effects of the accessions of James II and William of Orange.

The potential for a suitable kind of subsequent reform of the English monarchy, in which Gottfried Leibniz played a leading role inside England, as a considered candidate for Prime Minister, was ended by the campaign to drive Leibniz out of that country. However, the influence of Leibniz was restored in the role of certain leading circles closely associated with the Benjamin Franklin who had proposed his **A Modest Proposal for a Paper Currency** in 1729.

Leibniz's direct influence on the shaping of the American System of political economy came into the North American English colonies through the influence of German circles then centered at Göttingen University, there under the leadership there of the leading German mathematician and follower of Leibniz at that time, Abraham Kästner, who participated in the steering of a copy of Leibniz's second rebuttal of the slavery booster John Locke, to Benjamin Franklin. From that latter point, onwards, the influence of Leibniz's work was, so to speak, "all over" the development of the scientific principles which engendered what Alexander Hamilton identified as "The American System of political-economy."

The circumstances under which this development of the foundations of the U.S. Federal Constitution evolved, are to be recognized in the circumstances under which the Mayflower left England and the Netherlands, to land in what became known as "New England."

To get the historical flavor of that situation, the venture which generated the 1620 founding of that settlement, is to be recognized as situated at the onset, two years before the death of the aversively targeted (by his triumphant political enemy Francis Bacon) William Shakespeare, of what was to become "The Thirty Years War" of 1618-1648. The Plymouth settlement, was complemented by the founding of the Massachusetts Bay colony, as led by the Winthrops and Mathers, in 1630.

The intent which was associated with these American settlements was to create a place where the republican legacy of such as the principles of Dante Alighieri and the circles of Cardinal Nicholas of Cusa and his followers, such as Leonardo da Vinci, could find the means to bring the best of European civilization's culture to a relatively safe distance from the oppressive oligarchical cultures polluting Europe. Hence, our American legacy was, from the start there, a republican culture, as distinct from the oligarchical roots of the parliamentary systems and traditions of law prevalent in Europe, even today.

So, similarly, the American system, as expressed as the system of scrip in the Seventeenth-century Massachusetts colony, Franklin's proposal for a paper currency, and the Federal Constitution, attest, was always representative of a republican credit system, rather than the inherently imperialist systems of European monetarism, as the Euro system expresses such an imperialist form of monetarist rule over western and central continental Europe now.

This set of facts is typical of the evidence against permitting the continued existence of monetary systems, and monetary theory today: because they are, historically, inherently instruments of imperialist rule over nations which should be respectively sovereign, but are actually not for as long, as they are part, and victims of a set of monetarist systems. Looking back to the system of scrip under which Massachusetts Bay was more advanced in the practice of economy than Britain, should prompt insight into both why the U.S. economy is superior to those of Europe when it follows its own anti-monetarist tradition, and why Britain hated post-1877 Germany under the leadership of Chancellor Bismarck and his adoption of an American legacy, so bitterly.

It is, therefore, fairly said, that living under monetarist systems is about as refreshing, economically, as bathing in a common cesspool.

Look back to Massachusetts under the Winthrops and Mathers. Given the success of scrip back during the pre-1688 time, any really intelligent citizen should admit that we do need money in circulation, as in the form of Massachusetts' scrip back then. It is needed *among us, now, as for them back then*. However, now, as then, we must maintain sovereign control over money at our borders, through a state monopoly on public credit and currency. For matters of trade among sovereign nations, we require a system of working treaty-agreements on a fixed system of prices of currency among respectively sovereign nations.

The lesson to be understood is, that money is not in itself a standard of economic value, except as nations enter into treaty-agreements through which purchases and sales are made among sovereigns according to specific treaty-rules. Once we have accepted that information as the wisdom of the world's literate and intelligent persons, we have therefore created an entirely fresh notion of the organization of a world's economy (and Mars, too, whenever we can get there and return, safely).



Charma Corner

V. The Science of Physical Economy

When we have begun to build those industries on the Moon, which will be indispensable in man's assimilation of the planet Mars into our world's economy, there will be, because there must be, some qualitative changes in the way we shape policy for economy back here, on Earth.

The links from where we stand, in economy on Earth today, to the new definitions of Earth's economic policies once we are building up readiness for development on Mars, are really not new to mankind, but chiefly to certain academics and related specialists who will be viewed by intelligent representatives of future generations as comparable to the infamous academics from that floating island of *Laputa* visited by our beloved Jonathan Swift's character Gulliver.

Actually, we need not wait. The essential improvements in the methods of what passes for scientific thinking could, and should be made presently. I shall now return to your attention to certain popular frauds and related fallacies which have already polluted the efforts at scientific thinking in many of our universities and other places since the prank of a lunatic black-magic specialist Isaac Newton, who, in retrospect, had actually made not a single valid original discovery in science, but turned into a religious object of the same intellectual type as the taxidermist's art had produced as the post-mortal, imperfectly stuffed carcass of

"Tear up those massed arrays of Solar collectors and silly windmills which consume more power, over the course of their useful 'life' than the usable power they 'collect.' Build up irrigated areas of barren land with irrigation systems which promote plant life...."
Shown: handline sprinkler system, Idaho, 2000.

Jeremy Bentham.²⁸

Actually, those certain changes in our way of thinking about economic policy need not, and should not wait. The problem with scientific teaching generally, still today, is a reflection of what certain interests regard as their vested interests in the reputation of the Delphic Aristotle, or in the behaviorist ideologies of the circles of Paolo Sarpi and his followers. The specific, deeper-going obstacle to be overcome, is typified by what the great tragedian Aeschylus presented as the case of the Olympian Zeus of **Prometheus Bound**.

The pivotal, thematic feature of **Prometheus**

28. There had been actually competent scientists in England at the same time as those pranksters who reinvented the silly Isaac Newton whose most plausible scientific discovery was made during Newton's incarnation as a member of Parliament, on the occasion he had suggested that someone open a window on the premises. Newton certainly did not discover the principle of gravity which Newton's admirers concocted as a sloppy plagiarism of Kepler's works already available in published form in Newton's time. Neither Newton's advisers, nor Newton himself ever invented an actual calculus. Practically everything which was claimed for him as his discoveries was exposed as shams by leading scientists of Europe during the early parts of the Nineteenth Century. Unfortunately, there have been certain circles, down to the present day, whose particular interests impel them to promote the fraudulent myth of Newton's claimed successes as part of their proprietary mythologies.

Bound, is that the alleged Olympian Zeus had decreed a ban on the knowledge of the use of fire by mortal mankind. There is no reason to be startled by that part of the story. This was already an established, Delphic doctrine of what was termed “the oligarchical principle.” This was an assertion of the oligarchical interests of that time, that the ordinary people should not be permitted to acquire any knowledge which was considered as “above their assigned role in life,” a piece of hokum very much like that of today’s “global warming” hoax, which Jonathan Swift put on the level of schemes for gathering sunbeams from cucumbers.

The fact of the matter, is that the specific distinction of all mankind from lower forms of life, is that only man, among the animals, actually uses fire as a uniquely integral characteristic of human behavior. The issue here is actually that man’s use of fire is the characteristic element of behavior which enables mankind to increase societies’ potential relative population-density through such as what we term increases in the energy-flux density of heat-power per capita and per square kilometer of territory.

The reason the oligarchies tend to hate population growth, is that the advancement of the intellectual capacity of people, which is a correlative of scientific-technological progress, fosters the development of a population which results in their refusal to be treated as dumbed-down, serf-like creatures. In short, without making Americans and Europeans, among others, stupid, you will have difficulty holding them within the moral equivalent of cattle-pens. Promoting the use of narcotics for purposes of entertainment, helps to promote such evil ends.

Anyhow, as any competent scientist knows, man’s activity has very little to do with the rise or fall of the temperature of the planet’s surface. Simply compare the energy-flux density of the effects of the Sun on the condition of the planet Earth, or, also consider the sheer mass of the Sun and its activity, to that of the rest of the Solar system as a whole; then, any putative scientist who chatters about “global warming” effects caused by mankind, is to be quickly recognized as either an incompetent or a liar.

Man’s proper concern is to increase mankind’s power to do good within the universe. That specific concern, is the indispensable foundation for any competent notions respecting economy, whether within the confines of our planet Earth, or our people’s extended role within the reaches of the Solar system. The princi-

pal correlative of this increased power is what is termed in modern scientific practice as “increase of energy-flux density.”

The first lesson which a typically silly “global warming” fanatic should learn, is that the proper way to “collect” Solar radiation at the Earth’s surface is typified by the role of chlorophyll. Chlorophyll’s characteristic action, is to increase the energy-flux density of the Solar radiation captured by “green plants,” as the means to produce the output of the plant, an output at a higher relative energy-flux density than the incident sunlight. This benefit, as expressed by the greening of otherwise desert areas, supports the life-system of the plants, animals, and people of the planet.

Tear up those massed arrays of Solar collectors and silly windmills which consume more power, over the course of their useful “life” than the usable power they “collect.” Build up irrigated areas of barren land with irrigation systems which promote plant life both directly, and through rainfall patterns in rainfall systems downwind. Trees are especially good at cooling the region and building up the green mass at the same time. Rip out yellow and build up “greened” land-areas. Stop listening to those idiots who have been trying to brainwash you!

Now, consider the matter of nuclear and thermonuclear power.

Energy-Flux Density

Look at the role of energy-flux density from the standpoint of very elementary aspects of modern physical chemistry, as from the pioneering standpoint of Chicago University’s celebrated physical chemist, William Draper Harkins, the teacher of Chicago University’s and the Fusion Energy Foundation’s Professor Robert J. Moon. Since the seminal influence of the work of such celebrities of physical science as Louis Pasteur, Professor D.I. Mendeleyev, Harkins, and V.I. Vernadsky, the notion of “energy” has undergone certain, reported, successive stages of evolution, especially with special emphasis on the realm of physical chemistry, that most notably, today, through the developments in the fields of nuclear fission and thermonuclear fusion, and beyond.

At this present time, the aim of manned travel from the Moon, to and from Mars, has posed, very sharply, the importance of a mode of thermonuclear fusion based on Helium-3, as fuel collected on the Moon, for powering human travel between the Moon’s and Mars’ orbits, which provides us with a crucial perspective on the role

of fuels of a higher physical order than nuclear fission. We are challenged with relativistic modes of human travel between the orbits of the two planets Earth and Mars, or beyond. Many questions pertaining to this area of work need to be answered, but the perspective for science is already clear in respect to certain crucial considerations.

Somehow, in some way, the questions posed must be cracked within the span of the present, young century. Most interesting for some among us, we must contemplate the fact that the remaining ninety years of the presently ongoing century, the approximate span of the four generations of life of our descendants today, is not such a very long time for those who think of the work of a lifetime's experience of mankind in light of the kind and quality of progress we have seen in Europe and North America since the A.D. 1620 landing of the Pilgrims at Plymouth. We must think in terms of what might be accomplished during a life-time, and of what measures, including childhood, adolescent, and young-adult development, must be mustered for tasks conceived in such terms as the present perspective for future human travel between the orbits of Earth and Mars as within reach as soon, or even earlier, than a century ahead, a century during which we must progress through the succession of steps of achievement needed to reach such a goal.

To illustrate the practical implications of that just-stated point, consider the following.

My "New CCC Program"

Set a benchmark for the design of that "new CCC" program for unemployed, or underemployed late-adolescent and post-adolescent young people, which is needed as an essential part of a national economic-recovery program today. Think of the population of CCC matriculants which either entered military service during World War II, or in their role in the war-time and later decades of the post-war agro-industrial surge in agriculture, manufacturing and machine-tool design, and so on, during the first two post-war decades. Look at that history in the light of the launching of the accelerated space-program, as launched by President John F. Kennedy. Think of the Moon landing of the astronauts.



National Archives

A "new CCC" program, for unemployed, or underemployed young people, like the Civilian Conservation Corps established by President Franklin Roosevelt during the Great Depression, is needed to carry out a national economic-recovery program today. Shown: A CCC crew replaces old steel pipe at Gem Irrigation District Pumping Plant near Marsing, Idaho, 1941.

Think back to the Soviet space- and nuclear programs of the same periods. Now, think of the first stage of manned Mars flights to and from the orbit of Mars, as from, return to our Moon. We accomplished the Moon-landing a quarter-century after the close of World War II, Sputnik was launched about a decade after the close of the war. Look at the inside, together with the ups and downs of the late 1950s and 1960s, of the U.S. space program. However, we must also look at the terrible loss of even mere competence for work among the generation which came to adulthood about 1968. We are, presently, in far worse economic condition, than we were during the middle to late 1930s, a result for which we must give particular thanks to the Federal Reserve System's Alan Greenspan and Ben Bernanke.

So, I have proposed a new version of the model achievements of the old CCC. Why? The prospective new industrial operatives and those of like capabilities lack even an elementary orientation for the rudiments of actually productive work. The labor-force on which our recovery will depend is generally conditioned to nothing better than what is called "make-work," even "fake work." The culture of the population which must be brought up to the decent level of family existence required for serious science-driven technological progress, is presently at a disastrously low level. In short, there is no present commitment, under President Obama, to any real economic recovery, and no suitable

support of a culture of work-orientation in life-style which a successful program demands.

The best option would be an updated version of the former CCC.

Then, we are confronted with the fact that there exists virtually no established work-culture in the young-adult and adolescent populations in general, today. Yet, in order to reach the levels of productivity required to restart our economy as a truly productive economy, we must have a science-driver orientation built into the development of the emerging labor-force, which means a return of the orientation of education, at all levels, to a production-oriented, largely “blue collar” science-driver orientation. “No more green jobs!”

The obvious need is for a quasi-military training-for-work program. This provides the social structure needed for steering young recruits into categories which do not underestimate their career-potentials, both in skills and, even more important, orientation. The goal must be to produce scientists tomorrow, where there were laborers today.

The images of the development of industries on the Moon, and orientation to what a Mars program means, must be posted on the equivalent of the barracks-wall, inspiring the young person fighting to move the way up in life to the kind of orientation our society is presenting as the opportunities of our people for their future. The science-driver orientation, must permeate the atmosphere of ordinary life.

What About Money?

In the first place, we shall not get out of the mess which the present Washington leadership of the Federal Reserve System has fostered under the succession of Chairmen Alan Greenspan and Ben (actually no “benvenuto”) Bernanke, without an immediate, and stunningly effective use of the Franklin Roosevelt administration’s Glass-Steagall measure for wiping a vast mass of intrinsically worthless debt out of existence. Given the rotten situation inside the Federal Reserve today, it too must experience the process of salvaging which only the extension of Glass-Steagall to its relationship with the private banking systems would supply.

Actually, the Federal Reserve, together with all that has merit within it, should be absorbed in a general reform of the U.S. system back to a credit system, rather than remaining part of the presently bankrupt, world monetarist system. This must be done with the establishment of a Third National U.S. Bank based on Ham-

iltonian principles. This would mean the carrying over of essential leading personnel of the present Federal Reserve districts into a continuation of their essential present function under the newly restored, Hamiltonian U.S. National Banking system.

Our general orientation must be to a world-wide system of sovereign national banks based on national-sovereign credit-systems, rather than monetary systems. Our goal must be the replacement of the presently hopelessly bankrupt international monetary system by a network of respectively sovereign national credit-systems, organized as a system of sovereign national credit-systems operating under fixed-exchange agreements respecting long-term relations among sovereign credit-systems.

By clearing the books of account of the vast amount of essentially speculative monetary filth generated since, especially, the incumbencies of former Chairman Alan Greenspan and Ben Bernanke, we will have cleared the decks for uttering the comparably large masses of Federal long-term investment credit needed to virtually restart, and greatly expand the U.S. economy, Franklin Roosevelt style, on the basis of a sovereign credit-system.

Much of what must then be done, will follow, broadly, the tested pathways of the first administration of Franklin Roosevelt.

Such reforms as those just indicated above are much more feasible than most members of the U.S. Congress and relevant others will have understood up to the close of the present calendar year. The reason for optimism on this account, can be premised on the evidence, for any citizen to see, of the wretched outcome of not only the failed performance of the administration of President Obama, but also of the Congress itself. After Copenhagen, the President’s options will be a shambles, and the Congress, especially its guilty Democratic Party leaders, is already struggling to avoid becoming abhorred by the same citizens who had more or less chiefly elected them, the last time around. Meanwhile, President Obama, if he remains in office much longer after the dismal record of both the Congress and his Presidency during 2009, will have to clean out large sections of his own house of those who have, in fact, largely controlled, and misled him very, very badly, during the recent eleven months.

It is now time, as was once said, for “A New Deal.” It is time to do what must be done, rather than the now so richly discredited practice of “going along to get

along.” We have many of the essential elements of the Executive and Legislative branches available, on hand, once some extraordinarily poor performers are sent to seek harmless careers in other occupations. The emptied posts can be either filled with more suitable talent, or left empty without any sense of loss as a consequence.²⁹

The foregoing list of measures now outlined, we may focus our attention on the scientific issues of method needed to rehabilitate the Constitutional intentions of our nation’s Federal system.

The Matter of Money

As I have already emphasized, at an earlier point in this report; from such beginnings as the Seventeenth-century Massachusetts Bay colony, the distinction of the future United States from European systems, was pioneered as the highly successful design of the credit system of Massachusetts, a feature carried over into such elements of the composition of our Federal Constitution as Alexander Hamilton’s use of national-banking institutions to rescue our otherwise war-bankrupted republic

There were certain difficulties in maintaining that specific principle of our Constitutional system, which played into the way in which President Andrew Jackson, and his banker Martin Van Buren destroyed the Second National Bank to make way for that swindle perpetrated by Jackson’s “angel,” Martin van Buren, which set the stage for that Panic of 1837 which nearly bankrupted the U.S.A. A similar hoax against our republic was the success of British influence in shutting down the U.S. system of greenbacks, a British-sponsored action which caused the crises of the 1870s. Then, there was the creation of the dubious Federal Reserve system, which was the creation of two offspring of the Confederacy, Presidents Theodore Roosevelt and Ku Klux Klan fanatic Woodrow Wilson, both of whom were essentially agents of British imperialism in practice.

These species of problems in our republic victimized by British imperial interests inside, as much as outside our system, were resumed with the death of President Franklin Roosevelt, by President Truman’s crony-relationship to Franklin-Roosevelt hating, British imperialist Winston Churchill.

In the present juncture, when western continental Europe has been stripped of much of its independence

through the Euro system, and when the giants of the U.S.A., Russia, China, and India, when cooperating, represent the Pacific-based focus of the great power on this planet, we have a situation in which the U.S.A. may choose to resume, once more, the inspiring status it had achieved under President Franklin Roosevelt.

This reality of the emergence of the Pacific orientation of the planet’s political-economic life, combined with the decline of the U.S.A. under the influence of the British-imperialism-oriented President Obama, has created the circumstances in which the U.S.A. has been handed, as if by history itself, a grave crisis which presents us with both the opportunity and the obligation, to resume, fully, the kind of role which had been attained briefly under President Franklin Roosevelt, the President whom I had soon come to recognize as truly “our President.” Thus, if Obama does not resign the office of President, he will be, himself, operating under rules and principles differing greatly from the 2009 portion of his term in office.

The issue handed to the leadership of our republic at this instant of the gravest degree of global crisis, is the challenge to our leadership of, as it is said among our baseball fans, “stepping up to the plate,” to assume the obligation which has thus been handed to us now.

That is the opportunity to return the United States, and much of the world, besides, to a credit system, instead of the presently, hopelessly bankrupt, monetary system.

This much said respecting the urgent reform of the current Presidency, turn our attention now to certain crucial and fundamental matters of reform in policies of principle, away from the wreckage of the presently, hopelessly bankrupt, world monetary system.

What, really, is the truth about money?

The Principle of the Credit-System

It should be noted at this moment, that the “Triple Curve System,” which has given me such success as, in fact, a leading economic forecaster, in performance, if not acclaim, today, provides no notable emphasis on the future role of monetary-systems as such. My response to questions raised about this is, why bother?

Money, currency, as a form of official state credit, rather than of a monetary system, is useful, and therefore necessary, in the relationship of the individual household and person, or firm, to the economic process itself, at large. The notable problem of the use of money on the world stage, is that all monetarist systems are

29. The terrible, screaming Rahm Emanuel, for example, might dig out his old tutu for return to some other career.

intrinsically imperialist systems, or a lawful prey of a single international monetary system.

This danger was under some degree of control, but only for as long as the post-1945 U.S. dollar operated as a feature of a fixed-exchange-rate system. The action taken under U.S. President Nixon, in August 1971, began the process of throwing the world back under the imperialist control of the British Commonwealth system, a post-1971 development which was accelerated by the British-Saudi scheme for building up the petroleum “spot market,” and consolidated by the wrecking policies carried out under the U.S. Carter Presidency. After that, with what passed among the credulous for assistance from the roles of President Reagan’s Secretary of Defense Caspar Weinberger and Secretary of State George Shultz from Chicago University circles and Chilean notoriety, the old days of U.S. leadership have not returned, up to the close of the most recent Copenhagen farce.

At the same time, with the crisis thrust upon China by the collapse of a large portion of its export markets, the crisis of Russia, and the threatened consequent crisis for India, there is no possibility of establishing an equitable set of relations among the nations of the planet, without cutting the nations free of the influence of the actually monetarist-imperialist, British Commonwealth system.

In the relevant historical perspective, the United States under the leadership of President Franklin Roosevelt, in particular, was never imperialist. Anyone who would suggest a contrary view shows a lack of competence in these matters. The pivotal issue posed here on this point, is that, whereas, Franklin Roosevelt had a position on the post-war world, which included the intention of bringing the Soviet Union and China, and other nations, into a system of fixed-exchange rates which would have eradicated the British empire and other such intrinsically unfair obscenities, Truman was essentially an accomplice of Churchill and Bertrand Russell.

This change came suddenly, with President Harry S Truman. Three features of the Truman-Churchill scheming of that time of change, are of crucial significance still today:

1. Whereas President Franklin D. Roosevelt had rejected John Maynard Keynes’ proposed swindle, in the 1944 Bretton Woods negotiations, Truman joined with Churchill, in replacing the credit-system of

Roosevelt by the global influence of the imperialist monetarist policies of John Maynard Keynes.

2. Whereas, Roosevelt, acting in part through the OSS representative in Italy, promoted the negotiation of a peace agreement with the Emperor of Japan, the Truman administration postponed the acceptance of the agreement on the terms proposed by Emperor Hirohito, until the only two nuclear weapons in the U.S. arsenal were dropped on the essentially civilian centers of Hiroshima and Nagasaki.

This action was taken under Truman, not only to undermine General Douglas MacArthur, but to set up the world for what become the long-standing management of world affairs, through a nuclear threat launched between, on the one side, Truman and Churchill (and Bertrand Russell), and the Soviet Union on the other.

3. Whereas President Roosevelt had proclaimed the post-war elimination of British and other colonialism, Churchill and Truman acted jointly to restore it.

Essentially, the remedy for the great complex of crises which menaces the world today, requires the reversal of the effects of all three of those and related types of measures.

Under the condition in which the true sovereignty on which the nations of western and central Europe depended, has been ruined, at least temporarily, by the legacy of Prime Minister Margaret Thatcher’s use of her accomplices France’s President François Mitterrand and U.S. President George H.W. Bush, to destroy not only the sovereignty of Germany, but also, in effect, every part of western and central continental Europe: A situation has been created, by the thus impaired sovereignties of the relevant continental European nations, as continued by Tony Blair and Gordon Brown, in which the strategic center of the world was sharply shifted, as a matter of historical fact, from the Atlantic to the Pacific ocean.

The task so implied, is to resort to a turn to immediate measures of cooperation among the complex of nations of the Pacific-Indian Oceans basin, as replacement in the present role of world economic leadership, for the catastrophic situation presently extant among the principal powers centered upon the Atlantic.

That much said here, thus far, return attention now, to the matter of credit, versus monetarist systems.

There Is No Magic in Money!

I emphasize, once again, that there is no intrinsic value in money. Nor is there any moral, or comparable standard of value which can be defined by a “free trade” system.

First of all, in a modern economy seeking a significant rate of growth of real income of nations and their populations, the emphasis must be placed on increase of capital-intensity in production, in respect to basic economic infrastructure, in education and research, and in science-intensity. This requires a relatively fixed exchange-rate system, such that, for contemporary economies, a normal annual interest charge of between 1.5-2.0 percent is a base-line for the utterance of medium- to long-term credit, is a suitable goal.

In this aspect of the system of privately uttered credit by the role of state credit, the latter is the principal driver of growth, as the case of the Tennessee Valley development illustrates the point. The general formula for the use of such state credit, is “national interest.” The determination of “national interest” should be, generally speaking, “top, down,” driven by capital-intensive development of basic economic, energy-intensive modes in universalizing basic economic infrastructure. Other private enterprises are promoted through the spill-overs of relevant opportunities by the smaller versions of private enterprise from major national, and international projects of development.

The notable priority in large scale utterance of state credit, or in state-assisted projects of national or regional priority, is, especially in a presently, largely de-industrialized U.S.A., basic economic infrastructure.

That latter emphasis is, at this time, shaped by the systematic destruction of entire high-technology-driven, mass-production requirements in basic economic infrastructure.

For example, at the close of 2004 and beginning of 2005, I emphasized, first, the urgency of defending the menaced Social Security system, and, second, the reorganization of the automobile and related industries to convert the essential capacity of the then existing automotive industry, especially its machine-tool aspects, to public infrastructure programs which were urgently needed, and which would absorb the employment of, firstly, the machine-tool sector, and secondly, the labor-force elements



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LaRouche's proposals in 2005 to save the machine-tool sector of the auto and related industries was “snuffed” by the Bush Administration and Congress in February 2006, leading to the subsequent ruin of the entirety of the advanced-technology, mass employment sectors of the U.S. economy.

associated with the machine-tool driver-sector.

This was “snuffed” by the U.S. Administration and Congress in February 2006, which was, to put the kindest construction on it, a foolish decision which led to the subsequent ruin of the entirety of the advanced-technology, mass employment sectors of virtually the entirety of the present U.S. private sector.

Part of problem in the latter of those mentioned areas, was the element of insanity in the post-World War II notion of running down the nation's urban productive structures in favor of the highway over mass transit and of “suburbanization.” One properly notorious, crippling effect of that economically nonsensical scheme has been a cluttering of the highways with commuters and trucks at great, massively counterproductive costs to citizens and society generally. The implied reaction to the combined, disastrous effects of such changes, must be emphasis on what should carry the image of a “top down” reorganization of the national economy through emphasis on a complete rehabilitation and expansion of the most relevant kinds of investments in large-scale basic economic infrastructure, thus reversing the trend of 1965-2009, to emphasis on railway/magnetic levitation transport systems, large-scale water systems, including river transport, advanced generation nuclear power installations, rebuilding health-care systems through aid of returning to a Hill-Burton policy, away from the ruinous and fraud-ridden HMO system, and through a general orientation to using the

proposed new type of CCC system, as providing the base-line for return to employment of older generation labor which is returned to employment roles by association with the employment programs associated with young citizens' employment in CCC-related programs.

This includes, obvious expansion of Pacific transport, in keeping with the new orientation of a Pacific-Indian-Oceans development perspective, and the launching of a virtual global modern mass-transit rail and maglev system of world transport centered upon a group of nations led by Russia, China, India, the United States, and reaching out, from Eurasia, to links into Africa and South America.

Finally, in the report, some important changes in thinking concerning the needed revisions in thinking about the role of money and related matters of value.

Life in Spite of Money

The implied opinion concerning market-value in our society today, is to be regarded, at the very least, as awfully confused, or, should we say, "upside-down."

The prevalent assumption, if citizens really think out the subject at all, is that misguided inclination for competition at the relatively lowest price-level in competition, that of the individual sale for an individual purchase, as the determination of relative value. For a goodly portion of the post-World War II U.S. economy, a corrective was in place, a corrective identified as a "fair trade," rather than "free trade" system.

Under a "fair trade" approach, the working assumption was a variant on the notion "that labor and capital are worth their hire." This had a correlative, in the presumption that the cost of living of the labor contributed by households was also worth its hire, in terms of what the household required for its service to society, as represented by the development and progress of family households in their communities, as for the labor itself. In other words, you must meet the price which the purchase deserves, as distinct from some widespread, rather silly interpretations of the catch-phrase, "the price is right."

The "fair trade" outlook was conditioned, from the close of World War II onwards, by the fact that the restrictions imposed by the requirements of keeping more than sixteen millions of our adult citizens occupied with military duties of that war, before counting civilian war-production, had left the peace-time population with an accumulation of unsatisfied demands. This led into a crisis of the mid-1950s under President Dwight Eisen-

hower. From a brief letter-exchange which I had with General Eisenhower in 1947, I saw him later, as President, as to a significant degree as a captive of his times in that office, as there were reassuring signs of the persistence of my earlier, 1947 impressions of him, after he had left the Presidency.

Under the influence of Arthur Burns, whose actions I never liked, and that with excellent good reason, President Eisenhower was wonderfully strong on certain classes of issues, but delimited by his circumstances in significant other matters, especially those bearing on the domestic economy. One of these effects of the Burns role was an insane emphasis on over-exploiting the consumer market at the expense of needed capital improvements in national productivity, an error which I confronted as being just that, in my role as a management consultant during the 1950s.

As a result of what is fairly identified as the Arthur Burns syndrome of the 1950s, we experienced a long-term trend toward net decline during the late 1950s and, as I had anticipated at the close of the 1950s, throughout the post-Kennedy 1960s. By the middle of the 1960s, as I had forecast in 1965-6, that the U.S.A. was already trapped within a long-term decadence which never quit at any time up through the present instance. In the process, the idea of "fair trade" had foundered along the way. The Kennedy investment-credit measure was the last serious gasp of "fair trade" policy-making.

Once the "fair trade" notion was significantly undermined, and the lunacy of the plunge into the long Indo-China war embraced, the U.S. rate of net investment in basic economic infrastructure died. By fiscal year 1967, the space program was already in a phase of net decline in related investment, and any actual net recovery in the U.S. economy never restarted again up to the presently terrible days.

A large part of the source of the problem must be traced to what I have already referenced, here, as the bottom-up view of the market-economy. This brings us to the subject of the import of the "Triple Curve."

"The Triple Curve"

When we turn our attention to the physical economy, as opposed to the notion of "a market economy," we are liberated from relevant superstitions, to recognize that an actually effective organization of a national, or world economy, is defined as a top-down, rather than "market-up" process. This works out in the following way.

The essential issue to be considered is a matter of physical economy, rather than monetary economy as such. The issue, as seen in terms of physical economy, is as follows.

The essential principle of physical economy, since, as we may say, the discovery of fire, has been that relative increase in the adducible productive powers of labor which is expressed in the form of physical-scientific upgrading of the work of the human mind, an upgrading which has always had, for as long as mankind has lived as mankind, the effect of a technological-progress-driven increase of the net, physically productive powers of labor.

This progress is always circumscribed by two principal boundary-conditions. One is depletion of the relatively most accessible, relatively richest required resources available in terms of the existing technologies in use. The other is the relative depletion associated with increase of the population and of those consumption requirements which are increased by the effects of both the raising of the adducible equivalent of capital-intensity of production and existence otherwise, and the requirements of resorting to relatively poorer resources to meet the increased intensity of needs.

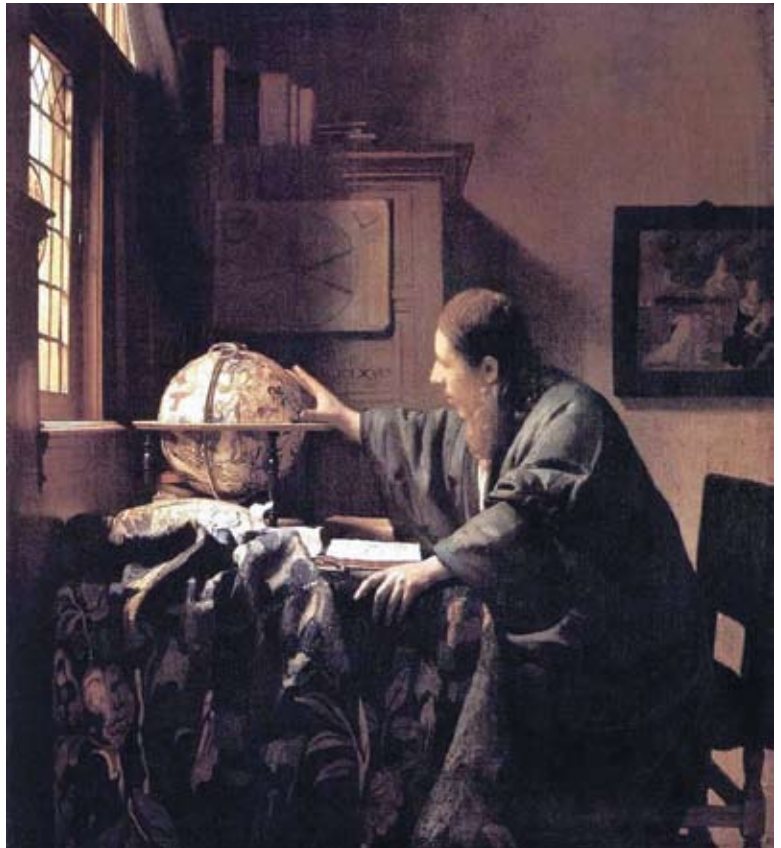
So, in that way, there is a natural increase in the required capital-intensity of the production of the conditions for human progress in existence.

The point of greatest impact of those considerations is in both required gains in physical-capital-intensity of basic economic infrastructure and the means and resources of production.

To make the explication of the point as brief as possible, it is the top-down management of a society's economy which is not only the optimal approach, but, ultimately, the only alternative to ruin of misguided cultures which attempt a contrary view.

That set of relations and conditions can be reduced to reasonable approximation in terms of credit-systems and the financial aspect of those credit-systems.

In general, this means a high, and increasingly high ratio of investment in scientific-technological progress, relative to other priorities of the economy. This can be expressed, and must be expressed, in terms of the money system, as in terms of a set of ratios among the allotted flows of money among the choices.



The fostering of individual initiative, especially scientifically creative initiative, in the well-conceived economic process, is the source of inspiration which supplies the motive for less challenging future goals and present investments. Shown: Johannes Vermeer, "The Astronomer" (1668).

The unpredictable, but nonetheless implicitly foreseeable role of the individual initiative, is chiefly that of human individual creativity, as I have identified creativity again in this report.

There is, to conclude this report now, a crucial role of individual initiative, especially scientifically creative initiative, in the well conceived economic process. This is brought forward as the factor it must become through the mobilization of the intellectual life of the society around the multi-generational challenge of possible future developments, especially strategically required ones. The fostering of creativity in terms of focus on frontier challenges, is the source of inspiration which supplies the motive for less challenging future goals and present investments.

The organization of the long-term-defined credit-systems of the planet's nations now depends on converting the notions for value under a credit-system with the ideas of scientific and technological progress toward which I have pointed here.