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## IV. Lyndon LaRouche, in 2011, Forecast the End of the British Empire

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BERWICK, BLAIR, HITLER & OBAMA:

# The Death of London's Roman Empire

by Lyndon H. LaRouche, Jr.

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*In earlier published reports, I had warned, in one way or another, that the Roman empire, which is represented presently by the terminal conditions of the hyper-inflated British empire, has reached the fag end of its tyrannies, in one manner or another. Either the British empire will be shut down soon, or the entire planet were presently at the brink of its collapse into a prolonged, global nightmare, a new "Dark Age" far worse than that which Europe experienced during the 14th Century.*

*However, it were true, hypothetically, that the United Kingdom itself could survive this threat, and the world at large, too; but, that could occur only if the United Kingdom were induced to abandon what Rosa Luxemburg<sup>1</sup>, and also the U.S. State Department's historian Herbert Feis<sup>2</sup>, had identified correctly as the systemic form of what, in fact, was the British empire as such. I supplement Feis's studies with the fact that the British empire is still, at this moment, an empire which is, in fact, the current expression of that imperialism which was originally that of the monetarist form of empire launched by the then future Caesar Augustus on the Isle of Capri.*

*The original Roman empire passed through a succession of crises, sometimes as the Roman Empire by name, sometimes as Byzantium, sometimes as the system*

*of Nietzschean-like "creative destruction" under the old Venetian monetarist system, sometimes as that New Venetian system led by Paolo Sarpi, which became known as the Anglo-Dutch imperialist system, and, now, since the assassination of U.S. President John F. Kennedy and the U.S. folly of a long Indo-China war; the presently crashing world empire associated with that so-called "BRIC" based on Lord Jacob Rothschild's folly known as the presently crashing Inter-Alpha Group.*

*Unless that hopelessly bankrupt Inter-Alpha Group is mercifully buried, pre-emptively, now, the planet as a whole will be plunged into the doom represented by an end of all successive phases of the existence of the Roman Empire, from its founding on the Isle of Capri, to the present days.*

*The only efficient way to explain the process at work, is to identify the principle which was presented, from the top down, in the crafting of the great principle on which the Preamble of the original U.S. Federal Constitution is premised to the present day. That is the same principle which is better known today as the Glass-Steagall principle—known as a name, but rarely, competently understood. I explain.*

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**Foreword:**

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## The Roman Empire

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There has been, recently, a foolish tradition in the writing of history, and I am referring here, chiefly to the history of the trans-Atlantic world preceding and during the history of the Mediterranean region, up through the

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1. **The Accumulation of Capital**, Chapter 30, "International Loans," 1913.

2. **Europe The World's Banker 1870-1914** (New Haven: Yale University Press, 1930).

present time. It is a tradition of viewing such phenomena as persons, generations, and even entire national cultures, each as discrete objects interacting, as if kinematically, among themselves, rather than, properly, as a continuing process of cosmic-like development, within which singularities appear as products of the continuing interactions within the trans-generational processes which are any real historical process.

Thus, to illustrate the just-stated point, consider the deep roots of all globally extended European history, with regard for its influence on the planet more widely, as this is traceable from the ironies of what are identified as Classical Greek roots, from the Homeric accounts onward.

That said, as a matter of forewarning, what we, today call “Greece” participated in the defeat of the Achaemenid Empire in the end, but, nonetheless, that ancient Greece, self-cursed by the Delphi cult which it had trusted all too much, had already destroyed itself with the folly of the Peloponnesian War, and would never become an empire, as Robert Burns would say, “For all that.”

Macedon’s Prince Philip, whose own folly had set him up to be killed, thus left the throne in the hand of Philip’s son and adversary, Alexander the Great. In the end of all that, Aristotle, the poisoner, triumphed in the death of Alexander. Thus, the attempt at an empire of the maritime power of the Mediterranean would wait until the completion of the negotiations, conducted on the Isle of Capri, between that tyrant Octavian who was the murderer of the Cicero who had been the only real hero for Shakespeare’s **Julius Caesar** tragedy, between the Octavian actually known as the then future Caesar Augustus, and the priests of the cult of Mithra.

In such a manner, the Roman Empire emerged as an imperial maritime form of world empire centered, originally, on the Mediterranean, which it became, and has remained of late, as the British Empire, since the day William of Orange had invaded, and largely raped the British Isles, all done under the invader’s flag of Paolo Sarpi’s “New Venetian” empire, thus initiating what became the British Empire as the world’s reigning monetarist power, still today.

So, with the decline of Rome, the leading oligarchical families of Rome had fled to the back-

ish swamps at the north of the Adriatic, to emerge, again, from amid a then-decaying Byzantium, as the reigning imperial monetarist body of the same old Roman Empire from approximately A.D. 1000, until the present day under the direction of the Venetian monetarists’ nominally British monetarist system of imperialism. Venice, in turn, under Paolo Sarpi, transformed itself from the Aristotelean form which had been traditional since the time of the elimination of Plato, into a



*As with the Roman Empire, which collapsed in the 5th Century, today’s hyperinflated British Empire has reached the fag end of its tyrannies. Either it will soon disappear, or the entire planet will sink into a prolonged, global nightmare, a new “Dark Age.” Shown: “Rome: Ruins of the Forum, Looking towards the Capitol,” by Canaletto, 1742.*

modified form of “The New Venice,” that of the followers of modern Europe’s Paolo Sarpi, thus defining the process leading from the utterly depraved Venetian puppet which was the English monarchy of Henry VIII, into the late Sixteenth-century degeneracy of Marlowe’s and Shakespeare’s England under the flag of Paolo Sarpi’s doctrine of “Liberalism.”

So, betwixt the invasion of the British Isles by William of Orange’s Sarpian “New Venetian Party,” and today, the last gasp of the old Roman Empire is to be found in the onrushing, self-inflicted doom of the old Roman Empire as the present British Empire of Lord Jacob Rothschild’s hopelessly worthless Inter-Alpha Group, the swindle also known as “The BRIC.”

The outcome of that set of pages of the world history of modern, trans-Atlantic civilization, is that the entire world is, presently, gripped systemically, by the presently continuing conflict between two leading cultures, the monetarist culture of a Europe presently dominated by the tyranny of the British Empire, versus the culture of a credit-system founded in North America over the interval from the establishment of the Massachusetts Bay Colony under the leadership of the Winthrops and Mathers. It was the consequent, later founding of the United States as a constitutional republic, as defined by the Preamble of its Federal Constitution, which was echoed by the miraculous resuscitation of that great republic under such exemplary Presidents as Abraham Lincoln, and in President Franklin Delano Roosevelt’s crucial role in launching of the Glass-Steagall Law.

Presently, unless that 1933 Glass-Steagall Law were immediately re-established, now, the continued existence of the United States were soon ended in a bloody, hyper-inflationary collapse now nearing its end. There is no action by the U.S. President and U.S. Congress which is “worth a hill of beans,” unless the re-enactment and enforcement of that Glass-Steagall Law occurs as a foremost priority now.

The problem is, that unless this current U.S. President were ejected, as might be done under the relevant provisions of Section 4 of the U.S. 25th Amendment to the Constitution, the continued existence of the United States is not possible by any known, lawful means under its own law. There is, therefore, no other morally tolerable commitment by the institutions of our Federal government, than the two-fold measure of immediately re-enacting the 1933 Glass-Steagall Law, and ending the power of the current President to prevent the prompt

and efficient re-installation of that 1933 Glass-Steagall law.

Abandon all silly chatter about worthless hopes for rescue by a general U.S. election approximately two years ahead; under present trends, a new election under our Constitution would probably never occur. Without Glass-Steagall, the United States will soon cease to exist in any presently recognizable form, if it exists in any form at all, even past the relatively few months now immediately ahead. A state of global, hyper-inflationary collapse, is already built into the trans-Atlantic system. The count-down to doom is already on, unless we replace Obama now.

### The Global Outlook

Without the type of reform which I prescribe here, the trans-Atlantic economy and its nations are already as much as foredoomed to rot; I present the summary proof of that fact within these pages. Whereas Asia’s problems are not hopeless in themselves, but tend toward a contrary, and, therefore, happier direction, a collapse of several leading economies of Asia, which would occur as an echo of any collapse of the trans-Atlantic system, would carry all of Asia down with it. You can blame Lord Jacob Rothschild’s system, which he installed, *circa* 1971 as part of the treasonous intention of the London-directed U.S.A.’s abandoning of the Bretton Woods System, an implicitly treasonous, August 1971 change, introduced as an alternative to the U.S.A.’s fixed-exchange-rate system which had been established by President Franklin Roosevelt’s triumph over John Maynard Keynes at Bretton Woods. A presently inevitable, already ongoing collapse of the Inter-Alpha system and its auxiliaries, would presently bring down the entire world economic system, chain-reaction style.

Without immediate re-enactment of President Franklin Roosevelt’s Glass-Steagall action of 1933, the planet as a whole were soon plunged into the deepest, widest, and longest dark age in historic times.

Thus, the doom of the British stage of the Roman empire lies, now, not in the hands of its present adversaries, but, finally, in no other foe as much as itself.

The ancient, and continuing root of the combination of already existing or immediately threatened, global disaster, lies, essentially, in the concept of **monetarism** itself, in the delusory obscenity of the belief that money as such represents a rational standard of “economic value.” Hence, for as long as the nations are intoxicated by belief in the folly of monetarists’ systems, the pres-

ent situation of the nations of the planet as a whole, even any form of belief prevalent as the ruling sentiment of the most influential laws of mankind as a whole, were presently a hopeless case.

Contrary to the monetarists, all of whom have now failed as would-be professionals, I am a physical economist in the same tradition as the authors of our U.S. Republic and the great principle set forth in the Preamble of our Federal Constitution to which all representatives of our Federal government have sworn a solemn oath of allegiance, whether they either meant what they have said, or whether they had, or had not known the actual significance of what they had merely said.<sup>3</sup>

Therefore, I summarize the truthful scientific principle of economy in those terms of historical and physical-scientific reference, here, as follows.

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## I. What Is the British Empire?

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The British empire, which has never been understood by more than a handful of modern economists, such as Rosa Luxemburg and the U.S. State Department historian and scholar Herbert Feis, has now entered what will soon turn out to have become the last gasp of its existence, that in one way or another. Either the British empire, a maritime empire, is soon wiped from the map, or, in the alternative, the effort to maintain the existence of that inherently failed empire will send the entirety of the planet to Hell for a long time to come.

The effect of the resumed influence of the British empire over the policies of the United States, has progressively ruined us since the death of President Franklin Roosevelt, especially since the successful assassination of a President John F. Kennedy which broke President Kennedy's and General Douglas MacArthur's resistance to entering the British trap for the

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3. There are professional economists whose work I applaud on many accounts, but my own successes as a forecaster, since the 1950s, are unrivaled, while my skills as a physical economist have been, on the record so far, unique.



Library of Congress

*Britain is a maritime form of empire, LaRouche writes, an international dictatorship imposed upon a collection of otherwise, ostensibly separate nations, as seen in the post-Westphalian, euro system today. This 1902 Puck cartoon depicts "Britannia," as "Civilization" crushing the "Barbarians."*

United States which the British empire had crafted in Indo-China. The Kennedy assassination, thus, unleashed ten years of physical and moral ruin of the institutions and people of the United States from which our republic has not yet returned, still today.

Such a maritime form of empire as that which the British empire exerts over Europe today, is the expression of an international dictatorship imposed upon a collection of otherwise, ostensibly separate nations, exactly as the "Post-Westphalian" policy of the present, so-called "Post-Westphalian," "Euro" system prescribes today. The quality of the Roman empire and its relevant sequels, as expressed by the British empire today, has two most essential characteristics, as follows.

The first characteristic of that empire, is that of an imperial "personality" with the power to decree a body of international law, presently termed "governance," imposed upon all subject "kingdoms." It is a power which lies in the personal authority of the Emperor, such as, nominally the British monarchy, as the body which functions as the *de jure* person of the emperor to equivalent effect. Such is the presently attempted form of the British empire's tyranny against the nations of continental Europe, since the imposition of the "Euro" system of monetarist imperialism by the concerted action against Germany by Britain's Margaret Thatcher, France's President François Mitterrand, and U.S. President George H.W. Bush, in 1990 and beyond. Similarly,

earlier, the intended design of Adolf Hitler's imperial form of Reich, had been a system of a form inhering in the British intention for the Euro system today. Such was the kindred import of the implicitly treasonous "signing statements" uttered against the Federal Constitution of the United States itself, under U.S. Presidents George W. Bush, Jr. and Barack Obama.

Second, all empires of that sort, are contained within a monetarist system which operates, through international institutions, as an imperial authority, as the design of the Euro system, essentially by the British crown, prescribes this condition for the "governance" of its victims, its subjects, presently.

Such systems are typified by examples such as the original Roman Empire, by Byzantium, by the extended Norman system under the direction of Venetian monetarism, by Sarpi's pre-shaping of the so-called "Liberalism" of the British empire, and by the expanded British Empire which dominates, and loots the Euro system presently.

For deeper insight into the Europe-based forms of such imperial tyrannies, one must examine the root of this system in the role of the Delphi cult in its time. The affirmation of "the oligarchical principle" by agreement between Macedon's King Philip and the Achaemenid empire, illustrates the point. Aristotle, like, later, that high priest of Delphi from the Roman empire's reign, Plutarch, remains a notable, ancient exponent of that oligarchical system of evil presently.

It is the currently, frankly expressed intention of the British empire, to bring about the early destruction of our United States. That treasonous effort is being done by the relevant "Wall Street" financier interests, through aid of the complicity of the present, increasingly Hitler-like health-care and related policies of the current U.S. Obama administration. That administration is working to make the way clear for an unchallenged world-empire whose intended center would be the British power in the City of London's reign over the former continental nations of Europe. Hence, the implicitly treasonous role of the British puppet-President of the United States, Barack Obama, in clearing the way for an imperial system of "world government" under a so-called "post-Westphalian system," as a system under which national sovereignties are outlawed by the replacement of government (i.e., premised on the "consent of the governed") by a "post-Westphalian" imperialism's system of "governance."

As under the system of the Delphi maritime cult and

of the Roman Empire, alike, the essence of the empire is its "supra-national" system of rule under a supra-national, monetarist system such as that established by the U.S. Nixon Administration's repeal of the fixed-exchange rate: an international money-system which rules, as an oligarchical social system, among and over nations, and which represents a reign maintained through the promotion of an imperial form of monetarist authority located among nations, rather than within any among them. Such is the intrinsically imperialistic, intrinsically treasonous character of what is called "governance."

In general, since the establishment of the Roman Empire, with relatively rarer, and relatively short-term exceptions, the European system has been a collection of "kingdoms" under the imperial rule of a trans-national, monetarist system. That has been the issue of the essential distinction of the constitutional system of the U.S.A. from the long trend in European systems thus far.

### **The U.S. Constitution's Great Principle**

The great struggle of all humanity presently, is a struggle of nation-states to secure their freedom from the looting practices of a presently dying world system, that of the British monetarist empire in its present form. Since that empire is systemically a monetarist system, the comprehension of the great existential struggle for a return to a system of freedom, depends upon the enforcement of a global, fixed-exchange-rate system modeled on the great fundamental principle of constitutional law expressed as the Preamble of the U.S.A. Federal Constitution.

From the outset of the preparation and installation of that Federal Constitution based on that great principle of its Preamble, our republic has been premised on the same notion of a credit-system, rather than a monetarist system, a credit-system which was pioneered under the sovereignty assured by the original Royal Charter of the Massachusetts Bay Colony and the colony's Pine Tree Shilling-based credit-system.

Under that tradition, and the Constitution created to establish that principle as a sovereign nation-state system, our United States had been the only durable expression of a truly sovereign nation-state within a world over which the Roman empire in its British incarnation had reigned, with few and brief exceptions, since the devastation wrought by the French Revolution and its recurring victimization by the British Empire which had been implicitly established in the February 1763

Peace of Paris.

All major warfare on this planet since that 1763 Peace of Paris, has been the expression of an imperial practice of attempted dictatorial management of this entire planet through monetarist practices aided by recurring long wars, including the perpetually recurring state of such ruinously long, intentionally geopolitical wars on this planet as those launched by the British empire through the effects of the British monarchy's ouster of Germany's Chancellor Bismarck, in 1890, as, also, recently, under the same British Prime Minister Tony Blair who has revived the criminal health-care policies of the Adolf Hitler regime in the United Kingdom and, now, under the British-appointed puppet-President of our United States, Barack Obama, presently.

To regain the constitutional order prescribed in the Federal Constitution of our republic, we must first regain an insight into those great principles of our republic which have suffered infraction against our constitutional principle through acts expressing an imperialist enemy's hatred of our republic, an enemy who has been determined to destroy the great principle of our republic ever since the time of the 1763 Peace of Paris. The great issue which has been the recurring source of mortal struggles between our patriots and the British monetarist system, as since the time of that 1763 Peace of Paris, has been our republic's recurring return to the affirmation of the principle of a credit-system, rather than that imperialist system of monetarism, as the monetarist system is expressed for our United States by the implicitly treasonous character of the once Hitler-loving Wall Street of Brown Brothers Harriman, which was the type of a usurious predator which makes slaves of all those who become its victims.

Only the affirmation of the principle of a credit-system, rather than a monetarist system, as the original Glass-Steagall Law expresses that U.S. Constitutional principle, could now prevent the entirety of this planet from an early plunge into a global Hell from which civilization would not recover for many generations to come. To this end, the institutions and citizens of our United States must clear the cobwebs of the rabid, pleasure-pain-driven irrationalism of the Paolo Sarpi-Adam Smith liberalism from their minds, to see, and obey that true principle of the credit system which is inherent in the founding of our republic and its Federal Constitution.

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## II. The Science of Physical Economy

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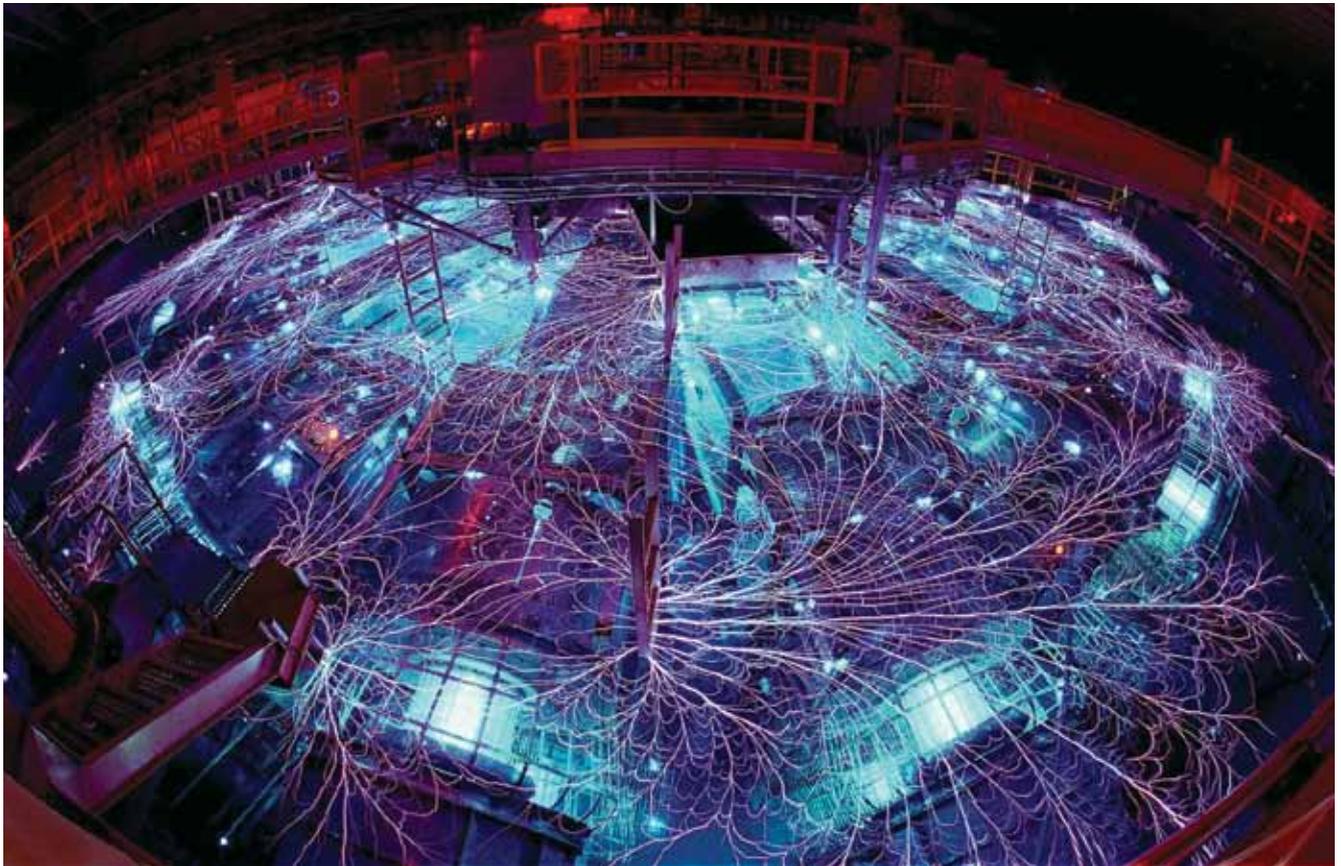
The most essential of the preconditions for the political freedom which our Federal Constitution was intended to secure for us and our posterity, is the commitment to an increase in the net *physical* powers of productivity of the means of existence of a growing population of our republic, and, hopefully, a contribution of a kindred quality for other nations as well. On this account, there can be no other definition of wealth than *the net increase* of the physical wealth produced per capita and per square kilometer of territory of our nation, and, also, our assistance to that same quality of end for the other nations with which our republic must cooperate, that done for common ends, on behalf of the general welfare of humanity as a whole.

It is the nature of the universe, a nature which must be the guidance of all sane nations and their peoples, that our universe demands, as a condition for our survival, that we pursue a vigorously anti-entropic policy of universal practice, as, for the case of "fire," which only mankind among all living creatures, practices, through a persistent increase in the energy-flux-density in the principal forms of action on which not only the progress, but the very survival of a human culture depends.

So, survival of mankind exists, presently, only in a vigorous advance into the increased power to exist of an age defined by nuclear fission and thermonuclear fusion, and beyond, exactly as the history of the emergence of, and progress in life on Earth has always depended, so far, and will depend, increasingly in the decades immediately ahead.

The currently onrushing great general economic-breakdown crisis, has been, in a large degree, the increasingly contrary, and increasingly fatal error of belief and practice among our citizens and the institutions of government which is called "monetarism," "monetary theory," and such. In short, the conflict between President Franklin Roosevelt and John Maynard Keynes, during the proceedings of the 1944 Bretton Woods conference.

The trouble was, that soon after that, President Franklin Roosevelt died, to be succeeded by a Vice-President Harry S Truman who had been a Wall Street Democratic Party crony of fascist-leaning implications, and, also, a bit of a late-comer in recognizing the nature of the evil of those combined British and Wall



NASA

*The continued survival of mankind exists depends upon the vigorous advance of an increase in power, as defined by nuclear fission and thermonuclear fusion. Shown: Sandia National Laboratories' "Z Machine," the world's largest X-ray generator, which, it is hoped, will, one day, ignite a nuclear fusion reaction.*

Street financier interests, such as the head of the Bank of England and his partner, Brown Brothers Harriman, which had, in fact, brought Adolf Hitler to power in Germany.

Already, once the Allied forces, led by General Dwight Eisenhower, had effected the successful landing in Normandy, the same old "American Tory" attachment was resumed as the expression of Franklin Roosevelt haters whose loyalties had lain between those British imperialist interests and their Wall Street cronies who, as in the case of Brown Brothers Harriman and its official Prescott Bush, had funded bringing Adolf Hitler into power in Germany. The British intelligence service's role in the wrecking of the surrender being prepared by relevant German generals, and the seemingly insane Montgomery-led caper of the First Army, successfully postponed the gaining of the Allied victory for virtually another year, during which many Americans in service, and others, died. With the death of President Franklin Roosevelt, and the accession of

the Wall Street-friendly Harry S Truman, the cause of our United States suffered a defeat from which we have never fully recovered as a nation, to the present day—despite great Presidents such as the Dwight Eisenhower and the John F. Kennedy who operated under hostile and also, especially for President Kennedy and his brother, implicitly deadly conditions.

Thus, the time came, when the assassination of President Kennedy had plunged the United States into the long, foolish war in Indo-China, from which our United States has never resumed its true self, to the present day.

So, in these and like ways, most among our lawful and other political leaders, have lost a large part of the essential moral and intellectual inclination which was specific to the founding of what was to become our republic in Seventeenth-century Massachusetts, and in the great achievements under our greatest elected and other leaders during sundry periods of the Eighteenth and Nineteenth centuries, as, also, under a

President Franklin Roosevelt whose conscience inherited the devotion of an ancestor, Isaac Roosevelt, who had been allied with the designer of our U.S. constitutional economic policy, Treasury Secretary Alexander Hamilton.

We had also been led, in a good time, by a President Franklin Roosevelt whose comprehension of our great Constitutional principle is virtually unknown among most of those newly elected members of the U.S. Congress today, who, if allowed, will destroy what remains of our republic, members of the Congress who, today, proceed, in large part, with brutish lack of comprehension of the nature of their own incompetence. How could a man swear an oath to perform a duty of which he has no comprehension?

Today, there is presently virtually no comprehension of the actuality of those great principles on which the unique genius of our republic had depended thus far. Without re-educating much of our republic's political leadership, and citizens alike, by giving them back the great principles understood by those, such as the Winthrops and Mathers, who planted the roots of our great American design, there is little likelihood that either our republic, or any part of the world's civilization at large, will survive the increasingly terrible months now just ahead.

Presently, most of the trans-Atlantic world's leaders, and ordinary folk, too, have a gambler's instinctive wish for good luck, rather than relying upon scientifically valid principles. They cast dice with little reason, and hate the most, any person who doubts the infallibility of their desperate, and wretchedly failed ambition. When doom descends upon them, they whine: "They should not have let this happen to me. You must bail me out, whatever it might cost you, even the very life of the members of your family!"

To get down to fundamentals, respecting my numerous achievements as a forecaster, contrary to that of notable other specialists in the field, the difference between my successful method of forecasting and analysis, and their usually failed foresights, has been, essentially, ontological: Their forecasts are premised on a statistical (e.g., *phenomenological*) standpoint (statistics, the Sarpian, "touchy-feely" Liberalism of Adam Smith), whereas mine are *ontological* (physical principles). The most publicized example of this difference, is that reflected in my defeat of a leading British economist of the intrinsically pro-fascist tradition of the cult of "creative destruction" of such as Friedrich

Nietzsche, Werner Sombart, Joseph Schumpeter, and the likes of Larry Summers: the Professor Abba Lerner whom I defeated in a celebrated New York's Queens College debate on December 2, 1971.

Instead of those prevalent, but essentially incompetent notions of principles of political-economy, we must consider economy as not statistical monetarism, but as being at the core of the principles of a human practice of a physical science.

### **Economy as Physical Science**

Contrary to the poor fellows who had lately come to occupy precious positions of government and the like, any distinctively competent form of a physical science of economy for today, is essentially a reflection of the current of physical science coherent with two of the greatest scientific geniuses of recent centuries, Bernard Riemann and the Academician V.I. Vernadsky who was no Marxist, but a patriot of Russia who performed his mission of devotion to both Russia and Ukraine, and, to humanity at large, as well.

For the purpose of an adequate appreciation of the relevance of Vernadsky's leading contributions to a less imperfect science of physical economy, still today, we must recognize the crucial role which the work of physicist Bernhard Riemann had contributed in defining the conceptual foundations for all of those most singular achievements which were either contributed by Vernadsky, or expressed a shared world-outlook respecting not only science, but on mankind as such, an outlook, which, despite those statisticians who seem to trace their intellectual ancestry to Jonathan Swift's floating island of Laputa, permeates still all of the greatest of the surviving achievements of science in the world at large still today.

Apart from the fact, that I have been an extraordinarily, even often, uniquely successful physical-economic forecaster since my first such success in 1956-7, all of my own significant contributions to any actually competent notion of a physical science of economy, have been, essentially, a product of the interrelationship between my own knowledge of a physical-economic process as such, and the foundations, in the fundamental contributions of Riemann, for appreciating what I later came to recognize as the indispensable function, for a competent science of economy, of Vernadsky's rigorous treatment of the respective and interdependent notions of the *lithosphere*, *biosphere*, and *noösphere*.

Thus, competent economic science, is physical-

economic science, not statistical forecasting. It has nothing to do with the likes of such charlatans as both that pair of dupes of Bertrand Russell, the John von Neumann and Professor Norbert Wiener whom David Hilbert had tossed out of the faculty at Göttingen. More to the point, recently accumulated investigations bearing on the leading role of what is termed a “cosmic radiation” permeating what is never, and nowhere a part of “empty space,” now depend on deeper insight into the conclusive quality and forward-looking implications of the apparent qualitative divisions, and interrelations among the *lithosphere*, *biosphere*, and *noösphere* within the confines of that region which our Solar system inhabits on our galaxy’s periphery.

In addition to what relevant physical-science professionals have brought to us, as such, my own leading work concerning the human mind, intersects those considerations in a crucial way. The most relevant implication of these considerations, is the proof of the falseness of the naive notion of “sense-certainty,” a proof which shows us that the human mind’s true function is that mind’s direct relationship to the universe, as ancient, trans-oceanic maritime cultures from no later than the last great ice age, already anticipated, in practice, the Kepler-Einstein principle of trans-oceanic navigation, that the universe of the stellar navigational system’s star-map, is finite, but not bounded.<sup>4</sup>

The unique success of Johannes Kepler in defining the Mars and Earth solar orbits in his **New Astronomy**, and his subsequent, uniquely original discovery of a principle of gravitation, in his **Harmonies**, point out to us the significance of what Kepler himself defines as a method of “vicarious hypothesis,” a discov-



*Recent investigations bearing on the role of cosmic radiation “permeating what is never, and nowhere a part of ‘empty space,’ now depend on deeper insight into the conclusive quality and forward-looking implications of the apparent qualitative divisions, and interrelations among the Lithosphere, Biosphere, and Noösphere,” within our galaxy. Shown: “Aurora Borealis,” by Frederic Edwin Church, 1865.*

ery of the ancient Platonic method, and that of Nicholas of Cusa, which assumes its momentous character in the uniqueness of Kepler’s discovery of the principle of gravitation. Hence, Einstein’s genius in insight into the explicit notion of a universe as finite but not bounded.

Similarly, for most of that time which we can presently attribute to the existence of manifest forms of life on our planet Earth, the evidence has been, that life had been long expressed, chiefly, in something approximating unicellular forms of animal and vegetable life. Thus, for most of what we consider as relevant fossil resources, known human societies have depended upon the accumulation of the massed dead bodies of unicellular, or comparable forms of life.

The development of life itself on Earth, has been the notable cause of the changes in the environment of the planet and its surface, changes which have, in turn, made possible the emergence of higher forms of life. The development of the function of oxygen for life, thus led to the consequent development of the new functional phase-space for life-forms, known as that “ozone layer” which provides the protection needed for higher forms of life. This presents me and my associ-

4. Not the silly Titius-Bode concoction of the reductionists’ schools.

ates in scientific researches with two phase-spaces, each of which has its own characteristics for the way in which life is organized on this planet during the course of the evolutionary development of the respective “platforms.”

Such is a fair description of the matter to be considered. The case of iron ores is an illustration.

Most of the raw materials on which civilization depends today are found in fossil remains, such as iron deposits, left behind by deceased forms of what had been living processes. Thus, when we gather up and employ “iron ores,” we are depleting the density of the forms of ores left behind by long-deceased expressions of life concentrated in certain environments in this manner. Hence, to overcome the loss of richness of such resources left behind, we must act in ways which have the effect of increasing the equivalent of “the energy-flux density” of the sources of heat-power applied to production for human needs. This pattern of proceeding from raw materials and heat-processes of relatively lower, to higher orders of energy-flux density, has been the basis for every case of a society’s ability to maintain its population’s ability to maintain an improved, or even a constant level of potential relative population density.

Only the scientifically insane could believe, today, in the outright fraud of presuming that the degeneration of the productive powers of labor by reliance on such wasteful nonsense as windmills and “solar collectors” is allegedly sane policies of practice.

Mankind’s willful progress in the discovery and use of heat-sources of relevant forms of higher degrees of energy-flux density, is the precondition for maintaining a viable form of human culture at a pre-existing level. Today, the use of the sources of power such as nuclear fission, and of thermonuclear fusion, have become a growing ration of the indispensable means of rising standards of “energy-flux density” which are, more and more, indispensable for preventing a society’s physical and moral degeneracy through attritional processes.

Not only must society rely upon increases in the level of energy-flux densities controlled and employed; mankind must organize the environment by aid of revolutionary transformations of society’s cultures to higher levels of the equivalent of energy-flux density.

There is no sane excuse today, for what are the actu-

ally mass-homicidal practices of what are called “green” anti-nuclear policies and the like today.

For reasons related to such considerations as those, a competent practice of the principles of economy depends upon discarding virtually everything usually taught as “economics” in common practice of economists and related others today. Therefore, we should not find ourselves surprised, to learn that a competent practice of economics as a science, takes us into what is, in fact, the most profound, and least well known of all presently known branches of physical science. The principle of “energy-flux density,” is among the simplest of those often neglected considerations.

It is mankind’s tendency to recognize crucial qualities of proof respecting those universal physical principles which are specifically accessible to the development of the processes of the human mind, which defines an implicitly direct relationship between the creative powers innately developable in the human mind and the universe with which that mind is interacting. It is man’s conception of that relationship between ourselves, our cultural progress, as in science, and the universe which man inhabits, which is the basis for anything of truthful value which man can adduce for lowered ontological forms of existence.

To proceed from that broad overview of man in the universe, to the preconditions for man’s overcoming the forces of attrition, we must consider some among the most important of the relatively simpler of the physical-scientific considerations. I begin the series of considerations to be taken into account, by explaining my objections to the continuing use of the term “infrastructure.”

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### III. The Allusion to ‘Infrastructure’

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I have, recently, discarded further use of the term “infrastructure” as a term of professional economics. Instead, I have introduced the term “platforms,” as notions to free me of the popular, but imprecise meaning of the term “environment.” There have been several crucial considerations.

I shall approach the subject of these platforms, in two, successive ways. First, I shall indicate the terms to be used as definitions of certain, pivotal technical terms used for this purpose. Second, I shall restate the case in terms describing an actually historical process which

represents the modern cultural roots of the existence of our United States. The significance of those notions, is that they correspond to the character of space-time relations within both the planet and its particular regions, rather than being typical of the limits of an occurrence of a specific localized action.

Therefore, I begin this chapter with the included subject of the *transport* functions listed in historical, or quasi-historical orderings: water (maritime); water (riparian/rivers integrated with canals—as under Charlemagne); rail-

way systems; high-speed transcontinental railway systems; very-high-speed track (rail or maglev) systems; ultra-high speed systems (e.g. 1000 mph in semi-evacuated tubes); and, extra-terrestrial systems.

Next, we have to consider the chemical infrastructure treated in terms of technological levels of “power,” as defined, chiefly, in “levels” of energy-flux-density, as expressed by the modal physical chemistry of society’s general, or local practice. This includes the role, since ancient times, of that notion of the general use of “fire” which is presently known as a characteristic behavior unique to mankind among all known living species, “fire” as to be measured by us, here, in units of “relative energy-flux density.”

Next, we have the quality of intellectual cultural level of development of mankind within society considered as an ongoing process. E.g.: “Classical artistic” and “scientific” education of the population generally (as an expression of the intellectual potential which is characteristic of a specific quality of a human population). Putting this in relevant, other terms, this means the general intellectual development of power expressed intellectually by the culture of a nation or comparable society; this points to a general intellectual level of a national or comparable division of culture, as distinguished, as an underlying category of aptitude of a culture, as *a notion of potential*, as contrasted to the



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*Rather than the term “infrastructure,” LaRouche has introduced the term “platform,” to describe an “upshift” of the Biosphere, produced by the application of the discovery of a universal physical principle. NAWAPA, as conceived by LaRouche and his scientific Basement team, represents such a platform. This image is taken from the LPAC-TV video, “NAWAPA, Water for Life” (<http://larouhepac.com/node/15570>).*

notion of the localized practice specific to some group of individuals within society.

The cross-over from the category of what may be treated as simply “platforms” as such, to the development of a society’s potential and individual or local action, is to be located in the application of the discovery of a universal principle, such as a level of quality of practice of a body of physical science, or of Classical artistic composition and its performance. In short, we have the concept of the universal personality of a general population’s productive potential, as one distinguished by the radiation of an efficiently valid discovery of some relatively higher, truly universal principle of physical science, or, equally, of Classical-artistic mode of composition.

In other words, we must distinguish between the general level of application of energy-flux density, and extraordinary higher, or lower cases within the same domain.

These, and comparable features of the environment on which human life of a certain level of quality depends, are comparable, in their effects, to the climate conditions near the surface of our planet. In the extreme case, these conditions are indispensable choices of feasible approaches both to the maintaining and developing of successively higher orders of organization of human life, within such bounds, this corresponds to

the notion of the development of the conditions for not only life as such, but, that the level of productivity achievable is determined in ways aptly illustrated by the available quality of transport of human beings and their productivity.

It is to be emphasized, that among all species, only mankind is known to recreate its willfully adopted, specific behavior in ways which are to be compared, and contrasted to a higher “evolutionary” progress to a superior species of life within the animal kingdoms generally

To introduce this subject, let us refer, here, to the case of celebrated statesman Charlemagne’s revolution in economy and culture, through integrating networks of inland transport of persons and freight through integrated networks of rivers and canals. This work effected under the leadership of Charlemagne, was one of the greatest leaps forward in the productive powers of labor presently known in the human species’ European history. For an example from a later phase of European and North American progress, take the still higher “geopolitical” level of trans-continental rail and related transport. “Nuclear Age,” or “Thermonuclear Age,” typify relevant cases of qualitative leaps to higher, physical, “geopolitical” states of organization of society as a whole.

### On Higher Physical Principles

To make clearer the significance of replacing the notion of “infrastructure” by “platforms,” consider, once more, the profound changes in conditions for life-forms on this planet as Earth came into an oxygen-dominated phase, and the later shift to an “ozone” phase. We are challenged, presently, by two broad classifications of such phase-spaces. The one by the natural evolution of the conditions of life, as determined by qualitative shifts in the Solar system’s relationship to our galaxy, and, within those bounds, the qualitative shifts in the



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*The natural evolution of the conditions of life on Earth, is, in significant part, determined by qualitative shifts in the Solar system’s relationship to our Galaxy. Shown: Our Solar system oscillates above and below the plane of the Milky Way, in a 60-million-year cycle.*

conditions for life within the bounds of the Solar system, and, within the Solar system, within the conditions for life-forms on Earth.

Following that, science must focus attention on those general changes in the potentiality of human habitation and development of our planet, which are willfully man-made principles of the environment in which mankind’s habitation and work within human life and production, are brought to relatively higher stages of productivity, as within the newly created “level” of the potential representation by the environment. You should focus, first, on the strategic quality of logistical forms of “environmental factors” of quality of habitat and of facility of movement throughout the inhabited form of the developed environment.

To serve the purposes of this present phase of the discussion here and now, compare societies which are dominated by the strategic power represented by maritime movements, with the later, successive stages of approach, as through Charlemagne’s development of an inland waterways system of combined rivers and connecting canals; then, proceed from that to the role of railways as supplements to riparian-canal systems, thence to trans-continental railways which represent a powerful, “geopolitical” challenge to imperial maritime capabilities.

The latter is the great issue which prompted the British Empire to drown the planet in a permanent state

of global warfare from the time of the 1890 British ouster of Germany's Chancellor Bismarck through the ensuing state of virtually perpetual warfare throughout this planet since that time.

From there, move on to the fact, that since "World War II," we have had the prospect of a great change in the economy of life on this planet represented by the then-recent mastery of the domain of nuclear fission. We are now, for example, advancing toward general application of the higher cultural-physical phase of thermonuclear fusion, and beyond.

To bring about a relevant, competent understanding of the functional implications of such relatively primary kinds of logistical factors in government of mankind's habitation of our planet, we must take into account the broader and deeper implications of the concept of the "oligarchical principle" in shaping mankind's shaping of mankind's history. I shall classify this aspect of the problem by using the term "monkey business:" the role of cultures in which some people treat other people as, at best, virtually higher apes, rather than the human beings which they actually are.

Thus, there is the related issue of a functionally essential, strategic correlation, between the permission of some people to permit other people to use the higher forms of the principle of "fire," and the oligarchical model, in which latter case, a ruling class treats the lower classes of persons as virtually apes, denied the effective, willful choice of use of power, as such suppression of the conditions of life of the so-called "lower classes," is done in the name of "environmentalism" by the British monarchy and kindred nasty types today.

To summarize what I have reported in this present chapter of the report this far, that which I have chosen in order to arrive at an appropriate method of policy-shaping for a national economy, or a portion of technologically and culturally similar nations in the world economy, we must distinguish between the general "foundations" of the economy of a nation or related group of nations (what I have termed "the platforms"), and the way in which that foundation is utilized for the development of the local and regional applications of particular methods and capabilities of production represented by local production, services, and individual public and private enterprises.

To summarize this chapter's introductory remarks thus far, let us emphasize the level of scientific and cul-

tural development of, on the one side, the foundations of the productive potential of a nation and its regions, and, on the other, the application of scientific and technological potential to planting and harvesting the fruits which depend upon the qualitative level of the general foundations on which the fruitfulness of the production throughout that region depends.

### **The Notion of Physical Principle**

I think it preferable that I interrupt the line of the argument which I have been following within this chapter thus far, to bring into play the notion of a true universal physical principle, a notion which does not exist in the practice of either the crude "materialists," or either the Aristoteleans, nor the followers of the doctrine of "pleasure-pain" of such as Paolo Sarpi and the notoriously degraded Adam Smith.

So far in this present chapter, I have emphasized the use of fair descriptions, as if to "box in" principled conceptions, rather than address them more directly. Now, I must shift to direct representation.

In reality, there is no "space per se." There is no separation of "space" and "time," but, rather, there is an indivisibility of a space-time best fairly identified as "a space-time filled with cosmic radiation," a system of cosmic radiation which situates the "singularities" which a less sophisticated science prefers to identify as "particles" or the like.

That principled type of distinction has broad implications, but, here, I concentrate attention on one aspect.

The domain of the "cosmic radiation" of "space-time," can not be understood efficiently except for those cases in which the subject of primary interest is something which does not exist for either the followers of Aristotle or modern Sarpian Liberalism, to say little about the crudest form of sense-certainty. Since some of these implications pertaining to cosmic radiation are currently being addressed by a core grouping among my associates, I shall limit myself here to minimal considerations on this subject.

Expressed most simply, while avoiding actual error, the situation to be referenced here, is presented as follows.

No truly universal principle of nature can be deduced, in itself, as a derivative of a mathematical deduction. The most useful illustration of that point is the case of Albert Einstein's recognition of Johannes Kepler's uniquely original discovery of the principle of universal gravitation, as implying a universe which is

finite, but not bounded. The proof of Einstein’s conclusion on this account, is illustrated immediately by the method which Kepler employed to define a universal principle of gravitation, especially when one takes into account Kepler’s method of experimental hypothesis for defining the principle of the Earth orbit. The construction of the duplication of the cube by Archytas, is an illustration of the case of a physical action which can not be represented deductively, but for which there is a construction.

This same principle is expressed systematically in the work of Bernhard Riemann, and, notably, the discoveries of the principles of the Biosphere and Noösphere by V.I. Vernadsky. Indeed, contrary to the hoax of Titius-Bode, every true discovery of a valid universal principle is literally metaphorical in the respect that its proof is not located within the domain of an extended notion of sense-perception.

Whereas, the universe is inherently creative, the creativity is not willfully generated in the way human creativity functions; it is the willful aspect of human creativity which distinguishes V.I. Vernadsky’s Noösphere from the Biosphere. The role of the human intellect and its will in efficiently discovering successively higher orders of true creativity in the universe, is the essential distinction of man from beast.

Notably, the origin of new, valid expressions of creativity, is located in the domain corresponding to the Classical poetic method of metaphor, metaphor as a physically-experimentally anti-entropic, humanly willful discovery of what corresponds to a principle of the universe. Life itself is such a universal principle; human cognition as a principle, is a universal principle of a higher quality than life in itself. Such is the only valid meaning of the term “human creativity.”

Mankind creates, and that willfully, specific types of higher states of organization in the universe than would be generated by other means. It is by such human activ-



*The 15th-Century “Golden Renaissance” revived European civilization following the 14th-Century “New Dark Age.” Shown: “The Journey of the Magi,” by Benozzo Gozzoli, 1459-61, a metaphor for the visit by leading scholars, statemen, and intellectuals, to the Council of Florence (1439).*

ity, whether by some original inventor of the discovered principle, or by assimilating some broader implication of an already discovered such principle, that the essential changes of the human race to higher qualities of states of existence within the universe are accomplished in a willful mode.

The occurrence of such forms of human individual’s such creativity has the characteristic of a change in the lawful ordering of the universe by the action of the human creative will. Man introduces a new state of lawfulness into the body of the universe, man, seen in Biblical terms of **Genesis 1**, as representative of man and woman “in the likeness of the creator,” not in form, but in function.

### **The ‘Golden Renaissance’**

Consider the most crucial of the relevant developments of trans-Atlantic civilization during the period of accelerating emergence of a new kind of society which appeared at an accelerating rate throughout the early through middle decades of Europe’s Fifteenth Century. Focus on the process leading into and beyond the mid-century’s Florentine Renaissance—the so-called

“Golden Renaissance,” and its expression as “the great ecumenical Council of Florence,” a renaissance whose intellectual leadership featured, to most notable scientific and economic effect, the leading role of the figure soon to become known as Cardinal Nicholas of Cusa.

Divide the entire period into three principal parts, beginning since the earlier collapse of Fourteenth-century Europe into a so-called “New Dark Age,” the process of a relevant discovery of civilization in Fifteenth Century Europe under the impact of the process culminating in the Florentine “Golden Renaissance,” and the later descent into the 1492-1648 period of horrid religious warfare.

To gain access to the “flavor” of the Fifteenth-century Renaissance itself, consider, in broad terms, situating that review among the crucial features of the developments in Europe during the Twelfth through Fourteenth centuries.

The close of the Tenth Century had seen the beginnings of a long wave of decline of the second phase of the Roman Empire, the Byzantine empire, and the rise of Venice as the center of the leading, imperial form of monetary power in Europe generally. The character of the opening of this period, is identified by the rising role of Venice as the monetarist power of Europe, and the expression of that character of the period by the Norman Conquest of the British Isles and the process of the Crusades, leading into the mass-murderous “New Dark Age” of the Fourteenth Century.

That Fourteenth-century “New Dark Age,” is to be remembered, since the so-called “Norman Conquest,” as the period of the notorious Hildebrand, a period dominated by evil Crusades, such as the Norman Conquest itself, warfare launched under rising Venetian monetarist financing and manipulations. It was a period which, from the time of the Norman Conquest into the depths of the Fourteenth-century “New Dark Age,” a period of broadly chaotic, genocidal nightmares, leading into that vastly and stubbornly genocidal nightmare, a horror



*Nicholas of Cusa, the great “polymath” behind the ecumenical Council of Florence, is the founder of modern science.*

which began to end only with the cleansing of a Christian church deeply corrupted by its Venetian direction, until the rising contrary developments, known as the Renaissance, during the early through middle of the Fifteenth Century.

Return to touch on some matters to which I have referred earlier in this chapter.

### **Cardinal Nicholas of Cusa**

The modern expression of this notion of actual, universal physical principles was introduced to the “post-dark-age” developments in Fifteenth-century Europe around the rallying point of what I have already identified here as the great ecumenical Council of Florence. Many from that time contributed to this, including, notably, the Jeanne

d’Arc whose specific intention and heroism inspired the great Councils of the Christian Church through the middle of that century. The most fertile of those minds engaged in launching the Fifteenth-century Florentine-centered European Renaissance, was what I have already referenced as the great “polymath” of the period, Cardinal Nicholas of Cusa.

There were two outstanding historical figures of the period leading into the Great Ecumenical Council of Florence, Jeanne d’Arc, who was baked alive by the English (Norman) inquisition, but whose role and its reflexes on Europe not only bestirred the councils of the Christian church during that time, but which had a crucial effect in shaping the history of Europe from that time on, through the great role of France’s King Louis XI. This was the same Louis XI whose role inspired the revolution in England led by Henry VII.

These developments, sparked in significant degree by Cusa’s **Concordantia Catholica** defining the modern sovereign nation-state, and Cusa’s formal founding of modern physical science, his **De Docta Ignorantia**, remain outstanding, still throughout the world today, as the root of the launching of all competent strains of modern physical science today.

For example, it was Christopher Columbus’ reading

of the legacy of Nicholas of Cusa, in Cusa's proposal to build up civilization by trans-oceanic voyages to distant continents, which prompted Columbus and others to cross the Atlantic, as a measure to save European civilization from the effects of a fresh Venetian launching of a European dark age of wars and the like. It was Cusa's initiatives in the founding of modern science which were chiefly responsible for every great scientific figure of Europe from the late Fifteenth, Sixteenth, and Seventeenth centuries, with strong reverberations among all competent currents of fundamental scientific progress. Such as Bernhard Riemann, Max Planck, and Albert Einstein, to this day.

As the case of Cusa exemplifies this, all great movements in physical science were essentially "polymathic," as for the great, avowed follower of Johannes Kepler, Gottfried Leibniz, for whom there was never any separation of the world-outlooks of Classical artistic composition and physical science.

Thus, the mid-Fifteenth-century great ecumenical Council of Florence, was that true Renaissance of European civilization on which all of the good developments in European civilization have depended for their adopted roots, to the present day.

It was not the entry into Paradise; it was an entirely original quality of advance in mankind's insight into mankind, which emerged to remain, thus far, an imperilled new force of civilization on which the creation and usually imperilled existence of our United States has depended up through the presently, monstrously imperilled United States of America today.

Many from that period of the Renaissance contributed significantly to this greatest of all known qualitative achievements of mankind to the present day, including the rise of the Federal Republic of the United States out of the seedlings planted in Massachusetts during the middle of the Seventeenth Century. That subject, so situated as I have done immediately above, is the kernel of the argument which I present here and now.

### **'The Massachusetts Syndrome'**

In this present report, up to this present point in my account, I have emphasized the physical accomplishments which supplied the foundations of all European society since the appearance of the roots of the influence of Solon of Athens. Now, bearing in mind my preceding remarks, we are obliged to shift our point of

view in a qualitative way.

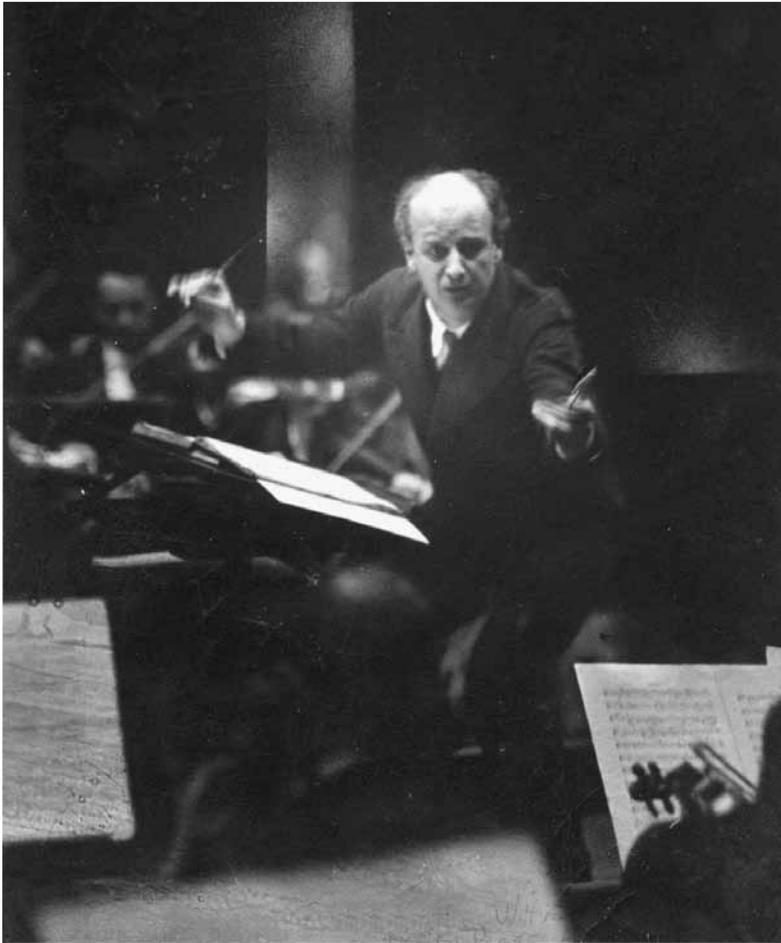
Up to the beginning of the present chapter of this report, I had emphasized the physical principles of progress, as such. Now, we must shift from emphasis on the commonplace, narrower, more popular notions of physical effects, to the role of human culture in generating the causes for those leaps in the quality of life on this planet which have been fruits of what we call "culture."

By "culture," I now signify the transformation of the physical quality of the existence of our human species on which the physical fate of human life on this planet absolutely depends; I mean to emphasize the role of the cultural impact of the Fifteenth-century, Florentine-centered "Renaissance" in producing what became the Seventeenth-century high point of the Massachusetts Bay Colony under the leadership of the Winthrops and Mathers, and of what survived of the great Massachusetts Renaissance in trans-Atlantic civilization, to become the heritage of the Eighteenth Century's Benjamin Franklin, that heritage of our United States, which is expressed by the American Revolution and by the launching of the constitutional, anti-monetarist credit-system which is to be recognized as the United States.

So, turn to the second of the two approaches which I have outlined for this chapter of the report. Take the model historical case of the original foundation and development of the Massachusetts Bay Colony prior to both the last period of suppression of the colony's development, a period of peril during the reign of England's James II, and the crushing of the colony following the accession of that "New Venetian Party" which was led into power in the British Isles by William of Orange.

To understand the roots of our American Revolution, we must take into account, and emphasize, what is presently the almost unknown concept of what is truly a universal physical principle. This is a notion of principle which does not exist in the imagination of such as the followers of the ancient Aristotle or the modern Paolo Sarpi, the true notion of a discoverable, universal physical principle.

In notable degree, that Renaissance in science and the principles of humanism, was brought into modern European culture as an echo of the process leading into the great achievements of Plato and his associate, that Pythagorean, Archytas of Tarentum, whose signal



*“The great obstacle to human reason has been the popular delusion of belief in ‘sense-certainty,’” LaRouche writes. As the great conductor Wilhelm Furtwängler warned, “music requires its performance ‘between the notes.’” Shown: Furtwängler, conducting, in the 1930s.*

achievement had been, what the later Eratosthenes underscored as the method of construction required for the duplication of the cube.

### **The Human Mind**

The great obstacle to human reason has been the popular delusion of belief in “sense-certainty.” The worst form of that delusion, has been the presumption that the evidence of each of the given senses has an independent authority of its own, and that that authority defines what the mind should adopt as if with a cry tantamount to “that settles it!”

My own views on sense-perception were settled for me by early 1953, when I adopted the implications of the Third Section of Bernhard Riemann’s 1854 habilitation dissertation, in which Riemann develops his famous argument against the foolish presumption that

mathematics, such as that pathetic mewling called statistics, defines physical science. Our sense-functions are not merely the equivalent of a set of sense-organs, but, nonetheless, they provide us, not with reality, but with something akin to the shadows cast by an unseeable reality. Thus, there could be no decent poetry which is not premised on the principle of enunciated irony which is typified in the tendency for metaphor. As the great conductor Furtwängler warned, music requires its performance “between the notes.”

What we can properly claim that we know, is the discovery of universal principles, as Archytas crafted the duplication of the cube, and as Johannes Kepler defined, uniquely, and with perfect originality, the principle of universal gravitation.

Consider the great lesson provided by Classical poetry, uttered accordingly.

The function of the great principle of metaphor, as in Classical poetry, and as in musical counterpoint composed and performed according to the principle of Johann Sebastian Bach, is to provide mankind with a prescience of the approach of a discovery of a great principle. We call this “Classical artistic” composition, because it is presented to us as if a voice of truth spoken from the future, not yet the present. It is the shadow cast by a principle of the universe which is yet to be spoken; thus, properly uttered, or performed as music, it is the idea which can never be deduced, since it is the prescience of that reality which is still waiting impatiently to become discovered.

Those who do not serve that principle, should—please—never compose Classical poetry or music. All competent practice of scientific discovery depends upon exactly that same principle of the prescience of a hand from the future reaching in to touch one’s soul with a discovered principle of nature yet to be born. The true mission of the human individual is to feel the prescience of the principle which is about to be born.

Such is the true content of the much-abused word named for a prescience of immortality, a prescience which you might wish to call “love” of being, in that moment, truly human.