LAROUCHE'S FOURTH OF JULY ADDRESS!

It Happened in Berlin Last Week

by Lyndon H. LaRouche, Jr.

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As I said in Berlin last week: suddenly, very soon, the entirety of the present world monetary-financial system will collapse. It will come like a Summer thunderstorm, far more devastating than anything we have experienced during the recent two centuries. If I told you all that I know about this onrushing collapse, it would stagger your imagination. So, rather than telling you how bad the situation actually is, I shall do as I did in the closed door seminar held in Berlin last week. I shall tell you just enough about the origins and outcome of this presently onrushing crisis, that you might understand the way in which the presently onrushing collapse of the world economy can be overcome, hopefully in the nick of time.

As this collapse of the present world monetary-financial system hits, soon, the continuation of a civilized existence of all the nations of this planet, for generations to come, will depend upon the courage and wisdom which must be shown now by the government of our United States, in providing the needed initiative for halting the presently onrushing collapse, and conducting a general economic recovery throughout the planet.

So, this Fourth of July has presented itself as the appropriate occasion on which I should now summarize that needed set of decisions. If we have the wisdom and will to make that timely decision, future generations of humanity, world-wide, will praise us for what we have done. Therefore, I, personally, can assure you now, as I respond to what President Franklin Roosevelt did on an appropriate occasion, that we must be at peace with ourselves as we face this oncoming storm, knowing that we have nothing to fear as much as that fear itself. The solution for this crisis is clear to me; for me, the principal questions which remain unanswered are: whether the U.S. government will adopt that solution, and whether the leading nations of Eurasia will accept that remedy, if or when we introduce it.

The role of the United States in this matter will be presented and conducted among nations in a fraternal spirit; nonetheless, it must be clearly understood, that that will require reliance upon a unique capability of our constitutional system. What might be regarded as "the secret" of this unique capability and responsibility of our United States, is to be discovered in the economic implications of the underlying constitutional principles set forth successively in our Declaration of Independence and our Federal Constitution.

Those principles implicitly define a system of national economy which is neither capitalist nor socialist, but, rather, nothing other than what our republic's first Secretary of the Treasury, Alexander Hamilton, and others have repeatedly identified as *the American System of political-economy.* It is those principles of our American System, which provide the unique foundation for the kind of decision we must make, for the sake of ourselves and all mankind, during the ominous moment of crisis now rapidly, even suddenly descending upon the entire world of today.

The historical fact we must emphasize here, is that no *modern* economy in the strict meaning of that term, existed prior to the Fifteenth-Century emergence of the two model nation-states, called *commonwealths,* which were established in King Louis XI's France and Henry VII's England. This line of separation in European history, between "medieval" and "modern," is defined with the exactness of a universal

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What might be regarded as "the secret" of the unique capability and responsibility of the United States, LaRouche writes, lies in "the economic implications of the underlying constitutional principles set forth successively in our Declaration of Independence and our Federal Constitution." Here, John Trumbull's painting of the signing of the Declaration of Independence, July 4, 1776.

scientific principle. That principle is illustrated by the crucial fact, that under these Renaissance republics, the existence of the state was premised upon the responsibility of the nation to promote the general welfare of *all* of its people, present and future.

That principle of constitutional law, the ecumenical principle of the general welfare, was already known to the founders of our Federal Constitution, from study of the ancient Greece of Solon of Athens, the Pythagoreans, and Plato. In ancient Greek, that principle was identified by the term *agapē,* the same principle of Christianity which the Apostle Paul emphasizes in such famous locations as ***I Corinthians*** 13. However, it was not until the Fifteenth Century, that actual societies based on that universal principle of natural law came into existence. Hence, there is a clear principle which, with scientific precision, separates the modern from medieval history of European culture. This is a principle which has changed the shape of history since the appearance of a form of nation-states which embody the universality of modern European culture.

That is the essential historical background for understanding the causes and cure for the currently onrushing, economic breakdown-crisis of the world's present monetary-financial system. The presently onrushing blow-out of the U.S.A.'s presently doomed real-estate-mortgage bubbles, is only one crucial aspect of this reality.

During the concluding session of a two-day, closed-door meeting of notable figures from the U.S.A. and elsewhere, which was held in Berlin, Germany on June 28th and 29th, I interpolated a summary description of what is the only durable and feasible mode of economic-recovery program for the world today. That recovery is premised on the principle underlying the separation of modern from medieval society, the principle upon which the successful periods of progress of modern European civilization have depended. That declaration is now being excerpted from the record of those Berlin proceedings, for wide circulation among relevant circles internationally. Here, in this July 4th utterance, I outline the relevant background in natural law for that proposal which I summarized in the June 29th session of the Berlin event.

The particular point to be emphasized on this occasion, is the unique qualifications of the U.S.A. for instigating the series of actions required for a durable rescue of the world economy from the present onrush of a planetary general breakdown-crisis of the present world monetary-financial system. For that needed wisdom for today, we must look to the origins of our U.S. republic, as we do here and now.

1. How Our Republic Was Conceived

In service of the Fifteenth Century's affirmation of that same universal principle of law which subsumes our Constitution as a whole, Nicholas of Cusa directed future generations to conduct voyages of exploration, to find allies for that cause in even distant locations of the planet. Christopher Columbus's voyage of discovery to the Americas, was based upon Columbus's discovery of this facet of Cusa's work, and upon that famous navigator's subsequent study of the relevant plans which had been made at Cusa's prompting, by Italy's scientist

Paolo del Pozzo Toscanelli, who crafted the map actually used by Columbus.

Unfortunately, Columbus's voyages coincided with the launching of religious and related warfare by the surviving remnants of the earlier, medieval world, as by the Grand Inquisitor Tomás de Torquemada, whose brutish acts of terror echoed a medieval time when Venice's financier oligarchy had been formerly allied with the Norman chivalry in a peculiar kind of imperial system, a system known as the *ultramontane* order. This was the medieval root of the religious warfare which began in 1492, with Spain's brutish expulsion of the Jews. This religious warfare continued from 1492 until the signing of that 1648 Treaty of Westphalia which affirmed the principle of law of the promotion of the general welfare among nations, a law defined, up to the present day, as the indispensable precondition for religious and related peace, despite the contrary impulses of Zbigniew Brzezinski's accomplice Samuel P. Huntington, Henry A. Kissinger, Bernard Lewis, et al.

Already, while the Thirty Years War of 1618-1648 was still raging, two voyages of colonization, that of the Plymouth Colony and the Massachusetts Bay Colony, set the precedents, in conception of law, for creating a new nation in North America, a nation to become a place of refuge and development in expression of the best principles of modern European culture. However, with the rise of the predatory Dutch and English India companies during the late Seventeenth Century, the Westphalian peace of Europe was thus imperilled in a new way. This threat increased the importance of the successful development of civilization within the Americas.

The decision to seek our independence from the British monarchy, was forced upon us by the February 1763 Treaty of Paris, a treaty which ended the mutually ruinous "Seven Years War" which Britain had foisted upon the continent of Europe, a treaty which established the British East India Company as an empire in fact. This imperialist Britain's sudden and cruel suppression of the liberties of the North American economies, obliged us to resist, and, in July 1776, when we could postpone that decision no longer, we declared our national independence. The best minds of Europe understood that our successful establishment of a republic in North America, could be, and should be, the spark which would ignite the cause of political freedom from Anglo-Dutch Liberal imperialism and Habsburg oppression in Europe itself. For them, our cause expressed their hope.

Unfortunately, soon after we had crafted our Federal Constitution, we were to discover that our republic was not only a uniquely good, but also a lonely design for self-government. Today, we should have learned from centuries of experience, that ours is a constitution of society which Europe has never enjoyed for any extended period of time, to the present day. That same uniqueness, by means of which we later supplied the margin of difference to save the planet from a world-wide Nazi dictatorship, comes back to haunt us again today, when we must now prepare to lead this planet to safety once again, this time in defense against the storm of an economic collapse like nothing experienced during the recent centuries. Fortunately, the needed knowledge of the means to conquer this present threat exists, if we but choose to employ it.

So, to continue the account of the historical essentials behind this present crisis, when we had just crafted our Constitution, we had assumed, mistakenly, that our friends in Europe would continue to be our friends; but, suddenly, on July 14, 1789, France was plunged into a bloody orgy which would grip it until the fall of Napoleon Bonaparte's empire. The enemies of our Benjamin Franklin, the assets of imperial Britain's Lord Shelburne, Philippe Egalité and Jacques Necker, started the France which had been our chief ally on its road into Hell. It became a road paved with the corpses left in the wake of Britain's spies Danton and Marat, and, in the wake of the Jacobin Terror led by Benjamin Franklin's old freemasonic adversary Robespierre.

Then came the monster, our enemy Napoleon Bonaparte, the prototype on which the later Adolf Hitler dictatorship would be modeled.[1] The fall of Napoleon left our young nation alone and imperilled in the world of two hateful monsters, the rivals and partners which were the British Empire and Prince Metternich's Holy Alliance. While that British puppet, the Spanish Restoration monarchy, dumped boatloads of slaves into our country, the principal European imperial powers, Britain and the Habsburgs, remained overtly our mortal enemies until the time that President Lincoln's leadership in the defeat of the London-backed Confederacy, established us as a leading nation-state in both economic power and rate of development.

Thus, in the wake of our 1876 Philadelphia Centennial celebration, Bismarck's Germany, Japan, France, and other Eurasian rivals of the British Empire, adopted crucial features of our own American System of political-economy. But, in response to precisely that happy development of the 1870s, the British Empire of that Prince of Wales who became Edward VII, struck back with his Fabians' liberal-imperialist, grand-strategic scheme, thus launching what became known as World War I, echoing the Eighteenth-Century "Seven Years War" through which Britain's East India Company manipulated and largely ruined continental Europe to London's imperial advantage. Out of the World War I designed by

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1. The intended destruction of the U.S. allies Spain and France was launched by Shelburne personally, during the relatively short time, during 1782-1783, he was Britain's Prime Minister. First, Shelburne orchestrated the peace negotiations with the U.S.A., France, and Spain to occur separately, and with aid of his satanic imp-like Jeremy Bentham, choreographed what became the ruin of all three former allies. The principal instruments of subversion which Shelburne, Bentham, et al., used for this campaign of subversion, was an organization built up from among the followers of Voltaire in France, Switzerland, and Savoy, the Martinist freemasonic order, steered from London, which orchestrated the principal horrors of the French Revolution and the remolding of the Jacobin Napoleon Bonaparte into becoming the imperial forerunner of the neo-Venetian Synarchist International's creation Adolf Hitler.

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Lyndon H. LaRouche, Jr. takes the occasion of the Fourth of July "to summarize the specific measures which I am proposing that we take, to lead the world to safety and out from under the effects of the presently inevitable collapse of the existing form of world monetary-financial system."

Edward VII, and out of the political and economic pestilences which followed it, came the Great Depression and World War II. Yet, once again, in the footsteps of Abraham Lincoln, came President Franklin Roosevelt, an advocate of the American System of political-economy, leading a U.S. which was to become the greatest, most successful economic power the world had ever known.

Later, after the retirement of our President Dwight Eisenhower, the same European forces which had launched two World Wars, the forces which Eisenhower had labeled a "military-industrial complex," struck back against us, this time with the "military-industrial complex's" plunging our nation into its prolonged, and ruinous war in Indo-China, and brought us what have proven to have been the catastrophic reigns of William Yandell Elliott-trained National Security Advisors Henry A. Kissinger and Zbigniew Brzezinski during the 1968-1981 interval.

So, soon after the assassination of President John F. Kennedy, once again, as under Presidents Coolidge and Hoover, and as now, our economy was ruined, this time from the mid-1960s onward, chiefly by the same forces which Eisenhower had labeled a "military industrial complex." This time, the ruin has been continued over a much longer period than under Coolidge and Hoover, and with much worse effects than we knew from the earlier Great Depression period of the 1930s. We are now gripped by something far worse than a mere world economic depression; we are gripped by an onrushing breakdown-crisis of the world's present monetary-financial system. Despite that ugly present reality, as Franklin Roosevelt led us to safety from deep world depression and war, now, despite the ugly follies of the George W. Bush Administration, the historic legacy of our republic defines us once again, today, as the nation whose heritage equips us to lead the world, once more, into forms of cooperative action which could bring the planet to safety: provided we effect the urgently needed measures for reintroducing competence into the mental life in the office of the President.

Therefore, I have taken the occasion of this Fourth of July to summarize the specific measures which I am proposing that we take, to lead the world to safety and out from under the effects of the presently inevitable collapse of the existing form of world monetary-financial system. I now present, first, the diagnosis of the causes for the accelerating, global economic collapse which was set into motion under the circles of Kissinger and Brzezinski, and, second, the cure which must be prescribed for that disease.

2. Two Kinds of Financial Systems

The great mistake which many among our citizens have made, in adopting their recently popular, misguided opinions about economy, is that they take their own recent experience as something like the toothpaste they insist could not be "put back into the tube." They have assumed, out of nothing so much as superstition, that there is some awesome quality of self-evident "rightness" in today's widely taught and popular opinions about the nature of the economy as their recently shortened memories have experienced our economy in recent times. In effect, they are like those passengers on a ship who consider the ship unsinkable, and therefore think of nothing so much as being moved, perhaps miraculously, hopefully free of charge, into a more opulent stateroom. The lemming-like panic which so many despairing citizens have shown in their wild-eyed flight into legalized and other gambling, reflects the kind of mass-insanity into which many have fled from what has been for them a flight from the despair caused by an increasingly wretched state of our national economic and cultural decline.

Since, especially, August 1971, the great majority of our citizens have been losing the health care, private pensions, and quality of education formerly available to them. The physical standard of living of the lower eighty percentile of our nation's income-brackets, has been collapsing, while remaining opportunities for skilled, productive employment are going off the map. Many of our citizens work two jobs now, if they can find them, to maintain an income which is less than what they could have had from a single employment a decade or two earlier. Therefore, they may complain of many things, but many of our citizens, so far, usually find it comforting to overlook the most important fact: that conditions of life in the U.S.A., in particular, have been becoming worse, and worse, and worse, over the recent four decades, since the second half of the 1960s. Our nation and its economy have been decaying consistently over about four decades, especially the recent

quarter-century. Instead of recognizing that the quality of government has changed for the worse, our citizens react, mainly, by dreaming of the lucky day they come to occupy a better stateroom on this sinking ship of national-economic state. Hence, the wild-eyed flight of so many into the nightmare world of stock-market and similar gambling manias.

The intellectual and moral collapse of our educational systems, and popular culture, over recent decades, have deprived even people who considered themselves relatively well-educated, of nearly all relevant knowledge of the history of the European civilization we of European cultures inhabit today. Truthful knowledge of our culture would require essential knowledge of more than 2,700 years of European history, as this was launched by Egypt in places such as ancient Athens. Without knowing the principled features of that history, we are incapable of accounting for the way in which our culture of the U.S.A. today was developed, and also ruined. Having little or no knowledge of the way in which our culture was developed in successive phases over these millennia, our typical citizen tends to the view that he, or she, must regard events and situations as little more than experiences which have, simply happened, perhaps miraculously, as if a fortune determined by some devil's throw of the dice.

The frequently included result of that increasing ignorance of actual history among our citizens, is the typical American's or European's ignorance of the way in which today's fraudulent popular and academic opinion about the idea of "money" came into being. The most pathetic of these people are those who preach the alleged virtues of an actually clinically insane, but currently popular version of "monetary theory." This is the monetary theory practiced, with increasingly worse effects, by successive U.S. governments during most of the recent forty years. So, even the typical citizen, educated or not, proffers his or her idea of what each imagines to be the way in which money determines economic value, clinging thus to ideas about money which are, like those of the current Bush Administration, frankly absurd, sometimes even dangerously insane.

"Yes, but, how is the market doing today?" is the common expression of a mind which has fled from a reality it has found too fearful to face, into a wild-eyed, tinsel-tinted world of compulsive gamblers' childish dreams. Today's recent crops of home-owners are typical of what is becoming a virtually suicidal compulsion to own property in the vain hope of never actually paying for it.

Sometimes we might think of such people as standing in the equivalent of used-car lots, where people, instead of used autos, are on display. Each such person in that silent display stands, eyes fixed, like unlit headlights, staring straight ahead, while sporting a sign around each neck, which reads "For Sale." That image which each citizen so self-displayed is actually thinking, represents the way in which his essential worth, his imputable "shareholder value," is to be measured. Meanwhile, the relevant director of this modernist's Greek tragedy has put the figure of Associate Justice Antonin Scalia standing

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President Franklin Roosevelt walked in the footsteps of Abraham Lincoln, as an advocate of the American System of political-economy.

almost off-stage, where he seems to be nodding in contextual agreement with the message of those signs.[2]

Deluded states of mind such as those which the image of those citizens portrays, are products of the relative success of the spread of the cult of "post-industrial society" beginning the second half of the 1960s. Among the mass of the adult population coming out of the experience of World War II, sanity was expressed by emphasis on the benefits secured through technological progress in physical goods and services expressing professional progress in physical sciences such as the practice of medicine. The overthrow of the successful Hill-Burton law by the Richard Nixon Administration, already reflected the influence of a certain kind of mass-insanity expressed in the replacement of Hill-Burton by HMO scheming.

In place of the idea of producing wealth, such confused citizens as those think of wealth as the benefit of something irrational, as today's most popular forms of mass-entertainment express the recent decades' change in choice of a mid-

2. Clinically typical of this deranged state of mind spread through much of our population today, are such fantasies as the sheer lunacy with which many formerly sane persons plunged into hysterically blind faith in the assumed miracle of the "IT" bubble. Even as that bubble was crashing, during 2000, some wild-eyed "true believers" were saying, hysterically, "Lyn," referring to me, "is wrong. There are some troubles, but the money will always be there for those smart enough to find it." The case of the U.S. and British mortgage-based securities bubbles is a far more extreme expression of the spread of the same quality of mass-lunacy than the "IT" bubble before it, a far worse expression of the same mass-insanity phenomena as the Ponzi-scheme-like John Law bubbles of the early Eighteenth Century. The worst lunacy of them all, is the mind of the wild-eyed citizen who argues, "But, how is the market doing today?" The religious frenzies associated with Karl Rove's campaigns, are more an expression of wild-eyed worship of popularized financial delusions than any actually Christian or related concerns, like the back-alley crap-shooter shouting, "Baby needs shoes!"

dle-class system of values, from actually producing physical benefits, into creating fantasies intended to proffer the individual's escape from perception of our increasing national physical ruin, into the personal convictions of faddish Enron style in fantasy-life. As in clinically similar cases taken from known parts of ancient and medieval societies, we should recognize great economic calamities, such as that striking us now, as examples of the way in which nature itself acts, still today, to destroy a civilization which has degenerated in the way the United States and Europe have manifestly degenerated physically, as morally, through the cultural paradigm down-shift which enveloped so many among the minds of those 1960s and later young adults who had been born during the immediate post-World War II decades. Nature itself is now telling us, "Change your ways, or nature itself will lawfully remove you as a way of purging the planet from the disease of popular practice and opinion which you have come to represent."

3. The History Every Citizen Should Know

Today's potential capacity of the U.S.A. to provide the germ-cell of a general recovery of the world economy, lies within the fundamental distinction in philosophy of practice of the constitutionally-based American System of political-economy, as contrasted with the extremely decadent varieties of Anglo-Dutch Liberal monetarist systems which imprison the nations of Europe today.

The first fact which every citizen must know, to be freed of such currently popular delusions, is that the present world system of political-economy, under the leadership of the Anglo-Dutch Liberal ideology, is a fraud, an attempted imitation of the medieval system which was created as an alliance of the Venetian financier oligarchy with the Norman Chivalry. This was then the system of the Crusades, a system which dominated Europe from the time of such slaughters as the Albigensian crusade, and the crusade known as the Norman Conquest, and all of those later crusades preceding the mid-Fourteenth-Century collapse into a so-called "New Dark Age," of the so-called "Lombard" system of international usury.

Unfortunately, that medieval Venetian system of usury came back to power even within modern Europe, a Venetian pestilence now called "globalization," or, more traditionally, Anglo-Dutch Liberalism. That system of Liberalism is what has ruined us, both culturally and economically, during the recent four decades, especially since the 1971-1972 sabotage of the fixed-exchange-rate, Bretton Woods monetary system.

Thus, since the Fifteenth-Century Renaissance which gave birth to modern European civilization, the world has been dominated by a conflict between two principal forces. On the one side, we have had the modern nation-state otherwise known as a commonwealth, in which the nation's overriding responsibilities include the promotion of the general welfare of all of the population and its descendants. On the opposing side, we have the modern continuation of a medieval system of usury, the Anglo-Dutch Liberal system of the late Seventeenth Century's brutish William of Orange and John Locke. That Liberal system largely inherited its principal characteristics of today from its Venetian oligarchical predecessors. In fact, that Liberal system was known during the Eighteenth Century not only as "The Enlightenment," but, more appropriately, as "The Venetian Party" whose neo-medieval, imperial style of ultramontane financier-oligarchical usury is more popularly known as "liberalism" and "globalization" today.

So, today, the post-1971, floating-exchange-rate form of International Monetary Fund (IMF) and World Bank, are governed by that Venetian oligarchical tradition of usury which is associated with the doctrines of John Locke; whereas the Declaration of Independence and Federal Constitution which the United States adopted, expressed the anti-Locke policies of Leibniz and his followers.

In Europe today, for example, governments are under the overlordship of so-called "independent central banking systems," which are each creatures of a consort of private financier interests. In other words, Europe today is thus ruled, as the IMF and World Bank are ruled, by that law of predatory usury which the British East India Company and its student Karl Marx have preferred to identify by the mysticism-ridden name of "capitalism."

The return to sanity from such Venetian-style delusions, is expressed typically by the U.S. Constitution. The concert of principles set forth in the Preamble, identify the supremacy of the principle of the general welfare over all other law, including the other provisions of the Constitution itself.

This Constitution's approach to defining the use. and control of the circulation of money, is traced from the eminently successful pre-1689 use of paper money by the Massachusetts Bay Colony. This use of paper money, as advocated by Cotton Mather and Benjamin Franklin, was incorporated in the way in which the U.S. Federal Constitution defines the difference between "capitalism," as the Anglo-Dutch Liberals and France's neo-feudalist Physiocrats defined "capitalism," and our American System of political-economy. Our republic's constitutional principle of promotion of the general welfare, is the crucial, generative, continuing distinction of the American System of political-economy from the Anglo-Dutch Liberal system of international usury.

Nonetheless, despite the Liberal tradition still corrupting Europe top-down, as it has also corrupted our United States, we of the U.S.A. today are a reflection of that current in European civilization which recognizes the universal supremacy of the principle of the general welfare. Although persons of Asian origins are an increasingly significant portion of our population and its heritage, the U.S.A. can not be understood unless we emphasize that it was created chiefly by Europeans,

chiefly those who found our land a place where better opportunities awaited their families and their posterity. This was clearly the case in the original New England colonies, and has been the general case since the 1861-1876 struggle to free our nation from the earlier grip of the inhuman systems of African slavery and Hispanic peonage which European powers such as, chiefly, Britain, Netherlands, Portugal, and Spain had forced upon the nations of the Americas.

The other, non-European entrants into the U.S. citizenry have largely adopted the culture which was created by the common efforts of people of many European language-cultures. The common features of the history of the European civilization founded in ancient Greece under, predominantly, preceding millennia of accumulated Egyptian knowledge, have been an evolving cultural tissue, in which the imprint of rich achievements and also large chunks of sheer decadence, exist as if in a simultaneity of eternity, a simultaneity of ideas. Modern European civilization was created by the interaction of many relevant languages, a process in which the memory of purging of grave errors serves a positive purpose of as much importance as the shining new discoveries of great principle. The rises and falls within ancient Greek civilization, are clinically typical of European civilization taken as a whole, when conceived as it should be recognized, as a single, integral idea over the recent 2,500 and more years of the existence of the distinctive historical core of European culture as a whole.

The emergence of the U.S.A. as the proposed alternative to the continued decadence polluting modern Europe from its past, is a crucial quality of example of the way in which the mixture of new discoveries of universal principle is blended with the legacies of the past within globally extended European culture, up to the present time.

We must consider, in that way, the actual superiority of the system of government we adopted here, over those of Europe, which enabled us to build what became the greatest economic power on Earth under President Franklin Roosevelt's rescue of us from the ruinous grip of the Coolidge and Hoover Administrations. For example, a German farmer migrating into the late-Nineteenth-Century U.S.A., could find a farm to enrich both himself and our nation, within the territories of our once great American grain-belt. It was the greater opportunity which our republic afforded to the immigrant, relative to the poorer political conditions of Nineteenth-Century Europe, which enabled us to transform the continental territory we occupied into the most powerful economy of the planet, the economy feared and hated by Britain's Edward VII, and admired and emulated in the France of Thiers and President Carnot, in Bismarck's Germany, in Alexander II's and Mendeleyev's Russia, in Meiji Restoration Japan, and, in Sun Yat-sen's China.

We are the most typical expression of European culture taken as a whole. The difference is, that the development leading into the Benjamin Franklin-led design of our Leibnizian Declaration of Independence and our Federal Constitution, freed us from the relatively worst characteristics of the traditions and governments of Europe.

The positive influence which we exerted in Europe, as through our struggle for freedom against George III's and Lord Shelburne's England, as also in the aftermath of President Lincoln's victory over the British puppet known as the slaveholders' Confederacy, and also through the impact of President Franklin Roosevelt's great achievements, was rooted in our Constitutional system, as defined both by the Declaration of Independence and the Federal Constitution. This freed us, at least in constitutional principle, from that lingering liberal's legacy of medieval culture which still cripples the parliamentary governments of Europe today. That crippling of those European governments must be recognized as being the legacy of the subordination of governments to the higher authority of so-called "independent" central-banking systems derived from the Venetian financier-oligarchical model. Although the principle of the promotion of the general welfare, is a commendable characteristic of some European constitutions, only our Constitution's most fundamental doctrine of law, its Preamble, places the promotion of the general welfare above all other considerations.

The Economic Role of the U.S. Constitution

The American System of political-economy, which provides the only existing basis in precedent for organizing a general economic recovery from the presently onrushing type of general breakdown-crisis, is a derivative of the principles which informed the crafting of both the 1776 Declaration of U.S. Independence and the 1789 Federal Constitution. Any effort to judge the principles of economy as they might apply to the U.S.A., or to the U.S. development's impact on the world at large today, must start with the natural-law implications of the crafting of the U.S. Declaration of Independence and Federal Constitution. There is a universal science of physical economy, of course, but all actually adducible economic systems exist only in the form of political economies. To understand any economy, we must adduce those natural-law principles which it either expresses or violates politically.

The importance of governmental and related regulation of money-systems, is demonstrated by tracing the way in which the reforms of France's Louis XI and Henry VII functioned to promote net physical growth per capita and per square kilometer. The work of France's Jean-Baptiste Colbert, summed up the progress in an attempted science of economic policy-shaping, until the discovery of the founding principles of the science of physical-economy, by Gottfried Leibniz. It was Leibniz's discoveries in the field of an actual physical science of economy, which informed that development within the North American English-speaking populations, which led to the distinctively specific qualities later expressed in the U.S. constitutional commitment to what is known as the American System of political-economy.

In direct contrast to the American System, the worst of all influential kinds of systematic schemes in the name of the practice of modern economy, is typified by the lunatic "Robinson Crusoe" scheme for which Bertrand Russell fanatic John von Neumann joined Oskar Morgenstern in concocting their ***Theory of Games and Economic Behavior.***

The general principle of both the original two U.S. constitutional documents, is located in the phrase from Leibniz's attack on John Locke, "the pursuit of happiness," which is systemically central to any competent natural-law reading of the Declaration of Independence. It is also located in the composition of the Preamble of the Federal Constitution around the distinguishing clause, "promote the general welfare." The way in which this constitutional principle functions in defining the "fair trade" principle of a regulated national economy, or fixed-exchange-rate monetary system, is conveniently illustrated in U.S. Treasury Secretary Alexander Hamilton's reports to the U.S. Congress, his report ***On the Subject of Manufactures*** most notably.

The contrast between President Lincoln's principles of defense of the U.S. Federal Constitution, and the Constitution of the London-sponsored slaveholders' confederation, the C.S.A., is the most illuminating demonstration, still today, of the efficient differences between the Anglo-Dutch Liberal and American systems methods of determination of the systemic character of economic relations.

This distinction of our U.S. Constitution is thus underlined by a comparison of that Constitution with the disgusting parody of it by London's asset, the Confederate States of America (C.S.A.). The most notable difference lies in the respective Preambles of the two documents. The U.S. Constitution is governed by the explicitly anti-Locke, Leibnizian principle of "promote the general welfare," thus rejecting the proposed, explicitly Lockean C.S.A.'s Preamble. It is a difference of fundamental principle of constitutional law, a difference paralleling the difference between the constitutions of Lycurgan Sparta and Solon's Athens, precisely as the principal architects of our Declaration of Independence and Federal Constitution recognized that quality of distinction.

The differences between the U.S.A.'s and C.S.A.'s constitutions are the indispensable key for pin-pointing the determinants of the relative superiority of the U.S. economy after the defeat of the Confederacy. This assessment must take into account the victory over the U.S.A.'s subjection to the blackmail of the pro-slavery faction in the United States of Presidents such as Martin van Buren's Andrew Jackson, landbank swindler van Buren himself, and wretches such as Polk, Pierce, and Buchanan.

The system of slavery, as reenforced by Britain's protection of the continuing African slave-trade by London's restored and utterly contemptible, Nineteenth-Century Spanish monarchy, was documented precisely by the leading world economist of the mid-Nineteenth Century, the same Henry C. Carey who played a leading role in the modernization of the economies of Germany, Japan, and elsewhere. It was the suppression of that institution of slavery known as the Confederacy, by President Lincoln, which unleashed the superior power for physical-economic growth per capita of the American System of political-economy, once that economy was freed from the grip of the London-directed "free trade" faction whose political base inside the U.S. was the combination of the system of chattel slavery with the corruption of financial affairs by bankers such as Aaron Burr, Martin van Buren, and August Belmont. Thus the alliance of the Confederacy's slaveholders and the London-steered bankers, expressed an alien, implicitly imperialistic political doctrine which was not only an echo of that of the Emperor Napoleon, but largely a witting copy of the system of the two actual emperors Napoleon: Joseph de Maistre's original Emperor Napoleon and the Napoleon III created by Britain's Lord Palmerston.

The use of paper currency, as prescribed by the U.S. Federal Constitution, and as understood by Alexander Hamilton, was a proper continuation of the paper-money policies of the pre-1689 Massachusetts Bay Colony, Cotton Mather's proposal, and of the echo of Mather's paper composed by Benjamin Franklin. Instead of basing the national economy on a monetary basis in those principles of usury sometimes known as "shareholder value," as the Anglo-Dutch Liberals and kindred monetarists do, still today, the American System of political-economy uses the sundry instrumentalities, such as the Federal issue and regulation of currency, sundry forms of regulation, taxation, and tariffs, to induce price relations which are consistent with the goals of promotion of the general welfare. In former times, prior to the shifts to radical monetarism over the course of the late 1960s and beyond, the popular slogan often employed to describe this effect was a "fair trade" policy, as contrasted to today's popularized "free trade" policy.

Thus, it was the undermining of the regulated value of the U.S. Bretton Woods dollar by Britain's first Harold Wilson government, as this was followed by the Nixon Administration's destruction of the regulated system of international credit, and the barbarism of the Brzezinski Trilateral Commission's wrecking of the protectionist system on which our earlier economic health had depended, which has led in ruining our own nation, as also many others today.

4. Economics As Physical Science

What had been said here thus far, now brings us to the crucial issue posed by the present world crisis. How shall the relative value of a currency be defined in world trade; therefore, how shall the measurement of relative economic value be defined?

For example, over the recent four decades, since the early days of the official U.S. war in Indo-China, the U.S. economy which had been a leader in physical economic growth during

the first two decades following World War II, suddenly shifted into an accelerating rate of net physical decline. As our use of computerized, county-by-county animations has demonstrated, if we measure the collapse of physical economic values per capita, and per square kilometer, for each and all of the counties of the U.S.A. as a whole, the fact of that physical collapse of the U.S. economy's net performance during most of the recent four decades, is beyond reasonable doubt. Yet, the data concocted by government and by the usual private accounting practice, has insisted that the economy has been growing overall during the decades it has been actually collapsing.

In short, what is measured in today's fashionable monetary units, using generally accepted financial-accounting methods as a standard, has consistently given us a false picture of the performance of the U.S. economy (and also the economies of western Europe) over a period of no less than thirty-five years, and probably about forty years. Clearly, the estimated relative values calculated on the basis of a "free-trade" dogma, have been wrong; decisions based on what have been treated as approximately free-trade values have played an important part in misleading our own, and other nations, over an interval of decades, into the self-inflicted ruin which menaces us today, in the U.S.A. and world-wide.

What this contrast of physical and monetary trends shows us most clearly on this account, is the combined physical effects to be seen as the collapse of basic economic infrastructure and collapse, a collapse through shutdowns and attrition of the essential medium- to long-term physical capital assets upon which higher levels of physical productivity and standards of living had depended prior to the changes which were imposed over the span of the recent forty years. Worse: of what has survived today, of such earlier long-term investment in basic economic infrastructure and agro-industrial productive capital, a great part of that nominally surviving former capital is presently nearing, or has already reached the end of its physical life. Consequently, the situation is, that without a sudden, large-scale boost in renewal of that physical capital, the U.S.A. were about to plunge into the agro-industrial status of a "third world" economy.

Given the fact that the world has grown weary of carrying the burden of a bankrupt U.S. dollar, the impending withdrawal of foreign subsidies of our national current account deficit, and our stock and bond markets, could transform the U.S.A. into a "third-world, failed-state" nation, in matter of fact; unless recent decades' policy-trends in employment and capital formation were suddenly reversed on a scale comparable to the best periods of Franklin Roosevelt's Presidency.

Throughout the history of modern European civilization itself, the evidence to date is, that money is a very poor indicator of the actual relative value expressed by an economy's performance. On this account, free trade, so-called, produces the relatively wildest falsehoods and performance-outcomes for economies. The net result of reflection on this history is that, while the issue and circulation of money is an essential feature of modern economy, money as such is not an efficient measure of economic value.

The ultimate value of a nation's economy and currency, is actually determined by the perception of the nation's efficient and reliable increase in long-term physical economic power. The problem of defining economic value was understood by the relatively best modern governments and scientific thinkers in approximately such terms. However, the method by which the value should be calculated for purposes of medium- to long-term investment, remained essentially unsolved until the relevant original discoveries by Leibniz.

For example: Treasury Secretary Hamilton's reports, especially his 1791 report ***On the Subject of Manufactures,*** stand up still today, as providing an excellent insight into the way in which the successful functioning of the American System of political-economy works in respect to such matters as the functional relationship of basic economic infrastructure to rise in productivity, and the desirable relations among progress in agriculture, manufacturing, and investment in basic economic infrastructure.

Given the context of my present report, it is important to point out here, the importance of the direct influence on American Eighteenth-Century thinking of Gottfried Leibniz's writings on the subject of a science of physical economy. This includes the notable influence of Leibniz's work on the education of Hamilton himself, in addition to other members of Benjamin Franklin's circles. In fact, the bitter, often savage conflict between the empiricists of the so-called "Enlightenment" and scientists in the tradition of Cusa, Kepler, Fermat, Leibniz, Gauss, and Riemann, usually played a large part in the shaping of the pro-American versus Anglo-Dutch Liberal currents in economic thought and practice, on both sides of the Atlantic.

However, the importance of the way in which this conflict has affected the shaping and performance of economic and related theory on both sides of the Atlantic, is rarely recognized today. Looking back to the early period of development of the modern form of sovereign nation-state economy, prior to Leibniz's work, we are confronted with the great difficulty which even the best thinkers of that period had in attempting to deal with the challenge of defining a reliable standard of measurement of performance of national economies. Some people, such as, most notably, France's Jean-Baptiste Colbert, had brilliant insights into making successful choices in long-term national economic development; but, the challenge of defining a principle of measurement of economic value, did not begin to be clarified until the revolutionary work of Leibniz in defining physical economy as a branch of physical science.

For example, the first of the two original, modern nation-states founded during the late Fifteenth Century, was Louis

XI's France. Louis's principal enemies were the British Norman chivalry, and the Venetian oligarchy then recovering its power through exploiting the effects of the fall of Constantinople. These enemies, most notably the Normans, loudly lamented the fact that Louis XI had defeated France's sundry enemies by the use of his superior business-management methods as a frequent substitute for actually fighting wars. In effect, adversaries of Louis XI complained, that he submitted to extortion by France's enemies, but managed to defeat them and enrich France greatly by his generosity in his apparent submissions.[3]

In the notable second case, Richmond, later known as England's King Henry VII, studied Louis XI's genius at close range, from inside the French royal court circles, and then went on to overthrow the brutish Norman tyrant of England, Richard III, and enrich the newly founded English commonwealth by heavy emphasis on technical innovations, including modes of naval warfare which were correlated with the development of the per-capita productive powers of economy generally.

In all cases, the Renaissance centers of Europe of the Fifteenth and Sixteenth Century were characterized by the spirit of science expressed by the founder of modern experimental science, Nicholas of Cusa, and such explicit followers of Cusa in science as Luca Pacioli, Leonardo da Vinci, and Johannes Kepler. After Kepler, but before the crucially relevant original discoveries by Fermat and Gottfried Leibniz, the connection among innovations in basic economic infrastructure, agriculture, and manufacturing technologies, and increase of national wealth, per capita and per square kilometer, were evident to all relevant leaders in these departments of technological progress. However, as I have just emphasized, above, the discovery of economics as systemically a branch of physical science, was due entirely to the work of Leibniz, who defined his work in this domain as *a science of physical economy,* which is also my principal field of work as an economist.

The central feature of this aspect of all the work by Leibniz was coincidental with his devastating exposure of the incompetence which is inherent in the empiricist method employed by both the empiricist "ivory tower" philosopher René Descartes and Descartes' followers such as the "Newtonians" D'Alembert, Euler, Lagrange, et al. This is key for understanding the central achievement of the American System of political-economy, the secret, so to speak, of the superiority of that American System over the so-called "capitalist" and "socialist" systems as defined by the influence of Jeremy Bentham's British East India Company's Haileybury School, from whose products Karl Marx derived the foundations of his methods for study of economy. Essentially, the British Haileybury school, and its follower Karl Marx, despite their differing conclusions otherwise, commonly represent the work-product of a reductionist method consistent with the Liberalism of the empiricists Descartes and John Locke; whereas, as the crucial internal evidence of the U.S. Declaration of Independence's reference to "the pursuit of happiness" attests, the American System of political-economy reflects the Platonic tradition of Gottfried Leibniz's science of physical economy.

As I emphasized in the referenced Berlin seminar, the importance of managing the environment defined by our expanding, manned exploration of the Solar system, means that the world's affairs have reached the level of development at which the development of the conceptions of Biosphere and Noösphere introduced by Russia's V.I. Vernadsky must be given the further development they deserve and require, if we are to develop competent standards of policy-shaping for the present physical challenge of sustaining needed rates of physical-economic growth in the world today, as I have summarized the point in my recent "Vernadsky & Dirichlet's Principle."

Given what I have outlined in this July Fourth Statement up to this point, we may now concentrate our attention on three topical points:

4.1.) That whereas most teaching of political-economy and related subjects is based on the kind of mechanistic outlook typified by the influence of René Descartes, the science of physical economy, as founded by Gottfried Leibniz, rejects the Cartesian and related, "Enlightenment" methods of *mechanistic* analysis, and chooses, instead, the modern European revival of the Classical Greek concept of *dynamics* (Gr.: *dynamis*), a conception which is typical of the major work of Leibniz in physical science generally, and economics specifically.[4] Rejection of *mechanistic* thinking, in favor of the

3. As the history of the repeated follies of Britain's frequent victim, continental Europe, attests, really smart governments, of which the Bush-Cheney government clearly is not one, prefer to let their own rivals in other countries fight wars among themselves, avoiding the temptations of so-called "patriotic passions" from luring them into entanglement in needless warfare.

4. I chose Carl F. Gauss's 1799 doctoral dissertation, refuting the reductionist ideologues D'Alembert, Euler, Lagrange, et al., as the starting-point for comprehension of modern physical science among the LaRouche Youth Movement (LYM). By turning from that starting-point in their reenacting the work of Gauss, to go directly to the relevant original work of Archytas, Plato, et al., numbers of young adults participating in this program have now progressed to an actual comprehension of such matters as Leibniz's catenary-cued principle of universal physical least action, Gauss's general work on principles of curvature, and Riemann's Theory of Abelian Functions. Such redesigns of relevant curricula of secondary and higher education, which turn away from textbook and related modes of "learning," are essential for developed new generations of young adults capable of efficiently meeting the physical-scientific challenges of today. The same educational methods also work in the domain of Classical artistic composition, thus overcoming what Britain's C.P. Snow outlined as a "two cultures" paradox in modern higher learning. See Lyndon H. LaRouche, Jr., "Vernadsky & Dirichlet's Principle," ***Executive Intelligence Review,*** June 3, 2005. For his exposure of the incompetence permeating the mathematical physics of Descartes, as

mathematical physics of *dynamic* systems, is the basis for Leibniz's solution for the problem of defining economic value. This is also the characteristic distinction of the mathematical-physical methods employed by Carl Gauss, Bernard Riemann, and their leading associates. The leading new problems of economy world-wide today, boldly require us to adopt Vernadsky's adoption of those methods of dynamic systems used by him in defining the qualitative distinctions among the interacting domains of the abiotic domain, the Biosphere, and the Noösphere.

It is important to emphasize here, that the method which underlies Leibniz's development of the notion of power (*Kraft*) in the science of physical economy, is the same anti-Cartesian (anti-mechanistic) premise for Leibniz's exposure of the incompetence of Descartes' notion of momentum, with the notion of *vis viva,* which, in turn, underlies the more fully developed, catenary-cued concept of the infinitesimal calculus, the universal principle of physical least action which was savagely attacked by those fanatical followers of Descartes, the empiricist ideologues Voltaire, D'Alembert, Maupertuis, Euler, and Lagrange.

4.2.) The indispensable function of the concept of *dynamic,* rather than *mechanical* organization of processes, for defining the relative value among systems of respectively sovereign national-economic systems. This is crucial for the design of a global recovery program suited to the challenge represented by the onrushing collapse of the present world monetary-financial system.

4.3.) The relevant manner in which relative values of currencies of a new fixed-exchange-rate monetary system may be set for the purpose of organizing a long-term economic recovery of our planet.

4.1 Dynamics Versus Mechanics

My recent acquisition of a copy of the authorized English translation of V.I. Vernadsky's 1935 programmatic presentation of work on the Biosphere, provided me with clear and conclusive proof of what I had long guessed to have been his method, that the scientific method employed in the development of the concepts of both the Biosphere and Noösphere were reflections of his application of the concept of dynamic, rather than mechanical systems, to his principled definitions of both the Biosphere and Noösphere.[5]

As I have stated the case in various published locations, such as ***Earth's Next Fifty Years,***[6] the currently increasing rate of consumption of essential raw materials, and related developments, has brought the planet to the verge of a new requirement in the practice of economics: the factor of required scientific management of the raw materials resources of the Biosphere and Noösphere. We must go beyond the mechanics of extraction and processing of extracted materials, to assume responsibility for regenerating, and expanding qualitatively, the natural mineral and other resources which we extract, chiefly, from the fossil regions of the Earth's Biosphere.

As a result of the growth of both population and the consequently accelerated need for scientific and technological progress, we face qualitatively, as much as quantitatively increased requirements for such "fossils of the Noösphere," as increasingly intensive development of basic economic infrastructure and heavier investment in more advanced technology in agro-industrial capital goods must be a built-in characteristic of what must be redefined as national public and private budgets and cost-accounting. As a result of such and related considerations, we can no longer tolerate the kinds of thinking and practice about economy associated with practice of governments and private enterprises up to the present time. The legacy of Cartesian and other expressions of mechanistic thinking must be buried with cat-like precaution, once and for all.

This pattern should compel us to change our way of thinking about national and world economies, moving away from mechanical (e.g., Cartesian) thinking, into the direction typified by Vernadsky's Riemannian approach to defining the interaction of the abiotic, biospherical, and noöspherical processes as modern, anti-mechanistic, *dynamic* systems coherent with the notion of the principle of *Sphaerics* which the Pythagoreans and Plato trace to the astrophysical origins conveyed in ancient Egyptian scientific development. This does not mean that we should not have taken this approach much earlier, but that, now, the urgency of such a change is no longer ignorable among any persons with a penchant for competence.

This means the urgent scrapping of the use of currently fashionable practices of national product and income accounting, and also of ordinary corporate financial and tax accounting. It signals the urgency of turning to new methods coherent with the reality of the dynamic characteristics which Vernadsky associated with the Biosphere and Noösphere as interacting, but distinct systems. This is the concept of dynamic systems which Leibniz presented in exposing the incompetence of Descartes' method for physical mechanics, the concept of the dynamic system underlying Leibniz's original discovery of the general principles of physical economy, as also Leibniz's original catenary-cued discoveries of the prin-

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also in his introduction of the concept of power (*Kraft)* into the science of physical economy, Leibniz revived the Greek term, *dynamis,* from the writings of the Pythagoreans and of Plato. This term represented the central concept of the Egyptian, astronomy-based practice of Sphaerics central to the work of both the Pythagoreans and Plato. Leibniz's and Riemann's emphasis on *dynamics,* as opposed to the reductionist's blundering mechanics, is the basis in method for Vernadsky's rigorous definition of both the Biosphere and Noösphere.

5. LaRouche, op. cit.

6. (Leesburg, Va.: LaRouche PAC, March 2005)

EIRNS/Sylvia Spaniolo

Members of the LaRouche Youth Movement in Los Angeles work on Gauss's conformal mapping. The work of the LYM illustrates that such concepts are "within the reach of intelligent and dedicated young adults of university-eligible age, and are therefore concepts which should be included as benchmarks of professional competence in all professions during the lifetime of presently emerging adult generations."

ciple of universal physical least action and of natural logarithmic functions. These are systems coherent with Gauss's 1799 attack on the incompetence of D'Alembert, Euler, and Lagrange, and his notion of the general principles of curvature and of the magnetic field, as also Riemann's emphasis on Dirichlet's Principle. As the recent several years' work of the LaRouche Youth Movement (LYM) illustrates the point, these are all concepts within the reach of intelligent and dedicated young adults of university-eligible age, and are therefore concepts which should be included as benchmarks of professional competence in all professions during the lifetime of presently emerging adult generations.

This involves more than a radical change in systems and procedures. It compels us to adopt a qualitatively improved conception of the principled nature of man's situation in the universe, to the following leading effects.

Vernadsky's adopted scientific method leads him to an extremely important clarification of the practice of the experimental scientific method traced from such origins as Nicholas of Cusa's founding of modern physical science, in his ***De Docta Ignorantia.*** Instead of falling into the commonplace reductionists' error of defining the sensed object as such, Vernadsky divides the physically experienced universe among three general categories defined not as objects, but as subjects of the relevant, appropriate categories of methods of experimental physics: the *abiotic,* the living (*Biosphere*), and the cognitive (*Noösphere*). The abiotic is simply the domain defined by those experimental methods which make no assumption of a principle distinguishing *the products* (e.g., fossils) of living from *the products (i.e., fossils*) of specifically non-living processes. It is the existence of anomalies which do not fit the characteristics of the experimental abiotic domain, which betray the presence of the realm of living processes as the Biosphere. The Noösphere is the experimental domain of effects (e.g., fossils) which are not generated from within the bounds of products of a generality of living processes.

In other words, only life can produce life, and only the cognitive powers of the human mind can generate fossils which lie outside the capabilities of the generality of living processes (e.g., efficient discoveries of universal physical principles: creative mental activity). The latter distinction, which is, functionally, a crucial distinction of the science of physical economy, is demonstrated by the way in which discoveries of universal physical principle, in particular, are transmitted across generations, even over intervals of thousands of years. Focus for a moment on this latter phenomenon.

Take the case of the known discoveries of the Pythagorean Archytas, and of Archytas' friend Plato, which date from approximately 2,500 years ago. These discoveries are learned today by one of two methods. They are merely "learned" as from textbooks, or, actually known, not by textbook methods, but by the student's replicating the original act of discovery of a solution for the relevant statement of a paradox.

A typical example of this distinction, for purposes of illustration, is the case of the student's replication of the actual act of discovery of the principle of universal gravitation. In Aristotelean method, such as that of Claudius Ptolemy and his imitators, only repeated patterns of action in accord with a principle of circular action, are recognized. In the case of Kepler, the discovery of the existence of an efficient universal principle of gravitation, rests upon the recognition of a singularity which is associated with the fact that the orbit of Mars, for example, is elliptical, rather than circular. So, similarly, Archytas' solution for the construction of a doubling of the

cube, solely by geometrical construction, appears in the experience of the Eighteenth Century as the crucial issue of principle dividing the science of Carl Gauss et al. from the empiricist blunders of the reductionists Euler, Lagrange, et al.

By such methods of the anti-reductionists, the original act of discovery of a universal physical principle, can be the replicated act which occurs within the mind of a person living today. *Just as only life can produce life, so, only cognition can replicate the discovery of principle by one individual mind in another individual mind, even across the intervening distance of thousands of years. Such is the principle of personal immortality of the human individual, as contrasted with the mortality of the lower living species.*

It is similar with the case of life in general. No one has ever discovered a principle of life as an object of sense-perception, Rather, we experience the presence or absence of life of individual beings which have the apparent biochemical characteristics of living processes, but are lacking the continued presence of an active principle of life. The apparent paradox so posed by the experimental method of scientific work, is not paradoxical on principle. The universe is composed of three respectively distinct, but interacting known universal principles, the abiotic, the living, and the cognitive, such that, from the standpoint of the study of the relevant categories of fossils, the superior lies outside, and above the domain of the experimental subject-matter which the relevant principle commands: in which the principle of cognition is ultimately superior to that of life, as life is superior, in the domain of fossils, to that of the merely abiotic domain.

Yet, while each of the three domains is functionally distinct from the others, all three interact in shared effects. This illustrates the importance of viewing all aspects of the universe from the vantage-point of dynamic, rather than the intellectual mediocrity and relatively intellectual sterility, which is the mechanistic viewpoint of the reductionists. This fact is less obvious for the case of abiotic processes as presently defined in relevant classrooms and textbooks, but is a systemic distinction of crucial primary importance in the domains of living processes and human behavior. In the former domain, the reductionist standpoint is a barrier to otherwise potential scientific progress; in the latter two, respectively higher domains, the reductionist standpoint, as reflected in today's customary accounting and related practice, is always manifestly incompetent.

The most notable of the implications of this investigation of life, is the way in which this view of society implicitly defines the notion of the immortality of the individual mind. From the standpoint of the principle of dynamics, the human mind is imposed upon appropriate living processes, and interacts efficiently with those processes, but it is the body which dies, a distinction which is demonstrated experimentally by the way in which the discoveries of physical scientific and Classical artistic principle are transmitted across successive generations. It is cognition, as expressed rather uniquely by discoveries in physical science and Classical artistic composition, which is the substance of the human individual's existence, a substance which lives on as the continued living imprint of the human individuality when the animal-like aspects of the body used by the creative personality have ceased to perform their assigned function. The scientist must see this distinction in that way, as the immortality of the human individual personality, and the basis for the universal principle of natural law called *agapē,* as Plato presents that case for such immortality of the soul in his dialogues, as Moses Mendelssohn later.

4.2 The Dynamics of Economy

All three phase-spaces—the abiotic, the Biosphere, and the Noösphere—interact as one in any viable economy. Thus, the productivity of labor depends upon the simultaneous impact of all three, to determine the relative productivity of the labor acting upon his or her point in the larger process of society as a whole.

For example, if we might assume that the same quality of labor is operating in different locations, the level of development of man-made infrastructure of production, will be a variable factor in determining the actual productivity of labor of relatively identical skill. Similarly, if the man-made infrastructure in which that labor occurs, is equal in two localities, the relative quality of the local aspect of the Biosphere will be the variable determinant of the relative productivity of labor.

Furthermore, production is not competently measurable in terms of equivalence of the quality of the object considered to be a product for consumption. The value of consumption for society, depends upon the variable quality of the place and circumstance in which the consumption occurs. In general, higher degrees of skill, as ascertainable from the standpoint of physical-scientific potentialities of the employed person, are a good, but the benefit from that good will vary with both the circumstances in which the production occurs, and with the quality of the part of the society into which that product is introduced for consumption.

It is all of these and related considerations of production *and consumption* taken into account, which interact to define a *dynamic,* rather than *mechanistic* conception of an actual economic function within society in general.

So, for example, the transfer of production from places in the U.S.A. or Europe, where the development of basic economic infrastructure and education of the population in general is relatively high, to places where labor is cheaper because of lack of development of infrastructure and of the dynamic potentials of the entire social process makes labor cheaper, as through "globalization," has caused a collapse of the level of productivity of the world as a whole. This dramatic form of actual ruin of the world economy during, emphatically, the recent quarter-century, has been motivated by a lustful expression of individual greed's indifference to the

effect of its behavior on the future of the nation and planet as a whole. The result of this mechanistic disregard for the actual, dynamic costs of production, has been the principal determining factor in bringing about the presently onrushing rate of increase of the collapse of the productive powers of the human species as a whole.

The interrelationships within the process I have just summarily described, are a relationship among the functions of what Leibniz identified as the powers (dynamic, *Kraft*) represented. This is a notion as old as the famous aphorism of Heraclitus, that constant change is the primary ontological condition of the universe, of the processes of which the universe is composed. It is the introduction of either newly discovered universal physical principles, or, in the alternative, new principled kinds of applications of previously discovered principles, which are the relevant quality of action which defines the types of sets of relations to which I have just referred here.

The determining set of relations of the quality associated with those notions of discovered universal physical principles, can not be reflected competently in annual economic reports on the performance of firms, nations, or the planet as a whole. The circumstances of production of the conditions of continued life and progress of the planet depend upon long-term processes so defined, including a large portion concentrated within the bounds of a relatively long-term usefulness. Typical of this factor in the set of functional relations which I have described above, is necessary capital investments, in both basic economic infrastructure and means of production which, as improvements, have life-cycles of between a quarter- and half-century. Long-term improvements in the biosphere, have a comparable significance.

Therefore, the value of current production, and investments in improvement of the economy and labor-force, must be premised on efficiently reliable foreknowledge of the effects of current investments on potential productivity, per capita and per square kilometer of the planet's surface in the range of a quarter- to half-century ahead. Thus, the future, more or less as the past, determines the value of the economic performance of the current year of the economy's activity. This brings us to the matter of the role of credit, especially long-term credit, in determining the actual, effective value of a particular economy during any year referenced.

Accounting which does not take such long-term future impacts of current activities into account, is a manifestation of miserable incompetence typified at its relative worst.

The configuration which I have just described, albeit summarily, in the preceding fashion, conforms to the role of Riemann's notion of Abelian functions, as defined in accord with Riemann's enhanced insight into the implications of what he terms Dirichlet's Principle, as I have indicated these functional configurations and their significance in my "Vernadsky & Dirichlet's Principle." Such are the principled characteristics of the global economic system of dynamics which I have identified here.

4.3 A Fixed-Exchange-Rate System

If we are to reverse the currently accelerating trend of general physical-economic collapse of the economy of our planet, we must apply discovered universal physical principles to raise the level of development, per capita and per square kilometer, of the relevant aspects of the Biosphere and Noösphere.

These applications are chiefly expressed as long-term capital improvements which have "life expectancies" of between two generations, or even longer, beyond which those investments must be either replaced or merely improved in accord with principles discovered since the original installations and their interim improvements were made. Experience indicates that the tolerable charge against the outlay of capital to provide such physical-capital investments is, usually, approximately 1-2%, and not more than 3% simple-interest charge per annum. This means that a fixed exchange-rate among relevant currencies must prevail over most of the duration of the long-term investment. The rate of profit on private investments in improvements in production capital must not be significantly higher. This must be within a system of fixed exchange-rates, since significant fluctuations in values of currencies over the life of these investments will raise the imputable interest-rate to functionally unacceptable levels.

In certain crucial respects, the setting of fixed exchange-rates is a much simpler, but also far more interesting challenge than ordinary opinion on this subject would imagine. To illustrate that vitally important point, consider the following aspects of the challenge facing a concert among leading nations at the present moment.

Currently, the nations of Europe are ostensibly bankrupt. The case for Germany merely illustrates the prevalent trend of affairs in Europe as a whole. The U.S.A. itself, under the past five years of the George W. Bush Administration, is also bankrupt, hopelessly so under a continuation of the characteristic features of the Administration's stubbornly economically-suicidal policies, even far worse than Herbert Hoover's, thus far.

It would be sufficient to raise the level of productive employment through state-generated, and related forms of long-term credit. This credit must be used, in all of these cases, in particular, to increase the ration of physically productive employment in overall capital-intensive, technologically progressive modes. The most significant ration of such investments at the beginning would be in basic economic infrastructure. The initial objective would be to lower the rates of unemployment of the population as a whole, while shifting the composition of employment from so-called services, into building of basic economic infrastructure and increasing the ration of the total labor-force from non-professional services, into dedication to physical production of goods.

In general, such reforms would be sufficient to bring the indicated economies quickly above break-even levels.

However, to keep the system functioning, existing debt overhangs must be reorganized. The general objective is to shift the composition of legitimate debt (with no consideration for financial derivatives) into a generally long-term life of combined current debt and new debt launched, chiefly by governments, for recovery, expansion, and technological growth.

A relevant concert of governments has a reasonably wide latitude in choosing the relative values of a package of fixed rates. There is negotiable latitude in choosing the relevant parities for this purpose, but not much time available for making that decision. The principled question the governments must ask one another in this connection, is, "Will these values we choose today hold up for the long term of twenty-five to fifty coming years?"

On these accounts, the U.S.A. has great historically determined advantages. advantages derived from what I have already referenced here as the history of our constitutional system, as compared with the constitutions of Europe, for example. Moreover, the presently imperilled world monetary system is based on both the denomination of the U.S. dollar and the huge overhang of dollar-denominated debt in the international system. That debt overhang itself is not the most crucial problem to be addressed; the crucial issue is, can that debt be rolled over successfully through a process of expanded global investment? Over a period of a quarter to half century of upward development of the global economy? The primary questions are: a.) What is the nation in question prepared to pledge itself to do, as relevant long-term investments; and, b.) Is the reasonably expected performance of that nation in meeting that adopted obligation, a reasonable expectation in the considered opinion of the partners?

The necessary precondition for such long-term agreements, is an immediate shift from a "free trade," to a "fair trade" system of pricing. This means an immediate shift, away from a practice of "globalization," into the protectionist system needed to match the nested sets of commitments of sovereign governments over lapsed times of a coming generation or more, before significant adjustments might be worked into the system.

In summation, I add the following most relevant concluding observations to what I said in my relevant, previously stated outline from the referenced Berlin closed-door meeting.

The conditions for reorganization of a global return to a fixed-exchange-rate system akin to that of the original Bretton Woods agreement, are generally those which I have interwoven into the preceding pages of this report. There are certain summary conditions to be added at this point.

The principle of world economy which is implicit in my outlined perspective for reform, is not only a reflection of the American System of political-economy. It is premised on the notion of power (dynamic) presented by Leibniz in founding the branch of physical science known as physical economy, the system on which the U.S. constitutional republic was established. In crafting an acceptable agreement for global economic recovery and stability through a new, fixed-exchange-rate system, the notion of power of the long-term effort for progress of a national economy which is partner to the new system, is a notion of credible power expressed by the individual nation-state, the credibility of its stated will to perform what it would promise to do. It is this subjective factor in the realization of future intended results, on which relations of states within the new world system must depend. As the value of an investment is based on the reasonably expected performance over the medium to long term, so it is among nations.

Perceived power—perceived relative value—is the credibility of the determination and ability to perform, on what our own Cotton Mather identified as the commitment to do good. That subjective power, on which the objective power of a nation depends, is, as Leibniz rebuked John Locke, the commitment of a people "to the pursuit of happiness," to the promotion of a mortal individual's sense of immortality through a credible performance in service of the general welfare of both present generations and future generations to come. Without that commitment there could be no durably efficient government, nor relations among governments.