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# LAROUCHE PAC REPORT

# **End-Game Forecasts**

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April 28, 2007

The axiomatic incompetence of today's usual methods in statistical modes of economic forecasting, is inherent in that type of method itself. This will show itself with undeniable force, as an immediate threat of absolute breakdown of an actual economic system, whenever the underlying physical-economic cycle is permitted to approach closely what is best described as a Riemannian boundary condition, as now.

This presents two leading questions, which I pose to economists today. 1.) How are these boundary conditions defined? 2.) What is the kind of effect of postponing attention to the fact, that those systems which I denounce here, were not only incompetent throughout the span of the relevant economic cycle, but that great, even irreparable ultimate damage may result, as now, from the use of today's commonly used professional forecasting methods, even if the effects of the boundary conditions may not yet be acknowledged as having been reached?

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Today's world as a whole has entered the terminal phase of what threatens to be not a mere world depression, but what has been classed in relevant earlier times as a "new dark age," such as that in Europe during the middle to late Fourteenth Century. Exactly when the breakdown of the present world society would occur, is, as usual, uncertain, except to say that we must assume that the threatened collapse, if it occurs, must be expected soon, or even sooner than that.

I am not predicting such a collapse; I am committed to attempt to prevent it, even at this late stage in the game, when such a collapse is, as it is sometimes said, "just around the corner." Therefore, my principal duty here is to present a relevant description of the root of the problem; what we must uproot, very soon, and, having said that much, point to the measures we must take to prevent the threatened new dark age from taking over the planet.

In this circumstance, looking, at the moment at the present case of our U.S. economy itself, the use of the typical, popular misinterpretation of the term "free will," a misuse of that term which is habitual among those who are certifiably Liberals, should be expelled from the technical terminology of political-economy. Any major decision affecting any economy at large, or any pattern of local decision-making within even the relatively microscopic aspects of the economic process as a whole, has scientifically lawful consequences. Poor judgment on either of those levels, can have what are, ultimately, potentially catastrophic effects for the economy considered as a whole. Once that kind of misjudgment has been adopted, the fool who makes that judgment, such as even the leadership of an entire nation, as in the U.S.A. today, is no longer free to avoid the consequences of his own potentially fatal hubris.

Therefore, sometimes, as when the choice made is a policy decision of the national government, or of a large enterprise, or even by a Federal state, the wrong choice made can generate relatively irreversible, bad effects for that nation, or even for much, or even all of the world outside it. However, the cumulative effect of an emerging pattern among numerous individuals' decisions, when those decisions have been made under the influence of a defective popular assumption, as during the recent three decades, can be as disastrous for the national economy as a whole, as a particular single major failure of judgment by the Federal government or some very large private enterprises.

Notably, the pattern of decisions, as individual decisions



We are at that "future point" now, reaping the lawful consequences of "post-industrial" policy decisions from smalltime local decisions to larger decisions of government over the past three decades, LaRouche writes.

EIRNS/Christopher Lewis

of government, or of large private enterprises, as we should have recognized this happening since U.S. governmental budgetary decisions of approximately 1967-1968, can virtually doom a national economy to more or less catastrophic economic effects, effects of a type which would erupt, as is already happening now, at some point down the line, within a generation or more to come. This is especially notable in respect to the actual cascade of innovative, and massively destructive follies of the 1969-1981 interval. Similarly, to state the same case in another guise, habits adopted among populous categories of seemingly ordinary private households and enterprises, can, like a youthful adoption of the habit of heavy smoking of tobacco products, or of other recreational "substances," act as the latter effects were spread widely since the middle through late 1960s, and beyond. The result could also be a devastating, longer-term consequence, as a mass effect, at some future point.

The particularly troublesome fact, is that the connection between an explicit, or efficiently implied policy-decision by a society, is bounded by what should be recognized as forms of long-term investments in capital of one sort or another, as in production, in basic economic infrastructure, or the development of the mind of the individual, from birth into adulthood. Society and its history tend to be dominated, even in the medium to long term, by cycles measured in half, or an entire span from birth to maturity of the members of a new generation, or even two or more such generations. In part, this reflects the cycle of development of an individual from conception to youthful adulthood, to such an effect that each generation, as a generation, and in terms of the effect of the decisions made by that generation, tends to imprint its special mark on the history of that society as a whole.

For example, the members of my grandparents' generation were born during the 1860s, and the greater part of my ancestry is traced, in North America, to the first half of the Seventeenth Century. The accumulation of crucially distinctive characteristics of the half-millennium span of modern European civilization, are traced in the development of ideas, policies, and tendencies of practice in the first half of the Fifteenth Century. It is only to the degree that the contemporary individual has reexperienced the evolutionary cultural history leading into his present existence in terms of a personal consciousness of family connections to the evolution of culture during those successive centuries, that we may gain the means to begin to understand what lies within ourselves, what shapes the way in which our present society, and our family traditions, and our individual selves, react to the circumstances in which we find our nation and ourselves today.

# 1. Incompetent Economists

If you can remember the day before yesterday, you probably suspect, or even know, rightly, as I do, that the usually leading economic forecaster of today is not to be trusted with your future. There are various reasons why virtually all of today's usually consulted economic forecasters fail most of the time, especially in matters of medium- to long-range forecasts. However, whether each is better or worse than another, there is one big mistake that virtually all of them share.

What they do wrong, can be identified in relatively few words:

Today, there are chiefly two reasons for the usually incompetent forecasting and related analysis by nearly all among presently prominent governmental and other economists. The first reason, is their choice of an incompetent kind of statistical mathematics used for forecasting. The second reason, is that they usually measure the wrong class of chosen evidence.

The first of those two sources of the bungling by all of the usual leading statistical forecasters of recent decades, is that their method is essentially a statistical extrapolation of a type such as that of Descartes, which Gottfried Leibniz exposed as universally incompetent. Most economists today have no manifest comprehension of the way in which long-term trends in economies are generated, or of how economies work generally over intervals no more distant than a few relatively short steps of decades, years, or, sometimes, even months, into the future.

The second of the sources of the errors, is that most economists, and related types of specialists in modern European history, have assumed that national economies are primarily expressions of the function of money.

However, a qualification must be added to that. Leading policy-shapers, inside and outside of government of the recent quarter century in Europe and North America, are far more incompetent than the usual economists of the 1930s through the 1960s. The difference is, that there has been a shift, over the recent period of about four decades, from a notion of economy as primarily a physical economy, to a pathetic misconception of an economy as a post-industrial economy. Where the earlier economist measured prices and income chiefly in terms of real physical values, our economists today see an economy as either what is essentially a so-called "postindustrial" one, or what they believe must be transformed into one.

All scientifically competent forms of medium- to longterm economic forecasting today, will be based on the same type of methods associated with the discoveries by one among the greatest mathematical physicists in modern history, Bernhard Riemann. All incompetent, but professional qualities of forecasts, rely on intrinsically incompetent, so-called mechanical-statistical methods, derived from modernized versions of the axiomatic methods associated with the René Descartes who was already exposed as a fraud by Leibniz at the close of the Seventeenth Century.

That said, as a matter of opening this chapter of this report, I set the stage for the discussion with some remarks on the peculiarities of the leading current dialogues among those who reflect the consensus among notable witch-doctors of our present times.

#### The 'Wall Street Journal,' for Example

Before returning to the just stated crucial issues of physical science on which all competent economics doctrine and practice were premised, let us devote the remainder of this chapter to examining the present financial-economic situation as it might be more or less fairly described by leading relevant officials and professionals today.

As we saw back during August-September 1998, the *Wall Street Journal* at its peak, doesn't really count. Actually, with money itself now plunging lower than toilet paper, Wall Street couldn't really count, even if it tried. In any case, the U.S. economy is not really being run from Wall Street any more; it is being run, currently, from the world's imperial hedge-fund capitals, from which today's modern Draculas, such as the bloodsuckers of the British monarchy's Cayman Islands, are flying in to suck the juices out of our leading banks and crucially important industries, here, today. At my latest report received, the strategic question on the plate in London, is still, "Shall we bankrupt the U.S. dollar now, or a bit later?"

Lately, things are turning very nasty!

We could still change things for the better, if we really tried. Dumping Vice-President Dick Cheney now, would be a good start, if we can find some members of Congress with the guts to do it.

Survival of our nation, and also the world at large, means giving up the drivel which passes still, currently, for teaching of what is misnamed "economics" in most of today's relevant university classrooms and kindred neo-conservative bordellos, such as the Mont Pelerin Society and American Enterprise Institute. However, that is not sufficient. Negative measures against the morally criminal effects of Mont Pelerin and kindred policies, are necessary; but, the heart of my subjectmatter here, is that something positive, and also feasible, must be introduced to replace, entirely, what could never work for good.

In times of extremes of existential political-economic crises, as the present moment, the hysterical folk usually cling to the delusion, as now, that those intentions which have been adopted by governments, or some other expression of what passes for authoritative opinion, will determine the outcome of a current period of history, as if "inevitably." Utterances such as: "We have decided"; "It is inevitable that. . ."; "It has been decided by authorities whose views I share"; "History teaches us"; and so on, are familiar echoes from the last gasps of old regimes which are about to be overthrown, conquerors about to be demolished, and powers and cultures soon to be obliterated from the pages of continuing history by their own hands. Such are the usual follies of economic forecasters of the type whose work I have observed closely over most of over five decades.

Therefore, we must ask: What is the proper alternative for those among today's customarily deranged modes of thinking?



The flag of the Cayman Islands, home of the British monarch's hedge fund Draculas, which is "flying in to suck the juices out of our leading banks and crucially important industries here, today."

It would seem that almost every adult, and others, too, will express, with or without prompting, a more or less strong, but scientifically absurd opinion respecting economics; but, as I have emphasized at the opening of this chapter, only a tiny few among these talkers, including professors conducting their careers in that field, actually knows anything significant concerning that topical area of policy-shaping. Babble, babble, babble, where and how they might choose, on the subject, the economic process, nevertheless, moves on, seemingly in disregard of all that academic and kindred babble.

Then, the gathering of such babblers, like hens in a yard after the rooster has returned to his chosen perch, seize that opportunity to babble again, about that, too. At that point, the spectators are drawn from miles around, to come to the fence surrounding the chicken coop, to hear the expert opinion on these proceedings from the exhausted Professor Rooster himself.<sup>1</sup>

In fact, since the dwindling, almost vanishing numbers of the so-called "blue collar" farmer and manufacturing operative, the remaining part of the population, now become the overwhelming majority, has lost virtually all sense of reality respecting national economy, to that point of virtual insanity, that it believes that organized gambling, in the financial markets, or the casinos, is a principal contribution to the nation's economic output. For the white-collar masses of today, economy is essentially a matter of getting money, instead of actually earning it. "Don't you see how hard the croupiers work?! Don't you realize how important it can be to work in such an occupation?! Haven't you learned how to swindle, or even simply steal, fair and square?! Don't you ever listen to Donald Trump?!"

#### Look Back to Our Roots

That problem of today's world can be seen more clearly, if we compare some relevant highlights of our nation's economic history.



Take the contrasting happier example of the Massachusetts Bay Colony, until the calamities imposed upon it from England in 1688-1689. Take the example of the Saugus Iron Works' success. During these happier times, before 1688, the Colony conceived the happy idea of creating "scrip," a kind of promissory note which could be exchanged, like money, only within the Colony, and that according to the adopted rules. The Colony prospered, until the disastrous change imposed from London, in 1688-1689, which shut down much of that prosperous Colony's envied successes, for

lack of its invaluable former system of public credit, and introduced a period of relative ruin to follow this change.

To follow up on that crucial part of our history, turn to the successive writings of Cotton Mather and his follower, the internationally renowned scientist Benjamin Franklin, who was the key figure. Franklin had led in introducing an early Manchester-style form of industry, based on canals as inland waterways, and the promotion of the use of coal, to England itself. Both Mather and Franklin had emphasized the proper use of a paper currency, thus pioneering the design of that system of state credit, as opposed to monetarism, which became the hallmark of the superiority of the constitutional American System of political-economy of Treasury Secretary Alexander Hamilton and President George Washington, over the usury-based systems prevalent in England and other parts of Europe.

Unfortunately, with the French Revolution and the ruin of Europe by the Napoleonic Wars, the newly founded U.S. Constitutional republic was soon isolated, and chiefly menaced from abroad. The Vienna Congress world of Castlereagh, Wellington of "Peterloo," and Metternich reigned. Andrew Jackson launched crimes against humanity against the Cherokee nation, to clear the way for the spread of slavery, to produce British cotton, in the territories in which wealth, freedom, and access to knowledge, of the literate nation of the Cherokees were looted. The Cherokees were largely murdered, in one way or another, by Andrew Jackson, who was rewarded for this by his employment as U.S. President, a reward organized largely by Aaron Burr's Manhattan successor, Martin van Buren. It was van Buren, who, with Jackson's aid, destroyed the public credit of the U.S.A., in favor of the swindle, called a land-bank scheme, which virtually bankrupted our nation in the Panic of 1837.

Despite that, under former President John Quincy Adams' one-time collaborator Abraham Lincoln, the U.S. first emerged as a world power, one continental nation, as Adams had prescribed, from north to south, and ocean to ocean, united by vigorous internal economic development in between those bounds. No longer could any foreign empire conquer, or divide us by force; we could be destroyed only by the

<sup>1.</sup> There are two ways to serve a hen, or those who consider themselves qualified students of economics: one by the rooster, the other by the cook.



This drawing by Charles H. Overly, depicts the successful Massachusetts Bay Colony's Saugus Iron Works as it would have looked in 1650. Shown are the (1) Ironworks House, (2) Grist mill, (3) blacksmith forge, (4) slag pile, (5) blast furnace, (6) dock, (7) warehouse, (8) forge, (9) charcoal storage house, (10) Great Pond (main water supply), (11) canal to ironworks, (12) holding pond, (13) rolling and slitting mill, (14) blacksmith shop, and (15) Saugus River.

Saugus Iron Works National Historic Site

corruption which was supplied to us in great abundance from, chiefly, our English-speaking, imperial adversaries in Europe. That corruption from Europe, especially from the British Empire, was, therefore, promptly and persistently supplied.

It was in that sense, that Franklin, Washington, Hamilton, John Quincy Adams, Abraham Lincoln, and Franklin Roosevelt, led in providing our republic those instruments of greatness expressed in the Declaration of Independence; the Federal Constitution with the unique spark of genius of its fundamental law, the Preamble; our unique American economic system for design of political-economy; our unification as a continental nation; and, our leading role in mustering the bold economic recovery of 1933-1945, which enabled us to lead the way in destroying the menace of Hitler, and to define the potential for a new great order of affairs among perfectly sovereign nation-states, which we have yet to bring into actuality still today.

It is in that image of the bare bones of our unique quality of historical existence, as a republic in the commonwealth tradition, that we may define the proper outlines of the only durably competent system of political-economy which the world as a whole would not simply copy, but whose principles it must consider, a system which is to be examined as offering a model clinical expression of the principles which must order a new system of global cooperation among a world of sovereign nation-state republics, as Franklin Roosevelt had intended this, freeing the planet from imperialism and colonialism, had he not died when he did.

The principles of that American System of political-econ-

omy, if served, provide the basis for establishing and maintaining an economy which need never fall into a depression of its own making. Only "outside factors," such as hostile acts of nature, or foreign powers, could bring on an economic crisis as such. However, a sound economy can never be designed to operate on "autopilot." *No economy will survive*, *free of self-inflicted disasters, unless it develops through adoption of scientific and technological improvements, based on the continuing discovery and use of new physical principles.* No form of economy which ever existed, which operated on the basis of a virtual policy of "zero technological growth," could avoid a self-inflicted, catastrophic collapse, or ever has, in the known history of mankind to date.

No other factor, but obstruction, or even banning of what are defined physically as capital-intensive modes of realizing scientific and technological stagnation, could promote, as "globalization" does, the desired, morbid effect produced by the intellectual and moral degenerates who oppose a permanent commitment to science-intensive, capital-intensive economic progress. This means that we must maintain a constant emphasis on increasing the level of "energy-flux density," per capita, and per square kilometer, through the territory of the national economy as a whole.

I have emphasized repeatedly, in the past, that our republic was created, largely, by emigration from Europe, by Europeans whose intention was to bring the best ideas of modern Europe into a new continent, where the essential European principles of a truly republican republic could be planted at a relatively safe distance from the evils of an oligarchical legacy which still polluted Europe itself.



Benjamin Franklin, promoted a science-driven industrial policy and the use of a paper currrency for state credit, "which became the hallmark of the superiority of the constitutional American System of political-economy... over the usury-based systems prevalent in England and other parts of Europe." Here, Franklin's portrait in the U.S. Capitol.

So, from the beginning, *the American System of politicaleconomy, as defined by Benjamin Franklin, among others,* presumed continuing emphasis on the acquisition and use of newly discovered universal physical principles, and of improved technologies correlated with emphasis on fundamental scientific progress. Thus, today, there is no happy future for mankind anywhere on this planet, without an immediate emphasis on massive expansion of nuclear-fission as a source of power, and a massive commitment to the development of applicable technologies of thermonuclear fusion.

#### The Cultural-Paradigm Shift

In recent decades, especially since 1968, the U.S.A. had been made extraordinarily vulnerable to the risks of such kinds of long-term effects, a vulnerability which was caused, chiefly, by the specific effects associated with the rise of the so-called "white collar" Baby-Boomers as a growing influence within the transformations occurring within the culture of an evolving adult society.

For an example of that fact: In many nations, it is often difficult to find a local Catholic priest younger than sixty or more years of age; this is chiefly an expression of the cultural influence of the "white collar" tradition specific to the 68er generation. The present rampage of the "Global Warming" swindle is a prominent clue to the specific form of cultural and moral decadence rampant in the "white collar" roots and fruits of the 68er revolution. The often violent cleavage of the "white collar" stratum of "68ers," from "blue collar" strata of the same age, as shown dramatically in 1968, is of special evidentiary significance on this account.

The so-called "white collar" stratum of our "Baby Boomer" generation, as typified by the 1945-1956 interval of the "white collar" class, has lost a commitment to posterity which distinguishes the immortal soul of the true human being from the feral beast. The bonds which should tie successive generations in the expressed immortality of an eternal mission, have been severed by the radically quasi-Nietzschean, Sophist existentialism of such as the European Congress for Cultural Freedom's Horkheimer, Adorno, and Arendt, and the circles around Margaret Mead's Josiah Macy, Jr. Foundation's "information theory" cult.

Thus, we have experienced the "white collar" social castes which, by and large, distinguish that Baby-Boomer generation from its "blue collar" contemporaries, a caste whose influence is reflected in the actual long-term effects of the influence of the "white-collar 68ers," over the 1968-2007 interval. These effects have tended to prompt the culprits, the Baby Boomers themselves, to resort to sweeping and destructive, draconian measures of social control, such as today's lunatic, so-called "environmentalist" measures of globalization, and, thus, into methods of political tyranny employed, ironically, tragically, as "corrective" measures of control of individual behavior, as by "environmentalist" measures which generate long-ranging ruinous effects as bad in their own way, as those of the pro-eugenics Hitler regime earlier. Often, even usually, this draconian reaction to long-term consequences of patterns in cumulative local, short-term behavior, is a reaction of a type which has little or nothing to do with the causes of the problem, but is simply the tyrannical enforcement of some antic delusion, as, presently, by many among our Baby-Boomer stratum itself.

Customs which are intrinsically irrational, from a functional standpoint, have been often enforced by the approximation of fascist, or other oligarchical forms of tyrannies called a "consensus"—or "consensus" in Hitler-era German, *Gleichschaltung*.

History is full of examples of this type of populist folly; nonetheless, the history of the catastrophic situation in the U.S.A. and in western and central Europe today, has special historical features, features which have no general precedent in the history of the development and use of the English language in North America since 1620. This recurring type of today's problem has already had a presently relevant, specific root and relevant expression, centuries ago, in the history of the form of the so-called "Philosophical Liberalism" which came to dominate most of the internal history of globally extended European civilization, especially the English-speaking world, since, already, about the time of the inauguration of England's King James I, but especially since the death of Queen Anne, and in the triumph of the British East India Company's Lord Shelburne in the aftermath of the February 1763 Peace of Paris.

The special, radically positivist, so-called "existentialist" type of the Sophistry, which was imposed, as virtually from birth, on the members of the U.S. "white collar" class born between 1945 and 1956, has functioned as a unique subset of, a specific distinction of what is otherwise an expression of the longer wave of modern European philosophical Liberalism.<sup>2</sup> It has been, chiefly, the special impact of the "Baby Boomer" phenomenon, which has produced the presently on-rushing, immediate threat of the descent of the planet as a whole into a general breakdown-crisis of not only the present world economy, but of any form of civilized existence, over a generation or more to come.

#### Liberalism as a Disease

The root of this specific cultural influence which has built the present kind of global catastrophe into the present Trans-Atlantic and world systems, combined, is the form of what is called modern Liberalism, built into modern Trans-Atlantic civilization by the influence of the Venetian reformer Paolo Sarpi. This Sarpi reform had produced the specific kind of axiomatically irrational habits of practice which came to be



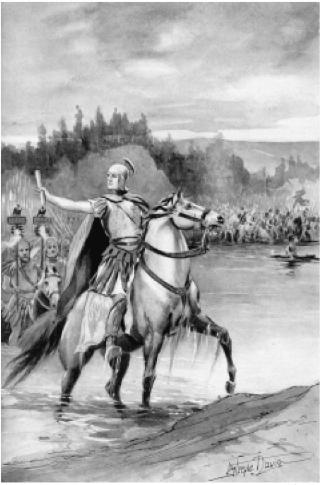
EIRNS/James Rea

The environmentalists' "corrective" measures, such as those proposed by demonstrators like these, would "generate longranging ruinous effects as bad in their own way, as those of the pro-eugenics Hitler regime earlier," LaRouche writes.

associated with the development of the Anglo-Dutch Liberal world-outlook and practices, which are to be traced to such Eighteenth- and Nineteenth-Century followers of Sarpi and his lackey Galileo Galilei, as Thomas Hobbes, René Descartes, John Locke, Bernard Mandeville, François Quesnay, David Hume, and the circles of Jeremy Bentham's British Foreign Office and the Haileybury School. The emergence of the British East India Company as a quasi-imperialist power, with the February 1763 Peace of Paris, and the subsequent formal establishment of the British Empire under Queen Victoria and Prince Edward Albert, have bred the characteristic features of Anglo-Dutch Liberal dogma into the presently ruinous habits which, once again, have come to dominate the monetary and economic policy-shaping of the world as a whole.

To understand any system of social practice, you must first recognize what pass for its underlying, often seemingly hidden, axiomatic characteristics, its systemic characteristics. You must recognize what controls the way of thinking and reacting which usually unsuspecting peoples and their governments treat, as "simply natural" and "inevitable."

<sup>2.</sup> The post-war "Baby Boomer" syndrome passed through two distinct initial phases. The first phase, 1945-1956, is best described as "the triumphalist phase," the phase of the euphoric delusion that "our type is on the road to endless triumphs" over other "classes" in our own nation, and over the world at large. This phase, of the "Organization Man," coincides with the emergence of what President Eisenhower was to describe, at the close of his second term, as the initial phase of the "military-industrial complex." In the meantime, over the 1957-1961 interval, a deep recession had demoralized the typical parental households of the "Baby Boomers." There was a recurrence of that cyclicallike, manic-depressive cultural pattern during the span of the Clinton Administration, when Federal Reserve Chairman Alan Greenspan's wildly lunatic financing of the combined housing and Y2K "bubbles," prompted a wildeyed, "we are wonderful" euphoria among the Baby Boomers, who had now taken over power in government from the hands of their parents' generation. This was followed by the wave of cultural pessimism, echoing somewhat the 1957-1961 interval of pessimism among the generation of the typical parents of the Baby Boomers themselves. It was the politics of the disastrous 2004 Gore-Lieberman election-campaign, not the mystical power of the menopause, which prompted, and thus made possible the 2000-2007 pattern to date. For me, working in circumstances and professional functions which afforded me special advantages at that time, I can attest that the reactions to the delusions of 1993-1999, and the shift from 2000 on, parallel almost exactly that of the parents of the Baby Boomers with similar experience during and following the 1957-1961 interval. One wonders: Is it possible for Baby Boomers to actually think for themselves?



Caesar crossing the Rubicon in 49 B.C., an imperial act of war. Throughout the span of history, LaRouche writes, the traditional adversary of mankind has been the " 'oligarchical model' of the Achaemenid, Roman, Byzantine, ultramontane, and British imperial systems," up to today's fascist promoters of "globalization."

What kills great nations and cultures, is what they refuse to recognize about themselves: the control over their minds and hands that they tend to accept as being virtually inevitable.

So, the effects of that Anglo-Dutch Liberal system, and the history of its evolution, constitute the practical subjectmatter which must be considered, to understand the systemic origins and outcomes of the existentially crisis-stricken, present world economic system, the system whose onrushing, self-inflicted breakdown menaces the entire planet today.

To prevent the globally existential disaster swooping down upon us all at this juncture, we must understand the need to uproot this *classically tragic* systemic aspect of modern history while we might still do that. There are two classes of evidence which must be considered. We must focus upon the specific, ideology-driven, inherently destructive practice of

philosophical liberalism, as defined in practice by the effect of the dogmas of Venice's Paolo Sarpi, to the present day. We must, secondly, also focus upon the deeper root of the circumstances, the so-called "oligarchical principle," which the influence of Sarpi's Liberalism expresses in its own special way, still, in recent times.

The effect of the Anglo-Dutch Liberalism spawned by Venice's Paolo Sarpi, has thus brought the world as a whole to the present juncture, at which the present world monetaryfinancial system must be placed in bankruptcy by a concert of leading and other national powers. Essentially, since the lunatic accumulation of fictitious debt generated under the usually incoherently babbling former chairman of the U.S. Federal Reserve System, Alan Greenspan, is presently unpayable on its own terms, a general reorganization-in-bankruptcy of the world's monetary-financial system must be effected, more or less immediately, to prevent a chain-reaction of consequences which would lead quickly, into a planet-wide, prolonged new dark age.

The present U.S. dollar, however tattered it is, must be the instrument around which the needed forms of sudden and radical reforms of the presently worthless world financial order must be brought into a sustainable form of order. The instant at which the U.S. dollar ceased to function as a reserve currency of the world, the world as a whole would now be plunged, as if instantly, into a prolonged, genocidal new dark age.

At this time of monstrous world crisis, an urgently needed, general reform could not be launched, without bringing in the keystone nations of Russia, China, India, and others, with the government of the U.S.A., as a rallying point for the sane nations of the world, in placing the presently, hopelessly bankrupt world financial-monetary system under control, and instituting relevant kinds of long-term treaty-agreements, with maturities of between a quarter- to a half-century, of a single, world, fixed-exchange monetary system operating at a base-rate of between 1-2% simple interest on long-term national and treaty-based international credit.

There are obvious objections to such a proposal. Were the objectors successful, then, simply, civilization as we know it would not survive. World population levels would drop rapidly by a margin of billions, in the planetary new dark age which would be ensured, under present global conditions, by any successful attempt to prevent the early institution of the type of reform I have just indicated here.

The May-June issue of Foreign Affairs presents a directly contrary proposal, in British ideologue Benn Steil's "The End of National Currency," in which he, as a notably decadent expression of the tradition of typical imperialists in the same genre as Britain's Margaret Thatcher and Tony Blair, proposes a world system composed of three parallel semiglobal currencies.

That proposal is, in functional terms, clinically insane; but, for Steil, it is a proposal conceived in desperation, out of fear in London, in the Cayman Islands, and also on what is called Wall Street, that the United States might return to the memory of the success of the recovery under President Franklin Roosevelt. On that issue, the London-Wall Street gang in whose service Steil writes, is grabbing at straws, grabbing for anything which might be used to destroy the prospect that a United States caught in a sudden deep depression, might rally around the memory of Franklin Roosevelt's leadership. This time, they would prefer, still today, something like Hitler to FDR.

You can bank, quite literally, on what I have just said; it is the only kind of bank which could survive the state of general ripeness for a chain-reaction blow-out of the entire world system we have reached, more or less exactly, at this present moment. Saving civilization from a presently looming threat of a planetary new dark age, requires a pattern of measures which should remind us of U.S. President Franklin Roosevelt's stroke of planetary genius during the 1930s, but on a broader base. The means to conquer the danger, exist, provided the will to do so is provided in timely fashion.

In this setting, it should be obvious, that the immediate ouster of the impeachable Vice-President Cheney must occur, if we wish to have a U.S. government under our present Constitution, come January 2009. We must act now, in time to prevent what could be, within months or a bit later, not a new world depression, but a general, chain-reaction form of breakdown crisis of the present world economic system, and the disintegration of the present governments existing around the world still today.

# 2. The Role of Dynamics

You may say, that what I propose can not be done. You are terribly mistaken. It must be done, and it would be done by any sane group of people, in and around our own government, who were competent enough, sane enough, to recognize the immediate dangers of the accelerating, general economic breakdown-crisis which is already in an advanced stage of progress around the world during these present months.

To that end, the following economic factors must be considered. These factors are expressed in, principally, two categories: 1.) the physical, non-monetary characteristics of the economy, such as national economies as wholes. 2.) The sane, properly subordinated functions of the role of money, and its generation, in the circulation of goods and services.

We must also recognize in the fascist regimes which were brought into being during the 1920s and 1930s, an echo of the so-called "Asian Model," the so-called "oligarchical model," which served as the foundation for the shaping of the Roman Empire, Byzantium, the ultramontane system under Venetian financier-oligarchical tyranny, and the modern British Empire. We must recognize Italian, German, Spanish, and other fascist tyrannies from the 1920s and 1930s as reflections of the continuing tradition of the imperial "oligarchical model" of the Achaemenid, Roman, Byzantine, *ultramontane*, and British imperial systems. It had been chiefly the British Empire which, with its confederates in the U.S.A. and elsewhere, had brought Mussolini and Hitler to power. The same "malthusian" impulse, the same danger to humanity, is expressed by the plots of the haters of President Franklin Roosevelt, launched in service of socalled "globalization" today.

The adoption and installation of reforms premised on weighing those considerations, the proposal presented in this chapter of the report, requires attention to a crucial, longerterm, historical factor: Who, exactly, is the enemy of mankind in this time, the traditional adversary of mankind throughout the known span of ancient, medieval, and modern European civilization? The kernel of that history will be the subject of the following chapter.

However, more immediately: The only intrinsically sane form of modern money economy presently available, is one based on a credit-system, whose prototype is expressed as the protectionist form of generation and circulation of money which is implicit in the design of the U.S. Federal Constitution, as in that fundamental law of that Constitution which is expressed in its Preamble. This is, and must be our constitutional system, our economic order, rather than an intrinsically usurious, intrinsically ruinous monetary system of the Anglo-Dutch Liberal, or Venetian type. This reflects the principle underlying the successful use of scrip in the relevant period of the Seventeenth-Century Massachusetts Bay Colony.

I shall return to the subject of the credit-system in a few moments. However, to prepare the way for that subject, we must first consider the crucial principle of physical science which underlies any competent approach to a modern economy.

#### **The Riemannian Principle**

Any competent treatment of the subject of a modern economy, must proceed from modern science's insights into the essential difference between man and beast. That is to emphasize, that the difference between man and beast is the potential of the human mind to do what no animal can do: that is, to effect a discovery of a universal principle, as of physical science, through whose willful employment the human species is enabled to increase the potential relative populationdensity of the human species, as no form of animal life could do.

This issue is celebrated in history and art, by the defense of Prometheus by Aeschylus, as in *Prometheus Bound*, the power of mankind to discover the use of fire (e.g., nuclearfission power) to increase the power of the human species to exist, per capita and per square kilometer. In modern European civilization, this is generalized by Academician V.I. Vernadsky's discovery of the principle of the *Noösphere* as a



The control room of the experimental hightemperature gas-cooled reactor at Tsinghua University in China. This fourth-generation fission reactor typifies the growth potential of the physical economy: It has a higher energy-flux density per capita and per square kilometer than the more primitive energy sources.

IAEA/Petr Pavlicek

principle of Riemannian physics. This coincides with Albert Einstein's situating of the essential feature of modern European science as the process, as seen by Einstein, which unites the development of the foundations of a generalized modern science by Johannes Kepler, and the development of a true anti-Euclidean, dynamic physical geometry by Bernhard Riemann.

The paradigm of Einstein's expressed view on this point, is the notion of a universe as self-bounded as a finite universe by universal physical principles such as the harmonic determination of the role of universal gravitation. This is the same concept of a finite and self-bounded universe, already clearly implicit in the work of the Pythagoreans and other circles of Socrates and Plato. This is the notion which defines an anti-Euclidean physical geometry of an anti-entropic universe, as opposed to the Sophist doctrine of an intrinsically entropic Euclidean-like space-time, such as the astronomical scheme of Claudius Ptolemy.

In a Riemannian physical hypergeometry, as implicitly in the universe of the Pythagoreans and Plato, no aprioristic conception of definitions, axioms, and postulates are permitted. The universe is self-bounded by discoverable universal physical principles, such as Kepler's harmonically defined principle of universal gravitation. The grasp of this distinction between a Riemannian and a Euclidean geometry, is the most direct, relatively simplest, yet sound basis for understanding the intrinsic incompetence of all attempts to reduce the task of economic forecasting to mechanistic-statistical models.

For example, in animal life, the potential of the species of beast is determined, relative to the existing conditions of life of that species, by its biological characteristics as a phenomenon of Vernadsky's Riemannian *Biosphere*. This consideration exists for mankind, but is subordinated to another consideration absent from the beasts, the power of the individual human mind to generate an ontologically efficient willful principle of the human mind, one corresponding to the discovery of a true universal physical principle, as typified by the Promethean notion of man's willful use of fire to provide the human species a power to exist beyond that of any beast.

Thus, the human species is advantaged by the power to discover such usable principles. However, at the same time, the possible human condition is bounded by the limits for growth and development represented by a limited number of such discovered principles. This bounding is associated not only with a kind of "outer limit" by which the scope of human expansion and advancement is implicitly bounded, but also with the power of man to make new discoveries of principle which expand the potential for size of population, and also increase of its standard of existence per capita and per square kilometer.

So, the quasi-Cartesian methods of attempted forecasting which are, implicitly, in general use as the ontological basis for statistical forecasting today, presume that the future is bounded in a way coherent with the reductionist, mechanisticstatistical methods of statistical forward projection. In reality, the bounding of economic processes are not competently represented by reductionist mathematical methods, but implicitly follow the method of Kepler's follower Gottfried Leibniz, as this method is extended into the generalization of principle provided by a Riemannian physical hypergeometry in which no *a priori* definitions, axioms, or postulates are tolerated. Competent forecasting is not a matter of statistical extrapolation, but of the curvature expressed as a boundary, reflecting the boundary which the extension of a current process will encounter.

Thus, in competent methods of forecasting, such as my own, what is forecasted is not the extrapolation of a course of direction, but the effect of the rate of increasing convergence on a boundary condition defined (in Vernadsky's language) by the present state of the Riemannian *Noösphere*.

The outcome of these Riemannian considerations is that the true rate of economic growth in an economy, is not monetary, but physical. To achieve a state corresponding to a seemingly linear expansion of output and human per-capita standard of living, there must be a corresponding rate of scientific and technological progress through realized employment of the benefits of discovered universal physical principles.

For example, the readily used rough measurement of the mode in which such growth of potential occurs, is typified by the notion of an upward shift of "energy-flux density" per capita and per square kilometer, per second. This means moving from simple solar radiation, radiated to the Earth's surface, to burning of, in succession, brush and cut wood, charcoal, coal, natural gas, petroleum, nuclear fission, thermonuclear fusion, and so on. "Soft energy" is preferred only by a self-endangered species made up of silly people with "soft heads" (possibly as described in a lost chapter from Jonathan Swift's Gulliver's Travels. One of the best uses of sunlight, is the devotion of large rations of sunlight to the growth of forests by aid of large doses of carbon-dioxide consumed by plant-life, such that the increase of carbon-dioxide consumed thus, will, as all sane and sentient beings know from experience, nicely lower the temperature of the relevant environment.

Just as the development of the Biosphere, decreases the percentile of the Earth's mass devoted to non-living processes, so the increasing of the human population and its standard of living, increases the ratio of the mass of the Noösphere to the mass of the Biosphere. This is an anti-entropic process; in fact, the universe, to the extent we know it, is essentially the expression of domination by an anti-entropic process. The driver of the progress of the human condition, is those aspects of the uniquely human mental processes associated with both fundamental progress in realized scientific progress, and similar advances in Classical modes of artistic composition. Those determining processes are Riemannian.

#### Why Money?

In every truly civilized culture, it is recognized that the attribution of intrinsic value to forms of money, is implicitly an expression of evil. One of the recognized names for this evil is "usury." While the custom of charging "interest" for certain uses of money is an available means for conducting a legitimate practice, the notion that money itself "earns" added value for society, is a form of barbarism which should not be permitted in an actually civilized form of culture. The legitimate function of money is not productive, but administrative, as provided by the U.S. Federal Constitution when that Constitution is followed according to the intent rooted in the fundamental law of the U.S.A., the Preamble of the U.S. Federal Constitution.

The proper, essential function of money must be limited to the implicit conditions of the U.S. Federal Constitution. Money should exist as a form of public credit, regulated in circulation and other, both private and public use, in a manner, and to a purpose as implicitly created and regulated by sovereign government, rather than existing as a private interest as such.

The problems implicitly posed by the modern ideas concerning the nature and role of money, are reflected in the measures, regulating a gold reserve, taken by the U.S.A. under the Administration of President Franklin Roosevelt, and, otherwise, on the initiative of the U.S.A. under his Administration. It should be recalled that those provisions were introduced by the U.S.A. as reflections on both the imperial tyranny of the British Gold Standard, which had collapsed in 1931, and our recollection of the evil represented by the imperial role of the British Gold Standard while it had existed. To maintain a "hard currency," a monetary gold reserve must be protected in that role, from the implications of the use of the same gold as an ordinary commodity. Hence, the crucial importance of the distinction between a Gold Standard and a Gold-Reserve Standard.

There can be little clarity on the subject of monetary standards, for as long as the idea of a "free trade" system is tolerated, as opposed to the notion of a "fair trade" system of production for market and for production of goods exchanged in trade. The essential value of product issued for trade, lies in a credible notion of the fair cost of production, rather than the market of traded goods.

To come to the crucial point: Money is properly created as a form of credit uttered by a sovereign nation-state government. Its principal function lies in the intention to promote real capital formation within the economy, and beyond. This function is typified by the use of such U.S. Federal Credit for a large portion, or even the entirety invested in the creation of a capital investment in productive processes, or essential basic economic infrastructure.

The experience of the U.S.A. in the economy of World War II should be considered on this account.

The U.S. created a vast mass of Federal public debt, in

producing the material needed for the conduct of the war, both on behalf of the U.S.A., and its allies in that war. The intent had been, under President Franklin Roosevelt, as Roosevelt had forewarned Winston Churchill in Morocco, to redeem much of that debt, at the close of hostilities, by converting the capital invested in facilities needed for war production, for the production of productive capacities for both domestic and foreign needs. The Truman Administration's scrapping the Roosevelt post-war development perspective, at the urging of the British Empire and other imperial powers, created a major problem for the post-war internal U.S. economy.

The physical-economic principle at issue here, is that credit uttered for promotion of technologically progressive modes of capital-intensive development of essential infrastructure and production, will gain the advantage of technology-driven gains in productivity, thus increasing the national output by a greater amount than that represented by the investment in combined capital improvements and funding of production within a climate of scientific and technological progress. Military production, by comparison, is economically waste.

The use of public credit in a "fair trade," "protectionist" form of economy, is the promotion of full productive employment by increasing the ratio of new, more advanced modes of production and product designs, relative to technologically older modes. The use of large-scale, long-life capital improvements in basic economic infrastructure, is an indispensable contribution to increase the rate of improvement in national productivity per capita and per square kilometer of total national territory.

This objective can be fostered only by emphasis on the role of Federal and other capital budgets, rather than restricting investment to current account.

Thus, that which had been the "future point" to which I have referred in these prefatory remarks, is, on all those accounts, where the U.S.A., and also the world at large, stand at this moment.

To restate the point, in the category of what passes for a "democracy," the cumulative impact of small-time local decisions, even masses of merely personal, individual decisions, such as votes cast in elections, or abstentions from voting over a generation, or longer, may tend to produce some of the most disastrous effects which will be suffered by that society as a whole, a generation or more later.

Those are not merely possibilities; all of that which I have just described, is what has actually happened.

# 3. Satan as Zeus: The Oligarchs

Since the rise of what we recognize today as the ancient Greek civilization of about 700 B.C. and onward, European civilization, in particular, has been the victim of the vicious practices of what are known interchangeably as "imperial-



This Greek vase painting from around 500 B.C. depicts Prometheus (left) condemned by the Olympian Zeus to be bound on a desolate rock, where each day an eagle eats his liver. Prometheus' crime was to bring the gift of fire (and hence industry) to man, so that man would no longer be a slave. At right is Atlas, Prometheus' brother, who was also punished by Zeus, and condemned to hold up the sky.

ism" and "the oligarchical model." Aeschylus refers to the heart of that problem in *Prometheus Bound*. What is credibly regarded by historians as "imperialism," is otherwise known by such names from ancient times as "the Persian Model," "The Asian Model," or, simply, the generic term, "the oligarchical model." The Olympian Zeus of Aeschylus' *Prometheus Bound* typifies the essence of "the oligarchical model."

The essential distinction of the oligarchical model, as Prometheus Bound expresses this, is the ban on passing powers of scientific progress to that larger part of the population, the subject population, which the reigning oligarchy treated as human cattle, forbidding such human cattle from gaining access to that scientific knowledge, such as the use of fire, which distinguishes the life of free human beings from the conditions of life of captive cattle. The practice of stupefying the portion of humanity selected for the fate of human cattle, is what is expressed by the murder of U.S. Negro slaves who had learned to read and write, and the continuing preference of oligarchical layers in the U.S. itself for maintaining the relative illiteracy of the freed slaves, in opposition to the policies of Frederick Douglass. This was the basis for the doctrine of the British Malthusians, and our contemporary eugenics advocates, such as the so-called "environmentalists" drawn from the ranks of our 68ers. This is the truth behind the doctrine radiated from the circles of the British monarchy today, the Olympian cult called by such names as "globalization" and "Global Warming" today, the same policy, then called the "eugenics" of Adolf Hitler and his program of genocide against Jews and Slavic populations, during his reign.