

The Uniquely Needed Doctrine for U.S. Economic Survival Today: Why 'Fiscal Austerity' Is Insane

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A Foreword: How Your U.S.A. Was Ruined

It is time to explain some basic facts of economic life to our citizens. If the majority of the reigning Baby-Boomer generation of today, might prove to be so foolish as to reject my warnings, what I write here should be passed on to both the young adults of the 18-25 age-group, and, hopefully, their progeny, too. In the worst case, then, the outcome of my effort might thus assure that something good for mankind's future generations might survive out of the new dark age of humanity which today's presumably leading choices of U.S. Presidential candidates threaten, more and more, to bring down upon us now.

Today's spreading demands, both in and from the U.S.A.'s political, financier, and economists' circles, for the kinds of "fiscal austerity" which led Germany under Chancellors Heinrich Brüning and Franz von Papen into the Adolf Hitler regime, can have a far worse immediate effect now, than similar policies of the 1929-1933 period in both Europe and the U.S.A. then. Those methods of fiscal austerity, are not merely wrong; to attempt to revive them now, to repeat that error once again, is not merely foolish, it would be insane.

The officials and economists who have proposed that such measures be repeated as response to the present financial crisis, once again, are not merely stupid, but immoral in the extreme. Meanwhile, we must also consider those habituated underlings who constitute the great number of our own and other nations' populations. Will they continue to believe that

their officials, the majority of economists, and the general run of political lackeys of the present system, are acting out of necessity? Are they hopelessly ignorant fools, who believe that their superiors know what is best for them? Today, we see that many among the poorer ranks of our population are often much worse: in their desperation and rage over the apparent hopelessness of their situation, they became hungry wolves in human guise, who would join the pack of those who intend to survive, by eating the people of Argentina today, and also of other nations, including their own, the day after that.

Therefore, let us begin with the crucial fact which every truly intelligent, informed, and moral citizen of the U.S. will choose, in attempting to understand the cause of, and solutions for the economic crisis of the world today. To find out who those noble citizens are, ask: "Whose methods of economic forecasting have been successfully proven experimentally, over the course of the recent four decades?"

That fact is, that on my publicly documented record as a long-range forecaster, since the mid-1960s, I have never been mistaken in any forecast to which I have actually committed myself publicly; and, what I have forecast has been, usually, the crucial developments of the coming interval. Typical are my forecasts of the monetary crunches of 1967-68, 1970, 1971-72, the follies of 1979-82, and the stock-market crash of October 1987. The list of my forecasts includes my 1992 diagnosis of the already ongoing "great mud-slide" which hit with force in 1994, and also includes what I had diagnosed in my 1996 Presidential primary campaign as the onrushing developments later manifest as the successive 1997, 1998 monetary crises. The list also includes my warning, during my 2000 campaign, of an immediately impending flop of the great "IT bubble." Each of these forecasts was fulfilled in a



Argentina, which once had one of the highest living standards on Earth, has been reduced to hideous poverty—with families surviving by eating garbage—as a result of the fascist “fiscal austerity” demands of the international financial institutions.

timely fashion, during the appropriate part of the 1967/68-2004 interval. That pattern continues up to the present day. We are presently on the edge of what could be, unless prevented now, the greatest, international financial collapse in the experience of our republic.

Some might object: “But those were relatively long-range, macro-economic forecasts; weren’t there times during the recent forty years, that our economy enjoyed some recoveries? What about lessons of successes in micro-economics, which might be copied today? Despite its troubles, doesn’t the IT revolution represent a real change for the better down the line? What about successful short-term trends which some think point to interesting alternatives to the present times of troubles?” Ah! It used to be said, that “If wishes were horses, beggars could fly.”

The response to such wishful objections as those, is elementary. Over the recent forty years, we have experienced what appeared to many observers in the upper twenty percentile of family-income ranks, to be growing prosperity, if only during the short term. In fact, that apparent success was based upon turning resources being used up, into fictitious profits; that had continued, up to the point that the productive and related resources we failed to replace were running out. Over the same interval, especially since 1977, the long-term direction of changes in the conditions of life for the lower eighty percentile of the U.S. population has been, consistently, down, down, down, with a threat of runaway inflation building up during most recent dozen or so months. Soon, if the present trends continue, most among the upper percentiles

will come to enjoy the ruin already made so desperately popular among our poor.

In ancient and medieval times, in those doomed cultures of Europe and elsewhere, which reigned prior to the benefit of Europe’s Fifteenth-Century Renaissance, the upper social ranks of society were sometimes considered powerful and more or less rich, but their advantage was at the expense of the great mass of populations, which were herded or hunted as human cattle. The weight and fate of the virtual human cattle then dragged down each of the haughty empires and their like, one after one after one. Do we consider such failed societies successful? Do we propose to adopt such a model as those, again, now? Have we learned nothing, or perhaps less than nothing from history?

It is always the longer-term cycles in economies considered as a whole, which are the test of the reality, or the falseness of what some accounting methods report as shorter-term gains. Yes, during the past decade, some Americans, mostly ill-deserving ones, became quickly rich; but, we later discovered that Enron was never successful at anything but stealing from the pockets of others. The fact is, when all relevant facts are considered over the span of a generation or two, that the past forty years of trends in U.S. economic policy of practice, have been, overall, a terrible mistake. Looking back, the methods used to report those past practices as profitable, were fraudulent methods, methods premised upon a profoundly mistaken set of fallacies of composition.

Notably, my extraordinarily successful record in forecasting, never depended upon secret information, but had been

scientifically determined estimates, based upon generally accessible information from the public domain. Others overlooked the significance of that evidence, as a Manhattan-bred tourist would miss the significance of the crucial spoor openly displayed by a Central American jungle. I had known, and understood the jungle which is our modern U.S. economy; apparently, my ostensible rivals had not.

I very rarely make near-term predictions such as I did in one exceptional case, my June 1987 warning of an extremely probable U.S. market crash of early October 1987, and that for exceptionally good reason. There is nearly always a significant factor of “free choice,” although it is only a limited margin of freedom, in the behavior of social systems, as also in the case of choices available to the individual person. However, any such “free choice” has consequences; it is those choices among alternate sets of consequences which the competent economist would forecast, rather than offering, like the celebrated “race track tout,” a simple prediction of “who will win or lose the horse-race.” The most important forecasts are those which, in economy or science generally, show a medium- to long-term outcome which differs in some critical respects from what might be accepted widely as short- to medium-term performance.

For example, those who would be able to judge such matters which a qualified forecaster should have observed, should have seen that nations have often adopted policies intended simply to postpone the arrival of a financial collapse, such as the build-up toward a hyperinflation in 1923 Germany, or President Herbert Hoover’s foolish response to the 1929 “crash,” by creating a bigger, far worse collapse than would have occurred if he had faced up to reality earlier. In the real world, choices of that kind, and others, often exist. Even then, the continuation of any bad policy has its own, *systemic* consequences. It is those kinds of consequences which are the most important subject of forecasting longer-term developments, as I have had my relatively outstanding successes in this field.

Science & Forecasts

It is the same in all branches of science. The appearance of a predicted long-term result is of relatively little importance to a science which already knows the principle expressed. It is a startling apparent anomaly, such as Kepler’s study of an extraordinary, repeated, apparent reversal of direction of the orbit of Mars, which was crucial for his uniquely original discovery of universal gravitation. So, the distinction of really intelligent people, is that they are fascinated, and often happily amused, by stubborn evidence that their earlier opinions have been mistaken. It is the anomalies of the universe which are the only evidence which leads to new discoveries of fundamental principles, and to the correction of falsely held opinion. It is, as I shall show at a later point in this report, anomalous, ironical meanings which defy a standard dictionary, which are the only means by which actual ideas might be introduced to communications.

Therefore, only very rarely would a good forecaster face a situation in which he or she believes it is virtually inevitable that only one certain result will occur at a certain time. Usually, any competent variety of professional forecaster would be virtually certain that at a certain, fairly well-defined future turning-point, not only one, but one among a set of two or more choices in decision-making, will be forced upon society, a set of choices immediately confronting that society at some fairly approximated future time. All my published forecasts have had that character. A competent economist would know: that, because of the nature of the human will, bad policies usually lead, not directly and simply to a single outcome, but, rather, to a fork in the road of choices for continued action; he or she knows, that that fork in the road will arrive at a time when governments or others can no longer safely postpone qualitatively new choices. The forecaster’s job is to show what those choices, and their various consequences will be, and to indicate how we might estimate when that reality will confront relevant institutions of relevant nations.

The proper function of economic forecasting is not “crystal-ball gazing.” It is a function, like that of members of the medical profession, who perform the essential professional function within society, for discovering certain present and foreseeable developments whose abominable effects might be foreseen and prevented. Competent forecasting treats economic history as a branch of political science, and always excludes reliance upon the inherently fallacious, generally accepted methods of both financial accounting and stock-market, or other varieties of reductionists’ ivory-tower statistics. The forecaster recognizes that those accounting and statistical methods are rotted-out by their reliance on methods of fallacy of composition of the evidence considered, and that those commonly practiced ways depend upon mechanistic assumptions, which bring those characteristic, longer-range effects, effects such as the disasters which societies, like ours today, have often brought upon themselves.

So, the foolish clients of the foolish forecasters treat economies and their financial processes as they bet on horse-races. The foolish financial forecaster says, in effect: “My clients want a definite answer from you. Which horse is going to win which race, either tomorrow or the next day? If you can’t tell him that, my clients will say you are a faker, and want nothing more to do with you. Show me your charts, or shut up!”

To that, I respond with a shrug of my shoulders: “I shall give you a good forecast, free of charge. I might come to visit you when the time comes that you are hauled into the bankruptcy court where your claims to wisdom will be scrutinized more appropriately.” That is my forecast for a nation, our nation, including those of its voters foolish enough to believe in the predictions of Bush Administration officials and similar incompetents today.

Meanwhile, still today, as was already taught to the credulous dupes in some universities during the immediate aftermath of World War II, there are many hysterical fellows who

believe that a new depression, comparable to that of the 1930s, could not happen, unless we talked ourselves into it. These hysterics believe, desperately, even now, that if we all agree to believe that a new depression will be prevented, it will not occur. It were as if they had argued, that if we jump out of a skyscraper, we will be safe, as long as we believe strongly enough that we will not actually hit the ground. This is the hysterical, lunatic belief in magic of a large assortment, in the U.S.A. and elsewhere, of those influential financier and political forces, both Democrats and Republicans, who will go to virtually unprecedented lengths to block out virtually every vote cast for the virtual Cassandra they consider me to be. Many among them cry out: "I don't go there!" Unfortunately for them, and possibly also for our nation, and Europe's, too, Homer's Cassandra was right, and so am I; those who refused to heed her warnings, were doomed, like those who might wait too long to heed mine.

Perhaps, contrary to much opinion on the subject, Troy's Cassandra was no mystic, but a strategic thinker, like those among our generals who rightly warned, as if prophetically, against the Bush Administration's plunge into a war in Iraq. I am no peddler of mystical omens. It was, to a large degree, from reflections on the *Iliad* and *Odyssey*, treating the culture of the *Iliad* as a self-inflicted disaster, that Athenian tragedy forced reflection upon the evil that the persistence of a certain culture does to itself. So, the aging Solon delivered his warning to the erring men of Athens in that time.

That Greek Classical tragedy, even the surviving fragment of great Aeschylus' *Prometheus Bound*, was superseded by the dialogues of Plato is, of course, the correction made in reflection on the way in which the tragic influence of sophism typified by the popular flaw of its culture, the sophism which had brought ruin upon the once great Athens, as upon our U.S.A., and Europe, today. I am a scientist in my profession, whose forecasts are verifiable in advance by anyone qualified in my profession. I, too, as Solon, Aeschylus, Socrates, and Plato did, have come to recognize the recent generations of my own country as a great, self-inflicted tragedy, a tragedy susceptible of a strictly scientific comprehension; and, I, following Plato then, and the modern Cardinal Nicholas of Cusa, have prescribed remedies provided for those willing to make the necessary changes in those ingrained habits which had previously brought an entire civilization into the state of ruin which folly had bequeathed to that civilization at that time.

Therefore, while my professional achievements are therefore unique in that respect, it is frankly debatable whether my unique success is due to some superlative quality of genius I might possess, or, simply, as the old aphorism puts it, I have been the one-eyed man in the profession of the blind. I have often been astonished that my putative professional rivals had failed to recognize what was so clearly obvious to me; were they suffering brain damage, perhaps, or supporting a psychotomimetic habit?



To start the cleansing of dangerous lunatics and morons from our nation's policy-shaping functions, we might start with George Shultz, "who has played a leading part in orchestrating the long-term ruin of the world economy, over more than the past thirty-odd years of his leading role as a proponent of the predators' cause, in and out of government."

Indeed, I have often expressed my self-critical view of my unique accomplishments in this field, by comparing myself to that little boy in Hans Christian Andersen's "The Emperor's New Suit of Clothes," who exclaimed, pointing to the foolish, naked Emperor, "But he has nothing on!" In 1971, the non-existent clothes of the Emperor which the foolish mob was adoring, were the so-called "built-in stabilizers" which had been proclaimed to have become the eternal verities of the assuredly depression-proof, existing world order. Still today, my foolish Wall Street, and like-minded so-called "critics" simply "have nothing on."

The importance of that admittedly only qualified modesty on my part, is to point out to you, once again, that there is no impenetrable power of magic in my achievements as an economist. You, or any other intelligent U.S. citizen, if he or she wished, and were probably educated even to a modest degree, could master at least the ABCs of the science needed to understand and support my indication of the road to escape from the presently onrushing general collapse of the economy, even a collapse such as the present one, an onrushing collapse which threatens, unless checked, to be far worse than that the U.S. experienced during 1929-33.

It is therefore about time, perhaps even past time, for the serious citizen to think for himself or herself about these matters. As under Franklin Roosevelt's leadership, it was the mass support of the citizens, ordinary citizens, especially the "have nots," "the forgotten man," who gave that President the trust and support he required to rescue our people from the depression bequeathed by the combined foolishness by those

including Coolidge, Andrew Mellon, and Herbert Hoover. If the citizen wish his or her family, community, or nation, to survive, it is time for that citizen to stop and think about what I am saying here.

In the meantime, for example, anyone who tells you now, that the U.S. under President Bush is on the way toward a general economic recovery, is either a dangerous fool or a predatory liar. Credulous fools like those who warn hysterically against departing our currently sinking Titanic economic follies, who are foolish enough to believe in a current U.S. recovery, should be removed from influence over the policies of our government, now, before it is too late for us all. To start that urgently needed cleansing of the dangerous lunatics and morons from our nation's policy-shaping functions, we might start with the exclusion of dangerous monetarists such as the associates of the George Shultz who has played a leading part in orchestrating the long-term ruin of the world economy, over more than the past thirty-odd years of his leading role as a proponent of the predators' cause, in and out of government.

Why should you continue to rely on repeatedly failed "Brand X" recipes, instead of my proven competence! Your descendants, if you have some despite your present folly, will cry out to their forebears, "Shame on you!"

Be wise. Put your finger on the heart of the problem which has prevented most living economists so far from recognizing the basic principle on which my great margin of professional superiority over them, as a forecaster, has depended. The problem is, at root, elementary; any sample of truly sensible adult persons could easily recognize that principle, if they had not been hoodwinked into swallowing the swindle of Wall Street's and academia's monetarist confidence-men.

Real-World Economics

The first step toward insanity in thinking about economy, is to believe that economy "is about money."

As any hungry and homeless person knows, a depressed economy is one in which there is increasing lack of access to the physical pre-conditions on which even a meagerly secure life depends, conditions such as available decent employment, education, food, housing, medical care, and so on. The sane citizen recognizes such elementary truths, as that unemployment is often a result of the shutting down, physically, of one or more of the factories in the town, as we see this today throughout most of the farm-belts and former industrial centers of our nation.

As a reflection of our clinging to the insane system of management of a national economy, toward "post-industrial" decadence, as we began to do about forty years ago, the prevalent opinion today, is often a virtual copy of that which has been passed down from such charlatans of past centuries, as Bernard Mandeville, François Quesnay, John Law, Adam Smith, and the infinitely evil utilitarian Jeremy Bentham. Those types of influential swindlers, then as now, have in-

sisted that the principles of economy are not based on physical values, but exist only in places hidden within the mysteriously magical powers of money over "the marketplace." The poor fellow who came home from work late, and penniless, on payday, after stopping to gamble along the way, is only typical of the dupes who believe in a secret power hidden in money itself.

It is important to compare today's U.S. situation with that in continental western and central Europe, where the threat of a general monetary-financial collapse is currently, potentially even more desperate than even in a U.S.A. presently teetering on the brink of a greater, deeper collapse than that of 1929-1933, when the economy collapsed by approximately one-half, in physical terms. The difference between our U.S.A. and Europe, is, that we have a constitutional tradition which would enable us, if we wished, to overcome a depression, as Franklin Roosevelt did. Poor Europe's present constitutions contain the deadly poison-pill called an "independent central-banking system." Without junking that system, and copying ours, European nations, acting on their own, without our leadership, would have no chance of recovery from the presently onrushing general collapse of the world's present monetary-financial system.

As a consequence of those forty years of growing moral and intellectual decadence, our nation is presently in a moral and economic condition comparable to that which overtook a self-doomed imperial Rome. Our once mighty agro-industrial economy has become more and more a wasteland, a society degenerated into the habit of "bread and circuses," living, as ancient Rome, upon the loot we exact from weaker nations we have made our virtual colonies. For more than thirty of those recent years, since the 1971-72 change to a floating-exchange-rate monetary system, we, like imperial Rome, have been destroying our economy through "Globalization": replacing our production at home by reliance upon the cheap labor and other advantages we extract from others abroad. We are living by sucking the blood of those foreigners who live under the predatory rule of the present world monetary-financial system. But, when the source of blood runs dry, we, too, are faced with threat of doom.

We will understand our own nation's present tragedy better, if we compare our specific kind of national folly with the even more suicidal national follies which presently grip western and central Europe, where western and central continental Europe, having sucked as much as it has of the blood of post-1989 eastern Europe, has plunged into a pattern of blood-suckers' self-destruction of its own economies, like that which we and the United Kingdom had previously done to ours. The difference is, that we of the U.S.A. have a form of constitutional government which allows us to make the reforms we need to survive. Europe's constitutions do not currently provide this option.

As a lawful result of such post-1989-1990 changes in internal economic policy as the Maastricht agreements, west-

ern Europe's nations, as led by Germany, are in a state of accelerating collapse which would be obviously hopeless, but for the prospect of growing trade with China and other key nations of Asia. Potentially, Germany could stabilize at above break-even levels, by large-scale capital expansion of investment in basic economic infrastructure and production capital in its own market, an expansion mobilized to realize the opportunities in Asia. However, such a recovery in Europe is being prevented by the rulings made under what had been the Mitterrand-orchestrated Maastricht agreements. The Maastricht authorities insist upon the economically imbecilic, or, as I often suspect, diabolical intention, that the amount of current medium-to-long-term capital investments in job-creating projects, must be counted in as current operating costs. Under that rule, the survival of western and central continental Europe is virtually impossible presently; Europe is teetering on an internal general collapse, potentially as serious, or even more serious than Germany 1923. Presently, that collapse is coming on fast, and accelerating.

The Maastricht agreements simply carry to an extreme the same fatal error which has led to the overturn of each of the previously adopted constitutions of continental European nations, at least several times since 1789. We of the U.S. adopted the Constitution which has survived to the present day, and, under that Constitution, will continue to live on as a model to be admired and studied by a knowing world, provided we save our Constitution by dumping Lynne Cheney's ugly lout, Vice President Dick, in a timely way. It is the persistent, systemic defect in the heritage of the constitutions of Europe which brings them to the point of threatened existential crisis rampant again today.

The typification of that error is to be recognized in the pathetic behavior by governments of entire nations, in submitting to such effects of current Maastricht conditions, as a typical result of the widespread, lunatic belief, that an economy must be run under a monetary policy, rather than the principles of physical economy.

In a sane economy, the governing principle is that we must produce the physical conditions which we need. These are conditions such as food, housing, medical care, places of employment, and basic elements of physical infrastructure. In the opposite camp, the charlatans and their dupes shriek that we must improve the local economy by voting for more gambling halls, taking in each other's laundry, or rely on religious faith in "the magic of the marketplace" for exchange of money. Thus, when our citizens turn foolish, to the degree of preferring their superstitious religious faith in "the magic of money" over physical realities, they make themselves the victims of those predators slavering over the prospect of eating dupes such as those citizens themselves.

There are two things dangerously wrong about such kinds of superstitious belief in money.

First, any kind of money, even at its very best, is a brainless idiot, at any time in the past, present, or future history of

our planet. When issued as paper, or even gold or silver coins, it has no better monetary value than that which society chooses to assign to it. In a real economy, it is the physical action which counts—and counts, and counts, until the point that the fallen hero felled by faith in the magical powers of money may never get up on his feet again.

Secondly, that a pagan religious faith in money, such as the religion of "free trade," is expressed in its most deadly form, when it is used to promote fascism by witch-doctors such as pro-Synarchists Hjalmar Schacht, then, or Felix Rohatyn or Robert Mundell, now. That is the fascism wrought by those who apply monetary theory to the opportunity for imposing fascist rule, which they, like the financier houses associated with the Synarchist International during the pre-1945 period of the Versailles monetary system, have often seen as presented by an economy in a depression. The latter variety of witch-doctors, and their devout acolytes, prey upon the superstitious fellows who believe, religiously, that money has magical powers. These monetarists typify the kind of dangerous swindlers who put the Synarchist regimes of Benito Mussolini, Adolf Hitler, Francisco Franco, and France's Pierre Laval and Vichy into power, under world conditions parallel to those of Europe and the Americas today.

The danger which these kinds of charlatans, such as Rohatyn and Mundell, represent for you and your family, springs from the fact that contemporary monetarist theory is premised, axiomatically, on the same predatory principle shared by Thomas ("war of each against all") Hobbes, John Locke, Bernard Mandeville, François Quesnay, and Jeremy Bentham. The monetarist's theory of money is based upon the same principle expressed by that beast of prey known as the predatory gambler. The monetarist is one whose doctrine is, in the final analysis: who eats whom. Hence, since the French Revolution of 1789-1815, we have the general tendency of monetarism to produce the Darwinian folly of fascism (the survival of "the morally unfittest"), as we saw in Europe during the pre-1945 period, and, as we see, in the predatory practice of the so-called "vulture funds" today.

Under depression conditions, the crucial task of government is three-fold. This is a lesson we should have learned, among comparable cases, from the successes of U.S. President Roosevelt's successful rescue of the U.S. from the catastrophe wrought by "fiscal conservatives" such as Coolidge, Andrew Mellon, and Hoover:

First, government must unleash capitalized state-generated credit, to bring up levels of productive employment to the amount needed to balance the current operating budgets of the national and subsidiary state and local economies. If such productive employment is sufficiently high (and, therefore, unemployment sufficiently low), and if sufficient emphasis is placed on increased physical productivity through capital-intensive technological progress, the current operating budgets of the nation and communities can be brought into balance, and collapse averted in this way.

Second, government must proceed with the recognition that the state-generated credit creates a debt which must be fungible at some appropriately adopted future time. Therefore, the recovery must be premised on programs of real-capital formation, which will provide a long-term offset for the medium-term and long-term debt which governmental stimulus fosters in this way.

Third, there must be an applied, governing understanding of the way in which real, physical wealth per capita and per square kilometer may be actually increased through applied scientific and technological progress in modes of physical production through successive production cycles. Unless the productive powers of labor are increased, through technology, increased to effects measurable physically as per capita and per square kilometer, there is no real long-term growth possible.

In the following pages, I summarize the essentials of the way in which all this works.

The pivotal systemic feature which is most characteristic of the way in which what had been the world's leading economy, the U.S. economy, has destroyed itself during the recent four decades, has been the introduction of so-called "information theory," what Zbigniew Brzezinski, among others, dubbed the "technetronic" revolution. There were, admittedly, many other factors in that process of destruction; but it is the mind-set associated with devotion to the cult of "information theory," which characterizes the way in which popular culture has been conditioned to accept the changes which have done the most to ruin us.

It is more or less inevitable, that the nature of that IT cult-belief would be poorly understood by the society which has been hoodwinked into adopting it. Therefore, I begin the body of this report with a summary clarification of this specific factor, this immediate danger, in the ruin our nation is experiencing today. If the present civilization is on its way into a prolonged dark age, as the current trends in the pre-election campaigns seem to say it is determined to do at this time, what I have to say, as clarification here, will be of great value to the future generations who must rebuild the civilization the middle-aged generation currently in power has done so much to destroy.

1. Understanding the Immediate Danger

Presently, as I have said, the world is gripped by the onrushing, terminal phase of a general economic collapse of the world's present monetary-financial system. To define the practical political remedy which would be available to the U.S.A., today, if it were chosen, for leading the world out of this crisis, we must start with the fact, that there are several anti-monetarist rules, which are each and all based on the

pro-Constitutional *American System of political-economy* of Alexander Hamilton, Friedrich List, and Henry C. Carey. These are the same principles which were indispensable for President Franklin Roosevelt's organization of the economic recovery from the depression of 1929-33.

These are not merely better rules to play by. The American System, as sprung from the adoption of Gottfried Leibniz's concept of the pursuit of happiness, and from the overriding statement of intention which is the Preamble of our Federal Constitution, is the finest, and also the oldest system of constitutional self-government which has been brought yet into existence in the world. The American System of political-economy, as understood by Franklin, Hamilton, the Careys, List, Abraham Lincoln, and Franklin Roosevelt, among some relevant other leaders, is the oldest, because it is the most durable and effective means of self-government yet adopted in any part of this planet. No better design has yet appeared on our planet.

This Constitution was produced in response to the form of inevitable conflict which arose between the mother country and the North American colonies, with that 1763 Treaty of Paris which established Barings' British East India Company as a new empire modeled upon the intention to rival that of ancient Rome. The principal site of the day-to-day, pervasive principled issue, underlying that conflict between Europe's systems of today and our Constitutional system, still today, is that the British imperial system, is that of an Anglo-Dutch Liberals' empire created under the influence of a Venice-style financier oligarchy's control of the equivalent of an "independent" central banking system. It is to the degree that our nation, once freed, has so often aped the Venetian model of financier-oligarchy rule adopted by the British Empire, that all the principal self-inflicted economic and related catastrophes of our republic's history have been spawned.

Every major mistake in U.S. policy, from which we have suffered since 1945, has been an included effect of the kinds of monetarist theory which led the world into the pre-war Great Depression of 1928-1939. If you wish to avoid the presently onrushing, full impact of a depression much deeper than that of the 1930s now, we must get anyone who disagrees with me on that, out of direction of the policy-making of the U.S. government today.

On this account, our Constitution had already, wisely, banned the existence of an independent central banking system of the type associated with the Anglo-Dutch India Companies model. Admittedly, although this constitutional ban has never been lawfully overturned, it has been violated repeatedly since pro-Confederacy scoundrels Theodore Roosevelt and (Ku Klux Klan fanatic) Woodrow Wilson combined efforts to install the Federal Reserve designed by Jacob Schiff on behalf of his client, Britain's Edward VII.¹ Today, it can

1. Between the time Schiff had crafted the Federal Reserve proposal, and its installation by complicity of Theodore "Bull Moose" Roosevelt and Ku Klux

be fairly said, that millions of Americans vote, in effect, every two years, to feed sacrificial virgins and others as ritual offerings to those cannibal gods, the gods of a London-designed version of a monetarist central banking system which our Federal Reserve System tends to be, in fact. That British system, which has continued to dominate the thinking governing most of the world's international financial and monetary affairs, since 1763, is based on the Venetian financier oligarchy's model for a system of international usury. This transformation of such citizens into political prostitutes for what is called "free trade," is the folly on which the vultures of modern monetarism depend for their prey still today.

Still today, the only existing basis for competent economic analysis and forecasting, is that science of physical economy founded by the work of Gottfried Leibniz over the interval 1671-1716, a work which informed the design of the economic system implicitly built into our 1776 Declaration of Independence and 1789 Federal Constitution. As a young American, I was, so to speak, bred in the tradition of what our nation's first Treasury Secretary described as *The American System of political-economy*. Whether our people had studied the work of Hamilton, the Careys, and List, or not, those principles were deeply embedded in the leading edges of what was, during successful times, our former agricultural and industrial practice, and our system of development of basic economic infrastructure. My special contribution was to add certain relevant discoveries I made during the 1948-1953 interval, to that combined fruit of both Leibniz's writings, and my own experience of the day-to-day workings of our specifically American, superior form of economic system.

That much said, now look at the clinical case of the "IT" bubble.

The Lunacy of 'Information Theory'

Ironically, my discoveries of the 1948-1953 interval, from which my relatively unique record of competence as a forecaster was derived, were produced as a reaction against the insanity which I recognized as embedded in the concept of "information theory" as popularized during that time, chiefly by the writings of two acolytes of Bertrand Russell (of *Principia Mathematica* notoriety), Professor Norbert Wiener (*Cybernetics*, and *Human Use of Human Beings*) and systems analysis' John von Neumann (with Oskar Morgenstern, *The Theory of Games & Economic Behavior*).² It has

been the growing influence of that delusion of "information theory," which has been a leading, even sometimes crucial economic-policy factor in causing that collapse of the culture and economy of the U.S.A., the United Kingdom, Europe, and elsewhere, which has taken us over, increasingly, during the recent four decades, especially since the 1971-1972 changes in the world monetary-financial system. The timing of the relatively deep, and abrupt, 2000 collapse of the IT bubble, involved special political factors, but the ultimate collapse was inevitable under the sway of the reigning national doctrines of that time. The proof of the danger which "information theory" represents for civilized society, had already become clear to me from my relevant studies of the matter during the 1948-53 interval.

The essential secret of the science of physical economy, which is contrary to the IT myth, is a principle of physical science in general, a principle which had already been clear to pre-Aristotelean, Greek circles of the Pythagoreans and Plato; the principle of mathematical physics involved, was what was known then as "spherics," a conception of physical science, and of the physical nature of geometry, which those Greeks inherited from Egyptian astronomy.

The principle is, that the essential distinction which sets human beings apart from, and above all animal life, is the power of discovering universal physical principles which affect what we perceive, but which, themselves, as principles, are not directly visible to the senses. The pre-Aristotelean Greeks I have referenced, defined such discoveries of experimentally efficient universal principles as *powers* (Greek: *dynamis*).³ Through the application of those *powers*, mankind is able to break through the barriers of sense-perception which limit the self-development of any inferior species of life. It is through the discovery and application of knowledge of these specifically human powers, as they may be passed down from generation to generation, that the human species has been able to reach a level of a living population's development in the number of billions, where no species of higher apes could have risen above millions.

What has ruined us, is our induced willingness to turn away from that principle which sets us apart from the apes. The so-called "IT" revolution, with its axiomatically inhering tendency toward entropy, has been an essential part of that destruction.

In the systems of mathematical schemes which are allowed by the pathological doctrines of Russell, Korsch,

Klan fanatic Woodrow Wilson, the force behind Schiff, the principal author of World War I, Edward VII had died.

2. Systems analysis was also expressed in the ivory-tower form of mathematical economics, and linear programming, as associated with Koopmans and others. All of these shared the common trait expressed by Bertrand Russell toward the close of the 1920s, that science as a process of discovery of new physical principles, was drawing toward a close. Hence, the fellow-travellers of Russell et al., assumed that the age of non-linear events such as discovery of revolutionary new physical principles was drawing toward a close. Hence, mankind's convergence upon an asymptote of "zero economic growth."

3. The Pythagorean-Platonic conception of *power*, is contrasted to Aristotle's attempted replacement, *energy*. *Power* is a motivating action; *energy*, in its best connotation, is merely an effect. This is the same distinction which underlies Kepler's rejection of the Aristoteleanism of the erring Claudius Ptolemy, Copernicus, and Tycho Brahe, in defining the principled nature of astronomy in general and the discovery of universal gravitation in particular. Kepler is to be contrasted with the dubious Galileo, who attempted to turn science back to the medieval standpoint of the irrationalist William of Ockham.

Carnap, Wiener, von Neumann, and their like, no such powers are permitted to be recognized. In systems consistent with those doctrines, man's potential will converge, arithmetically upon fixed limits, such that man could have never risen above a pre-"stone-age" level of culture and population, had creatures such as Bertrand Russell's gang of followers had their way back then, in early times of our species' existence. Those are the disgusting implications of Karl Korsch's and Carnap's perverse definition of "linguistics," of Wiener's mathematical argument for the concoction known as "information theory," and, of von Neumann's lunatic economics of a Theory of Games, and of his anti-scientific doctrine of "artificial intelligence."⁴

In reality, economic progress, as measurable in productive power per capita and per square kilometer, is the fruit of the application of experimentally validated discoveries of universal principles (i.e., *powers*), either directly as such principles, or as applied new technologies derived from combined effects of such principles.

This means, that relative to a fixed purchasing-power of yesterday's money, not only is more generated by a healthy form of society than is consumed, but the level of physical consumption of society increases, either as current consumption, or as capital investment for further development. In a well-managed, scientifically-technologically progressive economy, part of the gains through technology go for a higher current standard of living, and, for reasons of systemic fea-

tures of functional necessity, a somewhat larger portion than that for capital investment in better technologies for the future.

Over the recent forty years, the U.S.A. and Europe have abandoned, more and more, the successful practices of earlier decades. We have made this change in ways which have now brought us to the brink of a threatened planetary new dark age of humanity generally. The substitution of the charlatanism of Russell-Wiener-von Neumann "information theory," for the science-driver orientations typical of every period of sustained upward progress in conditions of life and work of the population in general, has been a crucial, contributing, ideological factor in predetermining the transformation of the U.S., from the world's leading producer nation of the 1945-1963 interval, into the decadent, and presently bankrupt mass of "post-industrial" "bread-and-circuses" culture we have come to represent today.

There are two, multiply-connected issues posed by the way in which "information theory" has contributed to the destruction of the culture and economy of the U.S.A. Consider the effects, first, from the standpoint of mathematical physics. For this purpose, now focus, again, upon Carl Gauss' 1799 condemnation of the hoax perpetrated by certain leading formalist mathematicians of that time, the Swiss Euler and Euler's protégé Lagrange. Then, recognize that the empiricists' fraud perpetrated by Euler, Lagrange, et al., has the effect of denying the existence of any qualitative difference between man and an ape; Russell, Wiener, von Neumann, et al., carry the argument further; they deny the existence of any essential difference between man and a machine.⁵

On the first account, all competent physical science depends upon man's comprehension of the methods by which

4. Cf. Kurt Gödel's celebrated 1931 paper, "On Formally Undecidable Propositions of *Principia Mathematica* and Related Systems," in *Kurt Gödel Collected Works*, S. Fefferman, et al., eds. (Oxford: Oxford University Press, 1986), pp. 144-195. This celebrated work by Gödel is often wrongly interpreted among those who prefer to evade the crucial issue lurking behind the choice of argument which Gödel employed on this and other occasions. The specific brilliance of Gödel's argument in that location, was that he was defending a principle of physics within the bounds of the specific kind of merely ivory-tower doctrines of mathematics, doctrines which were carried to an extreme by Bertrand Russell and Russell followers such as Wiener and von Neumann. Gödel provided an exemplary kind of devastating demonstration of an essential, internal, fatal flaw in any ivory-tower mathematical scheme. To appreciate Gödel's work, or the positive, 1880s contributions of a Georg Cantor later driven insane by the combination of persecution from the circles of Leopold Kronecker and the more sophisticated sophistries employed against Cantor by the circles of Russell, the deeper, positive implications of Gödel's work must be adduced from the standpoint of physical science, rather than the ivory-tower mathematics of Russell, von Neumann, et al. The issue is clearly understood from a positive standpoint in physical science, only by adopting the standpoint in physical geometry employed by Carl Gauss' explicit, 1799, attack on the systemic hoax central to the work of Euler, Lagrange (and also Cauchy et al.) on The Fundamental Theorem of Algebra. The fuller development of Gauss' argument for an anti-Euclidean physical geometry, as already implied in the 1799 paper, waited until the more adequate development of the concept of the complex domain which Riemann expressed in his 1854 habilitation dissertation and subsequent work. This issue, as I discovered from successive attention to Cantor and Riemann in 1952-53, was the same ontological issue which I had posed in rejecting Norbert Wiener's and von Neumann's notions of "information theory" and "systems analysis."

5. Von Neumann's argument to this effect is given one of its boldest expressions in a posthumously published lecture, delivered to Yale, on the subject of the computer and the brain. The political nature of the connection of both Wiener and von Neumann to Bertrand Russell, is most noteworthy. Both of the latter had been chucked out of Göttingen University by an irate Professor David Hilbert, for incompetencies and, in v. Neumann's case, additional compelling reasons. At a later point, both figured prominently in the launching of that cult known as The Unification of the Sciences, by Russell and Chicago's Hutchins. It was through aid of backing by the latter cult, that Wiener was brought into a leading role in "information theory" around MIT's RLE, through aid of the Josiah Macy, Jr. Foundation's promotion of "cybernetics." The "artificial intelligence" scam, associated with Marvin Minsky and Noam Chomsky, at MIT's RLE, is a typical outgrowth of this mental illness which has spread copiously into the "IT" sector's more exotic, logical positivist niches. Chomsky's connection with the former European Communist leader, and Stalin advisor on linguistics, Carnap associate Karl Korsch, reaches from Korsch's role in Russell's Unification of the Sciences meeting at the University of Pennsylvania, through Chomsky's education at the university, to MIT's RLE, where Korsch had then taken up residence in the Boston area. The radically reductionist, pro-positivist variety of strain of Communist of the 1920s and 1930s, and radical positivists Wiener and von Neumann, share a common ground with the radical right in congruent types of proclivity for present-day forms of utopianism. The former Trotskyist turned into a fascistic utopian neo-conservative associate of Vice President Cheney today, fits that common pathological type.

the human species generates those kinds of discoveries of experimentally validated universal principles of astronomy-based physical geometry, which the ancient Pythagoreans, the founders of systematic European physical science, and Plato identified as *powers*. That is the crucial issue of all modern mathematical physics which Gauss raised, in 1799, in identifying the fraudulent definition of the Fundamental Theorem of Algebra (and the calculus) by Euler, Lagrange, et al. This involves the notion of mathematical-physical transcendentials, as introduced to modern science by Cardinal Nicholas of Cusa's *De Docta Ignorantia*, and as posed by Johannes Kepler's challenge to future mathematicians.⁶ The challenge posed by Cusa was taken up by the collaborators Gottfried Leibniz and Jean Bernoulli, whose combined work defined the universal physical principle of least action on which any competent modern conception of the transcendental depends.⁷

On the second account, the pernicious significance of the introduction of empiricism and positivism to modern science, is that these deny the essential functional distinction of man from beast, the ability of the human mind to generate what we know as a valid discovery of a universal physical principle, that by experimental validation of an hypothetical solution for a paradox which can not be solved by deductive methods.⁸ This capacity of the human mind is both the

essential distinction of man from beast, and the sole means by which mankind has progressed above the potential of a species of higher ape. The recognition of this distinction of man from ape, is the basis in physical science for all valid notions of morality and law of society, for all valid notions of theology (as in *Genesis* 1), and for the concept of a modern nation-state economy.

When the errors of empiricists and positivists are carried to the extreme typified by Russell, Wiener, and von Neumann, the result must tend to be some hoax akin to "information theory." To make this point clear, look at "information theory" against the background of the difference between human communication and the transmission of signals by a machine, such as a digital computer, designed to operate in simulation of a deductive mode.

These issues of mathematical physics have been foremost impediments to the progress in matters of economic policy of modern nations, since about the time of the hate-directed expulsion of Gottfried Leibniz from candidacy to serve as Prime Minister of the United Kingdom.

'Information' vs. Ideas

To develop an adequate appreciation of the deadly corruption inherent in the notion of "information theory," first look at this problem as I did back during the late 1940s. The uniqueness of my discoveries, as they developed, first, over the 1947-1951 interval, and, more deeply during my 1952-1953 wrestling with, successively, Cantor and Riemann, is that I combined the notion of a physical correspondence between communication of physical-geometric and Classical prosodic conceptions. In this way, I broke through the paradox of "Two Cultures" in a new way, leading to some significant discoveries in the field of the science of physical economy, discoveries to which I make reference here.⁹

On a point of general political relevance to that line of discussion, take the clinical, pathological case of U.S. Supreme Court Justice Antonin Scalia's stated doctrine of "text." On account of that doctrine alone, Scalia has exposed himself, beyond doubt, as a philosophical fascist, qualified to become an adherent of the Synarchist variety of freemasonic sect (in case he has not already done so), whose affinities lie not within the bounds of the 1776 U.S. Declaration of Independence and Federal Constitution, but, rather the nominalist Constitution of that treasonous British puppet, the Confederate States of America. The doctrine of "text" as Scalia argued this denunciation of the central principle of natural law, shamelessly, to an assembly at a Catholic university, is sufficient proof of the principle involved here.

The same principled absolute difference between man and

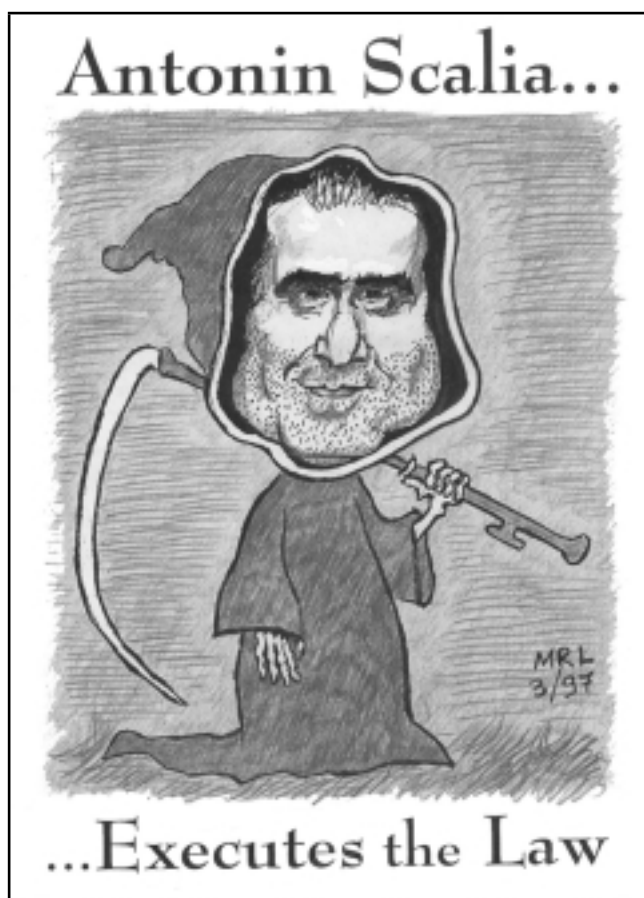
6. Kepler bequeathed to "future mathematicians" the challenges which his discoveries in astronomy had provided for deeper examination of the implications of elliptical functions and for the development of an infinitesimal calculus. Leibniz met the latter challenge, whereas, the successive work of, most notably, Gauss, Jacobi, Abel, and Riemann, absorbed the principal implications of the role of elliptical functions in Kepler's approach to astrophysics. The track from Nicholas of Cusa's founding of the leading, epistemological conceptions of modern mathematical physics, through the succession of such among Cusa's avowed followers as Luca Pacioli, Leonardo da Vinci, and Kepler, is the root which predefined the course of the leading progress of mathematical physics in modern times.

7. Gauss' youthful discovery of an anti-Euclidean, physical geometry, as reflected in the referenced 1799 paper on *The Fundamental Theorem of Algebra*, was a reflection of his education under two of the greatest Eighteenth-Century teachers of mathematics, Abraham Kästner and E.A.W. von Zimmermann. Kästner was the teacher and patron of Gotthold Lessing, the partner of Moses Mendelssohn in leading the Classical Renaissance of late Eighteenth-Century Europe. However, Kästner's exposure of the frauds of Euler, Lambert, Lagrange, et al., as reflected in Gauss' 1799 paper, prompted a subsequent effort to defame Kästner as a virtual non-person, from that time to the present day. It was Kästner who introduced the concept of what has been named, variously, as an ante-Euclidean, or anti-Euclidean geometry harking back to the pre-Aristotelean, or so-called pre-Euclidean physical geometry of the Pythagoreans and Plato. Gauss' 1799 paper reflects his own commitment to such an anti-Euclidean geometry, although he considered it politically expedient never to publish his explicit views on this subject after the attacks on him, by allies of Lagrange, from Napoleonic France. The continuation of Gauss' guarded commitment to an explicit defense of an anti-Euclidean geometry, waited until the successive work of Dirichlet and Riemann, as first expressed, most notably, by Riemann's 1854 habilitation dissertation.

8. This was the same issue involved in the quarrel between Gödel, on the one side, and Russell, von Neumann, and the followers of Ernst Mach generally,

on the other. In its more general, axiomatic expression, it is the most widespread issue in science today,

9. Cf. C.P. Snow, *Two Cultures and the Scientific Revolution* (London and New York: Cambridge University Press, 1993 reprint).



Supreme Court Justice Antonin Scalia is "a philosophical fascist, qualified to become an adherent of the Synarchist variety of freemasonic sect (in case he has not already done so). . . ."

the apes, posed by the case of Scalia's monkeying with the truth, is the point at issue in Carl Gauss' 1799 attack on Euler, Lagrange, et al. It is the ability of the individual human mind to read the systemic paradoxes presented to sense-perception, as reflections of the efficiency of a universal physical principle whose image lies outside the capacity of sense-perception as such. This capacity, contrary to the implication of Scalia's argument, is the scientific basis for the concept of the individual human soul, the concept upon which all natural law and tolerable theology depends. Without this, as I shall explain that point here, a comprehensive approach to the axiomatic-like problems of a science of physical economy can not be obtained.

This ability of the sovereign powers of the individual human mind, to discover a kind of object which functions as a universal physical principle, is what the ancient Pythagoreans and Plato define as a *power* (again, Greek: *dynamis*). It is that principle upon which both competent physical science, and all Christian theology rest, for example. These *powers* are the means by which mankind is enabled to increase the potential

relative population-density of the human species willfully, as no animal can. Therefore, the definition of the human species, as distinct from, and superior to all others, lies in the notion of a discovered, and experimentally validated universal physical principle as an essential *intention* of mankind. In mathematical physics, that *intention*, that *power*, is the ontologically existing, efficient object of consciousness, for which, as I shall explain below, the mathematically expressible effect is merely the shadow of the intention's trajectory of effects.

Therefore, all rational notions of human behavior, as human, depend upon this notion of *intention*. Thus, for example, the employment of Leibniz's concept of the *pursuit of happiness*, as the central principle of our 1776 U.S. Declaration of Independence, and the principles of universal natural law adopted in the Preamble of our Federal Constitution, are the declared, overriding intention to which all other features of our Constitution and Federal law must be subordinated.

In all competent science, such as a science of physical economy, we are dealing with two distinct, general classes of objects. One is the objects of sense-perception which can be shown to be true in the sense that their existence as mental objects may be validated by experimental methods; the second, are objects such as experimentally validated discoveries of unseen universal physical principles, as typified by the referenced 1799 attack on Euler, Lagrange, et al. by Gauss. The second class is associated with the notion of *ideas of principle* which, while experimentally validatable, lie, as objects, beyond the reach of sense-perception.

There are two distinct, but related kinds of verifiable *ideas of principle*, or as I shall simplify the language hereinafter, *ideas*. My usage of *ideas* in this way is consistent with the notion of *Geistesmasse* underlying the central conception of Riemann's 1854 habilitation dissertation.¹⁰ For example, the application of *Geistesmasse* to the notion of a universal physical principle, signifies that the mathematical expression associated with the application of that principle, is merely description of the shadow of the action by the principle itself. The practice of identifying the discovered principle with the name of its attributed discoverer, points to the coincidence of this practice with the fact that the experience of the principle as such occurs to the mind of the knower as an object in the same

10. On this matter of *Geistesmasse*, see two locations in *Bernhard Riemann's Gesammelte Mathematische Werke* (New York: Dover Publications reprint edition, 1953). First, chronologically, we have a section, designated as "Anhang," of Riemann's posthumously published work, "1. Zur Psychologie und Metaphysik," pp. 509-520, which is referenced in his 1854 habilitation dissertation, where he emphasizes that the precedents for his presentation there are found chiefly in the work of two forerunners. These are Gauss' second dissertation on biquadratic residues and Copenhagen prize essay, and a series of lectures delivered at Göttingen University by the anti-Kantian Johann Friedrich Herbart, p. 273. Riemann's reference to Herbart in the habilitation dissertation is clarified by reading the referenced Section 1 of the "Anhang."

sense the term “object” is associated with the experiences of sense-perception. This notion, as it appears in Riemann’s work, is correctly, and usefully associated with the physical-geometrical kernel of Gauss’ argument for mathematics in the referenced 1799 paper.

The object of any competent approach to scientific education is to cause the student to achieve the experience of the act of discovery of a principle itself, as an object of the mind, not a mere mathematical formulation. Then, under the guidance of that object, the student’s mind must be able to generate a mathematical, or mathematical-like sense of the trajectory which the action by and of that principle subtends.

The same requirement occurs in Classical musical composition, especially since the founding of the well-tempered system of composition by J.S. Bach. Any masterwork of Classical musical composition, as distinct from Romantic or modernist constructions, is a single idea-object, from which the composition as a whole is implicitly generated as a singular idea, for which all extended aspects are expressions of a single, constant principled idea, as if akin to a simple idea. A poor performance of such a composition proceeds as if from hand-to-mouth, from note to note. A good performance flows from a single concept of continuous polyphonic development in the mind of the performers, from a sense of what conductor Wilhelm Furtwängler described as “performing between the notes,” from a single, unifying, guiding sense of a single, governing notion of an integrated development which is specifically unique to that composition.

In both instances, physical science, or Classical artistic composition and its performance, the same sense of the whole process as implicitly subsumed by a single idea (*Geistesmasse*) is ruling.¹¹

This notion, as adopted by Riemann, is illustrated in the relatively simplest possible way for physical science, by Gauss’ referenced 1799 paper. In that paper Gauss presents, in modern terms, the most elementary Classical cases of *powers*, as already defined by a Pythagorean physical geometry. In those cases, as in the implications of the integrated construction of the series of Platonic solids, the solution for the doubling of line, square, and cube, is provided by a physical form of geometric action, rather than deductive successive approximations. The greatest transparency in illustrating that point, is achieved by Archytas’ solution for the doubling of the cube, which is the most crucial case in Gauss’ 1799 paper. Those solutions occur in a domain which is external to the simple images of the subject objects, but are caused by a form of action which acts upon, but is outside those objects.

Thus, what Gauss has done in that paper, is to define the necessary existence of what Dirichlet, Riemann, et al. later

defined as the complex domain which was already implicit in Leibniz’s construction of the catenary-related universal physical principle of least action, the principle upon which the proof of the necessary existence of a specifically transcendental infinitesimal calculus was already developed by Leibniz, long before Euler, Lambert, Lagrange, Cauchy, Hermite, or Lindemann.¹²

As I have indicated, my contribution to the science of physical economy centers around the way in which I locate the connections and differences between the phase-space we recognize, in one case, as mathematical physics, but also the phase-space defined by the principles of Classical artistic composition. The difference between the two is, that the first, mathematical physics, pertains to those discoveries of universal principle which express the sovereign individual human intellect’s focus upon the discovery and use of universal physical principles governing the ordering of the combined domain phase-space domains of abiotic and living processes. Classical artistic composition, including the social principles of statecraft, pertain to the same sovereign powers of the individual, whose subject of attention, for this case, has shifted from the point of reference represented by the abiotic-living domain, to the point of reference of functions of social processes as such.

In the second case, the subject is both the cognitive behavior of the human being, and the functional relationship among the cognitive behaviors within society.

In both cases, the subject of inquiry is ideas, as I have defined *ideas* above. In both cases, these ideas, which have the quality of discovered universal physical principles, eliminate the paradox of “Two Cultures,” by eliminating the false, misdirecting notions of definitions, axioms, and postulates in a formal geometry. In both cases, the notion of *Analysis Situs* associated with Leibniz and Riemann, replaces so-called “conventional” notions of the intention of Euclidean or non-Euclidean geometries, thus making it possible to portray a space within which events are presumed to have happened, by a geometry which is determined by the intentions which cause development of physical-space-time to happen.

Thus, as I shall emphasize this below: in history, Classical drama and poetry, principled ideas can be expressed properly

12. The concept of an infinitesimal calculus, as opposed to the argument of Euler, Lagrange, Cauchy, et al., is elementary once we depart the arbitrary assumptions of a Euclidean or Cartesian geometry. This was already emphasized by Nicholas of Cusa’s attention to the relevant paradoxical features of Archimedes’ attempted squaring of the circle. The attempt by such as Euler, Lambert, and Felix Klein to deny the existence of proof of the transcendental quality of π , implicitly, prior to Lindemann, is a fraud perpetrated, as J. Clerk Maxwell made the same argument in a related matter: the empiricists fanatically refused to accept the existence of any geometry but their own. The same argument was that made, in effect, by Lagrange’s explicit emphasis on claims of exclusiveness for his own specifically reductionist geometry, in his desperate effort to rebut the 1799 paper by Gauss.

11. This is the significance of Johann F. Herbart for the philosophy of practice of education, on which account anti-Kantian Herbart, at one time, played a significant part in influence on U.S. policies of education.

only in terms of both strict respect for historical specificity and for the functional context of the referenced statement. These are, admittedly, tricky points to present to the novice. Nonetheless they are comprehensible, if the novice explores the space being presented to him, rather than trying to explain it way in terms of the reductionist's *a priori* notions of space, time, and matter. I proceed accordingly.

A Principle As an Intention

In various other locations, I have emphasized the importance of the distinction between, on the one side, Plato's concept of a universal *physical* principle as a *power*, a principle of *cause*, or *intention*, and, on the opposing side, the opinion of the pro-sophistical faction, that of Aristotle's notion of what is merely an effect, called *energy*. Kepler, for example, identifies gravitation as *God's* efficient *intention*, whereas Aristotle's followers, such as Claudius Ptolemy, Copernicus, and Tycho Brahe, define planetary motion according to Aristotle's prescription, as the fateful consequence of what they claim to know to be an unknowable, "self-evident," proximate agency.

A universal physical principle is a willful intention to act, an intentional action with specific kinds of characteristic effects. Thus, when we discover an hypothesis which is proven experimentally to be a universal physical principle, we have lain the mind's hands upon a willful *power*, in the Pythagorean, Platonic conception of power, a power to change the relevant ordering in the universe. By willfully deploying that power in an appropriate mode, we change the universe in that degree, that in a fashion consistent with the *Geistesmasse* of that principle. The mathematical expression of the resulting action is the shadow, the trail left by the invoking of that power.

These powers we discover have existed in the universe before we discovered them. However, once they are discovered, and deployed as agents of our will, the physical geometry of mankind's interaction with the universe is changed, a change effected by man's use of the discovery of previously either unknown, or unused, but existing universal principles, or intentions.

This brings us to closer inspection of the manner in which we discover those powers. This, in turn, leads us toward discovering how Classical poetry and tragedy also function. Insight into that quality of Classical artistic composition, shows us the way in which the forms of communication associated with Classical artistic composition share common characteristics with, yet differ from the discovery of principles associated with mathematical physics. This knowledge, of that connection, empowers us to define a science of physical economy in an efficient way which is not otherwise possible.

The connection is the principle of irony; the physical conception expressed mathematically by the complex domain of Riemann et al., is the same type of conception expressed through Classical irony in such non-plastic forms of composi-

tion as poetry and drama, and the Classical principle of sculpture as echoed by Leonardo da Vinci's implicitly Riemannian revolution in the concept of perspective in painting.¹³ As in the physical science of the complex domain, the unseen object, the discoverable universal principle, leaves the effect of its passing, as a footprint pregnant with paradoxical ambiguity—*true Classical irony*—upon the explicit image displayed to the senses. Compare this with the way in which Riemann addresses the matter of projecting a real physical process, lodged within the complex domain, as a shadowy effect of projection on a sphere and plane surface shown within the bounds of sense-perception.

Take the case of an historical drama by Shakespeare or Friedrich Schiller, and compare both to Aeschylus' *Prometheus Bound*.

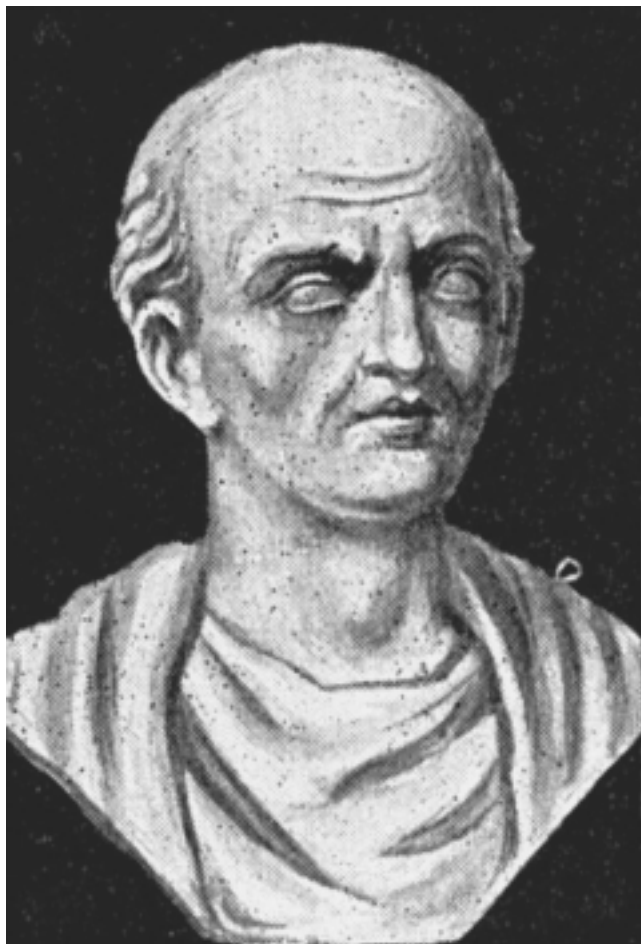
In respect to the legend of Prometheus, consider the plausible account which Diodorus Siculus of Roman times reported from the Berbers of his time. Compare Diodorus' account with the argument of *Prometheus Bound*; think of the comparison of Shakespeare's legend-tragedies, such as *Lear*, *Macbeth*, and *Hamlet*, to the legends upon which Shakespeare premised those plays. How shall we read *Prometheus Bound*? Where and what is the reality which sense-perception encounters as a mere projection of the reality of the drama upon the sense-perceived processes on stage? Diodorus' account is not indispensable for knowing Aeschylus' drama; but, it is more than slightly helpful in prompting the member of the cast, or audience, to grasp the reality which the drama reflects.

I explain.

It should be obvious, from reflection on what I have written and spoken, to date, on the subject of Classical drama's relationship to real history, that the object of the composing and direction of the performance of a Classical drama, is to prompt the members of the audience to view the play on the stage of the audience member's imagination, rather than being focussed in a literal way upon what can be seen and heard on stage. As in the case of the Riemannian view of the complex domain, so in Classical art, what is seen and heard on stage must be recognized as the mere shadows of that which is known on the stage of the cognitive powers of the mind of the audience.¹⁴

13. As employed by Rembrandt's wonderful image of the lively and insightful bust of blind Homer contemplating that unseeing rhetorician Aristotle who is being caught in the act of molesting him.

14. The work of the hate-filled Bertolt Brecht, a pioneer in those contemporary director-theater travesties known as Regie Theater, expresses Brecht's hateful awareness of this principle of drama, a principle he seeks always to destroy by his intervention with clangorous irrelevancies. This functional characteristic of Classical drama and poetry, which the hate-filled Brecht seeks to destroy, is the substantive basis for the principle of the Sublime, as defined by the Friedrich Schiller against whom Brecht's hatred is most intense. Contrast Brecht to the Clifford Odets toward whom Brecht devoted some of his hatred. For a parody of Brecht's method, see the once-popular



Gaius Marcellus Cassius, in Shakespeare's Julius Caesar: "The fault, dear Brutus, is not in our stars, but in ourselves, that we are underlings." That scene cannot be transposed to some different historical setting, without repudiating the intention of the playwright.

The object of the Classical playwright, director, or actors, is to do nothing sensible which distracts the audience's attention, or that of the author, director, and actors alike, from that ongoing reality which exists only on the private stage of the audience's imagination, as Shakespeare so advises the audience, through Chorus, in opening *Henry V*.

In a Classical drama treated as an historical subject, for example, the composer and performers of the drama must do absolutely nothing which distracts from the exact *historical specificity* of the actual historical place and time in which the events of the drama are actually situated. In the case of a Classical drama, any effort to make the details of the actions and setting of the drama "relevant" to the contemporary experience of the audience—or, as Orson Welles' Mercury Theater did, to a different period than either the drama's intended

Broadway theater-district farce from the early 1940s, Olson's and Johnson's *Hellzapoppin*.

or current time—is a Romantic fraud upon the play and its audience.

These requirements of Classical drama which I have cited up to this point, are to be recognized as reflecting the principle which Leibniz named *Analysis Situs*.¹⁵ There are several implications of that principle of physical geometry which are to be emphasized as of immediate relevance to my discoveries in *the physical-economy of political society*. The significance of any event, any action, lies in its historical specificity, as in the context in which that event acts upon both the society, and, also, upon the situation of that society within an unfolding developmental process of its own and more general history. You can not, therefore, situate a drama in any other setting than its actual historical one; but, you must take into account the effect of that actual history upon the process which *actually* shapes ensuing history.

The stage of the imagination on which the play is to be seen by the mind's eye of the audience, is the actual historical time and place, and its actual culture, which is the place which the playwright has assigned the events represented in the play. Putting the play in a different costume than that of that indicated time and place, is a crime by the playwright or director. Putting the play on the wrong stage of the imagination, is a moral failure of both the critics and the other members of the audience. Any opinion expressed by the director, critics, or audience, after their crimes against art have been perpetrated, is, at least worst, irrelevant.

In other words, pair-wise interactions among the characters on stage can not be competently, freely re-situated in some other place in any location in the society, its place in history. In other words, a pair-wise interaction in one place in history can not be compared, on the basis of inferred similarity, to a pair-wise action in some other place in history. Cassius' saying "we are underlings," in Act I of Shakespeare's *Julius Caesar*, occurs in that specific setting in the sequence of events within ancient Rome; it has a different meaning in that setting than any other setting. Yet, the fall of that Roman Empire which emerged out of the rise and death of Julius Caesar, is an event which has had an actual effect, transmitted since. Nonetheless, that transmission occurred through the fall of the Roman Empire, the horrors of the medieval period, and the attempt to turn back the clock to medieval times which was expressed in the judicial murder of the Sir Thomas More echoed by Shakespeare's histories. History is an unfolding process, such that the significance of events for history can not be taken out of the sequence of time and place in which they occur.

15. See "III. On Analysis Situs," in *Gottfried Wilhelm Leibniz Philosophical Papers and Letters*, Leroy E. Loemker, trans., ed. (Dordrecht, Boston, London: Lwuer Academic Publishers, 2nd ed., 1989), pp. 254-258. This concept of *Analysis Situs*, or "geometry of position," is crucial and pervasive in the work of Riemann, as most frequently noted in reference to his celebrated second section of his 1857 treatment of *The Theory of Abelian Functions, Werke*, pp. 91-100.

Now, within that frame of reference, begin the review of the principles of Classical drama by comparing Diodorus' chronicle of the Berbers with Aeschylus' *Prometheus Bound*.

Prometheus & Analysis Situs

Diodorus recounts the arrival of an ancient people of the seas in an area near the Straits of Gibraltar where the remote ancestors of the Berbers had lived. The arrivals, who came to be known in ancient Greek times as the Titans, were implicitly masters of astronomy and navigation, who had settled in the coastal region of the Atlas range, and, for a time, had dominated the Berbers. Then, came a time, when the children of a concubine named Olympia, led by her son Zeus, revolted against the putative father of her children, the reigning tyrant of the settlement. A leading figure of that time and place, Prometheus, had sympathized with the opposition to the tyranny of that time, but was known as a proponent of making the science of the time known to the practice of the subject peoples, the people who were the ancestors of the Berbers interviewed by Diodorus.

Obviously, if we follow Diodorus' account, the name of Olympia is carried by the descendants of the parricide led by Zeus, to become the mystery-ridden name of a relatively inaccessible place for that time, the famous snow-capped mountain which they found perched near the present-day Gulf of Salonika in Greece.

In Aeschylus' *Prometheus Bound*, the immortal Prometheus has been seized by Zeus and his Olympian gang, and condemned to perpetual torture as punishment for making science and technology available to the subject people. All this is associated with a pattern of developments among the seafaring cultures, known as the Peoples of the Sea, who settled the littoral regions of the Mediterranean, establishing cities, settlements whose typical fortifications were built against threats from the inland side. This account is in accord with several crucial features of the writings of Herodotus and Plato, among others, and with the known features of the pre-history and later Greek astronomy up to the period of the close of the Peloponnesian War, and with the conditions of the Mediterranean and adjoining regions through that Hellenistic period preceding the death of Eratosthenes and the murder of Archimedes during the period inclusive of the close of Rome's Second Punic War.

These elements of evidence must be located within the context provided by strong emphasis on an included study of the recent, approximately 20,000 years' emergence of European civilization out of the last general, long period of glaciation, during which the levels of the oceans were between 300 and 400 feet below those of the present. In this process, the most important keystone for defining the internal history of the emergence of European civilization, was defined by the work of Schliemann on Mycenae and Troy (Ilium); that Schliemann was able to show the sites of Mycenae and Troy,

from study of the *Iliad*, must be compared with Bal Gangadhar Tilak's *Orion* and *The Arctic Home in the Vedas*, as milestones of modern insight into the power of transmitting historical knowledge with astounding elements of accuracy—including broadly defined astronomical datings—through oral traditions of poetry, over thousands of years, or longer. Plato's accounts, as in his *Timaeus*, reflect this fact, and its importance for us for understanding ourselves, still today.

Looking at the history of emergent European civilization from such vantage-points, and correlating this with some crucial elements of factual physical knowledge concerning astronomy, development of varieties of cultivated plants, and so on, we have the following, included element bearing upon defining the crucial importance, for society today, of such topics as Aeschylus' *Prometheus Bound*. Take that line of investigation into our review of the methods of Classical artistic composition and performance of Classical drama. Against these combined elements of background for consideration, view *Prometheus Bound* as the prototype of those qualities of ancient Greek Classical tragedy which served as a precedent for the modern work of Shakespeare, Marlowe, Lessing, and Schiller, including, most notably for this case, such Shakespeare dramas as *Lear*, *Macbeth*, and, above all others, *Julius Caesar* and *Hamlet*.

The term "Greek" for the civilization of the period of the Trojan wars, was a later reflection. What we had, in the millennia of glacial melt and slightly beyond, preceding the events of the *Iliad*, was a powerful surge of influence of peoples known generally as "Peoples of the Sea" into the Mediterranean. We had, according to Herodotus, a current attributable to the maritime culture of peoples associated with the Dravidian language-group founding civilization in southern Mesopotamia (Sumer) and other regions of the Indian Ocean, and also Phoenician Caanan (e.g., Tyre). We had a contrary group, coming into the Mediterranean from either northern coastal and riparian Europe across Central Europe, or from the Atlantic, a later group which includes the subject of the Olympians and those Peoples of the Sea later associated chiefly with, variously, what modern accounts associate with the Greek colonization of the coastal regions of today's Greece, the Ionian colonies of Asia Minor, Southern Italy, and Cyrenaica.

The characteristic feature of what emerged as the leading current in the birth of European civilization in Greece, was the influence of ancient Egypt's culture, especially the impact of the Egyptian astronomy reflected in the designs of the Great Pyramids at Giza. The internal "cultural-genetic" characteristics of the various accounts of the historical setting of the personalities of Aeschylus' *Prometheus Bound*, situate them within the bounds of characteristic contributing elements composing the dominant role of an Atlantic-borne, common culture of Egypt and ancient Greece, the principal cultural stock of presently globally extended European civilization, from its origins to the present day.

At that point, the internal features of Aeschylus' *Prometheus Bound* come to life as a Classical Greek reflection on the conditions embodied as the contemporary experience of Greek culture's embodiment of a struggle carried over into Aeschylus' times, a struggle whose implications are made clear for us, from that time to the present day, chiefly by Plato's dialogues.

The conflict is specific to the conflict between Zeus and Prometheus, but the principle it expresses, is universal. As the setting of the action associated with that principle changes, the principle is then expressed in a new way, historically-specifically distinct from earlier expressions; yet, the principle itself remains universal, just as any universal physical principle. The study of history from this standpoint, is the foundation of competent practice of statecraft. Through adopting that standpoint of distinction between forms of action, and higher, universal, historical principles to which they are subject, we locate the specific differences in the way apparently similar forms of action take different forms in historically-specifically differing circumstances.

The distinction to be made on this point, is the same distinction between universal principle and sense-perception I have emphasized for physical science generally. Sense-perception is historically specific to the circumstances in which it is perceived. The combination of sense-perception with the superior reign of principle, which is required by the notion of the complex domain, has the just-referenced parallel in the domain of Classical artistic principles.

Foolish readings of history, such as those of the empiricists, replace true universal physical principles by so-called evident rules of pair-wise social interaction, as the empiricists Hobbes and Locke do. They then substitute such interactions, so perceived, for the notion of actual principle. The significance of this distinction becomes clearer, when we consider the case of Schiller's *Wallenstein* trilogy, out of which a new principled form of statecraft was born, "the advantage of the other."

The Fifteenth-Century, Italy-centered Renaissance had replaced the successive bestialities of Venice's quasi-Roman imperial system of ultramontane "interim," by the principle of the modern sovereign nation-state. The Venetians later struck back, using the hideously racist doctrine of the Inquisition, to attempt to destroy modern civilization, to turn back the clock toward a principle of ultramontane brutishness; the religious and related warfare of 1511-1648 nearly destroyed modern civilization. The principle of separation of religion from state, accomplished by the principle of the Treaty of Westphalia, created a new state of affairs in European civilization, which was, then, in turn, imperilled by the Anglo-Dutch Liberal model.

The actions which occur within each of these and other such successive states of organization within society, define a qualitative difference in significance between what is apparently the same form of interpersonal action in one society,

and a superficially similar interpersonal action in another. The resulting picture of history is, in fact, fairly described as "Riemannian."

So, for the Classical Athens of the times of Solon and Peisistratus through Plato's dialogues, the legend of Prometheus has a principled quality which resonates throughout Europe, the Americas, and elsewhere, through the Classical renaissance of the time of Goethe, Beethoven, and Shelley, still today. It is no mere story, no fiction, but, rather, an expression of a principle, whose historical truth lies in the same quality of relevance for social relations as a valid universal physical principle has for mankind's relationship to the combined universal phase-spaces of abiotic and living processes as such.

Since ancient times, such as those attributed to Zeus' brutal oppression of the Berbers, the primary issue of universal principle for man has been the problem of tyranny of an oligarchy over a larger mass of human beings degraded to the status of herded or hunted varieties of virtual human cattle. The crucial principle posed by this legacy of man's brutishness toward man, is the issue of the denial of the universal right of all human beings to practice scientific-technological progress on man's behalf. The imposition of a tyranny of "zero technological growth," has been the characteristic of every brutish, and ultimately ruinous tyranny practiced, from the times of such as the legendary followers of the Olympian Zeus to the followers of the Fabian Society's Bertrand Russell to the present day.

The crucial scientific issue posed by the example of the tyranny of the model oligarchy arrayed in the company of the Olympian Zeus, is that the relative suppression of scientific and technological progress of society, as "in the name of the Gaia's environment," Magna Mater, et al., and kindred devotions to witchcraft, is a bestial denial of man's nature, of the requirements mankind has incurred because of the way we are set apart from, and above the beasts. It is a practiced denial of the human individual's nature; it is theologically, nothing other than Satanic: in the specific sense, that the denial of a quality of the divine in man, is a matter of universal principle, comparable to, and rooted in man in the image of the Creator. Once man eats man, or engages in comparable expressions of regard for man as just another beast, all natural law, and all tolerable notions of morality are violated.

As the struggle for human freedom has reached the threshold of some qualitative degree of success, as in the Fifteenth-Century Renaissance, and the association of the American Revolution with the Eighteenth-Century Classical renaissance centered around such figures as Abraham Kästner, his student Gotthold Lessing, Moses Mendelssohn, Friedrich Schiller, et al., the Prometheus image referenced by Aeschylus tends to come more and more, again, to the fore. As a corollary, the contrary impulse resurges as if in reaction to the fresh threat from the cause of human freedom, a reaction expressing the bestial impulses of a tyrannical oligarchy,

echoing the Olympian oligarchy of Zeus and the Delphic code of Sparta's Lycurgus,

On that account, two points are to be emphasized. First, that Aeschylus' drama is a transaction within the historically specific bounds of the Athens of his time (526-455 B.C.), reflecting the humanism whose resurgent expression was embodied in influence, later, of the Socratic dialogues of Plato. Second, that, just as each discovery of a universal physical principle has a date and an associated authorship, so, in that time, the concept of the Promethean quality and destiny of each and all members of mankind was put forward, in that manner, as a true, universal principle of the universe, a struggle under which numerous specifically different cultures, under which seemingly similar actions have a specifically different quality of significance.

Those considerations situate the following series of crucial points.

Shelley, Schiller & Shakespeare

Percy Bysshe Shelley's *In Defence of Poetry*, which influenced my own world-outlook greatly since my early adolescence, is, when properly appreciated, among the great scientific works of modern times. Two points, which were of outstanding importance for me at the time I became acquainted with the work, may be singled out, still today, as the most crucial points of that essay as a whole.

The first of those points was, that he emphasizes, as a matter of historical fact and principle, that there are periods in the history of a people, during which there is an increase of the capacity for imparting and receiving profound and impassioned conceptions of man and nature, as in the aftermath of that Germany-centered rise of the late Eighteenth-Century Classical renaissance which spread into England in such forms as the rebirth of Shakespeare there, by, as Socrates would have said, German mid-wives such as Kästner and Lessing.

The second is his emphasis upon the resurgence of (Classical) poetry as the most characteristic expression of such great periods of a national culture. I owe it to my admittedly critical view, during the immediate post-war years, of William Empson's *Seven Types of Ambiguity*, to have been provoked by Empson's arguments and illustrations, into distinguishing the role of true irony as the form of action in communication, which is the exact correlative of creative scientific discovery and its communication. The result was my 1948-1953 elaboration of the congruence of my discoveries in the science of physical economy with the principles reflected by the composition of the greatest forms of Classical poetry.¹⁶

Much later, during the early 1980s, and with assistance

from some leading Vedic-Sanskrit scholars, I had astonishingly pleasant evidence of the power for accurate transmission of scientific ideas, as noted by Tilak, which is peculiar to the principles associated with Classical modes of musical composition of poetry.

Over both those phases of development of my views in these matters, I sought out those features of the Classical mode of well-tempered counterpoint which were the attributable source of improvement of the power of communication of poetry in such forms as the Italian and German forms of the Florentine **bel canto** song-setting of poetry. The roles of Dante Alighieri, Petrarch, Leonardo da Vinci, and certain English composers among Shakespeare's contemporaries, such as the exiled John Bull, must be considered to clarify certain relevant connections. It is for this reason, that, as Jenner details Johannes Brahms' instruction on this point: as a general rule, the poetry set to song by accomplished Classical composers, is superior in expression of ideas, to the original poetry-text employed.¹⁷ This was emphasized by Beethoven, who showed that it was the superiority of Schiller's poetry, over that of Goethe, for example, which made the musical setting of Schiller's poetry so challenging. Classical musical expression adds to poetry in a way which removes the blemishes of the poem chosen for this enhancement, if the blemishes exist.

The human singing/speaking-voice, when developed and used in a Florentine *bel canto* mode, is not an ornamentation of speech, but an integral, indispensable aspect of the ability to communicate ideas which correspond to the means by which "profound and impassioned ideas respecting man and nature" could be communicated. For that reason, to the present day, the *specifically* Florentine, Fifteenth-Century, **bel canto** mode of voice-training in song, as carved in stone in the interior of the Cathedral of Florence, is properly employed as the Italian source of the capacity for training of the human speaking-voice in ways which are in accord with the powers of human creative reason.¹⁸

My experience over more than sixty years confirms this. The decadence of the preceding Century, and the deeper decadence which took over the U.S.A.'s and Europe's artistic culture, during the post-war years, but, especially with the mid-1960s rise of the rock-drug-sex youth-counterculture, has corresponded to an accelerating deep decline in the quality of intellectual, and also physically determined musical capacities of the population generally, including, most notably, the graduates of universities, including those holding advanced degrees or teaching in those institutions. The loss of the ac-

16. True irony partakes, as I shall show here, below, of the notion of *Geistesmasse*, as that use of the term is introduced successively by Herbart and Riemann.

17. Cf. Gustav Jenner, *Johannes Brahms als Mensch, Lehrer und Künstler* (Marburg an der Lahn: N.G. Elwert'sche Verlagsbuchhandlung, 1930). As referenced in *A Manual on the Rudiments of Tuning and Registration*, Book I (Washington, D.C.: Schiller Institute, 1992), pp. 219-220.

18. *ibid.* p. xvii, Figure A: Panel from Luca della Robbia's sculpture for the choir stall.

quired habits of Classical irony, as Empson defended those in his choice of his own manner and degree, is the widespread expression of a moral and intellectual decadence manifest as a collapse of creative scientific productivity in respect to matters of principle, and in the capacity to produce, or even comprehend reasonably intelligent modes of speech and song.

The greatest periods of efflorescence of a people's culture, are those periods which can be defined as marked by the productions and influence of original thinkers of the qualities meeting the specifications stated and otherwise implied by Shelley's essay. The Fifteenth-Century Renaissance, the work and influence of Shakespeare, the scientific revolution of the post-1648 Seventeenth Century in Europe, the influence of J.S. Bach radiated from Saxony, the Germany-led Classical, scientific and artistic renaissance, as associated with the American Revolution, of the late Eighteenth Century, are typical of the type of experiences to which Shelley referred. So, the great dramas of Shakespeare and Schiller, and the role of Lessing as a forerunner of Schiller, defines a period, like that of Shakespeare's production earlier, which has a unique correspondence to the combined effect of the greatest Classical drama from ancient Athens, including the use of drama, as Socratic dialogue, by Plato.

Take the case of Schiller's *Wallenstein*, for example. The situation is the 1618-1648 phase of a policy of religious warfare in which the Habsburgs of Spain and Austria are the leading actors. They are acting on behalf of an effort, originally rooted in the launching of the Spanish Inquisition of Tomás Torquemada, to uproot and destroy the establishment of the first modern nation-states, in France and England, and the influence of that establishment in tending to overthrow the centuries-long-standing, *ultramontane* legacy established by an alliance between Venice's financier oligarchy, the Norman chivalry, et al., to turn back the clock, from modern to medieval society.

This is the model to which the British East India Company of Lord Shelburne et al., would later look back for suggestions as to how to craft an instrument, the Martinist freemasonic order of Joseph de Maistre et al., which would seek to destroy the possibility that the successful establishment of the U.S. republic would lead to reforms in Europe, France most immediately, to destroy the possibility of any present or future force which would threaten the newly established power of a de facto British empire.

Only a fair approximation of a top-down insight into that character, and specific situation of the Thirty Years War as a whole, competently defines the role performed by any and all among the players presented by Schiller's *Wallenstein* trilogy. The issue of the actual situation of 1618-1648, for Schiller, was the definition of the problem which would be addressed by the 1648 Treaty of Westphalia. The European of the close of the Eighteenth Century can not re-situate 1618-1648 within his contemporary circumstances; but, he must understand the world as presented to him as the outcome

of the developments specific to the 1618-1648 conflict. Any different interpretation of the drama, or, for example, of the character Wallenstein himself, would be absurd to the degree of showing the incompetence of the artistic insight of the critic.

Take Schiller's treatment of Jeanne d'Arc. The functional crux of the drama is Jeanne's immortality, an immortality which, although achieved in her action, was recognized for its impact on the future history of Europe after she was dead.¹⁹ That immortality, as expressed in the outcome of her death for Europe generally, becomes thus the only true meaning of the drama itself. Such is the principle of *Analysis Situs*, whether in art or a mathematical-physics context.

Compare that with a different target, the role of irony in a Classical poem. Rather than working through a series of examples, let us proceed more quickly to the crucial point by appropriate other means.

Irony in Poetry & Science

All of the notable expressions of Classical forms of poetry, and of forms of oral and written communication conducted under the influence of such poetry, defy comprehension by all pedantic worshippers of dictionaries. The principle so expressed by all literate forms of communication through the spoken language, expresses a principle which corresponds to that principle known today as the physical-geometric implications of the complex domain, the domain which Gauss' 1799 paper implicitly defends against the hysterical fanaticism of doctrinaire empiricists such as Euler and Lagrange then, and such followers of those empiricists as Laplace, Cauchy, et al., down to the widespread worship of that same empiricist cult in the modern university classroom. Even the modern customs of prose style, as employed by many publishers, are a reflection of the deadly effects on the cognitive powers of the student and readers of the attempt to treat the spoken and written language according to radical reductionists' notions of the deductive reading of text per se.

Among the extreme expressions of radical-empiricist illiteracy among teachers, publishers, and readers today, is the devolution of a currently fashionable, new breed of radio and television "news readers" into the likeness of spoken imitation of a runaway teletype machine. Sometimes, this is praised as an attempt to realize the goals of "value-free" reporting; what it achieves is even less than valueless. For those who wish to avoid the objectionable boredom such witless teletype-like recitations promote, there is offered a slightly different method, forms of spoken style tantamount to coloring-in emotional touches, to an already worthless drawing, by

19. See the comparison of the murder of the Rev. Martin Luther King to the judicial murder of Jeanne d'Arc by the Norman Inquisition, in my January 2004 Martin Luther King memorial address, at Talladega, Alabama. EIR DVD:EIRDV 2004-01. This DVD includes the introduction of LaRouche which Selma veteran Amelia Boynton Robinson delivered on that occasion.

allusions to what is called symbolism, or more fairly described as “symbol-mindedness.”

If robot-like teletype utterances are bad, the attempt to apply symbolism to the recitation of a worthy example of a Classical poem, borders on the criminal.

For example, until Heinrich Heine was old, sick, and demoralized to the point of readiness to give up the fight, he was the recognized epitome of his war against Romanticism, recognized so by some of the greatest composers of his time. For example, we have Franz’s Schubert settings in the collection of songs published under the title of “The Swan Songs,” and the rich larder of Heine set by Robert Schumann. When these poems are compared with Heine’s devastating attack on “The Romantic School” to which a post-Schiller Goethe had fallen prey for a time, the truth about poetry comes out in musical settings such as Schumann song-cycles, such as the *Dichterliebe*; especially the dramatically clear *Ich grolle nicht!* (“Grrr-olle!”) and the concluding pair of songs, have a certain impact, when adequately performed with cognitive insight trained in the Florentine **bel canto** tradition, which leaves no doubt of the intent of either the poet or the composer.

The quality which, for example, the Schubert and Schumann settings of Heine convey, when delivered by appropriate soloist and accompanist, is of a special sense of humor by all participants: poet, composer, singer, and accompanist, sometimes reminding us, not accidentally, of the best variety

of that Viennese tradition in sense of humor which came out so clearly in Haydn, Wolfgang Mozart, Beethoven, Schubert, Schumann, and Brahms, a playfulness exhibited by Schumann and Felix Mendelssohn in their Leipzig work, a dead-serious sort of playfulness rooted in the genius of J.S. Bach and his faithful successors. It is demonstrated in the conducting by Wilhelm Furtwängler, where a sense of “playing between the notes” is presented as the difference between so-so, Apollonian or Dionysian mental states, and the Promethean quality of great musical conducting and composition as typified to overwhelming effect by Beethoven’s “Missa Solennis” and “late quartets.”

My reference to Classical musical composition and its performance, is not merely an illustration of the working-point; it goes to the heart of the secrets of intelligent modes of ordinary speech, and, therefore, writing. For example, among important mathematical physicists, in former times, we met a zest for Classical musical composition, a zest of a quality lacking in the usual mathematician. A really consistent empiricist, or Aristotelean, is incapable of an honest sense of humor about much of anything that is truly important in the realm of ideas. The latter sort can not avoid a seemingly instinctive, erupting impulse from within him, to hate Dante Alighieri, Nicholas of Cusa, Erasmus of Rotterdam, Rabelais, or to admire the wrong figures, such as perhaps the whore Maritornes, in Cervantes’ *Don Quixote*. What he hates about Kepler and Leibniz, for example, is that quality of creativity which is expressed as a special kind of laughter. Generally, a person who lacks access to enjoyment of Classical artistic compositions is crippled emotionally, and therefore intellectually.

Here and now, on this point, the crucial connection between physical science and Classical artistic composition comes to the fore.

In the history of European science since no later than the work of the Pythagoreans, the definition of a valid notion of human knowledge, has depended upon the distinction of those shadows of reality known as sense-perception, from the reality of those efficient powers—universal physical principles—which control the universe but which lie beyond the scope of sense-perception. In a competent practice of physical science, as in the traditions of the Pythagoreans, Plato, Cardinal Nicholas of Cusa, Leonardo da Vinci, Kepler, Leibniz, Gauss, and Riemann, the notion of ideas, as distinct from mere sense-impressions, lies in that which Dirichlet, Riemann, et al., defined in principle as the complex domain, ideas as *Geistesmasse*. It is, properly, the same in all forms of Classical art, including those forms of Classical poetry and drama which are the model of reference for all literate forms of human speech.

This principled perspective on the use of language implies the existence of a kind of complex domain in speech, the method by which ideas, for which no proper word previously exists, are transmitted from speaker to hearer, just as Gauss, implicitly, and Riemann, explicitly, define those ideas which lie beyond the bounds of a literal mathematics, within the

Kepler’s Revolutionary Discoveries

The most crippling error in mathematics, economics, and physical science today, is the hysterical refusal to acknowledge the work of Johannes Kepler, Pierre Fermat, and Gottfried Leibniz—not Newton!—in developing the calculus. This video, accessible to the layman, uses animated graphics to teach Kepler’s principles of planetary motion, without resorting to mathematical formalism.

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A true empiricist or Aristotelean, lacking an honest sense of humor, cannot avoid the impulse to admire the wrong figures, such as perhaps the whore Maritornes, in Cervantes' Don Quixote. Illustration by Gustave Doré.

complex domain. In a literate use of speech and writing, the complex domain is the domain of Classical irony.

In physical science, the notion of an efficiently universal physical principle existing beyond direct means of sense-perception, such as the case of Kepler's uniquely original discovery of the idea of universal gravitation, is reflected as a systemic quality of anomaly in observed processes.

Kepler's observation, that the orbit of the observed planets describes an elliptical pathway, showed the existence of an unseen, but efficient principle of constant change as operating to the effect of "equal areas, equal times." This became the pivotal discovery on which Kepler premised his assignment, to future mathematicians, to develop a true infinitesimal differential calculus, and a general theory of elliptical functions. The former assignment by Kepler led to not only Leibniz's discovery of such a differential calculus, but his later refinement of the original discovery, make in concert with Jean Bernouilli, that such an infinitesimal differential calculus must express a universal physical principle of least action.

Riemann's bold declaration, in his 1854 habilitation dissertation, that all *a priori* notions of space, time, and matter, such as (in point of fact) Aristotelean or Euclidean ones, must be henceforth banned from physical science,²⁰ reflects the

method which must be employed to show the multiply-connectedness of the principles of physical science to those of Classical artistic composition.

On this account, the complex domain is exactly what is represented, typically, by the role of Classical irony in poetry and drama.

The member of the human species is constantly confronted with new ideas for which the speaker or hearer has no available name from among the existing terms of their personal mind's dictionary, nor even, often, any available dictionary. How shall he, or she, then name that idea for which no word exists in his or her knowledge? In physical science, as Kepler's *The New Astronomy* is among the very best sources of illustrations on this point, the same kind of problem arises, in principle, wherever the reported evidence leads to a contradiction which can not be resolved within the hearer's (or speaker's) pre-existing framework of knowledge. In the domain of acceptable examples from Classical poetry and drama, that problem of science, as typified by the evidence which confronted Kepler, is called *Classical irony*.

And, in Art

To create a name for an idea—either one just discovered by the reporter, or as presented by one familiar with the idea to persons who lack that familiarity—one must present a rigorous sort of Classical irony, as Shakespeare is famous on

notion, respecting physical principles as such expressed in the 1854 habilitation dissertation, include crucially relevant contributions to Riemann's thinking by Herbart and Dirichlet.

20. "This leads into another science, the domain of physics, which the quality of today's proceedings forbids us to enter." ("Es führt dies hinüber in das Gebiet einer andern Wissenschaft, in das Gebiet der Physik, welches wohl die Natur der heutigen Veranlassung nicht zu betreten erlaubt.") *Werke*, p. 286. As noted earlier in my present report, this ironically revolutionary

his account. The stubborn dolt, confronted by such an irony, refuses to think cognitively, and may often, therefore, retort by expressions such as, “In other words, what you meant to say could be said in plainer words as . . .” Often, the dolt will flee into the assumption that the speaker’s irony was merely symbolism, as Franz Liszt merely parodied Classical composition, symbolically, with sexual outbursts of passage-work, or as a skilled but bad musical performer might do the same to a performance of a work by Beethoven, Schumann, or Brahms.²¹

Indeed, as the work of the greatest Classical song-composers, Haydn, Mozart, Beethoven, Schubert, Schumann, and Brahms, attests, the work of J.S. Bach opened up a revolutionary expansion of the power of music; that, in a way which is typified by the setting of poetry by these composers, producing a resulting power of imparting ideas not possible in musical compositions from earlier times. Anyone who has experienced the observed process of conducting a choral work of Bach, either encounters this challenge successfully, or produces a botched performance. I cite that relatively elementary example here to make clear that deeper issue of Classical poetry and drama toward which I have been building up prior to this point.

Take two sets of examples as illustration of this point: the example of Bach motets and a Classical string quartet.

The typical case for demonstrating the principle of Classical Bachian irony in music is the contrast between the singing of each part, as in a Bach motet (e.g., *Jesu, Meine Freude*), separately, and then singing the four parts together. This, as demonstrated by a youth chorus’s performances during a recent conference of my association, demands adjusting the across-voice relationships to the effect which the famous conductor Wilhelm Furtwängler sometimes described as “performing between the notes.” The required differences in pitch, corresponding to the set of Classical modalities, are ironies of the specific quality upon which Classical counterpoint in

the well-tempered mode depends.

The same principle is characteristic of the Classical string quartet. The principle of the string quartet was brought to a higher domain of composition by Beethoven’s so-called late quartets. Just as a qualified chorus director hears the needed difference in adjusted pitch for a four-part chorus, so, the performers of a string quartet enhance their performance in rehearsal, through their remembering what had required improvement in their hearing of their own practice in the immediately preceding moments. Such is the source of the uniquely astonishing power of Furtwängler’s conducting of a Beethoven or Brahms symphony, for example, his incomparable, recorded treatment of Schubert’s “The Great” Ninth Symphony.²²

In each of these cases, the effect may be called “performing within the complex domain”; the heard difference is the persisting “edge of the seat” tension, from the opening lunge directed by the conductor or performers, all the way through. “Nothing is permanent but change,” would be the way a Heraclitus or Plato might describe it, as the way in which Kepler recognized the constant principle of change as the characteristic of the Creator’s universal physical principle of gravitation. Each tone is not a “thing,” but a specific, contrapuntal idea, an idea of a state of tension which carries the performance forward.²³

Similarly, the essential difference between the “tombstone”-like Archaic sculpture, and the Classical sculpture of Greece which Romans could never get right, was that same tension provoked by a specific object perceived by the mind as in mid-motion. Leonardo da Vinci’s revolution in perspective was similar: Was the “Mona Lisa” beginning, or concluding her smile?

By contrast, the modernist sculptor’s work often suggests to the viewer, an angry child’s banging on metal: hard going, but getting nowhere, by a mind racing inside a squirrel-cage.

Classical irony in poetry or prose produces a sense of “between the notes” in the sentient audience. In such composition, as the point is so magnificently typified in John Keats’ famous “Ode on a Grecian Urn,” there is a powerful sense of the concept of truth and beauty conveyed, as the experience of a surprise. An urn from then, comes into view, now, with a strongly felt surge of a sense of the presence of eternity bridged by a sense of beauty expressed then for now. Ideas that come upon us as surprise, ideas which exist only in the ambiguity of being between, among contrasting literal meanings: just as the mathematical physicist does by means of

21. This is no exaggeration. The entire modern school of Romantic and modernist expressions of musicological sophistry, is premised on the fanatical assumption that there is a categorical separation of the methods of Bach from those of “the pre-Romantic Classical” school of Haydn, Mozart, and Beethoven. The same sophistry is continued, by asserting that the later Schubert and Beethoven were on the road to becoming full-fledged post-Classical exponents of the Zeitgeist’s Romantic School, but demand that the interpretation of the compositions of Felix Mendelssohn, Schumann, and Brahms conform to the assumed principles of the Romantic School. The reality is, that all leading Classical composers, from Haydn and Mozart through Brahms, based the entirety of their own development as composers on the effort to master and continue the implications of Bach’s notions of well-tempered counterpoint. The difference between the Classical and Romantic, is the difference between fecundity and masturbation. The intention of the Romantics and modernists, is to substitute sex-driven symbol-mindedness for that principle of Classical irony which is the pervasive basis for the work of Bach and all of his followers, through that great follower of Bach, the Brahms of his Fourth Symphony and *Vier ernste Gesänge*. As was often said of the ultra-Romantic Richard Wagner’s *Tristan*, “not a dry seat was left in the house.”

22. E.g., Berlin Jesus-Christus-Kirche, December 1951 (Hamburg: Polydor Intl. GmbH, 1976).

23. This principle is recognized most readily, by focussing upon the function of register-shift in the *bel canto* mode of, not only singing, but also competent composing. Insensitive audiences require unsubtle effects; sensitive audiences require that driving role of tension toward which the special role of register-shifts points in an exemplary, Classical-poetical way.



The LaRouche Youth Movement sings Bach's motet "Jesu, Meine Freude" at the Capitol in Harrisburg, Pennsylvania on March 29. The ironies of tonality in the piece are the specific quality upon which Classical counterpoint in the well-tempered mode depends.

representation of an idea existing only in the complex domain of Riemann et al.

The uncreative mind acts as if he, or she had believed that either every meaningful idea can be deduced from predefined standard meanings of terms, as in, at best, something akin to an aprioristic Euclidean or Cartesian geometry, or that art lies in the sense of purely arbitrary impulses which are original in the degree that they are senseless, such as an arbitrarily made-up children's game. The idea that mind could generate a meaning which was neither deductive, nor arbitrary, but represented a previously unknown, lawful principle of the universe, does not exist for purposes of eulogies delivered at a grammarian's funeral. The difficulty these sundry varieties of unfortunates' experience, both in physical science and Classical art, is genetically the same dumbfoundedness which Euler and Lagrange expressed in face of the Leibnizian reality of the complex domain.

We are able to discover a communicable conception of a principle only through the use of Classical irony. We generate a paradoxical juxtaposition of terms which each has a pre-established place in the domain of communication. The intention of this paradox is to compel the mind of the hearer to recognize a real existence which he or she has never known before. That paradox, as an irony, becomes the name by which those who have shared the experience of the relevant discovery, are thereafter enabled to treat the name of that poem, for example, as corresponding to an object in the sense of *Geistesmasse*.

Thus, Shakespeare and Schiller, for example, bring to life a notion of a page from previous history, a principle such as the universal principle expressed by situating it in the historically specific setting of the Hamlet legend, as in the Third Act soliloquy and Horatio's ironical point made, as if offstage, at the close. In all cases, the purpose of Classical art is to define the principled mean of some historically specific situation of an experience of a conception as a mental object, as might be attempted in case-law under the proper form of American, rather than common law, or contract law.

Bach's system of well-tempered counterpoint, for example, provides a unique quality of service to modern European culture as a whole. It uses the requirement for agreement in well-tempered composition, as a way of disciplining the mind to the degree needed for refined, more precise notions of principled features of social relations. Instead of a bare stage, or one burdened by a disconcerting surfeit of trappings, the art transports the imagination of the audience to the stage defined by the "geometrical" implications of well-tempered counterpoint, such as four-voice counterpoint. On that latter stage, the mind sees what is not seen so precisely in any other way. The transformation of a mere poem into a powerful work of art, as song, in the way indicated by Jenner's Brahms, or the examples of Bach and other great composers earlier, represents a more powerfully insightful quality of mind: Shelley's power of imparting and receiving profound and impassioned conceptions respecting man and nature.

That is the Classical-artistic reflection of the Riemannian

complex domain.

So, in physical science, the principles of the physical universe are revealed in the paradoxes which are reflected as undeniably persistent, systemic paradoxes in patterns of sense-perception. In Classical artistic composition, we have a comparable quality of paradox. In the latter domain, the paradoxes which give rise to discovery of universal principles of social processes, are expressed in the form which gives rise to discovery of universal principles of Classical artistic composition. Only discoveries corresponding to those paradoxes are universal principles of social processes, the rest are merely events specific to an historical situation. The principles of economic science, which is to say the principles of application of a science of physical economy, are thus coherent with the notion of universal principles of social processes, are typical of the principles of Classical artistic composition.

Why practice Classical art? There are many reasons for doing so, as I have implied here. To simplify the answer, the response to the question should be: to keep the creative powers of the mind nourished, and alive.

2. Science, Poetry & Economy

The most ancient of the known traces of astronomical calendars, point to the origins of the main track of rise of civilization in transoceanic navigation. This evidence coincides with the cycles of glaciation which have dominated the Earth during two millions years or more before the present. It coincides with the picture pieced together from sources including ancient Vedic calendars, as by India's Tilak. From the vantage-point of the birth of European civilization in what we know as ancient Greece, it is the trail of discovery marked by the astronomy practiced by Egyptian civilization, since long before 2700 B.C., on which our attention is focussed here. As I have emphasized at various points in the preceding chapter: the ancient Greek development of the discovery of universal physical principles of action by the methods of *spherics*, is the beginning of known science within European civilization to date. However, the known best method of modern science as it has developed to the present time, is traced from the treatment by, chiefly, Egyptian sources, reflected in the work of figures such as Thales and the Pythagoreans, as reflected, in turn, in the unique elaboration of known, modern scientific method, the which is derived from the method of Socratic hypothesis, as developed by Plato in his dialogues.

So, from what we know today, since the emergence, and perpetuation of what we know as European forms of civilization, society's successful practice depends upon transcending what we might have learned, as practice, from earlier generations, to supersede mere learning; that, by means of added discoveries of universal physical principles. These needed discoveries are accomplished solely by that

faculty of the individual mind which Plato's dialogues define as the method of hypothesis.

The traces of ancient Vedic Solar-astronomical calendars from as early as between 8,000-6,000 years ago, and the remarkable development which Egyptian astronomy had achieved by the period of the Great Pyramids of Giza, points toward a correlated development of trans-oceanic cultures and Solar astronomy long before the emergence of the first traces of a specifically European civilization. Even taking into account important work by ancient China and elsewhere, the influence of European civilization among surviving cultures, in the development and practice of science, chiefly the ancient Greek Classical, and modern European, has been uniquely outstanding during historical times, especially modern times.

The development of any competent notion of modern national economy, is traced from those origins.

The foundations of modern European science are rooted in the post-Pythagorean Europe of, most notably, Plato, Eratosthenes, Archimedes, the founder of modern European science, Nicholas of Cusa, his follower Leonardo da Vinci, their follower Johannes Kepler, and their follower Gottfried Leibniz. However, since 1763, it has been only in the U.S.A. of Benjamin Franklin and his co-thinkers that a competent science of political-economy, one following the pathway charted by Leibniz, has been actually developed, to the present date.²⁴

Use the state of mind described in the preceding section of this report, to define the challenge of making economic policy under the presently onrushing conditions of a general, global financial-monetary collapse. However, before focusing on the positive side of these principles, spend a few moments on the typical insanity of the post-Roosevelt university classroom in economics.

'Don't Talk Us Into a Depression!'

The rampant delusion respecting economy, around Washington, D.C. and abroad at this moment of writing, is the stated, or implied notion, that a depression could not happen now, "unless enough people talk us into it." I recall my first encounter with the popularization of that particular nonsense, during the post-war 1940s, where it was reported to me as a doctrine of typical university freshmen courses in Economics 101 at that time. As I discovered, after looking into my reports of the spread of such silliness, this particular piece of pabulum for suggestible freshmen, was part of the right-wing turn under President Harry Truman. It was a sign of the times when fevered efforts to de-bunk the memory of President Franklin Roosevelt were being launched. However, that doctrine lingers on as a kind of obsession found even among amazing places, still today.

24. Jean-Baptiste Colbert's role as a statesman was crucial in setting the stage for Leibniz's contributions.

To the degree that there was ever even a mere caricature of rationality in that right-wing view in Economics 101 then, a prevalent such dogma might be considered the outcome of a simplistic bit of arcana, such as that was taught as political-economy from the early days of the Anglo-Dutch liberal doctrine, by such dangerous hoaxsters and wandering mystics as Bernard Mandeville and François Quesnay follower Adam Smith. In that doctrine, economy was a matter of linear forms of contractual agreements, all underlain by the capricious ways which might be attributable to certain mythical little green men lurking under the floorboards of history, small creatures who threw crooked dice, in favor of some lucky fellows, and disfavor of others.²⁵

Now, up to the point of events such as the presently looming, sudden, systemic collapse of the present world monetary-financial system, there is very little comprehension of anything “scientific” about generally taught and practiced economics today. Today, the introduction of any actual science to that field of practice, other than “ivory tower” mathematical games, would be considered a nasty affront to the favorite delusions of the practitioners of the generally accepted, and taught views under the rubrics of “economics” and “political-economy.” The notion that the way in which an economy rises and falls, must be determined by the sophistry of pervasive opinion, rather than rationally, in terms of determining, principled physical functions, is currently, still, the prevalent delusion today, as among the more credulous university freshman of the late 1940s.

During the span of the recent four decades, that current monetarists’ delusion has enjoyed increasing hegemony. The popularity of that academic and comparable silliness, reflects

25. Typical of the followers of Adam Smith, et al., today, is the following passage, which I have frequently quoted, from Smith’s 1759 *The Theory of the Moral Sentiments*. Notably, this was published by Smith prior to his 1763 assignment, by Lord Shelburne, to visit France for the purpose of developing a program both for undoing the economy of France, and ruining the post-1763 economy of the English-speaking colonies in North America. Also notably, Smith’s *Wealth of Nations*, was a 1776 tract published in the setting of the emerging U.S. struggle for independence, aimed at discrediting and subverting that struggle for independence. The indicated passage, as previously quoted by me, is as follows: “The administration of the great system of the universe . . . the care of the universal happiness of all rational and sensible beings, is the business of God and not of man. To man is allotted a much humbler department, but one much more suitable to the weakness of his powers, and to the narrowness of his comprehension: the care of his own happiness, of that of his family, his friends, his country. . . . But, though we are . . . endowed with a very strong desire of those ends, it has been intrusted to the slow and uncertain determinations of our reason to find the proper means of bringing them about. Nature has directed us to the greater part of these by original and immediate instincts. Hunger, thirst, the passion which unites the two sexes, the love of pleasure, and the dread of pain, prompt us to apply those means for their own sakes, and *without any consideration of their tendency to those beneficent ends which the great Director of nature intended to produce by them.*” (Italics added) Smith’s is an echo of the same irrationalist’s argument made by the frankly pro-Satanic Bernard Mandeville and the Physiocrat François Quesnay.

a flight from any form of economic reality, among most of the so-called “Baby-Boomer” generation, the generation which first reached academia and adulthood during the middle to late 1960s. Among that generation, which dominates policy-shaping in the Americas and western Europe today, the delusion of American and west European “Baby Boomers,” most emphatically, is that abandoning their nation’s own basic economic infrastructure, farms, and factories, for pursuit of the proceeds of cheap labor in South and Central America, Asia, and, now, the new colonial territories of the former Comecon bloc incorporated into the European Union, is, in some most magical fashion, the secret of continued imperial prosperity in their home territories.

It was this latter delusion, now bearing such rubrics as “NAFTA” and “Globalization,” which has been a continuing determinant of forty years of decadence of the economies of the U.S.A., Australia, Japan, and western Europe, their ongoing plunge into the abyss of today’s globalized general breakdown-crisis.

At the present time, the U.S.A. (in particular) is menaced by its own refusal to recognize that the changes in applied economic policy over the recent four decades, have now brought us to the point that an imminent collapse of not only the U.S.A.’s, but the world’s economy, is bumping into a boundary-layer of increasing turbulence, a boundary beyond which the world economy abruptly ceases to exist about as quickly as we might pronounce the relevant name of “John Law.” This case leads us into the way in which the considerations of the preceding chapter are expressed in the form of systemic forms of economic crises.²⁶

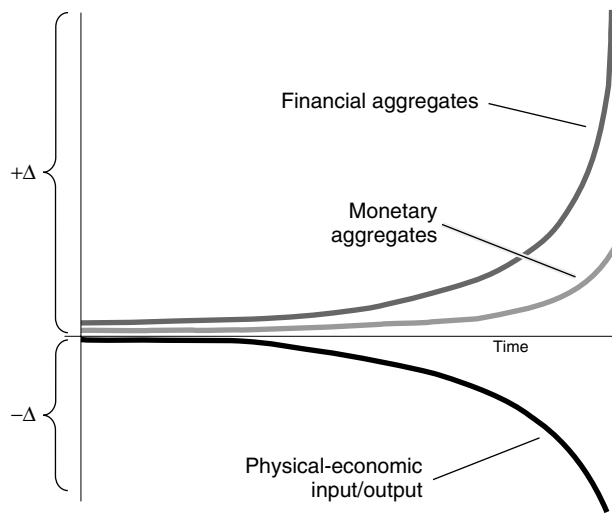
As the case of Riemannian physical geometry illustrates this point, any system is self-bounded in some way, by virtue of the set of characteristic principles upon which its existence depends. However, as Gödel’s referenced work implies, there is an important qualification in the notion of such self-bounded systems. In Riemannian systems so defined, the indefinite expansion of the system beyond any presently inhering limits, is made possible by adding new axiomatic-type universal physical principles to change the system as a whole. There is always some principle which is overlooked, and therefore yet to be discovered, in defining the formal self-bounding of any system.

That said, look back to 1961-65 for standard physical ratios of essential components of *non-monetary, physical* output, as measured in typical market-baskets for incomes and capital-to-current depletion ratios for household incomes,

26. By “systemic crisis,” I signify the outcome of a flaw which is not only inherent in the existence of the referenced form of economic system, but a flaw which threatens a disintegration of that system, unless there were the introduction of the type of axiomatic change in the system needed to avert that disintegration. This is distinct from a “cyclical” economic calamity which is not a threat to the continued existence of the system itself.

FIGURE 1

A Typical Collapse Function



agriculture, manufacturing, mass-transportation costs, capital goods of production, and basic economic infrastructure in categories such as power generation and distribution, mass transit of passengers and freight, water investment and management, and comparable figures. Measure these in per-capita and per-square-kilometer values for overall area and relevant definitions of area-plots.

Next, measure physical incomes and physical costs in current dollars. Also, take into account current ratios of debt-structures to incomes and costs for each designated sector, and overall.

The result you will observe will correspond roughly to the imagery of my pedagogical Triple Curve.

Skip ahead for a moment to three important breaking-points: the 1971-72 transition to a floating-exchange-rate monetary system; the 1982 point of aftermath of the catastrophic, crash-program installation of Project 1980s “structural reform” policies, under National Security Advisor, and Trilateral Commission founder Zbigniew Brzezinski. Add to these: the October 1987 New York stock-market crash; and the post-1996 (i.e., 1997, 1998, 2000) aftermath of the build-up and initial collapse of the “IT” and related bubbles, including the “Wall of Money” bubble launched during the fourth quarter of 1998.

Against that array of intermediate, critical points of inflection, compare the rate of decline of net physical output per capita and per square kilometer. This establishes a base-line for the actualities of the Triple-Curve pedagogy. Now against that base-line, compare the ratio of monetary and financial growth per capita and per square kilometer. A function corresponding to the conception of the Triple Curve pedagogy appears (Figures 1-3).

FIGURE 2

The Collapse Reaches a Critical Point of Instability

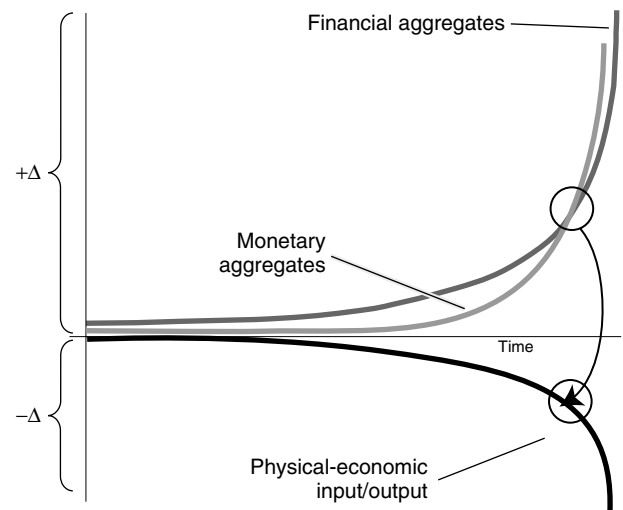
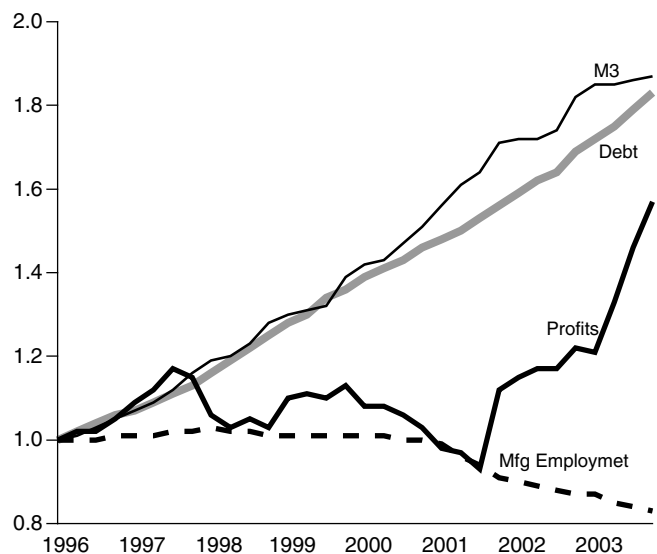


FIGURE 3

Changes in Triple Curve Components, 1996-2003

(Indexed to 1Q/1996 = 1.00)



Sources: Federal Reserve; Bureau of Economic Analysis; Bureau of Labor Statistics; EIR.

Interpret that array of trajectories as follows.

Ask: What is the amount of increase of monetary-emission required to drive the expansion of nominal financial

assets required to sustain the present, falling rate of per-capita physical output? Look at the increase of the ratio of monetary emission required to sustain the growth of financial aggregates. Look at the increase of the ratio of financial expansion required to sustain an accelerating rate of decline of net physical output, after discounting for physical attrition of physical capital of the economy as a whole.

The resulting picture resembles the approach of an aircraft to near the speed of sound, prior to the improved configuration presented to Douglas by a post-war German engineer then in U.S. employ. In other words, a Riemann sonic shock-front.²⁷

We have thus, the combined physical-economic, monetary, and financial system as a self-bounded system. That system is now entering the phase of increasingly extreme turbulence, which can be successfully escaped only by introducing a relevant new principle. A typical Riemann function is thus implied. The present world economy and its associated monetary-financial system, has now entered a phase-shift of accelerating, hyperinflationary mode of turbulence, at which either an elementary systemic change in function is superimposed on the system, or the global system under consideration must enter a “general breakdown crisis” of the type which presages a threatened “new dark age.”

Who, therefore, is talking whom into a depression? Rather, who is talking whom out of facing the need for immediate action to prevent a collapse into a condition comparable to the onset of the planet as a whole into a new dark age?

The leading threat to the U.S. and other economies, is therefore essentially mass-psychopathological in nature. The root of the virtual psychosis exhibited by the current policies of the U.S. government and Democratic Party leadership alike, including the pre-candidacy of Senator John Kerry so far, is the substitution of popularized delusions akin to those of the von Neumann theory of games, for consideration of the elementary physical-economic realities of mankind’s productive relationship to nature.

The game is called “money.” The delusion is akin to that of those players in today’s equivalent of a hobo-jungle, participating in a board-game of *Monopoly*, who are gripped by the delusion, that winning that game of chance will enable them to walk away from the game rich in real physical assets. Like, but far less sane than the spectacle presented, in the famous Charlie Chaplin movie, *The Gold Rush*, in the scene of the cooking and eating of the boiled shoe. It is, Hollywood aside, also an image of the infamous 1720 collapse of the John Law-modeled bubbles of France and England.

As I have emphasized earlier, money is, by its nature, a worthless idiot. It has no intrinsic value. Its value is that which is imputed to it by the power of governments, or by institutions which place themselves above the power of governments, such as certain “independent” central banking-systems, or



Charlie Chaplin’s cooking and eating of a boiled shoe, in his famous 1925 film *The Gold Rush*, reveals the insanity of the delusion called “money.”

other over-arching financier-oligarchical cartels. In fact, the value of money reposes in the power of government, or in the hands of an institution which has subverted the proper authority of sovereign governments. When the time comes, that the amount of pressing claims for redemption of money with physical values, greatly exceeds the magnitude of the prices of the relevant physical values available, the idiocy of money becomes apparent.

Some silly people speak of “real money,” as a proposed alternative. No such “real money” ever did, or ever could exist, except within the bounds of a delusion by the believer. Money at its best, is a means of exchange, best created by, and regulated by responsible government, and that best through the methods of national banking which are only typified by the arguments of our first Treasury Secretary, Alexander Hamilton.

The only means by which the perils of money’s intrinsic idiocy and recklessness can be checked, is through regulation, as the measures taken by the U.S. under President Franklin D. Roosevelt typify this. The idea of a fixed-exchange-rate, pegged to an assigned value of reserve gold bullion, and supported by regulatory measures of the sort associated with the Franklin Roosevelt government’s initiatives, is the only rational means by which long-term credit can be issued at low prices, over periods as long as the typical 25-50-year long-term-capital cycles on which a future, reformed U.S. dollar (for example) must be based, as replacement for Federal Reserve Notes.

Thus, we have now reached the point in the process, at which the only way to avoid the kind of collapse which leads

27. Bernhard Riemann, “Ueber die Fortpflanzung ebener Luftwellen von endlicher Schwingungsweite,” (1860), *Werke*, pp. 157-181.

into a new dark age for the planet, would be to use the powers implicit in sovereign governments, the kinds of Constitutional powers applied by President Franklin Roosevelt in March 1933, to put the present international monetary-financial system into receivership for reorganization, and operations in government-controlled bankruptcy. No other sane option presently exists.

A transitional system must operate under such reconstruction proceedings, to eliminate, immediately, the existing, bankrupt, floating-exchange-rate system of the recent

Some silly people speak of “real money,” as a proposed alternative. No such “real money” ever did, or ever could exist, except within the bounds of a delusion by the believer. Money at its best, is a means of exchange, best created by, and regulated by responsible government, and that best through the methods of national banking which are only typified by the arguments of our first Treasury Secretary, Alexander Hamilton.

thirty-two years, to bring into being a new international monetary-financial system designed according to the principles expressed by the successful precedent of the original Bretton Woods system: a fixed-exchange-rate system, designed to manage a process of two generations of the world's recovery from the mess created by the follies of the recent forty years.

The object must be to uproot and prohibit the use of the methods of so-called “fiscal austerity,” associated with the unfortunate memory of the Bank of England's protégé, Dr. Hjalmar Schacht. The system in reorganization must be based on the use of long-term state-created public credit, at rates of between 1-2%, to bring levels of productive investment up to relatively full-scale employment, to levels of output sufficient to keep the current operating budgets of nations and their governments at above “break-even” levels of financial management, while promoting rapid, technological-progress-driven gains in physical-economic productive powers of labor.

The reconstruction must be led by large-scale public works of this intention, by government, and with public credit

to fund medium- to long-term extension of financing of private entrepreneurs, especially those whose intentions are efficiently aimed at promoting the common aims of the general recovery and increase of physical productivity per capita and per square kilometer.

The purely financial-speculative features of the debt-accumulation from forty years of folly, must be hived off, with financial derivatives simply frozen and then cancelled in due course, as having been essentially gamblers' side-bets on the outcome of what was Alan Greenspan's folly from the outset. Other debt must be reorganized in a way which ensures no disturbance of the process of general economic recovery through physical-economic growth. In the long-term process of liquidating accumulated financial follies, much of the old financial structures will be allowed to quietly disappear, as they are replaced by the emerging new.

Recognizing Past Follies

Under the growing influence of monetarism during the post-war decades, especially since the 1964-1982 transition to a “post-industrial,” deregulated economy under “floating-exchange-rate” monetary-financial dogmas, there was a systemic destruction of those features of the U.S. 1933-1964 economy which had made the once-bankrupt U.S. of 1929-1933 the most productive nation of the planet, the nation, as rebuilt under President Franklin Roosevelt, which had led in the reconstruction of war-torn Europe, and other improvements of the planet.

Admittedly, the death of President Franklin Roosevelt had unleashed the Truman-Churchill alliance which acted, immediately upon the signal of the President's death, to turn the world back into the direction of the restoration of pre-war colonialisms, and into right-wing economic and other policies resuming essential elements of the Synarchist International influences which had led to the 1922-1945 rampage of fascist takeovers of the nations of western and central continental Europe. The worst feature of this post-FDR right turn, was the unleashing of the Bertrand Russell policy of “world government through the terrifying effects of preventive nuclear warfare,” a legacy of which we are not yet freed to the present time of the Bush-Cheney-Blair alliance. Fortunately, then, the election of U.S. President Dwight Eisenhower pulled us back from the brink, and held the Synarchist International's fascist, military-utopian tradition, the so-called “military-industrial complex,” in check, that for as long as he remained in office.

However, the Pugwash and related conferences, involving Bertrand Russell and his cronies, of the late 1950s, prepared the way for the 1982 Cuba Missiles Crisis, the attempted assassinations of France's President Charles de Gaulle, and the actual assassination of U.S. President John F. Kennedy. The successful assassination of President Kennedy cleared the way for the right-wing utopian faction's launching of a

return to the asymmetric warfare of Truman's Korean war from which President Eisenhower had helped to extricate us in a significant degree, the new, official U.S. war in Indo-China.

The aftermath of conditions of crisis during the first years of the 1960s decade, were the circumstances under which a sweeping cultural-paradigm shift was set into motion in the U.S.A. and the U.K., a shift spilling over into the continent of Europe and elsewhere. This shift, signaled by the spread of a rock-drug-sex youth-counterculture among university-age youth, proved to be a shift of those and other parts of the world away from the role of the post-war U.S.A. as the world's leading producer society, into becoming the monstrously decadent, presently bankrupt "post-industrial" wreckage of the nations of the Americas and Europe, and elsewhere, today.

A crucial, central feature of this right-wing rampage of mass-insanity, was the growing influence of a pro-Synarchist political-economic-cultural philosophy typified by the influence of the Mont Pelerin Society and such typical madmen of that outlook as those apostles of "freedom from sanity," Friedrich von Hayek and avowed illicit-drug-use promoter Milton Friedman. The characteristic feature of the social philosophy expressed by the Mont Pelerin Society's influence, was their adoption of the same inhuman policy which the Olympian Zeus had launched against Prometheus, the suppression of those creative powers of the individual which distinguish men and women from the state of human hunted or herded cattle. The denial of the right of the people to enjoy the fruits of scientific, technological, and cultural progress, and the corresponding Dionysiac promotion of wild-eyed, pro-Nietzschean cults of drug-induced and related irrationality, has been that attempted bestialization of those regions of mankind in which the greatest progress in the condition of mankind had been achieved earlier. This has been the characteristic feature of a forty-year march of what was once globally extended European civilization, down the road toward Nietzschean Hell.

The essential feature of these forty years of "post-industrial" decadence of Europe and the Americas, and of the decadence they have spread against the nations and peoples of Central and South America, against Africa, and elsewhere, has been the denial, in doctrine and practice, of that which sets the human individual apart from, and above the beasts.

In the matters of economic policy of practice, as such, this anti-Promethean denial of that cognitive principle of science and Classical artistic composition, which sets the human individual apart from the beasts, has been typified by the promotion and employment of the cult of "systems analysis" as an ideological weapon wielded against the perpetuation of the scientific and cultural progress on which the realization of the aims of civilized humanity depends, both in economic practice, and in other ways.

In U.S. and other economic policy of practice as such, the cult of "free trade" has been a principal instrument by means of which the economy and culture of the people of the United States have been destroyed.

"Free trade," as practiced increasingly since a notorious 1966 launching of a Republican "Southern Strategy" at a certain meeting attended by the future President Richard Nixon in Mississippi, has become a campaign to uproot production from places where it is not the cheapest. This has meant, especially since about the time Zbigniew Brzezinski stepped down as National Security Advisor, a reduction of the standard of living and quality of production in those areas of the world where those factors had been best expressed, as in the U.S. itself. The effect has been to imitate the emerging practice of the course which ancient Rome took during the centuries following the close of the Second Punic War, the destruction of the productive powers of labor within Italy itself, for the advantage of a combination of slave-labor and imperial looting of subject populations abroad.

As I travel back and forth among regions of the U.S.A. today, I see a degree of ruin of our once proud industrial and agricultural regions which leaves vast despoiled areas looking as if a great mass of locusts had destroyed the cities and fields. The industrial power we once had, has been largely destroyed, while the productive power we used to have has gone abroad into the great cheap-labor markets of the world. I am rightly reminded of the intention of some in the U.S., at the close of World War II, to impose the so-called "Morgenthau Plan" on the Ruhr district, and other districts of Germany. Now, the aims of that "Morgenthau Plan," are being realized in Pittsburgh, the greater Detroit area, and so on, around the former great places of productivity of our republic. It is also being realized, under the Maastricht agreements, in Germany today. No tyrant of former times could have done this, which we, as a nation, have done to ourselves, by, apparently, our own will and consent, these past forty years.

This has not been, as some imagine, a shift of productivity from western Europe and North America, to the poorer people of the world. The existence of the greatest part of humanity in Asia, as in sub-Saharan Africa, and South and Central America, is presently in grave jeopardy. The collapse of North America and western Europe as markets for the peoples of Asia, would be a demographic, as much as an economic catastrophe for the great masses and nations of Asia. Taking all in all into consideration, the world is teetering on the brink of a prolonged and ghastly, planetary new dark age, partly because of what happened with Nixon, in Mississippi, in 1966.

Fools chatter triumphantly, with nasty tones in their voices: "You can't put the toothpaste back in the tube!" We must do precisely that, or our nation, and much else besides, will soon begin to die at an accelerating rate, planet-wide.

Therefore, our economic mission should be clear. We must rebuild that which we have destroyed in this manner.



Traveling around the United States today, "I am rightly reminded of the intention of some in the U.S., at the close of World War II, to impose the so-called 'Morgenthau Plan' on the Ruhr district, and other districts of Germany. Now, the aims of that 'Morgenthau Plan,' are being realized in Pittsburgh, the greater Detroit area, and so on, around the former great places of productivity of our republic." Left: Berlin in 1945. Right: Detroit.

Rebuilding a Ruined Nation

The task we face on that account, has a certain resemblance to the challenge which President Franklin Roosevelt faced in March 1933.

At the close of World War I, under President Woodrow Wilson, we began to take down, quickly, the power we had mustered in preparation for what Theodore Roosevelt and Woodrow Wilson had intended as our participation, sooner or later, in the war which the now-deceased emperor, Britain's "Lord of the Isles" Edward VII, had prepared to become the war in Europe. The war which he had intended would bring about the mutual destruction of all of the British Empire's principal European continental rivals. Under Presidents Coolidge and Hoover, and Andrew Mellon, the great wave of U.S. growth which had been launched during the 1861-1876 interval, was slowed, and began to be reversed, even before the 1929-1933 Depression. During the Presidency of Hoover alone, the level of the U.S. economy collapsed by about half over the interval until President Franklin Roosevelt took office.

Today, as the official Great Depression of 2004-2005 is about to erupt in force, we have already been gutted to a degree far exceeding that of 1929-1933. Where there was much less then, today there is often none. We have done this all to ourselves, more slowly over the 1966-1968 interval, more rapidly during 1969-1972, and at a stupendous rate since 1977. The greatest source of danger comes not from what we have lost in productive powers, but, rather, what we have lost of our former impulse to build that mighty machine of scientific and technological progress which had been, in Presidents Eisenhower's and Kennedy's time, the wonder of the

admiring and fearing world.

Meanwhile, we have destroyed ourselves, as once-mighty Athens destroyed itself, by its sophistry, in the Peloponnesian War. Not only have we done this to our own nation. Europe has, meanwhile, done the same to itself. Most of all, we have destroyed that commitment to a principle of progress upon which all of the preceding net achievements of modern, globally extended European civilization had depended.

Travel across this nation in your mind's eye. Look down as you go, constructing a mental map of each section beneath your eyes, assessing each strip for past and present potential relative population-density, per capita, and per square kilometer. In each case, compare the values of that strip for forty years ago, thirty years ago, twenty-five, twenty, fifteen, ten, five, and today. Assess each strip for quality of capital improvements in basic economic infrastructure, operating producers' capital, and so on, shedding tears at the loss of what had been there, but was destroyed as through the hand of a malicious, predatory negligence. Assess it all as in a lapsed-time photography, from past through to present.

Resolve that what was needlessly destroyed, shall be repaired, to a state of better than earlier condition. Agricultural areas shall blossom again, worn down towns and cities shall be brought back to life. Industry restored to new and shiny condition. There shall be a bright smile on faces on the way to work, laughter in the school yards, dinner shall be waiting on the table for the family's return from the passing day. The hellish malls have gone, and neighborhood stores are back once again. Schools and libraries are as they once were. Each

city and town has its local, privately owned machine-tool shops, and sundry other places of business, where people who know how to do their job, are making the nation tick with a bit of progress added, day by day. This is America, as good or better than it was forty years ago, returned to life. In these places, in your memory, in your imagination, people live, and people die, but in their coming and going they mostly leave something good, perhaps better, to be remembered. There is a whisper in the air of memory, an image of what this nation shall become again; this was good.

Think, for each strip where agriculture and industry has been abandoned, where the infrastructure has turned shoddy or simply gone: What has been lost to the nation as a whole? When we abandoned so many of these formerly industrious strips, to dwell in mushrooming superurban areas of cheap shacks or the like, crowded against one another where they were dumped, these past twenty years, on the abandoned cow-pastures of the area around Washington, D.C., and similar blotches on the national map, did the nation undergo a net economic gain, or loss?

How did the loss of capacity for generation and distribution of power, decay to a state of menacing rot today? Where did the mighty transcontinental railroads go, replaced by suburban rush-hour parking-lots perversely called dual highways? Can you step onto a modern train, in Bangor, Maine, and travel in comfort to Boston, New Haven, New York, Philadelphia, Baltimore, and Washington, to read and dine along the way to work, or to the day's appointment? Why not magnetic levitation travel, in less lapsed time, from door to door of the day's journey along trunk-line routes, than by commuter air? What have we done to ourselves, the nation that used to export progress, over these intervening forty years?

Look at the faces in our slums. Count the homeless, driven from their homes by what some call "our prosperity." How much of typical annual income, of people in the lower eighty percentiles of family-income brackets, must be spent to command a decent place of family occupancy? How has the cost risen under Alan "Bubbles" Greenspan's mortgage-based securities bubble; how impossible is it becoming to own even a shrink-wrapped, plastic-covered shack, called a grand "Mc-Mansion," a shack built by half-skilled, underpaid labor, imported from the poor of central America: what is the percentile of annual income for such housing, for even working couples in so-called upscale, suburban careers?

Are we not living in a parody of Aldous Huxley's *Brave New World*? Or, of his crony George Orwell's *1984*? Is your neighbor subsisting on provident "soma" today? If we were such a rich nation, how did so many among us become so poor? Why can we not afford today, the relative standard of health care we took for granted twenty, thirty, or forty years ago, and that becoming less, and less, especially for the poor and aging, as if day, by day, by day?



"If we were such a rich nation, how did so many among us become so poor? Why can we not afford today, the relative standard of health care we took for granted twenty, thirty, or forty years ago, and that becoming less, and less, especially for the poor and aging, as if day, by day, by day?"

"Things are better," says the man in the White House. The sound of "Prosperity is just around the corner," that man says; and you stop to wonder: "Where did we hear that, once before?"

End this nightmare of today! Put it back together again, better than it was, then.

Look down as you soar, look down at each strip of area as I have pointed out the true principles of physical economy in the earlier portions of today's report. What was the power which had built this nation up to what it had achieved by about forty years ago? Looking back to what was relatively good then, why was it not better, even back then? Why, then, had we fallen far short of what we might have done, had we employed more of our people as people should have been educated and employed? Think of the story of Prometheus, and the persecution of mankind by the evil Satan known as Zeus. Think of those men and women who lived, in one degree or another,

as virtual human cattle, their creative powers largely undeveloped and untapped. Think of the sound of cows in the barn at night; how often had we consented to do that to people, too? How do we today, tell our senior citizens to shuffle on when they have been unhitched from their daily plow, because their time has come to make room, to leave the feed-stall, to move on, to leave that space for the next, young cow to come into the barn? Ah! Surely, truly, we have come into Huxley's *Brave New World* today.

How could it have begun to happen as it did, since about

The greatest source of danger comes not from what we have lost in productive powers, but, rather, what we have lost of our former impulse to build that mighty machine of scientific and technological progress which had been, in Presidents Eisenhower's and Kennedy's time, the wonder of the admiring and fearing world.

forty years ago? What was so rotten in our national philosophy, that we permitted this to happen to us?

We are sometimes called "a Christian nation." What a terrible lie that is! We are a heathen nation. Children dare to raid the cookie-jar when mother is not watching. Professed Christians dare, most of the time, to hope that the Creator is not watching. Do we consider man and woman as made equally in the likeness of the Creator of this universe? Really? Do we place the highest value, therefore, on those immortal powers of the mortal human individual which are in the likeness of that Creator? Or, do we, like that terrible heathen grandfather of the treasonous Aaron Burr, Jonathan Edwards, lure fellow man and woman into the Inferno of Dante Alighieri's *Commedia*, crying, as Edwards cried up and down the Connecticut River Valley, "Enter my church, you miserable, worthless wretch!"

Did Edwards save anybody for something worthwhile? It is to be doubted. If we teach people that they are miserable wretches by nature, how shall we expect them to behave out of sight of the steeple? Usually, therefore, we should not be surprised by the result. They behave as the wretches Edwards told them they are. At such religious festivals, it is said, more souls were created, than saved.

Are the ministers of the churches better than that? Do they speak of the immortality of the living individual human soul, do they say to the deceased, "Come home, you good and

faithful servant"; or do they promise the living some future physical comforts and delights, but only "on the other side" of death? They do not believe in the beautiful nature of man and woman, as the courage of the Rev. Martin Luther King, faced with immediate assassination in the interests of "the Southern Strategy" of 1966-1968, attests such a nature; therefore, they do not believe in the Creator worshipped by the author of *Genesis* 1. They evade the fact, that we are bad when we are not true to our own beautifully immortal nature, a nature in the loving likeness of the Creator. They are, in their daily practice, the worshippers of the Satanic Zeus, not the Creator. They are closer to the Satanic Grand Inquisitor of the Martinist freemason Joseph de Maistre of the modern Synarchists, than most of them think.

Therefore, those who are good often put their mortal life at risk, for the sake of that mission which expresses their immortality.

Let us rid ourselves of the all-too popular hypocrisy of our current crop of wretched bigots. Ignorance is not innocence; and populism is the adversary of virtue. To this we attest by showing the spectacle of our wasted land, our bankrupt nation, forty years after the assassination of President Kennedy.

Such are the proper quality of reflections on the nature and implications of the practice of economics. Economics, as the science of physical economy attests, is the natural expression of the creative nature which distinguishes the human individual, and the truly human form of society, from the bestiality of a Thomas Hobbes, John Locke, Adam Smith, or the frankly Satanic Jeremy Bentham. It is the passion to do good, as Cotton Mather and Benjamin Franklin reminded our nation's founders, which is the active principle of a practiced science of physical economy.

For forty years, the prevalent trend of policy-shaping of our United States, among others, has been chiefly an opposition to doing good. The wasted prospect we might see from above, travelling across those decades, and the presently on-rushing doom of our national economy, and that of most of the Americas and Europe besides, attests to this fact.

Learn, therefore, to do good. It is the intention to do good which is the central principle of the science of physical economy.

As I have emphasized in the preceding chapter, a universal physical principle exists within the human mind only in the form of an *intention*. The individual may act with foreknowledge of the result at which his use of that principle is aimed, but the commitment to that particular form of action occurs to him as an intention which corresponds to a power existing within the realm corresponding to a Riemannian conception of the complex domain. *Intention* and *motive*, are terms of commitment to action, and express a form of action in and of themselves. Only once we are freed of the delusions of the Eleatic, the sophist, the Aristotelean, and the empiricist, do we begin to understand the meaning of intention and action,

by the Creator and the human individual acting in the likeness of that Creator.

The notion of doing good, as Cotton Mather and Benjamin Franklin embedded that intention within the building of our Constitution, is not simply the desire to see a certain result; it is, rather, a way of acting which produces a more or less foreseeable quality of result. So, the selection of a choice of proven universal physical principle, is an intention to unleash that principle, that intention built into the universe, against the target of action. The result is derived from that employed intention known otherwise as a universal physical (or, Classical-artistic) principle.

The good farmer of times prior to Brzezinski's ruinous tenure as National Security Advisor, acted out of an intention for progress, as if by a higher sort of reflex action. The fertile inventive mind did not respond to the need to solve a problem; he, or she responded to the opportunity to recognize a problem against which his or her inventiveness could be unleashed. This distinction which I have just emphasized, is not a matter of emphasis; it is a crucial distinction of one, relatively more sterile quality of emotion from a form of emotion (intention) which is intrinsically fertile.

For example. Shall we educate our young in a repertoire of individual scientific and related discoveries? Or, shall we develop in them the power to generate qualitative discoveries of actionable principles? The former is the morally and intellectually sterile Aristotelean standpoint; the latter the scientifically and economically fertile Platonic. Do they copy, or do they create through motives embodying intention? The development of a modern physical economy is the outcome of the latter quality of motivation.

Thus, the intention which drives a healthy form of economy forward, is the habit of seeking out pretexts for the discovery of valid intentions, such as scientific principles, applicable as ongoing action. For the purpose of sound economy, we do not produce computerized accumulations of mathematical formulas; we produce the scientists whose intentions generate the breakthroughs needed to push the development of mankind forward. We develop those creative powers which exist only in the Creator and in the human individual. We develop a profession in the individual, a profession which supplies the individual with not only known existing forms of intentions, but the intention to seek out the opportunity to discover new ones.

The working point under immediate consideration now, may be otherwise stated as the principle which defines the distinct quality of abiotic and merely living processes of the *Biosphere* from that higher state of organization of our planet, and of the universe, which V.I. Vernadsky defined as the *Noösphere*. To illustrate the working point, life acts as the form of intention inhering in life; so, successful society acts out of the controlling intention of development as I have described and discussed this principle in the present report. The action of life upon the abiotic domain,

produces the *Biosphere*; the action of those cognitive powers which set the human individual apart from and above the beasts, transforms the Earth from a mere *Biosphere* to a *Noösphere*.

So, life itself is an efficient intention. So, the cognitive power which sets man above the beasts, is an intention which generates the *Noösphere* by the virtue of its actual existence.

Now, looking over the terrain which we surveyed, implicitly, in our tour of flight over U.S. territory, the task of development of the nation as a *Noösphere*, requires a density of development accomplished by the intentions wielded by mankind, over each inch of that territory. It requires the development of the human individual in such a fashion that the intensity expressed by human action, per capita and per square kilometer, is increased at a relatively greater effective rate. Such is the spiritual quality of beauty in true physical-economic development of our nation's territory, and of the people who bring those improvements about at increasing levels of achievement.

Our intention must be to free mankind to become what it is, Prometheans free of oppression by Satanic forces like that of Olympian Zeus.

Therefore, as Cotton Mather and Franklin would have said, I say to you now, above all be *good*. Be, in an obligatory, Classically ironical form of intent of practice, in all matters, a good economist.

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