

How to save a dying U.S.A.

by Lyndon H. LaRouche, Jr.

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Nearly 2,400 years ago, history's greatest philosopher, Plato, premised his optimistic outlook for the future of civilization, on a rigorous scrutiny of those principles, by means of which mankind had risen out of even the most awesome among the types of natural and other catastrophes it had suffered during earlier ages.¹ Today's new threat of apocalyptic times, should impel us to examine, and to revive, once again, that lately neglected capability and wont of the human mind, by means of which the level of the human condition had been moved upward and forward, despite even the darkest among intervening periods of calamity.

Admittedly, this recently accelerated pattern of catastrophes around most of the planet, presents us with an increasingly desperate condition of the world at large. Presently, for all who understand the present situation, the world lurches toward the brink of a threatened, planetary new dark age; but, as Plato, among others, had assured us, this appearance should not be mistaken for self-evident proof that the situation is already a hopeless one.

Thus, we have come now, to such a perilous time for this planet as a whole, that hope of a future for our posterity must impel us to reflect on possible "last chances." We must weigh not only the currently accelerating, global succession of new disasters. We must also consider that contrasting progress, during the same time-spans, which had uplifted the human condition, despite often deep and prolonged, intervening peri-

ods of retrogressions, from Plato's time, up to the time of the globally catastrophic, 1901 assassination of U.S. President McKinley.

We have come into a time when the only basis for an optimistic outlook, is the fact, that history—and what we know of pre-history—shows us, beyond doubt, that there is something essentially good within human nature. Indeed, this is rightly recognized as *a divine spark of goodness*. As I shall present that case here, it is this spark of goodness, which has brought about the great steps of progress in the human condition, even despite the relatively "dark" ages, which have struck all or large areas of this planet at one or another past time. Among the relatively dark periods, we should include the two so-called "world wars" of our present, post-McKinley Century.

If we understand that essential side of real, rather than schoolbook history, there is reason for optimism about the future of mankind, even under today's increasingly catastrophic world conditions. A bright future could be within reach for coming generations, even despite the mass insanity which presently seems to grip, routinely, most among the leading powers and looted populations of this world, alike.

Recovery, or doom? The U.S. citizenry has no moral right to complain about the presently worsening situation. It is precisely they who had largely wasted, but still possess enough of that waning legacy of the Franklin Roosevelt Presidency, our residual military and political power, to be in a position to choose the brighter future for all mankind. We must use that remaining power, to change what has become very bad, for the better. We could succeed in that effort, only if you ceased encouraging your neighbor to continue his, or her presently ongoing descent into that apocalyptic nightmare of luna-

1. Plato, *Timaeus* and other dialogues. Among English translations are those in the Loeb Classical Library series (Cambridge, Mass.: Harvard University Press), which include the Greek text on the facing page.



The Death of Socrates, engraving after the painting by Jacques-Louis David. Faced with today's apocalyptic threat to the human condition, the Socratic method shows the way that the human race can make the creative discoveries required to save itself, even at this late hour.

tic, hedonist's fantasy, the widespread orgy of banal pleasures and greed which is the principal cause for the world's suffering today.

We have reached such a level of general moral, intellectual, and economic decline, that civilization could not now survive the threat of doom gripping the world as a whole, unless, as in past recoveries from analogous situations, new leaders of exceptional qualities are chosen. These must be leaders of the type which, as history shows us, may be summoned only from among the greatest poets and thinkers. Leaders of this type are now most urgently needed, to supersede the kind of overtly malicious, or simply pragmatic political leadership which the recent, misguided majority of public opinion has customarily preferred. *The nature, selection, and role of such a needed change in quality of leadership for these times, is therefore among the most compelling topics of strategic studies today.*

To illustrate this point, I shall pivot your attention on a typical case chosen from the history of Europe's Eighteenth Century. This is the case reported in the current edition of the Schiller Institute's *Fidelio* quarterly. It is the inspiring story of two young friends, persons whose names today's putatively educated and other political illiterates rarely even recognize, Gotthold Lessing and Moses Mendelssohn. This pair had come together in an effort whose outcome was to lead much of mankind into a great late-Eighteenth Century renaissance. That was the Classical Greek-based renaissance, premised chiefly on lessons from Plato, which gave the entire world

the greatest political, scientific, and artistic achievements of Europe's late Eighteenth and Nineteenth Centuries. This benefit of the work of Lessing and Mendelssohn, included a vital, decisive contribution to the founding and further development of the U.S.A. as a constitutional republic.

The relevant *Fidelio* authors, Helga Zepp-LaRouche, David Shavin, and Steven Meyer, have combined efforts, to show: At a time when the heritage of the greatest of the early Eighteenth Century's revolutionary scientific and artistic minds, Gottfried Leibniz and Johann Sebastian Bach, were intended to be consigned to oblivion, it was the collaboration of Lessing and Mendelssohn which saved civilization. This pair of collaborators unmasked the fraudulent, dilettantish claims of that so-called "Enlightenment" faction associated with the hoaxsters Maupertuis, Euler, Algarotti, Lagrange, Kant, and Voltaire.² This defense of the work of Leibniz and Bach, by Lessing, Mendelssohn, and their associates, contributed the most to making possible, all of the most important among the scientific, artistic, and political achievements of European civilization during the late Eigh-

2. Examples of dilettantish swill of that sort are such coquettish texts as Algarotti's "Newton for Ladies" and Leonhard Euler's fraudulent "Letters to a German Princess." In content, Kant's *Critiques*, his *Critique of Judgment* most blatantly, are of the same quality as the silliness of fellow-hoaxsters and Newton fanatics Maupertuis, Euler, Algarotti, and Voltaire. On the evil role of Euler follower Lagrange, see discussion of France's radical formalists, below. See David Shavin, "Philosophical Vignettes from the Political Life of Moses Mendelssohn," *Fidelio*, Summer 1999.

teenth and the Nineteenth Centuries.³

If you and your children, and their children, are fortunate, such rare individual leaders of the type of Lessing, Mendelssohn, and their immediate followers, will be sought out, fostered in their development, and accepted as leaders by much of today's, and tomorrow's population. Such is the quality of those leaders who may then lead you and your posterity, like the more fortunate populations of history past, upward and away from the doom which today's so-called popular opinion would otherwise bestow upon us all.

There is nothing magical about the apparently miraculous

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way in which such relatively rare individuals, such exceptional leaders, then or now, might rally a people to save itself from its own such folly. I mean such terrible folly as that intellectual and moral decadence which prompts today's public opinion to adopt its customary, mind-crippling choices in popular entertainment. If you are willing to think about the matter I set before you, and that with appropriate concentration, the secret of the seeming great miracles of past history can be recognized, mastered, and, hopefully, repeated.

3. My collaborators and I, writing in numerous locations, have documented the relevant evidence for music, physical science, and the successful founding of the U.S. republic. For example: without the defense of Leibniz and Bach by Lessing and Mendelssohn, there would have been no Haydn, Mozart, Beethoven, Schubert, Felix Mendelssohn, Schumann, and Brahms. Without the collaboration of Lessing and Moses Mendelssohn, the legacy of Leibniz and Bach would have been virtually wiped from the memory of Europe, done so by the circles represented by Abbot Antonio Conti and Voltaire. It is notable, and relevant to our principal argument here, that the fiercest hatred against the legacy of Lessing and Moses Mendelssohn, was focussed by the followers of arch-existentialist Friedrich Nietzsche and Adolf Hitler in their intended expulsion of the influence of the Jewish followers of Mendelssohn in Germany; but, the guilt also lies with the supporters of that hatred of the Mendelssohn Reform which his enemies directed against his Yiddish Renaissance followers more widely.

The present crisis

For example, if it were possible, that either of two among Wall Street's currently leading political dummies, George W. "Tweedledum" Bush, and Al "Tweedledee" Gore, could be elected President, it were then virtually certain, that the United States, as you have known it, would not outlive the first several years of the coming century.

The election of either of those candidates as President at this time of crisis, could occur only as the result of a decadent state of mind of the majority of the U.S. citizenry, and of their institutions. The triumph of such a state of mind in those elections, would ensure not only the presently onrushing collapse of the world's rotting financial system, but also the collapse of that already teetering physical economy, on which the perpetuation of existing populations depends. Such a collapse would propel the entire planet into a global "new dark age," a dark age comparable both to that which Europe experienced during the Fourteenth Century, and the earlier collapse of the evil Roman Empire. "That," as the fellow said, "is the bad news."

At the beginning of Summer 1999, that news is very bad. Under the present world financial system, you have either run out of, or nearly exhausted, all of your old options for personal and family security, financial or other. If you imagine this could not happen, soon, you merely delude yourself, as do most of those people who, as President Lincoln warned, are fooled most of the time. We have come to that threshold of decision, at which most of you must either radically change the way you think about politics and culture, or you might as well kiss your future goodbye now, while you have still the opportunity to choose.

How bad is the situation? Review a few of the leading, undeniable facts which oblige all sane and intelligent U.S. citizens to accept my seemingly ominous conclusion.

1. Despite the present, wishful delusions of a rapidly diminishing, but still wide majority of U.S. citizens, nothing can save the present world financial system. *The fact is*, that with the world's financial bubble already estimated at more than \$300 trillions equivalent,⁴ more than ten times the entire world's annual

4. The world financial bubble is underpinned in part by multiply-connected, reinforcing levels of leverage—debt at high gearing ratios. There are three principal forms of this leverage: First, is margin debt, the debt borrowings by individuals and institutions from brokers, to play the stock market. From the end of 1992 to the end of 1998, customer margin debt borrowing jumped from \$44 billion to \$141 billion, a compounded annualized growth rate of 21.4%. But from the end of 1998 to the end of May of this year, customer margin debt borrowing rose from \$141 billion to \$178 billion, an increase of \$37 billion. This is an annualized growth rate of margin debt for 1999 of 74.9%, unprecedented in U.S. history.

A second form of leverage underpinning the stock market is mergers and acquisitions, in which buy-out firms can borrow \$5 for each dollar of their own money that they employ when they take over a firm—that is debt leverage. A third form of leverage is stock-based derivatives—such as the Standard and Poor's 500 index future—which are used to play and rig the stock

real trade turnover, the biggest financial “crash” in world history is now inevitable, unless my “New Bretton Woods” design is adopted, the only available, workable alternative, to replace the hopelessly worthless present system.⁵

2. Fools think that if the financial crash could be postponed a bit longer, things could go along, perhaps with a bit of strain, but without a collapse of the system. *Such people are being very foolish. The fact is, that, already, the onrushing collapse of the world’s present financial system, has brought us into an era of an horrifying blend of spreading economic depression and political chaos, a condition now already spreading with growing force, into ever wider areas of the world.*

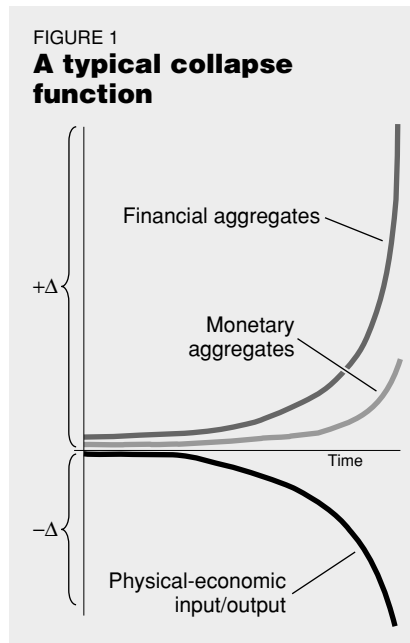
We see this pattern in the ongoing disintegration of the nations of South America, and in the continued U.S.A. toleration of the British monarchy’s and Vice-President Al Gore’s ongoing campaign of promoting AIDS and other modes of genocide against Africa. This deadly spread of economic collapse and chaos, is the direct result of such maddened fools’ hysterical efforts to postpone the inevitable, early collapse of the world’s present financial system.

Therefore, that pattern of increasing rate of demographic collapse, combined with cut-backs in real incomes, productive forms of employment, essential services, and production, already seen in Africa, South America, and elsewhere, is now being spread, at accelerating rates, within Europe and the U.S.A. itself. The driving force spreading doom is chiefly the successive waves of draconian austerity measures, like those of Germany’s pre-Hitler Brüning government, the attempt to eat the inedible, actions which, as I have repeatedly forewarned you, accelerate the collapse of *the political and economic system* by the very means forced through in the hope

market. The combined value of these stock-based derivatives is several trillions of dollars, out of approximately \$175 trillion in world derivatives overall.

When “reverse leverage” strikes, broker margin loans are called in, or investors have to dump stocks to meet margin calls; the derivatives bubble of options and futures collapses. De-leveraging in one sphere will trigger de-leveraging in another sphere, collapsing the system at lightning speed, since all these spheres are interconnected.

5. One of the measures which must be taken, if global chaos is to be avoided, would be a joint emergency declaration by a group of avowedly perfectly sovereign nation-states, to order the immediate nullification of all gambling debts, including those gambling debts typified by “derivatives” and kindred elements of a speculative financial bubble currently estimated as not less than approximately \$300 trillions equivalent (and still growing, that at a geometrically accelerating rate). That action would take more than \$300 trillions-equivalent of worthless debts—instantly—out of the world system, and permit an orderly, governments-directed reorganization-in-financial-bankruptcy of the remaining accounts of the global system. Without that specific form of action, and others in the same spirit, a descent into a global “new dark age,” resembling that of the Fourteenth Century, would be *physically* impossible to prevent.



of prolonging the *financial system*. [Figure 1.]

The Gingrich-Gore “welfare reform” of 1996, and the mass-murderous policies of Wall Street’s “managed health care” doctrines, both of which stampeded U.S. politicians have defended, are already typical of the way austerity- and free-trade-motivated genocide against black Africa is being brought home to senior citizens, AIDS victims, and others, inside the U.S.A.⁶ Under the present world financial system, and present U.S. law, these cut-backs will bring conditions like those now seen in South America, into the U.S.A. and throughout Europe—soon, and rapidly.

3. Consider the current upsurge of a greatly worsening financial crisis, in Europe, Japan, Brazil, and the U.S.A. itself. I forewarned you all, last Autumn, that this would be the case; but, from late Autumn, until now, except for some tens of thousands of citizens who have conducted themselves more wisely and responsibly in their support of my own and their common efforts, most U.S. citizens wishfully, foolishly rejected my warning. As if they were passengers clinging desperately to the sinking *Titanic*, most Americans, against all fact and reason, wishfully clasped themselves to the delusion, that the

6. Richard Freeman, “If You Get Sick, Will You Have a Hospital?,” *EIR*, June 18, 1999; Linda Everett, “‘Managed Care’ and Nursing: Back to the 19th Century,” *EIR*, June 18, 1999; Michele Steinberg, “America’s Missing in Action: Al Gore’s Genocide vs. the Poor,” *EIR*, June 25, 1999; Marcia Merry Baker, “California Destitution Rises as Welfare Ends,” *EIR*, June 25, 1999; Marianna Wertz, “How a Crime against Humanity Worked in Philadelphia” and “Mississippi: ‘Reform’ Where There’s No Work,” *EIR*, June 25, 1999.

Federal Reserve's Alan Greenspan had miraculously saved the system.

This already ongoing process of threatened disintegration of civilization as a whole, has been accelerated by the refusal of the U.S. government to face the ugly reality which continues, still, to underlie the August-September 1998 collapse of Wall Street's Long Term Capital Management (LTCM) syndicate. The renewed war against Iraq and the new Balkans war, were direct results of the follies adopted by the G-7

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nations during the October 1998 meetings in Washington, D.C. We are presently headed in the direction of actually nuclear warfare in the not far-distant future—possibly with Russia, for example, unless U.S. public opinion, on many subjects, suddenly changes its ways in the meantime.

Therefore, under those conditions, conditions in which a duped U.S. electorate might take seriously the candidacy of pathetic creatures such as Bush or Gore, the worst features of the recent downward trends in the global economic and strategic situation would be controlling. The nation's choice of that type of candidate, would show itself to have been a folly which had shaped the destiny of our society as a comet's destiny is determined by its orbit. Once you choose to lie in that orbit, "free fall" does the rest: your fate is chosen for you. The results of lying within such an orbit now, would then be early and hellish.

These and related trends, show, that the election of either of those two political dummies, Bush or Gore, would be a terrible tragedy for our nation and its posterity. Such an election would signify that the overwhelming majority of the U.S. population had lost what China's tradition terms "the Mandate of Heaven," or, in the language of the European Christian tradition, "the moral fitness to survive." In that case, most U.S. citizens—most of whom still have the power to vote—would have no reason to complain against anyone as much as their own foolish selves.

To see the causes for the threatened doom of our nation, look at yourselves in the "fun house" mirrors of the present Bush and Gore candidacies.

Admittedly, in both of those "Third Way" types of candidacies, there is a pervasive stench of a quality of intellectual and moral mediocrity, which seems to reach down, like the legendary woodbine, into satanic roots.⁷ Such is the character, or lack thereof, in both the "wise guy" style of these "classy" candidates themselves, and of the circles immediately behind them. The fact that any among you, who should have recognized that stench in those candidacies, could consider supporting either of those two specimens of our national self-disgrace, ought to be taken as a warning of your own complicity in the onrushing doom of our financially bankrupt nation, and of its collapsing real economy.

Nonetheless, although those are typical of the true facts about our present situation, I remain an optimist. I am neither predicting the Apocalypse, nor suggesting that an admittedly, seemingly miraculous change for the better in the morals of our population might not save us, even at this late date. Think about the good news, such as it is.

For example: I remember vividly that Sunday morning, December 7, 1941, when a great shock awakened the U.S. population to reality. This shock, combined with the assuring leadership of President Franklin Roosevelt, brought about a sudden change for the better among most of the population of our nation. This change saved the United States then. If—but, only if—the right leadership were chosen by you, the citizens, the inevitable new great shock now awaiting you, could bring this nation out of the pit, once again.

I also remember, with still vivid memory of my profound sadness and bitter disgust at that time, how our nation, and most of its people, retrogressed, repeatedly, as I watched the majority among my fellow-veterans degrade themselves, after the untimely death of President Franklin Roosevelt. I have seen our nation degrade itself still further, now with potentially fatal results, in the aftermath of the assassination of President John F. Kennedy.

We have been through such apparent cycles of doom and renewal several times in our nation's history. So far, we have been relatively fortunate over the longer run. During the past, we have, from time to time, chosen from among us the kinds of exceptional leaders who would rally us to overcome the popular follies of an earlier decade; thus, we survived until now. At other times, unfortunately, as President Lincoln said, most of our citizens have been fooled most of the time, especially by the mass media, notably during the recent Presidential elections of 1968, 1976, and 1988, and the Congressional elections of 1994 and 1996.

7. There is no difference, in content, among the "Third Way" of Al Gore and Britain's Prime Minister Tony Blair, former House Speaker Newt Gingrich's and Alvin Toffler's "Third Wave," and the "compassionate conservatism" of Mortimer Snerd look-alike George W. Bush.

The U.S. was ruined, economically and morally, by the influence of British agent of influence Albert Gallatin's "free trade" policies, under Presidents Jefferson and Madison.⁸ We were rescued from that threatened doom, by Presidents Monroe and John Quincy Adams; but, we degenerated under Wall Street-controlled Presidents such as van Buren's stooge, Andrew Jackson, and the catastrophic Presidencies of van Buren himself, Polk, Pierce, and Buchanan. We were saved, once again, to emerge to great power in the world at large, under President Lincoln and such leading figures as Garfield, Blaine, and McKinley, who continued the Lincoln legacy.

Then, the assassination of McKinley brought down upon us the catastrophic era of Presidents enflamed by their love for the tradition of the Confederacy, such as Teddy Roosevelt, Ku Klux Klan enthusiast Woodrow Wilson, and Coolidge, too; but, once again, our nation was rescued from that by the leadership of President Franklin Roosevelt.

The only predictions I am making, are two. First, I warn you, that conditions have become so bad, so perilous, and most public opinion so foolish, that only a seeming miracle might occur in time to save us. Second, I assure you that such a seeming miracle is still possible, but the fact which makes such a rescue seem miraculous, is, that there is not much time now remaining for your neighbor to choose to come to his, or her senses — at long last.

What you, the citizen, need to know, most urgently, is how such seeming miracles have been brought about in past times, and such might occur, again, now. You must know how most among your neighbors, each as an individual, must each change his, or her own presently foolish opinions, and that radically, in order to help you make the much needed miracle possible now.

First, now, examine the principled issues involved in saving this nation. Then, this strategic study will turn your attention to the method by which those principles are to be applied.

1. The goodness within you

After all else is said and done, the best of the good news remains, as the prophet Moses taught this, that there is an essential, divine spark of goodness, an image of the Creator of the universe, embedded, as like a spark of life, within each newborn child.

This is not an arbitrary doctrine of blind religious faith. The truth of Moses' teaching, is supported by the most rigorous, most unique of all physical-scientific evidence. This evidence is, that that quality of cognition called *Reason*, which is unique to the member of the human species, is the means by which mankind, and mankind alone, is able to secure increasing dominion, willfully, within the universe.

8. Mathew Carey, *The Olive Branch*.

On that account, as Gottfried Leibniz insisted, this Creation is the best of all possible universes. You might wish to congratulate yourself: your soul has chosen the right universe to inhabit, rather than one among the awful alternatives proposed by Leibniz's adversaries. That, in itself, is already very good news.

Yet, in practice, society has always fallen far short of that unique standard of goodness which is innate in each human individual. *There's the rub!* That paradox defines the underlying principle on which our hope of a seemingly miraculous

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rescue of this civilization must be premised now.

The paradox may be summarized in the following way.

If, as Leibniz said, this is the best of all possible universes, and, if man, as a species, has that unique quality of inborn goodness which empowers him to exert dominion within that universe, what is the cause of all these avoidable miseries which afflict us today?

In our response to that paradox, let us put to one side those calamities which are fairly attributed to natural causes. These kinds of troubles "go with the territory," so to speak. Therefore, we must locate the cause for great calamities other than those which are attributable to the natural causes which we, so far, lack the means to correct. We must restate the paradox with that distinction in view.

Therefore, to define the problem in an appropriate way, take a lapsed-time view of the matter. Think in that lapsed-time image as it might be expressed, in first approximation, over a combined past and future span of billions of years of human existence. See those billions of years as expressed in terms of successive, validatable changes, changes flowing from additional discoveries of universal physical principle. If we state the paradox I have outlined within that frame of

reference, then, as I shall indicate summarily, in due course below, it should become clear to us, that mankind has the innate power, as a species taken in the wholeness of its existence, to bring the natural calamities of this universe increasingly under mankind's control.

Next, adopt the idea of compressing that lapsed-time view, and its included billions of years of successive validated discoveries of universal physical principle, into the span of an hypothetical individual person's thinking lifetime. Look at the succession of validated discoveries of universal physical principle in this way. We are now positioned to put the issues of combined natural and man-made calamities into the kind of perspective needed for understanding the true nature of the great, menacing paradox which I have identified in the opening section of this report.⁹

Situate the shortcomings of human behavior within that latter perspective.

Now, focus this investigation upon both the case of an original, validatable act of discovery of universal physical principle, and include in this the subsequent act, by the discoverer, which provokes the same act of original discovery, of that same universal principle, within the mind of a second person.

With that latter intent kept in view, let us define the natural condition of mankind, provisionally, as that state of mind. That is the same state of mind which leads humanity to overcome, eventually, virtually all those naturally caused afflictions, those which might threaten the assigned mission of our species' entire existence.

Let us concede, that those imperfections of human knowledge which are mankind's inexhaustible opportunities for fundamental scientific progress, shall never vanish completely within any finite time, no matter how many billions of years pass. Thus, we must humbly exclude the notion of absolute knowledge from our considerations here. Let us therefore define that goodness of the human mind, its power for validated discoveries of universal principle, in terms of its knowably expressed efficiency. See this in lapsed-time terms, as if by successive approximations of man's increasing power in the universe, over a span of billions of years of what is, in net effect, progressive human endeavor in this direction.

Let us agree now, to define the possibility of the perfection of mankind in accord with that goodness. Let us, for the moment, burden the term *perfection* with no other requirements than *successive addition of validated discoveries of universal physical principle*. As the great Sanskrit philologist Panini would have remarked, "perfection" is not a noun, but a verb. Or, to say the same thing, as Heracleitus and Plato insisted,

9. This will be recognized by literate modern philosophers and theologians, as an echo of the concept of "the simultaneity of eternity." The functional significance of that concept, as it bears on solving the paradox posed afresh here, will be made clear below.

nothing is constant except change.¹⁰

Once any among us has adopted that compressed view of human progress, as sampled from billions of years of combined past and future human existence, and as I have summarily described that process here, there is a resulting, immediate, most profound change of that individual's state of mind. The resulting state of mind differs most profoundly from that simple-minded, nominalist's sense of personal self, which pervades popular opinion today. The better state of mind, is true of such scientific minds; it is also true of the minds of masters, such as Ludwig van Beethoven or Friedrich Schiller were, of those Classical forms of artistic composition which trace their origins to, chiefly, Plato's Greece.

That profound difference in state of mind, so induced, even when expressed only in approximation, defines the required moral quality of world-outlook among the qualified leaders of society's times of deep crisis. This is the quality which sets those leaders of a nation, who are appropriate for a time of great crisis, apart from the more primitive, fumbling state of mind, the more barbaric state of mind, which is pointed toward by a conventional use of the term, "the practical politician."

That difference in state of mind, is key to solving the paradox we are addressing here.

Now, let us identify a real-life experience, of a type which each among all properly-educated students of physical science has shared. This experience represents, if only as a moment, the quality of goodness which corresponds to the quality of state of mind of all great leaders of society, science professionals or otherwise. Let us turn attention now, to the model case: the enactment, or student's re-enactment of a discovery of a validatable universal physical principle. Choose, for this purpose, the typical case of a re-enactment of such a discovery of universal physical principle as by one student, and then include in that same phenomenon, that first student's action in provoking a similar, non-deductive, creative experience of discovery within the mind of a second student. As Plato's *Parmenides* implied: focus upon the *change* effected by the action which prompts the replication of the discovery by the second of those students.

How reason is defined

Three multiply-connected aspects underlie the phenomenon I have just described. It is those aspects of that phenomenon, which set the cultivated intellect of the exceptional leader of society, apart from, and above the world-outlook of the more small-minded, so-called "ordinary, practical" person.

The first, is the Socratic principle of ontological paradox: A deeply embedded reliance upon those methods, by means of which validated discoveries of universal

10. E.g., Plato, *Parmenides*.

physical principle are generated. This is otherwise known as Plato's principle of Socratic truthfulness and justice, as developed in the great dialogue recognized more popularly by the name *The Republic*.¹¹ This is otherwise knowable as the principle of perfect sovereignty of the act of knowing through non-deductive modes of cognition (i.e., *Reason*).

The second, is fairly described as the Classical-artistic sense: cultivated by the person who has generated—or, regenerated—a validatable universal physical principle, who then fosters the generation of the same sovereign individual cognitive act of validatable discovery in another person.

The third, is the discovery of those validatable universal principles, beyond merely physical principles, of that Classical-artistic form, which subsume the capacity of society to cooperate to the practical—e.g., physical-economic—effect of increasing mankind's power within the universe. These principles are typified in expression by those Classical forms of poetry, tragedy, plastic arts, and musical composition coherent with the development of the notion of the *idea*, as Plato defines this. This is typified by compositions modelled upon the role of the idea in Classical Greek productions of plastic and non-plastic arts.¹² These Classical-artistic principles, as applied to the subjects of history, Socratic natural law, and of other matters of statecraft, provide society the means to rally itself in that rational form of cooperation needed for the successful great enterprises of human scientific and other progress.

It is an essential fact, that no validatable universal physical principle could be generated by methods consistent with deductive methods. Cognition occurs only within the sovereign privacy of the cognitive activity of an individual person. Thus, *ideas*, as typified by a validated discovery of a universal physical principle, can be communicated from one mind to another, in but one way: replication of the cognitive act of discovery

11. This Platonic connotation of the term “republic,” defines the scientific-legal meaning of “republican,” as in direct contrast to the characteristics and customs of an oligarchical form of society. British ideology typifies today's anti-republican, oligarchical mind-set.

12. For the case of musical composition, the development of polyphonic musical composition out of its roots in the vocalization of Classical (e.g., Vedic-Sanskrit and Greek) poetry, begins its modern development with the Fifteenth-Century Florentine *bel canto* singing, as the principles of vocalization were systemized by Leonardo da Vinci. What proved to be the decisive development, was the perfection of principles of well-tempered tuning and polyphony by J.S. Bach, that through Wolfgang Mozart's revolutionary examination of such Bach compositions as *A Musical Offering*. This produced the modern Classical principle of well-tempered polyphonic thorough-composition, which became the standard of Mozart, Haydn, and Beethoven, as continued through the last works of Johannes Brahms.

in the second mind. In this process, there is no reliance upon deductive methods, except for purely negative, auxiliary activities (e.g., reduction to absurdity).

Thus, the attachment of a notion of truthfulness to any notion of a universal principle, such as a universal physical principle, requires that certain special conditions be satisfied. The hypothetical discovery of principle, made as a sovereign act of one mind, requires empirical validation of a special type.¹³ For such a notion to be shared among two or more individual minds, each must have experienced the cognitive act of generating that idea, and must also share knowledge of the empirical validation of the notion as being a universal physical principle. If those conditions are fulfilled, the shared belief can be called a truthful belief.

What I am about to write at this juncture, is crucial. It might, in fact, be the most important idea ever presented to you. It, most probably, is just that. I shall craft the elaboration of this point for you with special carefulness, with a keen sense of the unfamiliar sorts of difficulties which you might experience in coming to grips with any idea of such exceptional importance.

What most of you have been taught, as the modern Aristotelianism of the mortalist Pietro Pomponazzi, or, as the empiricism of Galileo, Cartesianism, philosophical materialism, Kantianism, and so on, is false, but, as the record shows, all too easily believed by today's credulous people. Most among you were mistaught, thus, the popularized falsehood, that the connection among observed sense-phenomena can be reduced to a system of deductive relations.¹⁴ Through the growing influence of the mental disorder known as mathematical formalism, you were lured into believing the lie, that the physical universe can be reduced to a mathematical scheme consistent with such a system of deductive relations.¹⁵ While my subject here is a matter of moral issues, rather than issues of physical science as such, it is necessary to touch sufficiently on the scientific issues to make clear the moral significance, the intrinsic immorality, of those systems of belief based upon an asserted universal principle of deduction.

The delusion, that the relations among phenomena are connected in the form of deductive relations, requires the implicit adoption of the axiomatic assumption, that the ele-

13. i.e., Bernhard Riemann's requirements for a *unique experiment*. Bernhard Riemann, *Über die Hypothesen, welche Geometrie zu Grunde liegen* (1854).

14. This is immediately clear in the cases of the most radical logical positivists, such as the followers of Ernst Mach, Bertrand Russell, and such Russell disciples as Norbert Wiener and John von Neumann. However, these radicals have but carried to an extreme the more general practice among the modern followers of Pietro Pomponazzi, Paolo Sarpi, René Descartes, Kant, et al.

15. The August-September 1998 virtual bankruptcy of the Long Term Capital Management (LTCM) syndicate, an effect caused by blind faith in the Nobel Prize-winning Black-Scholes formula, is an example of the effect of the same kind of mental disorder, earlier featured in the Seventeenth-Century tulip bubble and the Eighteenth-Century South Sea Island and Mississippi bubble.

mentary principle of physical action in the universe, is of the form of linearity in the infinitesimally small. All attempts to derive a proof of principle, by applying today's "generally accepted classroom mathematics" to the blackboard, or in an analogous manner, are consistent with the axiomatic absurdity of assuming that the celebrated "limit theorem" of Augustin Cauchy's widely taught, but corrupted version of the Leibniz calculus, corresponds to physical reality.

In reality, as the earliest known valid forms of solar astronomical calendars, and related ancient practices of transoceanic navigation, show, the mind of the crafters of those calendars and navigational methods, measured action in the universe in terms of what we call today physical space-time curvature: in angular measurements. The ancient Greek scientists, for example, knew that the Earth orbited the Sun, had estimated the distance to the Moon (crudely, but significantly), and had measured the Great Circle circumference of the Earth. The ideas of "linearization in the infinitesimally small," like the deliberate frauds of Claudius Ptolemy's hoax, were influences dumped by ancient Latin Rome upon a post-Hellenistic Europe. These beliefs persist in today's ideologies, as relics inherited from the catastrophic cultural decay of the Mediterranean region, under the influence and aftermath of ancient Rome's rise to that inherently decadent form of imperial power, from which European civilization has not fully freed itself to the present day.¹⁶

16. Among the Jews and Christians of the First Century A.D., the Rome of Augustus, Diocletian, and Nero was known as "the New Babylon." The same conception appears in the Apostle John's dream of the Apocalypse, in the image of Latin Rome as "the Whore of Babylon." The Roman Empire was, in fact, modelled consciously by its architects upon the model of the ancient empires of Mesopotamia. This is the same "Whore of Babylon" on which the British monarchy has explicitly modelled itself, its Empire, and its Commonwealth, since the time of the Eighteenth Century's Lord Shelburne.

During the Eighteenth Century, the effort of the British monarchy to model itself on the legacy of ancient Rome, was recognized by the term "Romanticism." The term "Romanticism" has the same connotations on the continent of Europe during the same period. The British monarchy's recognition of the Roman Empire as based on the Babylonian form of the so-called oligarchical model, is reflected in the fraudulent version of history, which traces the origins of civilization to ancient Mesopotamia, and which therefore denies the simple fact, as reported by Herodotus, that the first known Mesopotamian branch of civilization was founded by what Semites of the time described as "the black-headed people," as the Dravidian maritime colony known as Sumer.

Thus, the legacy of ancient Rome occurred as a great set-back to Mediterranean civilization, a cultural degeneration which began about the time the Latins butchered Archimedes. Most of the leading traditional follies of European science and culture, still today, are, like France's Code Napoléon, products of the cultural decadence strictly identified by the term Romanticism.

For these reasons, every renaissance in extended European civilization, from the time of Christ to the present day, has been, as Augustinus appreciated this, a product of the revival of the pre-Roman legacy of the Greek Classic against the burden of that cultural disaster known as the Roman legacy, or, in modern times, Romanticism. This was the specific form of the controversy between the European Classical versus Romantic currents of art and science of the Eighteenth and Nineteenth Centuries.

In modern times, since the fraudulent empiricist doctrine was taught by Kepler-hating Paolo Sarpi to Sarpi's household lackey Galileo Galilei, it has become conventional to assume that space, time, and physical action proceed in straight lines, unless bent by applied external force. The more intelligent, pre-Roman ancients thought differently; they recognized that our knowledge of the universe, as defined by solar astronomical calendars and related practices of navigation, knew regular action only in the form of curvature, as angular displacement. The internal evidence shows us today, that these pre-Romans constructed their best solar-astronomical calendars on the basis of attempting to normalize observations, as France's anti-Newtonians Carnot, Fresnel, and Ampère did (for example), to conform to a system of interacting, elementarily spherical "least actions," not straight-line actions.¹⁷

The fact is, as I shall summarize this below, that no validatable universal physical principle can be generated by deductive methods.¹⁸ This signifies that man's practical power in the real universe lies outside the domain of any deductive schematization of mere phenomena. The fact, that humanity's increased power in the physical universe occurs only through the cognitive act of discovery of new universal physical principles, means, that the form of the mental action by which humanity's power is increased, is to be ascertained by investigation of the form of the uniquely creative act of individual cognition itself.

Therefore, since the universe shows itself to be obedient to nothing but the discovery of validatable universal physical principles, principles generated by cognition, the geometry of universal physical-space-time must have a characteristic curvature which is congruent with the form of action represented by cognition. Now, examine that argument summarily.

If efficient action in the universe is not primarily straight-line, but elementarily curved: *What is its curvature?* The world waited until Riemann's 1854 habilitation dissertation, to read the answer to that question adequately stated in first approximation.¹⁹ But, we must go further than Riemann does,

17. Regard "spherical action" here as an approximation of regular, but non-constant curvature. The latter includes not only conic sections, such as Kepler's ellipse, but curvatures from the higher orders of hypergeometry. Although the Leibnizian notion of "least action"—e.g., regular non-constant curvature—can be traced to the catenoid-caustic relations presented by Leonardo da Vinci, the generalized notion of regular non-constant curvature as "least action," was introduced by the Johannes Kepler who relegated the mathematical problems involved to "future mathematicians." Thus, the Leibniz calculus; thus Leibniz's corollary *analysis situs* and monadology. The catenary-tractrix case, served as Leibniz's stepping-stone toward what later emerged as the hypergeometry of the Gauss-Riemann multiply-connected manifold.

18. The so-called "law of entropy," as introduced by Clausius, Grassmann, Lord Kelvin, et al., is no law of nature, but simply a result of a foolish effort to reduce science to nothing more than a deductive theorem-lattice.

19. op. cit.

as I did in my own original, 1948-1952 discoveries respecting the branch of science known as physical economy.

As I shall now set forth the case, man's knowledge of the lawfulness of the universe, is delimited to that proof of practice by means of which man's power in the universe is increased. *Man proves that he knows the universe only to the degree that man is able to change that universe's relationship to the human species. This is, therefore, the only literate meaning of the interchangeable terms "cognition" and "creativity" within the provinces of physical science.*

Since man changes that relationship successfully only through cognition, it is only to the degree we are able to acquire a mental image of the action performed by cognition itself,²⁰ that we are able to define the nature of a quasi-regular, non-constant curvature of the real universe we inhabit. In turn, *it is only through the cognitive action of one mind in conceptualizing a validatable discovery of universal principle by another mind, that the "image" of cognitive action itself can be "visualized."*²¹ The study of the relationships among individual cognitive processes, from the standpoint of such forms of cognitive insight, leads to the discovery of a new array of universal principles, typified by the best work of Classical forms of artistic composition, such as the Bachian form of well-tempered thorough-composition developed by Mozart, Haydn, Beethoven, Brahms, et al.

Now, keep that notion, of the *mental image* of the curvature of cognitive action, in view, as we now proceed. We shall return to this matter a short space later.

This quality of social relationship among what are each absolutely sovereign cognitive processes, is thus the essence of a truthful—e.g., Socratic—meaning-of-the-meaning of truthfulness.²² This truthful notion of truthfulness is essential for the social act of applying discovered universal physical principles as the authority for changes in social practice.

For example, the question whether science is truthful, or not, requires proof that, through scientific and technological progress, mankind's power in the universe is increased. This means mankind's ability to *increase its power to exist by no other means than such discoveries of principle*, and to include

20. i.e., Platonic *idea*. Images are of two types, perceptual, and those other, more important images, such as images of microphysical processes, which are beyond the capacity of sense-perception. The standard of truthfulness of the claim for the existence of a Platonic idea is Socratic truthfulness. Truthful mental images are as definite as images based on sense-perception, and have a more immediate correspondence to the physical world than mere sense-perceptions.

21. Hence, as some British psychiatrists have lately confessed, some of the world's worst modern philosophers, such as Thomas Hobbes, Newton and Kant, never married. Other bad philosophers may have married, but of course, have been so occupied with changing sexual partners, that they, too, find no breathing-space for love.

22. Why should it not be required, that the definition of truthfulness must itself be truthful? I.e., Socrates versus both Thrasymachus and Glaucon, in *The Republic*.

in the requirement of existence, the perpetuation of still greater powers, per capita and per square kilometer, by succeeding generations. In other words, progress as I have defined it for the science of physical economy, as measurable in terms of the human species' increasing of its *potential relative population-density*.

Thus, it is the nature of cognition, as knowable through the social relations among the individual cognitive processes sharing independently generated, validatable discoveries of universal principle, which is the most crucial issue in our efforts to define mankind's nature in a rigorous and truthful way.

In the first approximation, those social relations are expressed in terms of discovery and application of validated universal physical principles. However, as I have already emphasized above, the exploration of the social relations associated with individual cognitive processes, leads us to discovery of other sorts of validatable universal principles, other than what are recognized as universal physical principles.

The universal social principles, so defined, are typified by Classical artistic compositions, as typified by the Classical Greek models. However, if we recognize the efficient role for statecraft contributed by the mind cultivated in the composition of Classical art-forms, we recognize that history and statecraft, as those subjects were defined by Friedrich Schiller, for example, are properly studied as Classical art-forms, forms with the same characteristics as what are more narrowly defined as Classical sculpture and painting (Scopas, Praxiteles, Leonardo da Vinci, Raphael Sanzio), Classical tragedy (Aeschylus, Sophocles, Shakespeare, Schiller), Classical musical composition (Leonardo da Vinci, J.S. Bach, et al.).

Not only do Classical art-forms represent validatably universal principles, as do history and law when the latter are practiced in congruence with Classical-artistic standards. Society could not prosper without governance according to this array of multiply-connected universal principles.

The relationship between, and distinction between the principles of physical science and of Classical artistic composition, are crucial for attempting to understand either. It is this set of distinctions which accounts for the image of a mathematical formalist, such as systems analysis' John von Neumann, or the notorious Laplace earlier, as "a dead man talking"—a soulless automaton at the classroom blackboard. From the standpoint of the formalist, the difference between science and art is the *passion* which formalism prides itself upon banning from the scientific deliberations among the dispassionate talking dead of the formalist's lecture hall. Ah! But this is also the exact difference between mathematical formalism and validatable discovery of new universal physical principles!

The quality of cognition which will not let a paradox go, until a validatable discovery of principle has resolved the issue, and the joy which accompanies that discovery, typify the qualities of passion intrinsic to valid scientific discovery

and the Classical-humanist classroom's fostering of the re-enactment of original discoveries of scientific principle. These are the same qualities, identified by the Classical Greek term *agapē*, the term which appears as Socrates' passion for truthfulness and justice—in opposition to Thrasymachus and Glaucon—in Plato's *Republic*. This is also the passion which underlies all valid generation and reproduction of Classical artistic composition.

The face of the enemy is so exposed. The formalism—such as mathematical formalism—which characterizes the scientific opinion of the classroom's talking dead, is an alien to the innate nature of the human individual and social relations. It is the pseudo-art which eschews the standard of scientific rigor for art. Indeed, it is the passions seated within the domain of principles of Classical artistic composition, which motivate all of the accomplishments properly associated with the name of physical science.

The role of humanist education

In Schiller's and Humboldt's specifications for anti-Kantian, Classical humanist forms of education, the emphasis is upon the indispensable moral quality of an educational system which is based upon the principle of knowing through cognitive re-enactment, rather than mere learning. Textbook learning, is what is to be avoided on this account. The purpose of a universal secondary education premised upon Classical principles, respecting matters of science, art, and statecraft, is to develop the personal character of the student into the form of a Classically cultivated mind.

The function of Classical humanist education, and the proper function of all decent modes of public education, is to educate the inseparable passions underlying both physical science and Classical art. We must not teach the student what to think, but lead him or her into discovering how to think cognitively. If you are right, and if he thinks cognitively, he is likely to come to the same conclusion you have reached in that way. We must cease to be a society which shares taught opinions, and become instead, a civilized society, one which actually thinks in a human, that is, cognitive, way. That is the proper mission of universal education. In this way, education of that sort brings forth the innately human qualities of the young individual, those qualities which are in accord with the divine spark of Reason.

Such cultivation of the individual mind along the lines which Wilhelm von Humboldt, after Friedrich Schiller, defined as the principles of Classical humanist secondary education, typifies the way in which a society may develop at least a significant ration of its maturing youth into developing their potential as future foremost and secondary leaders of a society.

The scrutiny of those principles of Classical humanist education, as met among the earlier Brothers of the Common Life, France's Oratorians, and some other leading examples of the European Augustinian tradition, is key to knowing the

quality of difference between the relative moral frailty of the so-called practical citizen, and the higher moral powers for leadership of the cultivated Classical mind.

During my lifetime, in the United States, only a small fraction of the actual development of the mind of the student occurred within the classroom and related educational settings. Formal education never gave more than a sketchy outline of elements of human knowledge. Rarely did any of that formal education represent the prompting of the student's cognitive re-enactment of a validatable universal principle.

Rather, at best, from the combination of childhood nurture, books of a certain quality, and the schoolroom, a certain amount of cognitive generation of knowledge occurred. The child's playful sense of pleasure in these cognitive experiences, would prompt the child and adolescent into those voluntary plunges into cognitive activity, which produced the exceptionally cultivated mind thus exhibited by some among the adolescents or young adults. That cultivated state of mind defines the category of *Reason*.

There was a rapid degeneration of U.S. education on this account after World War II. Evidence of today's educational practices and related cultural impact on the child and adolescent, is simply awful. Today's younger generations are, therefore, far less *reasonable* than those of the U.S. veterans of World War II—and I was, quite justly, not excessively satisfied with the performance of my own and my parents' generation on this account.

It is from this standpoint, including the standpoint of my branch of science, physical economy, that the paradox posed above may be solved.

2. The individual act of reason

Now, focus more sharply on the relationship between an individual paradox of the so-called "ontological" form, and the nature of the kind of discovery of principle which this paradox requires. I have addressed these matters at varying length, and in varying depth, in numerous earlier locations. I now present a compacted summary of those points, as they bear directly upon the issue of political leadership being treated here. I begin with the case for discoveries of universal physical principle.

As a matter of preparing the assault on this topic, the actual nature of the cognitive act of discovery of a validatable physical principle, I include a summary restatement of points already introduced above.

From the standpoint of deductive method, any rationally coherent system of formal knowledge can be reduced to a theorem-lattice underlain by a single, multiply-connected set of definitions, axioms, and postulates. Such is the underlying, purely formalist misconception implicit in the way mathematical physics is taught and believed in most locations today.

The contrary view, on which the mid-Fifteenth-Century founding of actual modern European experimental science of measurement was premised, represents one of the most important of the revivals, this by Cardinal Nicholas of Cusa and his followers, of the Classical Greek way of scientific thinking associated with such leading figures of the famous Academy of Athens as Plato and Eratosthenes.

The legacy of Cusa's influence is typified by the succession of such figures as Leonardo da Vinci, Johannes Kepler, William Gilbert, Desargues, Fermat, Pascal, Huyghens, and Leibniz. The crucial breakthrough, after the work of Leonardo, was provided by Kepler, especially Kepler's definition of the characteristic, elementary form of physical action in the universe as regular non-constant curvature. Kepler's work led directly to Leibniz's founding of the original calculus, in 1676, a calculus based upon the elementarity of regular non-constant curvature, as opposed to the linear mentality of Galileo, Descartes, Euler, Lagrange, Laplace, Cauchy, et al. In other words, Leibniz's original development of the calculus is coherent with the notion of *analysis situs*, or "geometry of position."

The continuing residue of the influence of Leibniz in late-Eighteenth-Century France and Germany, led to the convergence of, and collaboration in the work of the Carnot-Monge circles in France, and the circles of 1806-1827 *Ecole Polytechnique* member Alexander von Humboldt, and Humboldt's continuing collaboration with Carl F. Gauss in Germany. Out of the confluence of, and interaction among these Platonic currents of modern science, there emerged the Gauss-Riemann conception of a universal *hypergeometry*, otherwise described as a series of "multiply-connected manifolds;" this was defined as a series, by physical, rather than mathematical-formalist methods. Thus, the combined contributions by the Oratorian-oriented Carnot-Monge faction of France's *Ecole Polytechnique*, with the continuing work of Alexander von Humboldt's circles in Germany, produced a best modern practice of experimental physical science, developed in the general form adopted by the best qualified scientific thinkers still today.

I merely summarize only the most relevant elements of Riemann's contribution.

Riemann's 1854 habilitation dissertation brought into the open what Gauss had already discovered, but had feared to disclose.²³ Riemann, proceeding from the work of Gauss, eliminated all *a priori* assumptions of definitions, axioms, and postulates, such as those of Euclid, the empiricists, Cartesians, et al., from geometry. He limited the adoption of any underlying axiomatic features, to universal physical principles which had been shown to be validatable by the methods

of what Riemann specified as "unique" experiments.²⁴ The very notions of time, space, matter, and physical action which had been premised upon *a priori* assumptions, were to be eradicated from physical science, and replaced by the notion of a manifold of uniquely validated, multiply-connected, universal physical principles.

After Riemann's habilitation dissertation, honest physical science had no honorable choice, but to treat every experimentally based ontological paradox in science in terms of assuming that, either some wrong choice of principle had been included in the pre-existing repertoire of science, or, in the alternative, that some missing discovery of a new, universal physical principle, must be added to the pre-established manifold of a number, *n*, of validated such principles.

In the latter case, by definition, such an added (n+1)th principle, could be neither generated, nor validated by pre-existing mathematics. A pre-existing mathematics, insofar as it is, or represents a deductive theorem-lattice, can not generate within itself a new axiom which overturns the existing system. The new "axiom" must be generated by cognition, and validated by following the advice of the founder of modern experimental science, Nicholas of Cusa, by going outside the domain of mathematics, into physics, into the domain of physical measurements of critical characteristics of processes. It must be validated by a unique quality of physical experiment, designed for this specific kind of purpose.

To this effect, Riemann turned, as he reports in his habilitation dissertation, to the work of Gauss on the general principles of curved surfaces. For me, back in 1952, Riemann's notion of a series of multiply-connected manifolds, was not only the standpoint from which problematic features of Georg Cantor's otherwise most valuable notion of the mathematical transfinite, must be corrected. Riemann's notion of a series of manifolds, ordered by their physical space-time characteristics (curvature), was the key to redefining the Leibnizian science of physical economy in the needed, fresh way.

The preceding account brings us to the point we are prepared to take up the most crucial of the practical issues confronting the President and Congress of the U.S.A. today: *The nature of the needed new economic policy, to solve the crisis caused by the foolish economic thinking dominating the policy-shaping of our Executive, Congress, and Federal Court today*. Whoever does not understand this needed change in economic policy of practice, is incompetent to determine what kinds of policies will actually bring the U.S.A. out of the "new dark age" now in the process of descending upon us all.

At the present stage of the present crisis, only a change back to the conceptions of Treasury Secretary Alexander Hamilton, combined with the principles of a science-driver agro-industrial growth program, could prevent the otherwise

23. That for reason of the anti-Leibniz, British political influences ruling Hanover at that time. See the relevant correspondence on the subject of "non-Euclidean geometry" among Gauss, Wolfgang and John Bolyai, and others.

24. op. cit.

inevitable disintegration of the U.S. itself. Therefore, all proposed new leadership of our nation must be judged, and shaped accordingly.

What need be added to the traditional American System of political-economy,²⁵ is contained in a coherent form in my contributions to the science of physical economy. The connections underlying my contributions to today's science of physical economy, are, summarily, composed of three steps: 1) The defining of the relevant ontological paradox; 2)

The connections underlying my contributions to today's science of physical economy, are, summarily, composed of three steps: 1) The defining of the relevant ontological paradox; 2) The experimental validation of the discovered new principle which overcomes that paradox; 3) The manner in which such a validated new principle becomes a driver for an upshift in the characteristic economic-physical-space-time curvature of that society, the society to which the new manifold is introduced as a standard of practice.

The experimental validation of the discovered new principle which overcomes that paradox; 3) The manner in which such a validated new principle becomes a driver for an upshift in the characteristic *economic-physical-space-time curvature* of that society, the society to which the new manifold is introduced as a standard of practice.

These considerations point, rather directly, to the new role which the science of physical economy must play, now, in defining those standards of statecraft, and related practice, by means of which the world could be led successfully away from the present brink of a global "new dark age." This reform redefines the meaning of individual reason, as reason is to be defined for purposes of future statecraft. Follow the

25. Among literate persons around the world, the term "American System of political-economy" has always meant the anti-British system of Hamilton, the Careys, and Friedrich List. Any different use of the term, is the mark of an economics illiterate.

following summary of the three indicated steps with that end in view.

I begin this summary with a thumb-nail sketch of a relevant case, the overturning of Isaac Newton's absurd doctrine respecting the propagation of light.

Reason on the attack!

Reason in all aspects of science, and also art, begins its work, as it must, with an assault upon the authority of mathematical and related expressions of either anarchic irrationalism, or formalism. Reason begins, in all cases, as a Socratic negating of presently established opinion. In the case of formalist opinions respecting scientific matters, including national economic strategy, the Socratic assault assumes the initial form of an attack on the set of definitions, axioms, and postulates (i.e., assumptions) which implicitly defines the formally defensible theorems of that entire body of opinion placed under attack.

I have chosen here an example, which as you shall see, is most relevant to this present report, that on several grounds. Take the case of a battle against the legacy of Newton, Euler, Lagrange, Immanuel Kant, and Laplace, by the *Ecole Polytechnique's* Fresnel and Ampère. To understand not only what Fresnel did in this case, but how he proceeded to do it, you must recognize that Fresnel applied the same principle otherwise known in its military guise as "the principle of the flank."

As a friend has expressed the point, "flanking does not mean 'always attack from the left.'"²⁶ The true principle of the flank comes immediately to the fore in battles over principle within science; Fresnel's ruin of Newton's reputation on the matter of light, is what should be considered a Classic example of the way in which the principle of the flank actually works, in science-wars and battles alike. The principle of the flank should be understood to signify, as in the case of Cannae itself, or in science wars, a matter of recognizing and exploiting, as Hannibal did there, that stupidity to which one is assured, the command of the adversary force will cling obsessively.²⁷ That is precisely what Fresnel did to Newton's reputation on the relevant occasion. That is also what Wilhelm Weber did later, to J. Clerk Maxwell, in Weber's experimental validation of Ampère's discovery of physical principle.

26. He points out, as von Schlieffen's *Cannae* supports this, that Frederick the Great's defeat of a superior Austrian force at Leuthen, demonstrates the folly of the Austrian command in their misunderstanding of the principle expressed by Hannibal's victory at Cannae.

27. It is for precisely this reason, that the worst military commands are those which have prepared themselves most thoroughly to refight the experience of the previous war, as the superior force of the Austrians marched to their defeat by Frederick the Great at Leuthen. And as the French went down to defeat in 1940, because the German command anticipated the folly of a French commitment to refight World War I against the Schlieffen Plan of 1905.

It is important for our purposes here, to get the strategic flavor of the circumstances under which Fresnel's ruin of Newton's claims occurred.

At the relevant time, the experimental scientists of the *Ecole Polytechnique*, representing the standpoint of the Leibnizians Lazare Carnot and Ecole founder Monge, were in a continuing, virtual life-death battle in defense of science against the rabid mathematical formalism of, most immediately, the Newton fanatics, the latter including Euler follower Lagrange, Laplace, and Cauchy. The Ecole had already been ruined, in significant degree, through Lagrange's role, by its takeover by the rabid Romantic Napoleon Bonaparte's intervention. The ruin was near to completion with the 1815 takeover of France by the Duke of Wellington's puppet, the Restoration monarchy.

If you are placed under attack by a force which intends to use that battle for the included purpose of imposing its stupidity upon the conduct of the war, as was done recently in a NATO war against Yugoslavia whose net results have not been recognized yet, use the fact that the enemy is committed to that stupidity, to bring about his defeat in ways which the attacker's bull-headed stubbornness (e.g., that of Blair, Robin Cook, Albright, et al.) refuses to recognize as possible.²⁸

Thus, in this illustrative case referenced here, Fresnel did not merely defeat the formalists' attempted defense of Newton. Fresnel's opponents had committed themselves to the folly of proposing to settle the absolute authority of Newton over Leibniz, as if for once and for all. Ampère collaborator Fresnel exploited their adversaries' stupidity on this account, by his Classic choice of flanking attack. He used the engrained stupidity of the mathematical formalists, to trap them into routing themselves in this battle over a matter of universal physical principle. Fresnel defended the Leonardo da Vinci principle respecting the propagation of light, the same principle of non-linear propagation adopted and demonstrated, if only in approximation, by the combined work of Christiaan Huyghens, Leibniz, and Jean Bernouilli.²⁹ The fact that the foolish French mathematical formalists were committed, as

28. One does not actually win the wars themselves; one actually wins, only if one wins the outcome of the war. In the case of Mr. Blair's and Mrs. Albright's war against Yugoslavia, the Yugoslav civilian economy was crushed, but, when the NATO command refused to carry through the exit strategy for ending the war, which President Clinton had outlined at San Francisco, by refusing to include Serbia in the reconstruction unless Milosevic were first ousted, it was the U.S.A. and NATO which had virtually lost the outcome of the war. Admittedly, President Clinton's credentials are not military, but those among his advisors who have responsibility for military matters, should have warned him against the ruinous potential of failing carry through the exit strategy outlined at San Francisco. The U.S.A. and western Europe have barely begun to feel what will soon be the monstrous effects of their folly on this account.

29. Like Kepler, much of the knowledge, by Huyghens and Leibniz, of earlier science, was most strongly influenced by the writings of Cusa and Leonardo. Huyghens and Leibniz came into possession of relevant manuscripts of Leonardo through the assignment of Huyghens' father as ambassador to London.

if suicidally, to the cause of Newton, made possible Fresnel's political victory over them on this occasion.

Perhaps in the early future, the detailed implications of Fresnel's work on that occasion will be reported, and explained, by others, in suitable other locations. I limit myself here to emphasizing the way in which the Socratic principle of flanking-action was mustered in this instance. Situate the opposing factions in science historically, together with what Fresnel and Ampère therefore knew of their opponents' flankable vulnerabilities.

During the period of William of Orange's coup d'état and dictatorship in the British Isles, the earlier role of Venice's founder of empiricism, Paolo Sarpi, was assumed, from a

The true principle of the flank comes immediately to the fore in battles over principle within science; Fresnel's ruin of Newton's reputation on the matter of light, is what should be considered a Classic example of the way in which the principle of the flank actually works, in science-wars and battles alike.

Paris base, by another Venetian clergyman, Abbot Antonio Conti. Many of you have heard me speaking, or seen me writing, on earlier occasions, on this crucial turn within modern European history.

As France, England, and the Netherlands were ruined by the prolonged wars foisted upon the reign of France's Louis XIV, William of Orange's protégé was enabled to assume the newly created throne of the British monarchy, and France lapsed into the monstrous state of corruption associated with the minority of Louis XV.³⁰ In this setting, Conti, the creator of both the cult of Isaac Newton and of the virtually bottomless Voltaire, too, became the central figure of a Europe-wide spider-web of power.

The central feature of the activity of avowedly pro-Descartes fanatic Conti, was cultural warfare in the domains of both art and science. This spider-web, which became known as "The Eighteenth-Century Enlightenment," featured such depravities as Pope and Dryden in England, the pathetic *kitsch* composer Rameau in France, and the corruption of science in

30. The John Law-style financial bubbles of both France and England during that time, are, like the even loonier derivatives speculation of today, a measure of the spread of moral depravity of the respective times.

Europe through the spread of the cult of Isaac Newton. Conti's networks represented the leading Romanticist movement in the arts and sciences throughout Europe as a whole. The use of the silly Rameau as the Conti cabal's chosen champion for the campaign to exterminate Johann Sebastian Bach, and the role of Maupertuis, Algarotti, Voltaire, Euler, Kant, and Lagrange in the activities of the Berlin Academy of Frederick the Great, are among the most significant elements of the cultural warfare coordinated by Conti and his late-Eighteenth-Century successors.

Fresnel and Ampère focussed their attacks upon the central features of the system of axiomatic follies constituting French mathematical formalism at that time. That folly was that same rejection of the principle of cognition which is expressed by depraved Immanuel Kant's *Critiques*. That same folly is expressed in every rejection of cognition, a rejection implicit in every attempt to limit learning, as Kant did, to theorem-lattices premised upon the axiomatics of deductive method.

It is the fact that, in such a contest, that superior efficiency of cognition which may be mustered against any competing deductive system, lies in the elementary fact, that cognition is a form of action which lies outside control from the domain of deductive formalism. This supplied Fresnel and Ampère the means for applying the military principle of the flank to the quarrel within the Ecole at that time. Axiomatically, cognition and its principle of efficient action, lie outside the domain of that which formalism is willing to conceive as existing. Thus, on this occasion, in military affairs, and in other ways, formalism is wont to outflank itself. That is the principle which, in that and other kinds of circumstances, provides "the good guys" their potential superiority over even the massed hordes of a great adversary.

Fresnel's starting-point lay not within his experimental hypothesis itself, but in a principle which is far more universal, more elementary than a notion of the principle of propagation of light as such. Together with his collaborator Ampère, he was an opponent of allowing the teachings of Kant to be introduced into scientific work.

Both of these collaborators started from principally two well-established authorities. First, the general principle that action in the universe is elementarily of the form of regular, or quasi-regular non-constant curvature. Second, the settled work on the propagation and refraction of light by Leonardo, Huyghens, Leibniz, and Bernouilli, and also the treatment of the notion of isochronic principles by the latter. They treated the issues of propagation of light and of electrodynamics in terms of comprehending Leonardo's notions of wave-propagation from a simplified expression of the standpoint of regular non-constant curvature, thus referencing the sine-wave which complements the cycloid, as a pedagogical starting-point of reference.

The results, in both cases, the work of Fresnel and Ampère, proved devastating against the formalists. This work

proved itself among the most crucial points of transition, from the methods of the Leibnizian Carnot-Monge *Ecole Polytechnique*, to the more profound Leibnizian achievements of Gauss, Dirichlet, Wilhelm Weber, Riemann, et al., in the further, post-1815 progress of modern science. There was never anything accidental in that connection. These developments must be situated within the intersection of Benjamin Franklin with the scientific circles of France and England, the common connections of Franklin's circles with the Lessing-Mendelssohn renaissance, and with the work of Carnot and the Prussian Reform faction of the succeeding generation's Schiller, vom Stein, Scharnhorst, and the Humboldts. These connections contain a lesson from living history which goes much deeper and is more far-reaching in its importance for today's global crisis than the particular controversy with France's mathematical formalists.

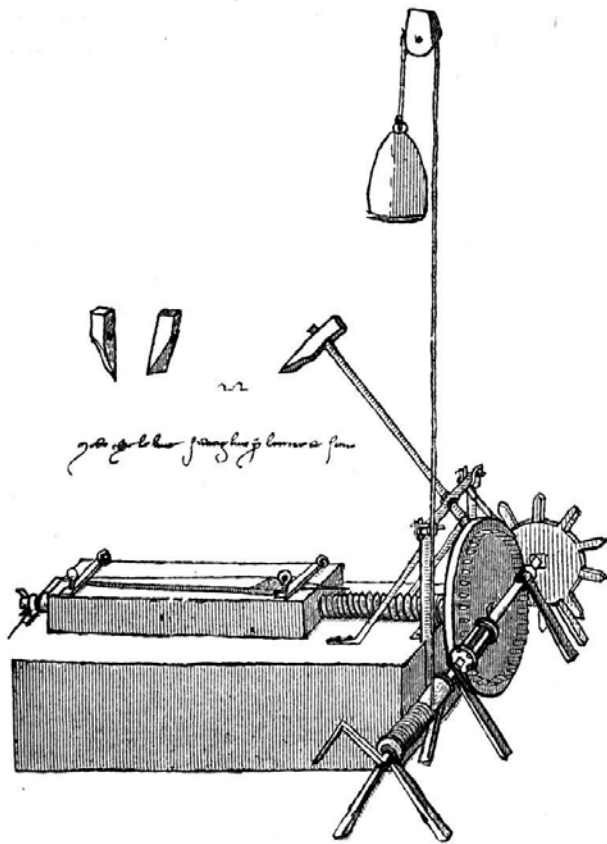
We shall resume that topic, after completing now the account of the relevant principles of physical economy.

Enter, the LaRouche-Riemann Method

The "LaRouche-Riemann Method" acquired that descriptive name from the consideration, that the adoption of Riemann's standpoint in physics, came as an addendum to my own preceding adoption of principle respecting the relationship between technological progress and Classical artistic methods. The significance of that connection has been already summarized above: *It is the principles governing the connections among two or more minds sharing the same, sovereign enactment of what is for each an original, validatable kind of discovery of any universal principle, which is the most elementary form of event, from which a science of epistemology and physical economy is to be derived.*³¹ Riemann's habilitation dissertation provided, in its elaboration of the notion of a multiply-connected manifold and its characteristic, the key needed to integrate my initial view of physical economy with physical science generally.

From the standpoint of that LaRouche-Riemann Method, there are two common varieties of paradoxes likely to prompt a discovery of principle. The first, is purely negative, of the type with which Riemann begins his habilitation dissertation: throw out the worthless garbage of aprioristic or other wrongly assumed definitions, axioms, and postulates. The second, more interesting type of paradox, is that which requires the discovery of a new, validatable form of universal physical, or other principle. The latter requires cognition in its purest form, the form corresponding to a progression from

31. As I had reported in earlier locations, this discovery was prompted in two steps. The first step came during adolescence, adopting the standpoint of Leibniz and choosing to make my combat against Kant's doctrine the focal point in my work on Leibniz. The second phase, premised on those earlier attacks on Kant, was prompted by early post-war encounters with, and against, Norbert Wiener's "information theory" and, a bit later, the "systems analysis" of John von Neumann.



Drawing by Leonardo da Vinci of a file-cutting machine tool. Leonardo's work, drawing on the legacy of Nicholas of Cusa, made possible the later breakthroughs of Carnot and Monge in the conceptual development of the "machine-tool principle."

an n -fold, to $(n+1)$ -fold Riemannian manifold.

What I have done, since the outcome of my work of the 1948-1952 interval, is to extend the notion of such manifolds to require inclusion of those principles which conform in quality to Classical-artistic principles.

The validation of an hypothetical new physical principle, requires a test of the form which Riemann defines, implicitly and otherwise, as *unique*. Here, as he says, in conclusion of that dissertation, science must leave the department of mathematical formalism, for the domain of physics. Naturally, the representatives of the Carnot-Monge faction of the *Ecole Polytechnique* would have agreed. It was the work of the latter, especially the development of the machine-tool principle by Carnot himself, which made possible both the U.S.A.'s preparation and conduct of the world's first, 1861-1876, development of a modern form of agro-industrial nation-state economy, and also the subsequent development of the science-driver features of a German economy modelled largely on the success of the 1861-1876 U.S. reforms.

The problem of physical, i.e., experimental, validation of an hypothetical discovery of principle, is two-fold. The most

obvious challenge is the validation of the principle itself. The additional challenge, is to measure the effect of the interconnectedness among the individual principles. After we have recognized the need to replace aprioristic geometries by physical hypergeometries, we can no longer presume that the interaction among these principles occurs in the way a naive, aprioristic form of physical geometry treats the relations among its attributed distinct dimensions.³² For both types of problems, the experimental requirements are, broadly speaking, the same.

The object of a unique experimental test of an hypothetical universal principle, is to determine whether a test design incorporating that principle, demonstrates some significantly different characteristic than a test design without taking that added principle into account. In such an experimental design, all that mankind knows of principles represented must be at least implicitly included. In that sense, a competent experimental design must compare manifold n with manifold $n+1$, the latter containing the hypothetical principle. The object of the test is to determine whether or not the manifest physical-space-time curvature of case $n+1$ differs significantly, necessarily, from that previously assumed for case n .

In the second case, it is the interconnectedness among (usually) only known universal principles, which is being tested. In both cases, the designer of the experimental apparatus must be the rare sort of shrewd old duck with proven maturity in such matters of machine-tool-design, or of equivalent scientific and engineering practice. He requires a sense of things which might be stirring out of the corner of his eye. This requires a highly cultivated scientific or engineering mind; such talent represents a crucial bottleneck in the possibility of realizing scientific and technological progress. Once one has assembled and developed a team specializing in such work, that team is of the quality of a virtually irreplaceable asset to any government or corporate productive enterprise.

Now, look at that experimental apparatus from a slightly different vantage-point. The settled result of tests conducted by a relevant such apparatus, will necessarily reflect the application of the new principle, or new combination of technologies, to the design of both products and productive processes. Thus, the machine-tool function (using "machine-tool" in the general sense implied) is the pivot which links science to technological progress, and, thus, to increase of a society's productive powers of labor, both per capita and per square kilometer of surface area.

32. The notorious design failure of Daimler-Benz's A-Klasse passenger vehicle, typifies the folly of using the computerized simulations of so-called "benchmarking," as alternatives to what were formerly the traditional experimental engineering programs of all respectable firms. Not only must unproven principles be tested; as the case of the fatal "O-ring" substitution shows, we must also test any arrangement in which new types of combinations might introduce an unexpected, even fatal, multiple-connectedness among principles represented.

That, however, is not the end of the matter. To produce, one must, first of all, produce the producers.

Monetarists, and kindred varieties of today's dangerously fanatical illiterates, think of an economy foolishly, as an anarchic aggregation of individual enterprises, whose interaction, according to the rules of a game set out by privateer financial interests, must produce the munificent benefits of the satanic Bernard Mandeville's god, "the Invisible Hand."

In fact, the required function of the private entrepreneur in a national economy, is his or her role in promoting technological and related innovations which ensure the infusion of both new and better products and productive technologies. However, no *viable* economy could exist if it relied on such private entrepreneurs alone. The greatest part of any healthy economy lies outside private entrepreneurship, in the basic economic infrastructure of the land-area as a whole, and in fostering, by aid of public law and government, of the nurture, the education, and the demographic characteristics of the households of the population as a whole.

Of all these required elements, the most important, and most precious is the interdependent development of the moral character and cognitive powers of all of the individual members of the population. It is the development and utilization of those cognitive powers of the population as a whole, which are the only source of the increase of those productive powers of labor upon which the welfare and progress of the economy as a whole depends absolutely.

Only the government of a sovereign nation-state can meet the combined requirements of the individual entrepreneur, basic economic infrastructure, national security, and the progressive nurture, education, and demographic characteristics of the population as a whole. Only the government of the sovereign nation-state republic can create the issuance of credit necessary to put all of these various essential elements of the society together in such a fashion as to ensure the welfare of all those essential elements.

To that end, as the Preamble of our Federal Constitution sets forth its fundamental law to this effect, the power of sovereign government must assume responsibility for the general welfare of all those essential elements combined. It must accomplish this chiefly through the regulation of the mechanisms of credit, finance, and taxation, in such a fashion as to match expenditure against that growth of the productive powers of labor upon which all possibility of prosperity depends.

This promotion of the general welfare rests upon the foundations of scientific and technological progress, from the nurture and education of the innate goodness of the newborn child, through the assurance of the opportunities for realization of the fruits of cognitive activity of its adult citizens. The succession of discovery of universal principle, experimental validation, and realization of the beneficial application of validated principles, is the view which we

must apply to our nation, and to our world, as we look back at ourselves today, from an hypothetical point, perhaps on a distant planet, a century or more ahead.

3. The Americas and Europe

This brings us to the matter of the kind of national economic and related strategy for survival, which a newly emerging leadership of the U.S.A. must adopt.

The rate of progress in the demographic characteristics of populations in Europe was significant, but relatively modest, at best, until the revolutionary change, the introduction of the modern sovereign nation-state, during the course of Fifteenth Century. From that point on, the chief impetus for progress came as a by-product of the struggle to establish a system of sovereign nation-states in western Europe and in the Americas. It was the repeal of those abominable forms of feudal law typified by England's disgusting Magna Carta, and the subordination of both the tyrannical feudal classes and overreaching supranational organizations to the superior power of a sovereign nation-state, which first established individual human rights under a form of law shaped by the concept of Socratic natural law, and created the necessary basis in political institutions and law for a successful form of modern economy.

With the establishment of the U.S. Constitutional Republic of 1789, the first true constitutional republic to appear in any part of the world, the long-term task of humanity became the obligation to bring the new republic in North America into cooperation with European states, this for the further purpose, as implicitly stated by then-Secretary of State John Quincy Adams, of extending the system of cooperating sovereign nation-state republics, to form a "community of principle" among the world at large. Today, that latter mission is centered around our prospective new form of equal partnership with two continents, Africa and Asia.

Relative to the sweep of history, and the nature of the combined immediate and long-term chores ahead of the world's nations, what is paraded by governments and mass media as "strategy," today, is mostly an evil sort of childishness, verging on the outlook of the perpetrators of the Littleton massacre, more or less in the spirit of *The Lord of the Flies*.³³

Strategy today must begin, by rejecting the sports fanatic's strategic view of current history, as typifying the kind of bloody competition practiced among gladiators in the Roman arena. We must delimit the notion of strategy, to purposes and conceptions which are fit for human beings. We must rethink today's use of the term "strategy," by looking at the relations among the Americas, Europe, Asia, and Africa in ways which

33. Or, the same thing, the current babblings of nasty Zbigniew Brzezinski. William Golding, *Lord of the Flies* (London: Faber, 1954).

accord with human nature as I have defined human nature here.

Since I am proposing that the United States use its remaining residues of global power and influence, we must abandon its present policy-trajectories, toward our nation's own, self-inflicted doom. We must redefine, so, what an effective leading action by the U.S.A. might be. Do not propose that someone else might be able to launch the required global initiative. Other parts of the world may represent important, weighty regional power and influence, but they have not yet reached that condition of their economic and other development, in which they could be a replacement for that specific role which we must assume at this juncture.

The power of the U.S.A., and the rest of the nation-states of the Americas, besides, lies in the elementary, essential fact, that the states of the Americas are products of a process of colonization by European civilization, a process of colonization whose impetus was supplied by the Fifteenth-Century Renaissance and its launching of the modern sovereign nation-state. That is what we are; therein, in our character so determined, lies our capacity to summon ourselves for meaningful actions in the world at large. When we, as a nation, act according to the nature impressed upon us in our struggles for freedom against the British monarchy, our natural strength is at our disposal. When we act to the contrary, we are weakened as a drunken man stumbles, contrary to his nature.³⁴

This requires that we pose to ourselves the question: *What is extended European civilization, and what is the essential significance of its colonization of the Americas?* This question carries us to answers which may grate against some strong prejudices in certain quarters, but these are answers we must face, and adopt, if we are not to fail in the role which the present world situation demands of us.

Those Greeks, again

European civilization is specifically Greek in its origins. Unless, and until that fact is recognized, and properly situated, talk about "European civilization" degrades itself to a blend of sundry varieties of silly prejudices and gossip.

The development of a Classical Greek culture, as best typified by Plato's work and circles, is most conspicuously indebted to its long association with Egypt, including the sometime region of Egypt known as Cyrenaica. The character of the Greeks who established this relationship to Egypt, is that they were Peoples of the Sea, a part of the great transoceanic maritime cultures, which evidently preceded the emergence of riparian and inland phases in the emergence of civilization.

There are two crucial developments within Greek culture

34. So, a poor military training policy, tries to break the recruit to a stereotypical mold. A better training-program draws upon the relevant potentials which already inhere in the recruit. The latter trainee, whether enlisted man or officer, were the one less likely to be flanked.

which came to define the proper meaning of the term "European civilization" today. Foremost, is the Greek development of the concept of the *idea*, as I have defined the notion of scientific and Classical-artistic forms of ideas, above. The second, is the early characteristic of post-dark-age ancient Greek culture: colonization, a characteristic of those ancient Greeks which they, like the Cyrenaicans, shared with all of the transoceanic maritime cultures classable as "Peoples of the Sea."

The known characteristic of these Peoples of the Sea, is

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their deadly serious, but also playful manner of exploring new areas, founding settlements which became colonies, bringing together the seeds of plants and strange cultures, to fuse these gathered elements into the synthesis of advances in the human condition. In this, the ancient Greeks operated in the eastern Mediterranean as Egypt's Etruscan partners in the western Mediterranean, and, somewhat as did their seagoing Caananite rivals of Tyre and Carthage throughout the Mediterranean littoral as a whole.

This ancient Greek notion of maritime colonization, was of quite different characteristics than the landlocked imperialism of ancient Mesopotamia, of the New Babylon which was Rome, or of the degeneration of the initial phases of modern European colonization by the Portuguese, Spanish, English,

and French, into the monstrosities which the Portuguese, Dutch, the British East India Company, and Napoleon III's French empires represented from early during the Eighteenth Century on.

Within the preceding sections of this report, we have already addressed that principle of the *idea*, as first known to us today from its Classical Greek origins. Now, we must briefly situate the needed conception of strategy, by some clarifying observations on the subject of colonization.

The continuing significance of the ancient, post-dark-age colonizations by the Greeks, is typified by the role of the Ionian maritime city-state republics, in setting the pace in the direction of a modern form of sovereign nation-state republic, such as the 1787 founding of the U.S. as a constitutional republic modelled, largely, on reference to the Classical Greek models. Colonization in that sense became a revived topic of policy-shaping, in the context and aftermath of that Fifteenth-Century ecumenical Council of Florence, which has been the watershed of modern European civilization. It was the circles of Cardinal Nicholas of Cusa that revived the pre-Roman, Classical-Greek map of a world orbiting the Sun, to promote global voyages as part of a strategy for flanking, then, the insurgency of the onrushing Ottoman Empire. This was the prompting of the Portuguese transoceanic explorations, and it was the map constructed by Cusa's associates, which guided Christopher Columbus to the rediscovery of the Americas.

The second phase in this post-Council of Florence wave of transoceanic exploration and colonization, came in the aftermath of the defeat of the League of Cambrai by Venice and its allies. Sixteenth-Century persecutions in Spain, and the degeneration of continental Europe's moral and political condition in the Spanish and religious wars of the 1512-1648 interval, turned the initial voyages of exploration into growing waves of European migrations into the lands of the Americas.

As it became clear, during that period, and later, that the prospect of establishing sovereign nation-state republics from within Europe itself, had been lost to the oligarchical forces of both the feudal landed aristocracy, and that aristocracy's sometimes partner and rival, the Venice-centered financier oligarchies, the idea took root, of flanking Europe by establishing the first true sovereign nation-state republic in North America, and then using that success to import that North American model back into Europe.

Thus, the greatest minds of Europe focussed more and more on the prospect of securing victory for the cause of establishing a North American republic among the circles rallied, more and more, around the figure of Benjamin Franklin. That relationship between the United States and Europe, is the natural, healthy relationship, still today. We must re-establish it, and carry it forward to include all of Asia and Africa.

The continuing trend of issues among the nations of Eu-

rope and the Americas today, is a continuation of a pattern which is most readily traced from those few centuries beginning the interval from the reign of Charlemagne through the Norman Conquest of England. This pattern persists as the underlying policy-motive behind the British monarchy's organization of the two so-called "world wars" of this passing century, and the recent folly of NATO's war against Yugoslavia.

The underlying issue has been the oligarchy's determination to check Christianity's impulse, the impulse to reverse the moral and other cultural decay bequeathed by the "New Babylon" empire of Rome, and to establish a form of society cohering with Christian principles, a form of society which would rely substantially on the benefits of that superior, Classical Greek culture which had antedated imperial Rome. This fight, led by the Augustinian currents within Christianity, as Charlemagne's Alcuin typifies this, faced two vigilant oppositions, the oligarchical faction represented by the landed aristocracy, and the financier oligarchy, as the latter came to be typified and dominated by the model of medieval Venice.

The natural inclination of Christianity, was the impulse to establish some form of nation-state, under which the sovereign's function was to serve the general welfare of a population defined as man and woman each equally made in the image of the Creator of the universe. The oligarchy, both financial and landed, was determined to prevent that conception of the state from being realized, as Castlereagh and Metternich were in the context of the 1815 Congress of Vienna. The idea of a Christian community of nation-states, whether federated or sovereign, both fiercely opposed by the core of both the landed and financier oligarchies, was the issue which motivated the oligarchy's wars to delay the emergence of the first modern nation-state, until the reign of France's Louis XI. This same issue has been the key to every war which the oligarchical forces have unleashed upon Europe and the Americas since the Council of Florence.

The characteristic feature of the oligarchical strategy, from Charlemagne through NATO's war against Yugoslavia, has been to destroy every effort to transform Europe into what John Quincy Adams defined as a community of principle. The chief recurring feature of this oligarchical strategy, has been to foster wars within Central Europe, and to work to ensure conflict and bitterness between France and Germany. Venice's virtual hundred years of Welf League wars against the Emperor Frederick II, are typical of this, as were the approximately 130 years of religious wars, from the defeat of the League of Cambrai, through the 1648 Treaty of Westphalia. So were the British monarchy's orchestration of two "world wars" of this century, and the most recent NATO war against Yugoslavia.

Since the founding of our republic, especially since the Presidency of James Monroe, the destiny of the U.S.A. was seen in finding partners against our British monarchical ad-

versary, and in reaching toward the prospect of a community of principle among both the nations to our south, in the Americas, and in Asia. Our essential military policy was always primarily defensive, just as Lazare Carnot emphasized the same doctrine, in opposition to the Romantic Napoleon Bonaparte, for France. Our object was not to conquer nations, but to build them up as prospective partners for an equitable community of principle. That was not such a far cry from the nation-building policies of the Emperor Frederick II, Spain's Alfonso Sabio, or Dante Alighieri.

Indeed, from the time of President Lincoln's victory over London's Confederacy puppets, until a British-controlled terrorist's assassination of President McKinley, that was the underlying strategy of the United States. With the fall of Napoleon III, France ceased to be our enemy. Those who bore the legacy of Schiller and the Humboldt brothers, in Germany, were virtually our allies from 1877 onward, as were the leading forces of Russia around Alexander II, Mendeleev, and Count Witte. With the emergence of Japan's Emperor as the anti-American tool of Britain, in the first Sino-Japanese war, the emergence of the *Entente Cordiale* alliance of France to Britain's Edward VII, and the replacement of the patriotic President McKinley by the Confederacy buff Theodore Roosevelt, all was rather suddenly switched around, with World War I as the more or less inevitable result.

The fact remains, that the establishment of a community of principle in Europe, including Russia, is the most vital strategic interest of the U.S.A. today. The kind of financier oligarchical forces which deploy lackeys such as Tony Blair, Zbigniew Brzezinski, and Madeleine Albright, will, as usual, do everything possible to prevent such a community of principle from coming into being. Nonetheless, the establishment of such a community is indispensable to the U.S.A. if we are to meet the challenge of bringing all of Asia and Africa into that same community, and if we can find a U.S. President with the insight, nerve, and support needed to carry it out.

The basis on which the success of such a community rests, is the kind of economic and related educational and social policy which I have outlined in this report.

4. Leadership as such

I like the old gag about the farmer selling what he professed as an "obedient" mule. When the mule obeyed, but only after being whomped along the side of the head, the farmer cheerfully explained: "You see. He's very obedient. You just have to get his attention, first."

I must admit that the present breed of typical American citizen seems to get into trouble more often through his own pure mulishness, than any other cause. Like that mule, don't expect that citizen to behave intelligently, until you have first brought him to attention. If you are one of those new-fangled, Baby Boomer type of "I can feel your pain" Americans, you

are not going to get that citizen's attention in the necessary way, and you, as a would-be leader, and that mulish citizen, both, are going to end up in a lot of trouble. If you are President, you are going to get the whole world into a great deal of trouble.

The characteristic of today's assuredly failed leadership, is the would-be leader who relies upon appealing to pre-established popular prejudices. Since all pre-established *popular* prejudices today, define an orbital trajectory which does nothing but ensure "free fall" toward doom, leaders who rely on readings of opinion polls, or mass media, to shape their policies, are worse than useless, to themselves, and to those who express the prejudices to which the would-be leader has chosen to cater. The so-called "Third Way," typifies the worst, most deadly of the political lunacies to be found in any so-called political leader today.

To lead the U.S. population—in particular—out of the grip of its present "free fall" toward doom, a leader must fight against the relevant popular prejudices.

One may anticipate the question: "How do you propose to fight against popular prejudices? Don't you know the typical American voter is the biggest lying gossip you could want to find anywhere? Those voters are so busy insisting on what they know more or less than nothing about, that they have no time, energy, nor desire left to seek out the truth on any really important subject. Those guys make even the corrupt politicians blush! The only things that are bigger liars than the typical voter, are Wall Street touts and the mass media."

The answer to that question is: "You must first get his attention." Baseball bats would have a certain kind of effect, but that is not recommended for the kind of problem at hand. You must simply point out the terrifying facts and other events which should be important enough to get their attention.

Once, at last, when you have their attention, your real work begins. You must use the same methods a scientist uses to eliminate a deeply held, false belief about current popular scientific principles. You do not resort to the foolishness of debating opinions you know to be absurd; you prompt the fellow whose confidence in his own folly has been shaken, to do some serious thinking.

From that point on, the process assumes a form and provokes feelings which might remind you of an experience of discovery of an idea, during childhood or adolescence. It is important that the person whose attention has been gained, come to an intelligent discovery of the alternative to a false belief. Even more important, politically, is the special kind of pleasure which that citizen gains from the experience of such an act of discovery.

The essence of politics, is to make citizens better people. The essence of doing that, is to evoke the goodness which lies, perhaps fallow, innate within themselves. Thus, it is the evocation of the goodness aroused by the act of cognition, which defines the educational task of the kind of political leadership qualified for today's sort of crises.

It is that relationship between such a citizen, and such a leader, which defines the kind of political process we require today. To evoke this quality in the poorly educated quality of citizen graduating from our secondary schools and universities today, we usually require the special circumstance associated with a most shocking crisis. That is usually what is required to bring the sense of shock up to the threshold level, at which the citizen's attention is gained in the necessary, relevant way. It is the moral connection between such leaders and such citizens, which defines the kind of political power needed for times of the gravest crises, such as today's.

However, that relationship can not be established, unless the leader has the qualifications needed to evoke such a quality of response. Such development is rare, far rarer today than when Franklin Roosevelt was President, or President Charles de Gaulle of France. It was often said among leading Gaullists I have known: "There never was Gaullism; there was only de Gaulle." Roosevelt became that kind of leader for his place and time of crisis, in his earlier rising from a crippling sickness, resolved to become functional again. In his studies of American history during that convalescence, he emerged as the President Franklin Roosevelt of the Depression and World War II.

Such qualities of leadership for times of crisis may appear in astonishing ways, but they are never accidents. If we take many facets of leadership as one — politics, Classical artistry, science, military leaders such as General Douglas MacArthur, and so on — the essence of their preparation for that role, is impassioned self-development of their cognitive potentials, combined with a toughness which enables them to be governed by those potentials, where weaker personalities would tend to vacillate, to compromise their way into great, tragic failures of will.

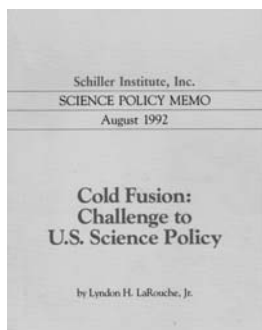
That said, what I have found, more and more, the most terrifying thing about leadership today, is that there is so little of it, and, of that we have, so very little that is qualified to play that part at all. The problem is, that we are producing a poorer quality of average personality than in former times, with the result that there are not only fewer qualified to be leaders, but also vastly fewer qualified to follow them.

Let the nightmare of today's world be a lesson to future generations. Never let civilization ever again degenerate so much, that the survival of civilization itself depends upon the biological and other uncertainties which may remove those few leaders, who may have been summoned to lead a nation out of pits like that into which civilization globally is sunken today.

For further reading

The following bibliography provides extensive documentary and analytical material on subjects that are covered in Mr. LaRouche's article (in chronological order by topic). See the end of this box for information on how to order.

Fundamentals of science and epistemology



Dino de Paoli, "Leonardo da Vinci and the True Method of Magnetohydrodynamics," *Fusion*, January-February 1986. **\$5.**

Lyndon H. LaRouche, Jr., *Cold Fusion: Challenge to U.S. Science Policy*, Schiller Institute Science Policy Memo, August 1992. **\$24.**

Lyndon H. LaRouche, Jr., "Leibniz from Riemann's Standpoint," *Fidelio*, Fall 1996. **\$9.**

Laurence Hecht, "The Significance of the 1845 Gauss-Weber Correspondence," *21st Century Science & Technology*, Fall 1996. **\$5.**

Laurence Hecht, "Optical Theory in the 19th Century, and the Truth about Michelson-Morley-Miller," *21st Century Science & Technology*, Spring 1998. Includes a discussion of the work of Augustin Fresnel. **\$5.**

