# **Feature**

# AN ELECTION'S TERRIBLE AFTER-TASTE:

# The Global Crisis Now at Hand

by Lyndon H. LaRouche, Jr.

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This report presents and analyzes crucial facts, bearing on those urgently needed, immediate changes in U.S. policy which must be adopted, if we are to equip our republic with those means provided by the intent of our U.S. Federal Constitution, means which must be mustered, now, to prevent the early destruction of our republic by a presently accelerating, hyperinflationary, implicitly global, breakdown-crisis.

The principal threat to civilization, at this moment, is the combination of the just established conditions created by the result of the U.S.A.'s November 2nd election. These are the conditions created by the lack of a sense of the presently existing reality among the Democratic Party's Congressional team, then, as after that election, now. Most among those same Democrats continue to refuse to recognize, as do the Republicans generally, that the world now hangs on a condition of global economic breakdown of nations of the trans-Atlantic community generally, a condition broadly comparable to what struck Europe during moments preceding the breakout of the infamous 14th-century "New Dark Age."

This immediate state of our national crisis, is the fruit of certain changes planted into U.S. policy and practice, those changes which began to emerge in the immediate aftermath of not only the assassination of President John F. Kennedy, but which were, also, a product of what was a crucial change in U.S. policy at that time: a shift into a direction contrary to what had been the firm intention of that murdered President, and contrary to the advice to him by General Douglas MacArthur.

The assassination of President Kennedy in that setting, had triggered a process of change in U.S. policy, from that of the war-avoidance commitments of Kennedy and MacArthur, to what became a virtual decade of needless U.S. warfare in Indo-China, a decade from which the United



White House/Pete Souza

The principal threat to civilization, at this moment, writes LaRouche, is from the conditions brought about by the Nov. 2 election: the combination of Nerobama and the newly elected pro-fascist Republicans. Here, Obama (back to camera), with his White House team, in the Oval Office, the day after the election.

States as we had known it at that time, has never recovered, to the present day. Since the assassination of President Kennedy, the United States has been drawn, again, and again, and yet again, into a new, colonialist's type of forms of long warfare, which was, chiefly, adventures into which we were lured and trapped by the manipulations of the British empire.

Thus, since the assassination of President Kennedy, the policies of long, virtually "colonial" warfare in Asia and Africa, warfare into which, chiefly, sundry British agencies have bullied, or lured our republic, as in the instance of British Prime Minister Tony Blair's fraudulent prompting of a U.S. long war in Iraq. These actions have created a pattern in policies and practice, a pattern which has been the principal contributing factor in plunging our republic into orgies of a presently accelerating process of self-destruction of our nation and its general welfare, all continued since the assassination of President Kennedy, up to the present moment this is written.

We have now traveled that same downward pathway in U.S. policy far, far too long. We have gone so far in a downward direction, especially so since August 2007, that we older fellows might now wish to urge our aching bones to crawl, painfully, back uphill in history, hopefully to bring us once more to where President Kennedy's initiatives had carried us in his promotion of highly

creative economic policies of machine-tool design, as coupled with the launching of what was to have become the triumphant landing of men on the Moon. We are, therefore, now, a nation ruled, like many other nations of the trans-Atlantic regions, by a two-generationslong descent into a deep-rooted cultural pessimism.

Therefore, if these recent conditions are taken duly into account, my first duty in writing here, is, to tell the citizens of our republic to give up their present, self-destructive worship of their own cultural pessimism. To that end, our citizens must be inspired to bring themselves back to behaving as we had done under President Franklin Roosevelt, and act as that President had acted during his first

days in office, with such prompt and monumental achievements as to generate the virtually immediate launching of both the Glass-Steagall Act and also, the matching Tennessee Valley Authority (TVA).

What our citizens must now consider, most urgently, is the following.

The ugly result of the just-past Federal election, was no accident. The cowardly failure of so many among the Democratic members of the Congress since that election, until now, was also no accident. That failure of those fellow-citizens of ours during the relevant weeks immediately prior to the election, was, essentially, a failure to summon effective resistance to a virtually treasonous posture which had been demanded by a deranged, virtual British puppet, President Barack Obama.

The Congress's crucial failure to overturn the President's obstacles by an immediate mobilization for the re-enactment of the original Glass-Steagall legislation, has had two, presently most regrettable effects.

The President's own contributing part in creating this catastrophe, has been, first, his flagrant betrayal, for whatever motive of his own, of the immediately most urgent interests of our Constitutional republic, and, second, he has greatly magnified the gains of what must be recognized as pro-fascist elements, within the ranks of newly elected Republicans, as such moral disasters as that are presently typified by the case of Kentucky's

#### U.S. Senator-elect Rand Paul.

That combination of factors operating within the Legislative and Executive branches, must be considered, as being, at their least worst, the hopefully temporary, but deep and bitter demoralization among an apparent, present majority of a broadly disenheartened general electorate, a sorrow brought upon them by the manifest lack of response to reality from among most of our republic's currently official leadership.

Lest our citizens were to continue to sit like useless blobs, either only sullen, or openly griping, we must remind them, that it was the majority of the citizens' own votes cast which rewarded them with such fresh afflictions as the newly elected clones of Dick Armey, clones such as Kentucky's shameful backing for what I have already cited as the election of a Rand Paul whose presently, publicly avowed policies are, as a simple matter of fact, at least for the moment, a murderous fascism of the form descended from the murderous fascism already rooted in the infamous "creative destruction" policies of such as Friedrich Nietzsche, Werner Sombart, and Joseph Schumpeter.

Such horrid developments as those were really no surprise.

Tendencies toward fascism in the trans-Atlantic region, again, today, were not the only leading factor to be considered in the presently immediate aftermath of that recent election. Ten years have passed under the reign of the evils typified by two terms of President George W. Bush, Jr., as those have been followed by a half-baked term under Barack Obama so far. During the same lapse of time, what had been ten-year olds when President Clinton left office, in 2001, have now reached the age of citizenship in the year 2010. When this matter of generations is considered in the large, that generation of those who have become eligible, recently, for the status of citizens, now represents, by and large, a different cultural outlook than those predecessors who had become citizens prior to or during the time President Clinton was in office.

Through relatively little fault of their own, that new stratum of actual or potential voters which reached voter-age since President George W. Bush's first election, has been lured by its own expressions of deeply plunging cultural pessimism, into the likeness of a post-civilized generation, a pessimism fit to match the "wet dreams" of those who had been the activists of the degeneration known, since 1950, as The Congress for Cultural Freedom (CCF). The effect of the present, im-

plicitly fascist legacy passed down by the CCFers, represents today, a new, deeply habituated cultural depravity within today's young generation, an existentialist depravity, whose outlooks converge on the existentialist plot of Peter Weiss's 1967 Marat-Sade, upon a commitment, now expressed as "no jobs, no work," and, therefore, little inclination, or ability to become active members of an actively "civilized" generation. Hence the pattern of suicides among the college-age student population, and also others, during the moral and cultural decline which has accelerated under the Presidents of the recent ten years.

In fact, we have the disastrously extensive loss of the role of the leading productive skills which had been formerly associated with the U.S.A. and Europe, a loss typified by the presently dwindling numbers of those still living veterans of World War II, as also from among slightly more than a generation later. These members of society, are now rapidly declining at such a rate that, were we to postpone a return to the mustering of skills associated with high energy-flux-density technology, by as much as a few more years, the possibility of a general economic recovery in North America, as also in Europe, could be postponed until a time generations to come, at best.

This presently declining pattern of both dwindling productive aptitudes and desires among our younger citizens, is to be taken as a warning that we must now act to change the direction in our culture, a change toward an emphasis on increasing energy-flux density in the prevalent modes of existence and productivity. Gimmicks of the dubious sort which pass for inclusion among the category of culturally pessimistic forms of "acceptable behavior" today, are worse than useless under the present circumstances of the currently accelerating, general economic decline throughout the trans-Atlantic sector of the planet.

A large minority of the world's population, now chiefly Asian, found among the world's leading nations, are tending to reverse the downward trend being experienced in the trans-Atlantic realm. These include China, India, and Korea most prominently, but also a few others which could or would walk the same pathway of progress. These include nations whose populations are also carrying a large ration of those who are yet far from what used to be considered as approximating a European standard of productivity of the sort remembered from prior to the 1968-1971 general downturn in the trans-Atlantic regions of North America





European history, including its trans-Atlantic extension, has been chiefly divided among three successive types of maritime, monetarist rule: Ancient (represental by the Roman Empire, top left), Medieval (Venice: the Horses of St. Mark were looted from Constantinople during the Fourth Crusade) and Modern (the British Empire: in 1805, the British Navy won a decisive victory in the Battle of Trafalgar, establishing its supremacy on the seas).



and western and central Europe. So, even the Asian nations inclined to increased emphasis on nuclear-and thermonuclear-powered technologies, could not presently resist the effect on them from a presently imminent, suddenly catastrophic breakdown-crisis now striking down the present trans-Atlantic region of the planet.

Therefore, a fresh concept, and matching new methods, are urgently needed. I proceed here, now, to outline the necessary conception which you must adopt, if you are willingly competent in the matter of keeping a nation fit for human habitation in the framework of the presently accessible level of human productivity per capita and per square kilometer.

# PREFACE

# A Tale of Three Empires

Consider the history of that monetarist form of empire-in-fact which has been commonly called Europe's own version of "European civilization" since the interim period of the reign of Alexander the Great. Consider this in the light of the present moment of an awesome, world-wide, economic breakdown-crisis in the existing order. This is an order whose immediate vulnerability is lodged chiefly within the trans-Atlantic community, but even the greatest and the most advanced of the Asian sector of the world could not long escape the presently oncoming, initial collapse of the trans-Atlantic system.

European history, including the trans-Atlantic extension of European cultures, has been chiefly divided, so far, among three successive, readily named, categorical parts of an essentially *maritime* set of types of *monetarist* rule: **ancient**, **medieval**, and **modern** types.

Each of these three has differed qualitatively from the others in essential characteristics as categorical types; but, each encounters its own peculiar doom, in what takes the imperialist form which is inherently specific to all specifically European models of monetarist systems as such. Each from among such systems, were each prone to its "own, peculiar" choice of way, either to be superseded, or to be plunged into the ostensible, cultural "dead end," as into some new dark age. That much said thus far, now trace the history of that monetarist empire-in-fact which has been commonly named "European civilization," which dates as such, since the interim period of transition following the fall of the Persian Empire, until the death of Alexander the Great, and until the present moment of an onrushing threat of an awesome, world-shaking, general breakdown-crisis of today's presently existing world order.<sup>1</sup>

This world's history of European-centered culture among, until now, three successive imperial systems, is a succession readily named as that of a set of categorical parts of that culture: *ancient*, *medieval*, and *modern*. Each among those three phases, has been qualitatively different from the others, but each was coming toward its own peculiar quality of doom, in its own time, and in its own way.

The first category of this historical succession, had begun with the rise of the Hellenic power attained prior to the ruinous, long Peloponnesian War, a war from which ancient through modern aspects of so-called Greece have never fully recovered as a political system since that time. That part of European cultural history ended its first phase with the fall of the Roman Empire into what has been customarily classed as The Dark Age, from which an eastern phase of the Roman Empire emerged, until the precipitous decline of Byzantium since about A.D. 1000. However, in the meantime, between the Fall of the first Roman Empire and the advent of the Fourteenth-century "New Dark Age," the coincidence of the ecumenical relations among Christianity, Islam, and Judaism, as during the collaboration of Charlemagne and Baghdad's Haroun al-Raschid, plays a most remarkably exceptional role in its time.

A careful reflection on the essential role of Charlemagne in his time, compels what remains among today's meager ration of actually thinking contemporary historians, to consider a glaring fact which most of them had contrived to overlook, until now.

The period of Charlemagne's leading role, launched what was, for that historic moment, the appearance of the second great European development of a dominant form of inland-based culture since the absorption of the defeated "Ionian" system, into that intervention by Alexander the Great's role, a role contrary to what had been the intention of his father, in his leading role in the destruction of that Achaemenid empire based on "the oligarchical principle." The failure of most European historians, including the trans-Atlantic varieties, to grasp the crucial importance of Charlemagne's cultural revolution, is among the most indispensable among those cases which must be addressed for understanding the deep background of any or all parts of the scientifically true history of the world's Europe-pivoted, trans-Atlantic region since the time from the fall of the Achaemenid empire, to the present date.

I am now obliged to step aside from what I had been tracing, here, thus far, as the unfolding process of rootdevelopment of the foundations of ancient and medieval European history-in-fact. To understand real European and world history competently, we must abandon the mere shibboleth of a chronology mistreated as causality, in order that we might now examine the implications of the case of Charlemagne's revolution, seemingly "long before his time," in its relevance for defining the process of the history of European civilization scientifically, rather than chronologically. To understand the role of Charlemagne in history, we must abandon conventional explanations of a sequence of developments in history, in favor of recognizing that a truly lawful study of history must be located as a special case of the application of a principle of physical relativity, rather than linearized sequences.

# Physical Relativity & Charlemagne

In the course of my dialogue with a circle from among our republic's best qualified economists, I shocked them, if only momentarily, by introducing the concept of economic "platforms," rather than what had been a more conventional emphasis on the term "infrastructure." The relationship of this correction which I have introduced to what have been, academically, "more conventional" categories of doctrines on the subject of economy, which have been maintained as a system of belief among economists and related professionals, which has been established and maintained on the pretext of conventionally taught mathematics and the treatment of related subject-matters, reflects a mid-Nineteenth Century adoption of what was actually the pseudo-scientific hoax which became known, since such mere mathematicians passing themselves off as

<sup>1.</sup> There had been maritime systems in Europe earlier, but, as in the case of Tyre, as an accessory of Mesopotamian interest, and of the alliance of Etruscans and certain Greeks with Egypt, the maritime power of the pre-Macedonian Mediterranean served as auxiliaries of the relevant land-based, largely agrarian powers, like the Sumer colonized by an Indian Ocean maritime culture, which had, themselves, often come, as did classical Egypt of the pyramids, into the Mediterranean as offshoots of a maritime culture.



Human transportation has advanced from less effective modes, including ocean and riparian transport, to the evolutionary development of railway transport, and now, to magnetic levitation modes. Shown: a Viking ship (8th-11th centuries); and the MLX01, a modern magley, at Yamanashi test track in Japan.



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physicists, as Rudolf Clausius, et al., had demanded be adopted, then, as a mere mathematician's "Second Law of Thermodynamics."

We must now discard what are merely a commonplace mathematician's attempts to impose formal-mathematical determinism in domains of experimental physics in general; we must turn, instead, to emphasis on the higher–ranking domains of the quite different physical causality expressed by living processes, and, then, again, the radically higher, different qualities of the experimental notions of causality expressed in that Riemannian domain of human behavioral causality, as that was developed further by such stellar figures as Academician V.I. Vernadsky. We are thus impelled, as Bernhard Riemann concludes the crucially important, third and concluding section of his 1854 habilitation dissertation: "to depart the department of mathematics, in favor of the department of physical science."

That is precisely the nature of the seemingly insoluble crisis with which the case of Charlemagne confronts the customary selection of historians and economists, still today. My own emphasis is on replacing, not only the term, "infrastructure," but the widely presumed notion of physical-scientific causality in economic processes, by the introduction of a conception which I have termed "platforms."

To illustrate the meaning of that distinction, consider the following.

In the world history of transportation, we have the following sequence in the order of ranking, away from the less useful, to the succession of the more effective economic performance obtained from a succession of extensions of the generality of basic transportation of the following succession of the general forms: human and animal movement, ocean transport, riparian transport (as by combinations of river and canal systems, as this was introduced as a nationaleconomic system under Charlemagne), the evolutionary development of railway transport as, initially, into its development from a complement to riparian transport, to full function rail, to transcontinen-

tal rail, to magnetic levitation modes, to magnetic levitation as a mode of ultra-high-speed transport within evacuated tubes (e.g., up to 1,000 miles per hour).

The most convenient illustration of the fact that a physical principle of national economy is at issue here, is the subject of why the British empire went to war against, and between Germany and Russia, over nothing so much as the "geopolitical" issue of the implicit economic superiority of trans-continental railway systems over oceanic modes of transport. (Air transport as such, is not competitive as a general system of transport, but, rather, a special one, with a special class of functions.)

This same *geopolitical* principle had already been posed, with mortal effects, by and against Charlemagne.

The case of comparative modes of general economic action through transportation, is paralleled by, and complemented by a second general category of physical economy. The subject in this case, is "energy-flux density."

The properly scientific use of the term "energy-flux density," can be illustrated by the role of the increase of potential as proceeding from the use of sunlight or wind as a source of power, to the far more efficient use of combustion of fuels which are to be ranked in the equivalent of a fixed number of calories contained within an increasingly narrow cross-section of a channel through which a fixed number of calories of flow is confined. Nothing can match nuclear fission presently, except, foreseeably, the higher rank of thermonuclear fusion as a standard expression of power.

Similarly, a national system of general health-care is vastly superior practice applied to the population of the territory of a nation, than health-care systems which serve selected individuals within the nation. Hill-Burton should have never been superseded by insurance "companies," or comparable, commercial health-care management systems.

Similarly, high-quality general education for all, is vastly superior in benefits of a national economy, than higher education selected for, or affordable only as a quality of education only for some.

Return attention, briefly, to the case of the history of the introduction of canal and railway systems inside the United States. Consider the Charlemagne revolution in economy in this light. Take note of the historical fact, that the European system of integrated rivers and canals, was already the model in terms of waterways, for the later development of national and continental railway systems. Note that the European continental riverway and canal systems for the areas inclusive of France, Germany, and Austria (for example) were not completed until the long-delayed 1990s completion of the link between the Rhine and Danube systems!

Do not overlook the element of economic insanity, which, in the case of the United States, was shaped by London and Wall Street policies for looting the interior of that nation.

In this case, public mass transport and power-distribution-and -production systems, predetermine the lines of development within a national, or continental territory. Public water systems, when organized on a regional or national scale, are less costly, in fact, for society than "private" ventures. Not only that, but the way such systems are charted and developed will be a cardinal factor in shaping national economic potentials within the nation, and will be both less costly and vastly more beneficial than any general sort of private policy-shaping imperative.

Return attention to the specific case of prototypes of modern national economy introduced as original leaps in progress of mankind. Here, we locate the role of the individual creative will in a national economy. What no machine can do, is actually create. Excepting the creativity inherent to the evolution of the universe and of living species, only the willful higher powers of the human mind, as distinct from the functions of sense-perception as such, can provide the factor of human creativity upon which the success of the nation, or continent depends absolutely.

In other words, the most effective approach to organizing an economy, is that developed in such exemplary cases as the Commonwealth of Massachusetts for as long as it was operating within the framework of the freedom which the original English charter allowed to the commonwealth itself. Notably, this success of Massachusetts under those conditions of sovereignty, depended upon the expression of that sovereignty in the form of the same notion of credit-system, as in the original case of Massachusetts and in the role of Alexander Hamilton's design for a credit-system of a national-banking system of credit, which distinguishes the original Constitution of the United States, systemically, from the monetarist systems of presently, and traditionally British-controlled Europe, still to the present day.

Indeed, the intrinsic superiority of those potentials specific to the United States economy which had been, until recently, qualitatively superior to those of the European political economies, is shown in two principal, convenient cases. In the rise of a modern German nation, the impact of Friedrich List provided a systemic foundation for what Germany would later achieve, when allowed to do so, followed by the post-Philadelphia 1876 celebration economic miracle of the Germany economy which Chancellor Bismarck based on the guidance by the United States', and the world's leading economist of that time, Henry C. Carey.

So, to summarize the argument bearing on the case of Charlemagne, as we have pointed it out thus far, it was the development, under Charlemagne, of all of the categories of essential features of a modern nation-state economy, including the essential rudiments of organization of a modern national economy, which were already present.

What had happened in the immediate aftermath of the death of Charlemagne, was that the "platform" built into the underlying general "platform" of the economy, was being aborted through the role of forces centered in

Charlemagne's principal adversary of that time, the Byzantine empire which had set into motion the process of destruction leading into the Norman conquest of what is presently named the British Isles. This was the result of a cycle established then, and implicitly concluded with the pitiable failure of the remains of the Byzantine empire left by that Fourth Crusade leading into the subsequent, Fourteenth-century "New Dark Age."

The lesson to be adduced from the admittedly preliminary condition of what I have presented as a special topic, here, thus far, touches the rudiments to be brought into consideration under the heading of what I have presented as the case of the notion of "platforms" as the role of integrated national systems, rather than "infrastructure."

The corollary word of caution to be supplied, is that to be "free," the population and its territory must be developed up to the level of development required for useful promotion of the productive advances in the creative powers of the individual person. The promotion of the development of the individual economic enterprise within the economy, is properly a matter of principle; but, the development of the "platform" on which the individual enterprise depends, is to be treated, as Charlemagne attempted, as the "platform" on which successful private initiative depends for its successful expression.

Compare the exceptional page of European history marked out by the role of the great reforms of Charlemagne with those of modern Europe and the United States since the 1648 Peace of Westphalia.

The case of the Transaqua approach to the rescue of Lake Chad, should be considered as a prime example of this principle of the rights of sovereign nations to secure the means of their needed development.

# Back to Reading "Conventional" History

We are now confronted by the prospect of the early appearance of the fourth, yet-to-be-settled, but possibly early successor to the presently collapsing system. This, in turn, confronts us with an implied choice between the greatest, and most advanced quality of human achievement ever dreamed by any known person thus far, or, the alternative choice of a prolonged dark age which would be comparable to, or even much worse than the infamous "new dark age" of Europe's Fourteenth Century.

This set of four maritime-rooted models up to the present time, presents us, in that fashion, on the one side, with three known, qualitatively distinct stages of a mon-

etarist form of Europe-centered civilization, and, in a fourth case yet to be determined, one way, or the other.

All three of the presently known phases in past or current European and trans-Atlantic systems, have been, essentially, of the quality of being both maritime and monetarist systems in their top-down characteristics, from their start, as distinctly monetarist empiresystems which secured their integrated forms as national phase-states of respectively separate nations, within an inclusive empire, as what were predominantly "inland" forms of monetarist practices in their essential character as virtual captives of the monetarist system operated from above the subject nations.

In this way, international monetarist systems which have been developed as supra-national maritime cultures, have been developed as an expression of the higher-ranking trans-oceanic maritime cultures, those of the class of "Peoples of the Sea" reigning over nations through an international system of finance and trade operating from above the authority of the individual nation within the system. Rosa Luxemburg<sup>2</sup> and the U.S. State Department's Herbert Feis<sup>3</sup> had been relatively unique, as much as outstanding, as they described this imperial model as the principle of what continues to be the modern British imperialism which has been continued, still, today.

This maritime-imperialist form of monetarist system, had emerged out of an implicitly long history of essentially transoceanic maritime life among coastal and insular points of contact, as between coastal and lower-riparian locations, as along the standard trans-Atlantic and Indian Ocean routes. There were also some significant trans-Pacific routes.

The significant extension of maritime cultures based on a concept of a predominantly closed system of changes within a guiding systemic form of "finite but not bounded" stellar array, can be traced, presently, as a form of organization of society, either during, or following the close of the roughly 100,000-year quasi-permanent glaciation of large regions of the northern latitudes. In this roughly 15,000 years of rise of the levels of the oceans by about 400 feet to post-great-glacial levels, there came expansion into what had been inland glacial regions, as accompanied by titanic shifts in cli-

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

<sup>3.</sup> Europe: The World's Banker 1870-1914 (New Haven: Yale University Press, 1930.)

mate and climates. Thus, we are confronted with the curious distinction of the "peoples of the sea" as "gods," or "immortals," and those of landlubber proclivities as ordinary, mortal men and women.

There is another implication of this just-outlined set of distinctions which must be at least briefly mentioned here.

The several kinds of evidence of the ancient transoceanic maritime cultures' knowledge of certain great and still greater astronomical and related cycles, such as that of the cycles of migration of the North magnetic poles, and the famous great calendar cycle associated with the name of Plato, must be kept in mind in efforts to assess the underlying intellectual forces operating as if beneath the surface of the direct experience on cultures experienced as being approximately "specific" within the span of two or three generations.<sup>4</sup>

# The System of Economic History

We can treat these—now identified—four categories of states of culture being considered, three known, and one to be added, as being akin in their respective distinctions from one another, as they are comparable to four different cultural types from among human biological species. The distinction among those "species" is not statistical in essential nature, nor merely nominal in other ways. To grasp this notion of specific distinctions with scientific precision, rather than merely "handwaving" description, consider the following argument to be made at this juncture.

The key term for this purpose, is the principle of "fire," as that has been a specific social category uniquely attributed to human behavior since, at least, no later than the relevant sociological issue was treated in Aeschylus' **Prometheus** trilogy.

The concept of man's use of fire, is the crucial distinction of man from ape for those archeologists seeking a crucial way of distinguishing ape from man in a sampling of the use of fire relevant among comparable sampling of human-like remains met in ancient sites. That fact leads attention to the therefore provocative report, that the Olympian Zeus of Aeschylus' **Prometheus** trilogy should have forbidden the use of fire by mortal man.<sup>5</sup>

To develop the argument, upon which the definition of cultures as being different species in principle depends, as I have done here, we must recognize that the qualitative changes which distinguish one human culture from another, correspond to species-distinctions, either in literal fact of the matter, or by analogous forms of distinctions of efficient principles expressed in a type of human practice. Examples of this method of assigning systemic distinctions among cultures, can be provided as successively higher forms of heat-principles marked out by distinguishing sources of employed forms of heat within the practice of a culture by the chemistry of successively ranked orders of "energy flux density" in the form of applied heat, or heat's congruent equivalent. By changing the composition of "energyflux density" per capita and per square-centimeter of cross-section, we have defined the basis for focusing attention upon the notion of the physically specific "level" of distinction of the cultural development of the population of a species of societal development.

That example of the role of energy-flux density in defining a culture, serves as a pedagogical model which should be found helpful in understanding the differences in essential nature of the distinction among different cultural-behavioral types among the human species, as when we contrast the range of behavior among animal species, to that of the social species of ranking specific qualities of differences among human cultures. It is particularly notable, that human beings can change the species of their culture, whereas lower forms of life can not do so voluntarily, as if by their own will.

Thus, the very notion of species must be defined as a matter of relative form of willfulness: the one essentially biological; the other, what the work of Russia's V.I. Vernadsky defined as the Noösphere, as the phase-space afforded to the *human noëtic powers*. Only man can change his species of existence voluntarily, doing that without changing the animal-like specifics of the human beings in which such voluntary modes of change of species can occur as a change in physically-specific features of a culture. Hence, we have the implicitly

<sup>4.</sup> We need not worry ourselves over precise mathematical scales in this discussion. What is of crucial importance here, is to bring to bear the factors of large magnitude for their impact on the short-lived and constricted span of experience of the human individual, the immediate household and local or regional community. As Bernhard Riemannn emphasizes in the third section of his 1854 habilitation dissertation, man's potential capability for knowing what is sought as being true, or as fairly approximated estimates in the very large, or the very small, both of which are each beyond individual sensory experience, are keys to discerning those principles which are demonstrably true, but whose construction from experience reaches beyond direct sense-perception. It is necessary to be capable of hypothesizing the higher hypothesis.

<sup>5.</sup> I shall come back to that in a later chapter of this report.

theological distinction of man, as a representative of the Noösphere, from the creatures of the Biosphere.

Now, with those conceptual tools so identified, we proceed here, now, to treat the three specific categories of human culture considered from the vantage-point of three European cases, and the choice between contrasting future options, for a fourth.

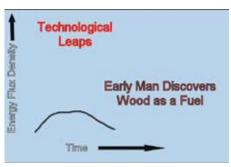
The practical importance of the qualification which I have just introduced here, is illustrated in the most convenient way, by the clinical distinction between the transition from Roman to Feudal cultures, on the one hand, and the more complex transition from the Feudal, to the Modern European culture, on the other.

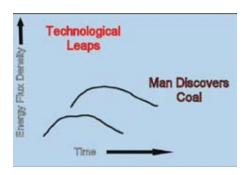
The first category of the succession defined by the sequence of the first three selected, previously known cultures which I reference here, appears in the rise of what became the hegemonic power within the Mediterranean region of a form of maritime culture which tradition associates with the Ho-

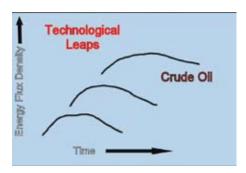
meric **Iliad** and **Odyssey.** The notion of the hegemony of a specifically European maritime culture, is associated with the transition, via the role of Alexander the Great, in the process of development of the relative supremacy of a Mediterranean-wide, imperial form of maritime culture leading into the establishment of a Roman Empire. That latter development should be traced through study of the plotting, on the Isle of Capri, between the future Caesar Augustus and the priesthood of the Eastern cult of Mithra.

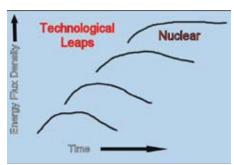
The development of the Roman empire, in its character as a Mediterranean-based, monetarist form of maritime empire, has been continued in globally extended European history to the present days of the British monarchy.

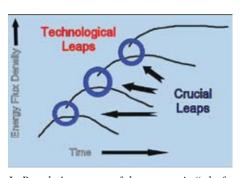
#### FIGURE 1

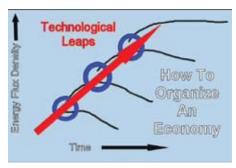












LaRouche's concept of the economic "platform," as opposed to the conventional notion of "infrastructure," is one of integrated national systems, as illustrated in this graphic series.

# I. Introducing Modern Physical Economy

My own principal, and relatively unique accomplishment in respect to an actual science of physical economy, has depended on my vigorous resistance to the notion of a "merely mathematical" science of economy.<sup>6</sup> My relevant decision to that effect was first expressed in early 1953, after, first, several years of actively rejecting the

<sup>6.</sup> This does not mean, as some foolish, would-be critics have alleged, that I have rejected mathematics. It means that competent mathematics depends upon the higher authority of physical science, as through the discovery of universal physical principles which supersede any form of mathematics contrary to those discovered principles.

attempts at defining an economy by two relevant acolytes of Bertrand Russell, Professor Norbert Wiener and John v. Neumann, that by my settling on the standpoint of the physics emphasized by Bernhard Riemann in the concluding, third section of his 1854 habilitation dissertation, the location in which he, in accord with his Berlin mentor, the great Lejeune Dirichlet, introduced the key to the development of an appropriately modern form of a science of physical economy.

From the beginning of adopting that approach to a physical science of economy, what my approach defined from the start, is implied in two crucial guiding principles. **First**, that no monetary system provides a functionally valid guide to defining a notion of economic value of anything other than a measure of the credulity of buyer and seller, alike. **Second**, the two-fold principle, that the proper measure of physical value, is relative to the economic processes of society considered as an indivisible whole, and in no other way, and to the fact that relative value can be described only in terms of rises and falls in relative values as value is definable in terms of the net rates of increase (or decrease) of the realized net productivity of the labor force of a society as a whole.

That is conceived and measured as either adducibly accomplished fact, or, as projectable changes, upward, or downward, may be defined over varying, relatively short-range, to relatively long range intervals of lapsed time.

### "Field Test: Auto"

My first "field test" of this approach came in the performance of my function as an executive for a management consulting firm. It occurred in the course of my forecast made at the close of Summer 1956, of a deep recession to strike suddenly at some point between late February, or early March 1957. The principal subject for this first such forecast of mine, was the topic of that system of production, trading, and credit as represented for the combined new-car and used-car marketing under the conditions typified by the form of the existing contractual agreements between the automobile manufacturers of new cars, and the used-car market. I knew, all as part of my relevant expertise in the automobile and other markets at that time: that, the leading automobile manufacturers' standard, was that the new car sales must be set, at that time, contractually, according to manufacturer's assigned sales price; this created a set of critical imbalances among such elements as the later development of the use of a closing "balloon-note" factor in financing of new car sales, with the consequences of this arrangement for the marketing of used-car trade-ins, as the effect of that arrangement was to be measured against the difference between the used-car inventory of trade-in on the franchised dealers' lots, and the wholesale price of comparable used cars in similar condition accumulated on wholesalers' lots.

This pattern in the domain of automobile marketing, intersected related patterns of behavior in relevant other market sectors. The effect of the interrelations was a clearly defined "bulge" in the financial market, a bulge like that produced by imagining the swallowing of a bellowing bull by a python: the similarity of that to the market's condition was really difficult to overlook, but many wishful thinkers did succeed in overlooking that fact—up to a certain time.<sup>7</sup>

As 1957 approached, the combination of the accumulation of "36th-month" final notes with certain doubts of the relevant vehicles' reaching a 36th month of useful life, was becoming a new meaning for the term "finality."

The result was the collapse of the markets at about the time for which I had aimed my forecast about six months earlier. The deep national recession which began at the close of February 1957, dominated the U.S. national economy through the time of the inauguration of President John F. Kennedy, in January 1961.

My forecast of a recession dating from six months prior to the relevant event, should not have been considered as a spectacular achievement in itself; however, the subsequent persistence and exhibited characteristics of the continuing recession, were to be considered as a consequence of exceptional importance. By Spring 1958, the worsening of the continuing of the recession more than a year and a half after my original, Summer 1956 forecast, showed that I had now developed what later proved to have been valid projections bearing upon certain national economic problems to be considered as probable for the decade or more ahead. As my refine-

<sup>7.</sup> The prevalent practice of "statistical economic forecasting" suffers the systemic expression of the chronic fault, that it is in the specifically contrary nature of all lawful processes, that the expression of the intrinsic incompetence of mathematical-statistical methods lies in their specific incompetence of presuming that the past and present generate the systemic changes which may occupy the future time beyond the statistical patterns up through a present date. Thus, for example, the introduction of emphasis on the role of a new physical principle, or the termination of the practice of a previously existing one, is the usual cause of a more or less early, or more distant systemic change in the process being subjected to methods of statistical forecasting.

ments in the original forecast progressed over the course of the 1958-1959 interval, I had concluded that a new, deep recession could be expected, under certain conditions, as early as 1961-62, but, even if such a recession were postponed, as actually happened, to the end of the coming President's term, that if the now deeply embedded U.S. economic-policy-trends from the 1950s were either continued, or newly introduced, a continued, and systemic U.S. economic crisis were likely for near to the end of either the late 1960s, or beginning of the 1970s. The crisis which I had forecast for the closing years of the 1960s decade, since 1966 onward, was now almost certain for approximately the close of the decade; it struck suddenly in the Summer of 1971. When that had occurred, I was the only notable economist who had repeatedly warned that such a development was built into the prevalent policies of what had been notable economists of sundry shadings at that time.

The uniqueness of my successes in forecasting during the 1956-1971 interval, and beyond, is to be located, primarily, in my rejection of statistical "market" and related projections, in favor of the determining role of either changes, or lack of changes, in terms of physically-efficient principle, relative to conditions of attrition inherent in any extended practice within the bounds of a fixed species-like type of a physical-economic system.

The customary, stated, but errant belief of my putative rivals, even after some dust from the mid-Summer collapse had been settled after December 2nd of 1971, had been that the so-called "built-in stabilizers" should have secured the United States against such an event; that view of my rivals had persisted until then, through a pack of statistician's sophistries premised in militant disregard for essential physical principles operating, such as "it didn't happen exactly as I wish to read what you said" attempts at denials, past the Nixon Administration's August crisis, almost to the time of my celebrated, December 2, 1971 debate on this issue with Professor Abba Lerner at Queens College. The closing remarks by Professor Abba Lerner left the impression on the faculty members seated in the front rows that

Lerner had definitively lost the debate to me.

However, since my widely celebrated defeat of Britain's Professor Lerner in that prominent event, I had been put on the trans-Atlantic map as a forecaster who had become a political figure in my role as a notable economist of the time. My leading adversaries, or, properly said, political enemies in the field, were centered, internationally, then, and, to a large degree, still today, in that 1950-launched Congress for Cultural Freedom (CCF) associated with such colleagues of Professor Lerner as Professor Sidney Hook. The personal enmity against me from those same circles of trans-Atlantic affairs, has not only persisted to the present day, but has been greatly accelerated, internationally, since that time.

Since that time, I have produced a limited number of original forecasts for the U.S. economy: all successful in fact, and of special relevance in their importance to what have continued to be what might be considered as my rivals in the field. That advantage of mine on this account, has always lain in a particular aspect of physical-scientific method rooted in the work of Riemann, not in customary varieties of statistical method; that is the point of the distinction to be emphasized at this presently early stage of this report.

It is an extremely relevant fact to be considered here, that any effort to attempt to explain away the successes of my method of forecasting for the U.S.A. as also for other markets, has failed. Although my methods have been significantly improved by subsequent refinements over the intervening decades, the essential reasons for the relatively systemic uniqueness of my successes, have not been changed in respect to their underlying, Riemannian basis, nor has there been a principled error shown to exist in the principles which I have adopted for treating those sundry national and international systems of economy which my forecasting has taken into account. In the practice of economic forecasting, as my own performance to date has shown, there is a systemic difference to be acknowledged, between an imperfect, but generally correct apprehension of a true principle, and an intrinsically wrong choice of principle.

The following relevant illustrations have been selected out of respect for their special relevance to those opening remarks of this present chapter.

# The War over Detroit

The long wave of decline and subsequent fall of Detroit and of related manufacturing centers in the U.

<sup>8.</sup> For example, the disregard of the fact, that the assassination of President John F. Kennedy had introduced the changes in policy which were expressed by the ruin of the U.S. economy, by the contrary-to-Kennedy policies associated with the Warren Commission's anti-Kennedy, British-steered actions in covering up, in effect, the intentional factor represented by the Warren Commission's own role in backing the utterly ruinous, virtually decade-long U.S. nightmare in Indo-China.



Among the most significant strategic accomplishments behind the revolutionary technological advances of the United States of the late-19th/early-20th centuries, was the development of the Transcontinental Railroad system, and the parallel development of Russia's Trans-Siberian Railway, as shown on the maps.

S.A., and elsewhere, as during the course of the post-World War II decades, was rooted in an industry which had generated reasonable, sometimes brilliantly conceived benefits of improvements in machine-tool and related features of manufacturing; but, it was also an industry whose usually controlling, post-World War II motivation, had been that of a London-allied Wall Street financier's higher intention of destroying the railway systems of mass-transport of freight and passengers, as through the aid of flooding the markets and highway traffic-jams with the manufacture of automobiles. In the case of the United States, in particular,

Wall Street's motive in destroying efficient mass transport systems, such as railway systems, was, very much a reflection of the same, specifically geopolitical, motives which had prompted the British empire's 1890 ouster of Chancellor Bismarck.

I explain.

The model of the Abraham Lincoln-sponsored development of the U.S. transcontinental railway system, had been spread into Europe, especially Germany and Russia, following the time of the 1876 U.S. Philadelphia Centennial exposition. The included impact of the post-1876 developments from this point onwards, was a set of revolutionary reforms of economic policy among a notable selection of other nations with also notable, combined scientific and related economic potentials. The cases of Germany under the leadership of Chancellor Bismarck, and a Russia inspired by the genius of Dmitri Mendeleyev, became the most notable such ef-

fects, historically, and politically, on this account.

Both of those latter nations had acquired impressive scientific capabilities, and continued to do so up to the threshold of the 1905 war, for Russia, and somewhat beyond 1914, for Germany. Both nations had been greatly impressed by the massive spread of U.S. methods of creating massively organized technological advances in manufactures, agriculture, and related technologies on a mass scale. Among these accomplishments, the most significant, strategically, was the U.S. development of a trans-continental railway system, a system whose most crucial strategic significance, was the fact, that transcontinental railway systems out-classed ocean shipping logistically, both technologically and systemically. So, we have the cases of the projected development of a transcontinental railway system, and the parallel development of Russia's combined Trans-Siberian railway and indus-

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trial systems under the supervision of the Dmitri Mendeleyev who had also participated in the 1876 Philadelphia exposition. That experience was recognized in London, as having the combined effect, combined with that of the U.S.A. itself, of a mighty, geopolitical, strategic threat to the continued existence of the British empire.

Not only World Wars I and II were the avowed, specifically "geopolitical" reaction again these railway systems; the British empire's reaction against those systems, came quickly. Britain was determined to defend its role as a hegemonic world empire. The British intention to bring about the destruction of Germany and Russia, by aid of pitting the two against one another in warfare, was the most notable of the immediately direct reactions from London. Beyond that, the destruction of our U.S.A. itself was, and remains a principal target, through to the present day. The British empire represents, relatively speaking, possibly a marsupial (e.g., imperialist) order of economy, while we were created representing an evolutionary upgrade to the status of being a society designed for the comforts of actually human mammals.

# Britain, The Enemy of the Republic

However, there have been only rare cases of actually competent efforts to gain a competent representation of the controlling processes over the span of the whole sweep of warfare beginning with, (a) the 1890 ouster of Chancellor Bismarck, through (b) the assassination of France's President Sadi Carnot, (c) the manufacture of the hoax which was the Dreyfus case, (d) the British alliance leading into the British-Japan war against China, which broke out in 1894, and (e) the same peers' 1905 Anglo-Japan warfare against Korea and Russia, all leading into (f) the Anglo-French organization of Balkan warfare, and (g) World War I in its entirety, and beyond. Nevertheless, these are all of one piece. So, (h) that openly internationally orchestrated assassination of U.S. President William McKinley, made possible the otherwise impossible U.S. successive phases of sympathy, and economic strategic cooperation with the British empire, set into motion by McKinley's successor Theodore Roosevelt, and the crucial phase of directly military support from a U.S. expeditionary force for the British imperialist warfare against Germany which had been launched in 1914, but actually set into motion, step by step, with the ouster of Bismarck in 1890.

A similar pattern continued during the 1920s and beyond, in (a) the British-Japan naval-treaty agreement launched in the early 1920s, for Japan's preparation for what was intended to become the destruction of the U.S. Naval base at Pearl Harbor, as known to the U.S. military planning of the 1920s, as in the celebrated case of General Billy Mitchell. (b) It was only when the British empire which had created and aided the strategic objectives of the Adolf Hitler regime, was (c) taken by surprise in the Wehrmacht "Blitzkrieg" victory in France, that (d) Winston Churchill of the British monarchy which had created Adolf Hitler in Germany, reached out in desperation to (e) the President Franklin Roosevelt whom Churchill hated, that Britain found itself clinging desperately to Roosevelt for (f) succor from Britain's former creation, as by aid of Brown Brothers Harriman's direct support for Hitler's installation in the British founding of Nazi Germany.

That much said, when combined as one, World Wars I and II were the avowedly British, specifically (g) "geopolitical" reaction to the emergence of the transcontinental railway systems of the U.S.A., Germany, and Russia. (h) Even prior to 1890, the trigger which prompted the British monarchy to use relevant British royal family connections to bring about (i) the dumping of Bismarck, had been (j) Bismarck's secret agreement with the Russian Czar, that he, Bismarck would wreck (k) any attempt to use the aging Habsburg Kaiser as the foil to unleash a Balkan war (l) intended to bring Russia into a military conflict with Germany.

In part, that British reaction was (a) already set into motion by Lord Palmerston's extended period of preorganization, and direction of the U.S. Civil War through aid of such agents as the uncle who would later guide the orientation of future President Theodore Roosevelt. British intelligence repaid the U.S.A. for its defeat of Palmerston's Confederacy puppet with (b) an assassination of President Abraham Lincoln; but, even after the retreat of the Palmerston who had actually owned Karl Marx, and also some relevant continental European socialists of that time, (c) the British monarchy was determined to "correct" the victory of the United States over the British Confederacy puppet.

The combination of (a) the success of closing the gap for the U.S. trans-continental railway system, (b) the American direct hand in Bismarck's economic reforms, and (c) the combination of the effect of those



Treason: The shutdown of the U.S. auto industry—in fact, the advanced machinetool-based mass-production capacity of the economy—by Wall Street and London's puppet President George W. Bush, has achieved British Empire's goal of destroying the U.S. economy. Shown: Bush at a White House conference, December 2004; a GM plant in Dundalk, Md., closed in May 2005.

reforms and of the development of Germany-Russia economic cooperation in development of transcontinental railway systems, essentially, complete (d) the package of British motivations for the efforts to destroy the United States (e) which were born in 1763, and (f) have persisted through the most recent steps in that direction, the role of U.S. puppet-President Barack Obama.

White House

Since Lord Shelburne, the heir of the 1763 British victory in the Seven Years War, had received Edward Gibbon's Decline and Fall of the Roman Empire, the idea of a master plan for a British Empire to supersede the Roman has been the imperial institution embedded within the British monarchy, from that time to the present day. Notions along those lines had existed with that notion of a new Roman empire conceived by the critic of the failed Council of Trent, Paolo Sarpi, and had been carried from the Netherlands into England by William of Orange's bearing the banner of what was then the avowed New Venetian Party of Sarpi's followers. The exact same policy is that of the British empire's creation of the Euro system presently.

Hence, the legacy of Paolo Sarpi's role as a successor to the old Venetian party which had overtaken the Byzantine empire approximately 1,000 A.D., the empire which had succeeded the original Roman Empire founded by the negotiations between the future Caesar Augustus and the priests of the cult of Mithra at Capri.

# Treason in America Today

Once President Franklin Roosevelt had died, and had been replaced by a notorious crony of Wall Street, Vice-President Harry S Truman, the systemic destruction of those Eurasian transcontinental railway systems which been founded, despite some British-led continental European opposition, was a bellwether and essential aspect of a relatively immediate sort of strategic objective of not only London, but London's traditionally "American Tory," Wall Street accomplice.

That British policy and its influence throughout the planet, has followed, up to the present day, the specifically fascist economic model of "Creative Destruction" which was inherent in the British imperialist motives for organizing two so-called "World Wars." This launching of European fascism occurred as a specifically "geopolitical" reaction, initially launched, with explicit British backing of Benito Mussolini, and British backing of Adolf Hitler's Nazis, against what had been since the rise of trans-continental railway systems, combined with the post-Queen Anne, British monarchy's intrinsically Sarpian orchestration of the so-called "Seven Years War" in Europe, and the post-1763 expressions of hatred of what was to become our United States.

That British system, whose incipience dates from the takeover of the British Isles by the New Venetian Party's William of Orange, is, as Lord Shelburne emphasized, a self-esteemed successor of the original Roman Empire

and its Byzantine and Venetian-controlled successor systems of monetarist imperialism. Our United States was created, in fact, as an outgrowth of that succession of the Plymouth settlement and the original charter of the Massachusetts Bay colonization, which constituted the initiation of the design originally defined by Cardinal Nicholas of Cusa, for building up a system across the ocean consistent with the great principles of an escape from feudalism known as the reform of the great ecumenical Council of Florence which Cusa's personal circles had inspired, as what was to become the trans-Atlantic European settlements in North America.

We were created as a nation, in what was to become our United States, following the Habsburg imperialists' ruin of the intention of Christopher Columbus' voyage, which Columbus undertook as his response to Nicholas of Cusa's intention of producing a form of republic consistent with such revolutionary designs as his Concordancia Catholica, De Docta Ignorantia, and De Pace Fidei, of the great ecumenical figure known as Cardinal Nicholas of Cusa who was the founder of modern physical science of such included among his followers as Leonardo da Vinci and Johannes Kepler.

Against that background, the particular point must also be emphasized, in the context of what I have just written, above, that, during the 1920s, the destruction of the U.S. railway system was already on the agenda of both Britain and its Wall Street accomplices in the Theodore Roosevelt and Woodrow Wilson traditions. It was the opposition to those scoundrels by President Franklin Roosevelt and the U.S. mobilization for victory against fascism in World War II, which had brought the railways back, if temporarily. From the beginning of the post-war period under an established Wall Street opportunist, President Harry S Truman, the railways were targeted to be run down, and, eventually, virtually disappear.9 That destruction of the railways, and the post-Kennedy Administration destruction of the U.S. economy, began in the shutting down of a city railway system in Los Angeles, a stunt from whose effects Los Angeles has not effectively recovered, to the present day.

Wall Street's chief geopolitical weapon against the U.S. railway system was the mass production of relatively cheap automobiles under, chiefly, the Wall Street pack of Anglo-American financiers' opposition to the rise of Henry Ford's achievements. So, by the middle of the 1950s, local gas stations had been added to the roster of authorized dealerships, shortly before the crash of 1957. The development of the U.S. super-highway system, and resulting vicious traffic-jams, was an important addition to Wall Street's geopolitical war against the still dominant, but already diminishing role of the national railway system.

There is often as much, or more folly than there is guile, in what are apparently, or actually high-level conspiracies, such as those against U.S. agriculture and industry in what a presently self-ruined Wall Street finance has done in its de facto effort to betray and destroy the United States under such as the Morgan gang's Alan Greenspan and U.S. Presidents George W. Bush and Barack Obama.

The British empire could not be competently understood, until we have restated the fact, that today's British empire, the empire which is acting to complete the destruction of our United States now, has been, and remains, for as long as it lasts, the living continuation of a system of maritime-centered, monetarist imperialism which led into the creation of the Roman empire, as that was done by way of conspiratorial meetings between the future Caesar Augustus and the priests of the Cult of Mithra conducted on the Isle of Capri.

That empire, was extended in the later forms of Byzantium, in the role of the Venetian monetarist system since about 1000 A.D., and since the mass-murderous invasion of the British Isles by the New Venetian Party then led by William of Orange, the invasion of those Isles which established, and has reigned as the British empire, from its role as a kind of "Rosemary's baby" in its seedling form under the butcher William, to the launching of the empire of the British East India Company, which was formerly constituted by the February 1763 Peace of Paris, all done as in the mode of the bloated Inter-Alpha Group presently, a Group which is a continuation of what has been the reigning imperial monetarist power of the world, with some very brief exceptions, from before ancient Rome to the present day.

It is therefore notable, that Chancellor Bismarck, who had come to understand this principle of a maritime form of monetarist imperialism, who understood

<sup>9.</sup> The fraud-in-fact of the relative speed, comfort, and price of traintravel between the nation's capital, Washington, and New York City, and return, illustrates this fact most simply. Admittedly, the U.S. railway systems have been intentionally ruined, most notably since the 1950s negotiations between the New York Central and Pennsylvania railway systems, all this as a part of an intentional de-industrialization of the U.S. economy. Only foolish people rely on comparing prices in such cases as that. The question should be: "How did it get that way?"

the nature of the British imperialist system, was not an enthusiast for the continuation of the Franco-Prussian War past the point that the British-created puppet-Emperor Napoleon III had capitulated. There was no actual strategic benefit for Germany in going beyond the dumping of the aggressor and British puppet, Napoleon III, in making France an embittered ally of Germany's intended imperial enemy, London. When one considers the second phase of the so-called "Franco-Prussian War," following the capitulation of the putative author of that war, the British puppet known as Napoleon III, and compares the damage to France during that second phase, particularly in the siege of Paris, one should readily understand why the former British special policeman Napoleon III, should have been sent by London to sacrifice himself in service of the intention of feeding a conflict between France and Germany which could be of advantage to no one except the British maritime form of monetarist imperialism.

The British imperial motive in organizing that Franco-Prussian war, could not have been overlooked by anyone who recalled and understood precisely, as Chancellor Bismarck had said and done after his forced retirement, that "Seven Years War" which had been organized in London to bring about the mutual ruin of the leading nations of the European continent. Since the fame of the Peloponnesian War, fools in the business of the planning and conducting of unnecessary use of warfare, especially poorly planned warfare, have often brought their own nations to a significant degree of ruin, or even worse, by launching a war against one another which is intended, as by imperial London since the ascent of the New Venetian Party's William of Orange, to ruin both, or even all of these contending parties, to the intended advantage of that enemy of both of them, the common enemy who is egging the rival gladiators on while the "Emperor" in the audience amuses himself by admiring the fray in the arena.

Notably, both President Kennedy and General Douglas MacArthur knew better than to be such fools, then back in 1963, as their successors in similar positions of the U.S. command have seemed seldom to have learned that lesson as clearly as General Douglas MacArthur had understood the folly of the U.S. entry into the protracted "land war in Asia," a piece of strategic folly so often repeated for those who should have been the witting, since the Peloponnesian War, through to the present day. So, since the assassination of President Kennedy, our wars have gone, as in Indo-China, as into

two Iraq wars, and into the follies of Afghanistan into which Zbigniew Brzezinski's curious sort of zeal had lured the thus self-ruined Soviet Union, and into the same Southeast Asian trap, organized jointly by the British and Saudi agencies, for putting the U.S. military into the same Afghan "booby trap."

Wall Street's aims for the destruction of the oncepowerful U.S. automobile industry, were an aspect of the problem; but, the fact remains, that what we called "the auto industry" was much more than an auto industry. During World War II Detroit was the central point of reference, "the make anything or everything" industry, while the production of privately operated automobiles was cut back in a very large degree. When Detroit and neighboring industrial centers were virtually shut down, the vast amount of production floor-space of the United States was shut down, under U.S. President George W. Bush, together with the means for producing almost everything else that our economy required of its machine-tool-based mass production capabilities.

Now, through that act of virtual treason against our United States, Detroit has become the "Produce Nothing Industry." In other words, Britain says, "Shut down the United States," even if it is necessary to do this by selecting a U. S. President who will be fully complicit in doing just that. The method of such a President would be, what de facto fascists such as the Nietzsche followers Sombart and Schumpeter named as the weapon of "Creative Destruction." It is what some perhaps rarely washed fanatics praise as "zero technological growth." That goal can be facilitated by limiting the generation of power by means of modes of generating power at monstrously high, relative costs per kilowatt which will, by nothing more needed than the mode itself, obliterate civilization from this planet, and that rather quickly.

# II. The Power of the Human Mind

About forty years ago, I kayaked northward, down Canada's Abitibi River, starting downstream from a great dam, ultimately shooting through the thundering "Class 3" rapid at the passage from the Abitibi into the Moose River, and, thus, into the port at Moosenee on Hudson Bay. In former times, before I had become a public figure operating at some rather large degree of personal and political risk, I had climbed Mount Washington repeatedly, and, therefore, routinely, and made similar jaunts in states along the U.S.A.'s Atlantic

coasts, all which kinds of experiences had served, at that time, to provide an occasional change from the hurly-burly of what had been, formerly, a more or less large portion of my ordinary life, as around Boston, or, later, New York City.

The kayaking down to Moosenee was a good thing, some moments of serenity stolen from the ordinary, modern experience of sundry varieties of what, all taken together, was approaching that time that ordinary circumstances would no longer exist to permit me to do such ordinary things as spend hours of a solitary stroll through virtually the length of Manhattan, or a countryside, or what is often enjoyed as a comfortable humdrum of daily routines.

There had been, therefore, past times now approaching thirty-five years ago, when I had preferred frequent long walks,

and climbing hills and mountains, rather than riding trains or planes, or attempting to contend with teeming assaults of masses of automobiles on the senses and respiratory apparatus. In this fashion, now, as then, I would often place my thoughts at a convenient distance from disturbing intrusions, often passing the better part of a day at a psychological distance from the spurts of insistent threat of breaks in my concentration. The resulting combination of one thing and another, was the appearance of not who I was, but what I might have often been caused, in one way, or another, to some, to appear to be. All otherwise said and done, the experience itself, was, and remains, a good thing; to me; even hum-drum can teach us much, even by forcing us to think of escaping the grip of the boredom which habit engenders.

There have been some moments of my bearing the image of me defined by the rumor-mills typified by the network of those whom I had defeated in the celebrated, December 2, 1971 debate at Queen's College, including the backing for this from high-ranking figures of the British oligarchy, all silly gossip tied to its manufacture



"Without the specific quality of passion which only systemically Classical modes of artistic composition can provoke, there could be no sustainable process of the creativity on which scientific advances depend." "St. Jerome," by Filippino Lippi (ca. 1493).

by much of the leading daily press in the U.S.A., such as massive outpourings of sheer filth from The New York Times, and even, often, copied as the shallow foolishness from the mouths of foolish people in the U.S., and in continents abroad. This experience warns one, as it often did me in times past, to live and to act, for much of my time, at a distance from all silly distractions from the mouths of the frequently foolish; but, that distancing was also required of me on account of the need for avoiding distractions from the frequent, and relatively prolonged part of the passing days, entering into times devoted to large chunks of escape into serious matters, away from the business day. Retreats like those, into extended periods of concentration on the subjects of my work as an economist and in intelligence matters, were demanded, and

are even indispensable to those among us who have learned the meaning of experience applied to the conduct of one's mission in life.

Nonetheless, I have liked to visit people, when circumstances permit, and generally like the people with whom I visit, and who visit me. From reading Johannes Kepler's output, for all that suffering he experienced, his life was that of one who knew that part of life, and its happiest moments, very well. I also like to recall experiences such as climbing mountains and shooting the rapid at the junction with the Moose River.

Such were the effect of lessons from an experience which I enjoyed in my own reaction to reading William Empson's **Seven Types of Ambiguity**, as I had enjoyed doing that from my already established standpoint of a related, more frequent and extended experience of, and attachment to the work of Percy Bysshe Shelley and bits of John Keats, all of which would also come to shape the way in which I had come to regard Bernhard Riemann. Notably, classical tragedy, properly conceived and imagined, has a similarly beneficial effect on scientific thinking, a freedom from that which

I had experienced as that sense of a slimy feeling, from a feeling that my skin were crawling, an experience which exposure to Romanticism provokes. The blame for much of that latter sort of folly, belongs to those, unfortunately, many people who may have a notion of the dictionary meaning of the word "metaphor," while only the very fortunate seem to have understood its scientific content. Mathematicians, for example, rarely do, and, as the Edward Arlington Robinson, stated to be President Theodore Roosevelt's favorite American poet, once wrote, Miniver Cheevy also had reasons.

You might have wondered, at this point: why do I open this chapter of my report in what might seem to some of you, as this dreamlike way?

I tell you, that it is necessary to think exactly such thoughts as these bearing on the Classical-artistic imagination, if one is to clear away the obstacles to genuinely creative insights. The principal source of all scientific reason employed in discovery of true principles, takes its root in the role of the imagination in Classical artistic composition, the latter the domain in which, like Albert Einstein's musical imagination, or that of Leonardo da Vinci before him, where the essential aspect of scientific creativity resides.

So, situate William Empson's **Seven Types of Ambiguity** within reference to the work of such as Shakespeare and Shelley, on the subject of metaphor and kindred matters. That comparison exemplifies a place where the sanitizing habit of frolicking amid real ideas might be found.

What I have just written, in the paragraphs above, is a subject which might be described in a formal way. This has advantages, but also disadvantages. To be precise about this matter, there is a way to think, and a way to speak of what one has thought, or, at a minimum, might gain a prescience of what needs to be discovered as a thought. Without the specific quality of passion which only systemically Classical modes of artistic composition can provoke, there could be no sustainable process of the creativity on which scientific advances depend.

Do not ask, "What should we think?" but "How might we think?" Think of Heraclitus' sense of human life as "a river into which no one may step twice." Think, of Heraclitus' aphorism in terms of the principle of reality which distinguishes competent, from popularized notions of the principles of economy. Discover what may lurk behind the mask which is usually considered to be literate speech. I shall come to the explic-

itly scientific connotations of such a distinction, soon, within this present chapter.

# Heraclitus on Economy

The great fraud common to what appears to be virtually all among the contending views on the underlying principles of economy, is an inherently fraudulent presumption by Rudolf Clausius and his co-thinkers, an assumption which might often be referred to as the psychopathology of believing in a "Second Law of Thermodynamics." That is the intellectually, and also morally defective notion, that frictional or comparable forces of attrition foredoom all systems to express a process of "running down" with wear and tear, over time. That is a principal source of the systemic quality of defects in the thinking of economists generally.

For example, such foul folly as that, is implicit in the practice of such as the late, and consummately evil Bertrand Russell, and by Russell's devotees among the intrinsically fatal incompetence characteristic of that Cambridge systems-analysis outlook which is embodied in the Laxenberg, Austria-based International Institute for Applied Systems Analysis (IIASA). In reality, as Heraclitus' parable actually suggests, the reality is, that the continued existence of any existing physical-economy's social process, demands the effect of a long-term increase in the relative anti-entropy of the physical process of economy, per capita and per cubic centimeter of cross-sectional measure of society's action. 10

Two aspects of that function are to be emphasized here. For a pair of relatively simple illustrations of that conception, consider the following:

First, all of mankind's primary sources for consumption, are to be located in the accumulated concentrations of deposited left-overs from the former existence of living processes. By using primary sources accumulated as "raw materials" for human consumption, we are not using up the biochemical material deposited; but, we are, in a manner of speaking, dispersing it, thus appearing to "use up" an earlier richness of the relatively richest deposits known to be accessibly available to our present means; this, consequently, implicitly obliges us to expend increased efforts merely to "stay even" with the effects of such apparent depletion.

Secondly, to offset the entropic effect just referenced, mankind's creativity and general ingenuity must intervene. A higher concentration of applied power

<sup>10.</sup> Compare this with the irony in Plato's Parmenides.

were required merely to provide for a constant level of better than breakeven in the efficiency of production of the materials which a net fixed standard of living would appear to require. Actually, on the account of the dependency of progress, even the need to resist attrition by higher forms of production, requires both an increase of the human population, and an accompanying advancement in the net productive powers and productivity of human labor, as through the means of applied inventions and investments in human creativity, and, also, by increases of the capital-intensity in current modes of production. This works to such effect, that there is required an increase in both the energy-flux-density of power applied, per capita, and therefore of capital-intensity, too, that per square kilometer of territory, even to maintain a constant standard of net productivity.

In a successful design and development of a national and world economy, these considerations are crucial.

For example, those persons who claim that society should avoid high-energy-flux-density sources of applied power, by limiting us to such as windmills and solar collectors, are either being stupid, or may be malicious hoaxsters. The fact is, that the very act of entertaining the idea that there is a ratio of power, net of physically incurred cost, extracted from such devices as windmills and solar collectors, is a folly whose ruinous effect far exceeds all acceptable lower limits which any nation's population could tolerate. Windmills and solarcollectors have the inherent practical effect of an attempt at imposing virtual genocide against the nation harboring the practice of such capital folly. The emphasis on those means, can have no result, but the destruction, through relative bestialization, of the preconditions for the survival of a civilized society.11

That destruction is what contemporary custom identifies as that fascist doctrine of "creative destruction" attributed to the doctrines of Friedrich Nietzsche and such among his followers in this doctrine as, most notably, Werner Sombart, and Joseph Schumpeter.

The fact that we must rely increasingly on shrinking of the richest resources available to us at any particular time, simply to maintain society, and that we must also increase the level of applied "energy-flux density" to make science-driven technological progress possible, adds weightily to the evidence that "green policies" of the sort demanded by advocates of the policies of the World Wildlife Fund (WWF) and comparable progenocide cults, must be outlawed, on the account of a charge of willful genocide, from practice, world-wide.

Actually, society needs more real "green" plant-life in respect to bring about: (1.) Rises in the level of energy-flux density in the order of nuclear-fission and thermonuclear fusion, increasing, world-wide, now, as needed, beyond honest doubt, even to maintain existing nations and their peoples; (2.) Increases in water throughput per capita and per square kilometer of territory, which can be done through modes such as the design for the National Water and Power Alliance (NAWAPA), and the Transagua project presently; (3.) Accelerated rates of physical-capital intensity of investment in production and in basic economic infrastructure; (4.) Revolutionary qualities of human improvements in the interrelationship between life on Earth and the processes of inter-action, on the one side, between human and other life on Earth, and (on the other side) long-term processes whose desired, functional effects on life on Earth depend upon mankind's understanding of the factors of cosmic radiation located, on the one side, within the bounds of the galactic and Solar-systemic functions of cosmic radiation, and, on the other side, as if reciprocally, life, especially human life, as back here, on Earth.

In the meantime, we are, thus, already entering a phase in which the reading of the Periodic Table of Chemistry is premised on a system of that table of Chemistry which is to be viewed from the standpoint of space-time, rather than from the standpoint of a space-and-time in which there is really nothing even approximating the existence of "virtually empty space," a space filled with that cosmic radiation, among which "elementary particles" may be recognized as singularities of the system.

In such a prospective process of reform of the very

<sup>11.</sup> Compare the incurred physical cost per kilowatt-hour among windmills and solar collectors, with those of hydroelectric dams and nuclear fission. Also compare the efficiency of chlorophyll's effects in the increase of the energy-flux density of the relevant environment with the loss of that gain through reversing the biological productivity of landareas through degrading the area by desertifying the area by substituting the far less efficient, and far more costly method of the attempted generation by the effect of solar collectors. Chlorophyll typifies the vast superiority of growing, leafy plants, or, better, trees. Note that the intention of Britain's Prince Philip and of the Netherlands' Prince Bernhard, in launching the World Wildlife Fund (WWF), was, not to maintain a higher standard of living for the human population, but to reduce and contain the world's human population to no more than two billions living human individuals. A policy of windmills and solar collectors would do just that, early on, but a continuation of such practices which destroy more wealth during their operation, than is produced, means setting population goals in the direction of a return to a "stone age."



The great bioengineering project of NAWAPA leads us to the question: What must the policies of the United States be toward the organization of new degrees of man's power to develop conditions both on, and nearby the planet Earth? NAWAPA will be a giant step into the galaxy, and beyond. Shown: an exploding supernova, sending cosmic radiation into "space."

notion of a physical, rather than a merely nominally monetary system of economy, we must replace the inherently tragic sort of so-called traditional methods of social-economic "traditions," doing that with a willingness to meet challenges to what have been presently more or less axiomatic, but mistaken notions of man on Earth. We must do this, to meet those challenges from even the future states which mankind must conquer even during both the recent and that coming generation which we are already entering now.

That much said, let us now return to the matters under discussion before this parenthetical intervention had just been inserted by me.

# The Present Conception of Mankind

It is virtually inevitable, but not necessarily very good in itself, that what we are customarily disposed to say, is closely related to the current variety of generally considered objects of our sense-experience. Yet, already, for reasons which I shall now illustrate, careful reflection on the role of our powers of sense-perception, especially when limited to the span of the conventional five senses, is, virtually, by definition, far from the domain within which actually productive thought might dwell. We should be reaching for the real ideas which are not matters of sense-perception, but thoughts "we

see as if in a darkened [and distant] mirror,"

We must think about a certain thought by Albert Einstein, on the subject of Johannes Kepler's uniquely original discovery of the principles of universal gravitation. Kepler's discovery recognizes that neither the sense-perception of sight, itself, nor that of harmonics, itself, is the truth of the real universe. Remember, that senseperceptions are, actually, merely shadows which may sometimes appear to be, to some among us, as if cast by the unseen universe. That can be, as it was for Albert Ein-

stein, very good. Kepler had demonstrated by his unique discovery of universal gravitation: it is only by means of experimentally demonstrable intersections of two (or, more) contrasted mere shadows, each being not real in itself, that what is neither of the two, casts its own shadow of that conceptualized truth which actually exists in an unsensed, but true domain, our universe as such.

Return, thus, to the third section of Bernhard Riemann's 1854 habilitation dissertation.

Riemann connects two points of thought. The first thought, is the fact that sense-perception does not pierce the reality of the respective extremes of the very large and the very small. This leads to the concluding sentence of the dissertation, that to enter the domain of physics, we must depart the prejudicial premises of mathematics. We do not actually know the real universe as an object of sense-perception; those objects we meet in our senses, are not real in themselves; we can know the effects of changes which we can demonstrate, which are effects of the type we should consider principles, but which do not correspond to the shadowy images of sense-perception as such. We must come to know, that we can actually know the real universe, which exists in this way, as that being only as we are enabled to change it, as Heraclitus wrote.

# What Is the Human Mind?

As if in a thought-experiment, set up the following organization of ideas.

For purposes of that thought-experiment, presume what are, unfortunately, usually classed as "the standard five senses." At the same time, in your imagination, establish a mental image of your own personal identity as a creature which is capable of witnessing the behavior of your sense-perceptions: not what you sense as such, but, rather, your reactions to the setting among your five indicated types of sense-perceptions. Treat what the sense-perceptions presented to "the you" of your observing sense-behavior, as being a matter of virtual shadows, rather than the reality which may have cast that shadow. The "you" which is watching the shadow-like images, now interprets the behavior of those sense-perceptions, as sense-perceptual experiences which are no longer, ontologically, what you might confidently regard as being the relevant "real you," but, rather the visible shadows cast by a domain which remains unseen.

Now, remember, from this point on, that sense-perceptions, at their best, are merely shadows cast by an unseen universe. The organs (agencies) of sense are a form of instrumentation built into the system of human sense-perception. Once we have recognized that those shadows are merely reflections of the function of sense-perception, rather than access to ontological sense-certainty, we have entered the domain of a competent practice of science.

Imagine that you are living comfortably within a (momentarily) virtually sealed space ship, imagining that that which passes for the space-ship's own sense-instruments are then your mind's only direct access to the world outside the direct experience of the ship at that time, rather than actually being you. You are now considered as incarnate within the sensed universe outside the ship, almost as if you were an immortal soul, and that "that you" is operating the space-ship under the conditions within the universe "outside," through aid of the use of the instruments. What you sense of the world outside can be recognized only by aid of the method employed in Kepler's uniquely original discovery of a principle of gravitation.

Now, think in the terms with which Riemann defines as the subject of the universe beyond sense-perception, in the unsensed aspect of the universe, as seeming to be the very largest and very smallest aspect of what you imagine you are experiencing as within "a

universe" outside the craft in which you imagine that you are traveling.

#### Mind & Sense

You exist. You are real in the respect that your senseperceptions can be proven by methods which are not dependent upon sense-perception itself as such, methods for which sense-perceptions are, at their best, merely shadows cast by some reality according to the chosen mode of illumination of the effect of the presence of the unseen object.

Once we have said that much, we are self-confronted by an ironical fact, a fact which identifies the substance of the central point to be made in this present publication

Pose the question: if sense-perceptions are, in each expression, to be presented as being merely varieties of the shadows of reality, what does that consideration say to the point of the nature of the actual being which we are, rather than being merely like a shadow cast upon a screen, as the Apostle Paul wrote of this, as "seen" through a darkened mirror? What remains, then, when the attributes of the living flesh fall away?

There is, in fact, a certain answer, which should be clear to any competent physical scientist, and to anyone who has comprehended the actual significance of the essentially underlying coincidence between discoveries of principle in physical science represented by the efficiency of the act of discovery of a universal physical principle: we are considering a discovery which is ontologically an act by a living human individual, but an act which persists efficiently as a still-living expression of the person, such as a relevant scientist, poet, painter, or Classical musician as in the Classical domain identified by J.S. Bach's set of pedagogical preludes and fugues. That creative act of such ontological attributes, is the essential expression of the person whose biological existence has an immortal outcome which is separate from his, or her biological expression.

Thus, true science and truly Classical modes of artistic composition and its expressions, have common essentials, to the degree their actions are the expression of principles. To similar effect, the use of those discovered principles, is the expression of a creative human action which partakes of the creative act of discovery through which society's use of that discovered principle is both specifically human and immortal in practice, when expressed in this way. The rediscovery of Bach's actual principle of the fugue, as by a student, is already

an implicitly immortal act of that student.

In the matter of the class of principles specific to physical science, the accumulation of such discovered principles beyond the ontological reach of sense-perception as such, is already of the character of an immortal act of the category specific to human existence. Thus, those who infuse such notions of principle in students through their work in teaching, are imbued with an apprehension of immortality in that way. As Heraclitus' aphorism implies, humanity never steps into the same river twice. The water of human creativity is changing, as for the worthy teacher, by the very nature of the practiced effects of its inherently anti-entropic existence. Such is the true meaning of "the good," to be, in this modality, a conveyer of the intimation of immortality.

Thus, in this fashion, the person who knows his or her existence in the fashion of this practice which I have just presented, possesses an identity which is, as the Apostle Paul has said, inherently beyond the reach of mere mortality. It is called "nice" to speak of such matters in this comforting fashion. However, it is far more important, not only for that individual, but for that society, that society recognize those individuals who qualify in such ways as I have just indicated, who not only know this of themselves, but understand the immortality of the qualified sort of deceased person as being an efficient agency for benefit of the future society.

The case of the fertile mind of the great scientist or great Classical artist, is true, but does not yet quite reach the essence of the point to be made. The discussion must proceed hence to a place beyond the notion of saints sitting eternally at peace with their immortality; what is human life without a continuing sense of an active expression of immortality? Does the deceased teacher of creativity to students, cease to have an active existence in society once deceased? Creativity as such is eternally efficient for as long as mankind practicing the advances inherent in creativity, continues to exist. True creativity is, speaking ontologically, an immortal principle in and of itself. Those who have created, live actively in the creative advances of those who have preceded them. Such is already the essence of true, continuing reproduction of scientific progress and of Classical artistic composition in society.

So much for the pitiable Hamlet, who finds death an existentialist's desired relief for a sense of being a worthless character of his own, and also of his entire society's personal existence, as Shakespeare saw this clearly in a triumphant vantage-point of his own im-

mortality of what he composed as a warning to future mankind in such works as on the subjects of the point-lessness of the existence of a Lear, a Macbeth, or a Hamlet, except for each being a victim of the same evil which their existence had embodied. How enraged the triumphant vultures among James I's hooligans would have been by such a thought, or Paolo Sarpi's Galileo would have hated Shakespeare's insight into such matters, as Shakespeare had foreseen them and their like from his safe haven in a triumphant death, and thought once more, wearing an eternal smile of happiness, about many things. He would have thought, perhaps, about the lesson he had taught to the court of Richard III or might have thought about the headless ambitions of Henry VIII.

# III. What Is Life's Purpose?

There is no reason for the simple perpetuity of a changeless expression of human life as such. We live, as true human personalties, in the future which is to be created as the outcome of the perpetuity of those qualitative changes in the universe to which our present existence contributes. As the very nature of human creativity illustrates this point, a universal principle, once discovered, lives forever (at least, implicitly so) as the accumulation of an ordering of that creation of principled changes in the universe which embody an ordering within existence in the universe as a whole, a universe which Einstein defined as finite, but not bounded. Heraclitus said: Nothing is permanent in the universe but change. As the celebrated psychiatrist, Dr. Lawrence S. Kubie, once said to a colleague of mine, in the very early 1970s: creativity is an intrinsic good. 12

That much said; we are now, thus, prepared to return to the subject of war in a fresh way

First of all: it is intrinsically a great crime against the very existence of all humanity, to launch, or continue a war which is either not necessary, or, a war which one does not intend to win in a reasonably finite range of lapsed time. Long wars such as that waged against Iraq, fought, since 2003, launched through a lie by then Prime Minister Tony Blair, which was a crime against humanity from the outset. In fact, while what is

<sup>12.</sup> Dr. Lawrence S. Kubie (1896-1973) "The Fostering of Scientific Creativity," **Daedalus** (1961); **The Neurotic Distortion of the Creative Process**, 1958. Formerly Professor of Psychiatry at Yale. A leading psychiatrist of the U.S.A. over more than four decades. Deceased in 1973.

called World War II, had become necessary, World War I as organized by the principal initiative of the British monarchy, was not, and neither, probably, was any protracted warfare since World War II.

Those rules to which I have just referred are not accepted by empires in the tradition of the British empire, a British empire which like all imperialist warring parties, creates warfare intended to be set into motion among nations duped into ruining themselves for the purpose of increasing the British empire's imperial grip on the world at large, exactly as Britain had set the pattern for such repeated behavior by her, as done by what was known as the so-called "Seven Years War" of 1756-63.

Take the case of Nietzsche and his

doctrine, for example. The perpetual state of murderous "unpeace" between Israeli and Arab, has been a crime against humanity, as a perpetual state of war which makes criminals of all those who willingly practice it. The worst of all warfare, is of the form practiced by the Roman empire and by the chain of successors culminating, thus far, in the form of the British empire presently associated with the essentially evil, Inter-Alpha Group's international system. The reigning international monetarist system of that British empire's practice of hyperinflationary explosion of intrinsically worthless nominal value, which has been unleashed as the generation of currency of increasingly worthless content, has already shown itself, in recent decades, to express the most evil, and most mass-murderous intentions shown by those agencies which practice such conflicts spread about on what now approaches a more or less global scale.

Those from among nations who are able to do so, but who do not resist such a latter form of British practice of warfare, make themselves the self-criminalized accomplices of something proximate to the greatest possible crime against today's humanity, as do the related forms of actions of the British, or their agent George Soros, repeatedly. The principle to be invoked in such cases, is that murder by any means, is murder, while murder against a nation or people is the crime of mass-murder. Mass murder by means of the weapon of hyperinflation, as conducted through the promotion of



USAF/SSGT Myles D. Cullen

"It is intrinsically a great crime against the very existence of all humanity, to launch, or continue a war which is either not necessary, or, a war which one does not intend to win in a reasonably finite range of lapsed time," LaRouche writes. Shown: a medical technician checks the condition of a solider injured in a rocket attack in Baghdad, Iraq, during "Operation Iraqi Freedom," August 2004.

intrinsically worthless debt, as that is practiced by the Inter-Alpha Group and its confederates, is as much mass-murder as any crime of which the Nazis were accused.

The same, presently lacking court of justice required for treatment of the foregoing statement on the class of criminality, creates a condition such as that practiced by a Soros-created private court, whose members must be tried for their part in the cases of those whose crime is the prevention of either, or both national sovereignty or scientific-technological progress in the conditions of life of even some, or many nations.

Such and kindred offenses represent capital crimes which the hand of overreaching power commits against, implicitly, all humanity. Those potencies which condone such crime as that, are as much criminals as those who initiate it.

Such matters as these which I have just indicated, go to the point, that the suppression of the increase of the power of existence of mankind, as in the case of suppression through the means represented by the action to prevent the promotion of scientific progress, is among the worst of all existential offenses against humanity. Indeed, by their expressed intention, the founders of the World Wildlife Fund rank high in the category of crimes against humanity, together with the criminal international drug-traffickers in the tradition in which that British East India Company became among the worst

of the criminals associated with "crimes against humanity."

Notably, the importance of that sampling of categories of great offenses by nations and entities of comparable power and authority, is that all work to the effect of a major offense against not only some victims, but against that proper intent of society which must bind human society as a whole, is a major crime by those agencies. What I have set forth, to this effect, in the preceding sections of this present report, expresses the principled obligation of society as a whole to protect and promote what should be promoted as the highest of principles of law; this demands that the purpose of society is nothing less than the promotion of the cause of universal increase of the productive powers of all humanity, as I have stressed that point in the preceding chapter of this report.

This, the matter of what should be considered as the proper law promoting universal human creativity, which I have, thus, set before us afresh, again, as in the opening of this present chapter, has lately acquired the character of a qualitative upshift in practical meaning for humanity generally, but, especially, for the world's great powers whose leading contribution to this end is the relatively most essential part of the effort presently, and beyond.

# NAWAPA as a Model

Specifically, the promotion of great projects which provide for the maintenance of the general welfare of society, presents us with the quality of issue posed implicitly by the present feasibility of the installation of the NAWAPA mission in North America. This project has unique qualities appropriate for the defense and progress of the conditions of human life in a great part of North America. The essential elements of that installation reach to implications of practice beyond any feasible design presented by mankind on Earth heretofore. The implications of that project reach not only to the matter of the interrelationship within the composition of the Solar system, but a known interrelationship, bearing on the intimate details of the existence, to date, of life on Earth is combined with important relations of the Solar system with our galaxy.

The presently crucial contribution to certain details of attention to this set of relationships within our galaxy, is presently allocated to the work of my associates of what is called "The Basement Team." My remarks here, in this present chapter, are intended, up to this point, to

serve the modest function of indicating the limitation of this report to significantly restricted policy implications of the more immediate of the global-systemic implications of a NAWAPA development, this for its effect on human life on this planet of ours as a whole.

The question which I address, accordingly, here, is posed as follows: What must the policies of the United States be, in the light of this evidence, toward the organization of new degrees of man's power to develop conditions both on, and nearby the planet Earth? These are conditions which open up the opportunities represented by new, qualitatively improved options for overcoming many among the most urgent of the present environmental and economic challenges for the nations of our planet now, that rather rapidly.

What is to be presented here, in that light, is to be located, as a matter of principle, in the view of the work of Academician V.I. Vernadsky, a view which is, in turn, a reflection of the great Nineteenth-century revolution in science and its method, which is to be attributed specifically to the work of Bernhard Riemann. My special authority in this subject-matter of the modern science of physical economy, has, and remains my unique position as a successful forecaster, during slightly more than sixty years of largely successful applications in the domain of a science of physical economy. This has been, and remains a practice which is premised on the standpoint of reference provided by, most emphatically, the topics posed in Riemann's celebrated 1854 habilitation dissertation.

# Man & Creation

When we situate my own special competencies as a physical economist in their appropriate relationship to the specific achievements of V.I. Vernadsky, a fresh view of nearly everything follows. First, there is the matter of the nature of the principle of creativity as such, as the principle is distinct from any axiomatic form of merely mathematics as such.

There is nothing in mathematics as such which corresponds to the existence of an efficient causal factor in physical science: mathematics is a subject of physics, rather than the other way around. The discovery of any new physical principles defines a new mathematics. However, this requires attention to certain distinct, specifically qualitative dimensions of creativity.<sup>13</sup>

<sup>13.</sup> The problem here is, that the a-priori presumptions of Euclidean geometry, are not physical principles, and that there are no true physical

These dimensions include creativity in general, creativity in ostensibly non-living processes, the creativity specific to living processes as such, the creativity specific to plant life, the creativity specific to animal life, and the creativity specific to the human mind. This includes the interrelationship among those categories.

However, as a matter of contrast, Gottfried Leibniz, implicitly a follower of Cardinal Nicholas of Cusa's De **Docta Ignorantia**, introduced a systemic approach to creativity in non-living processes, a discovery which is to be attributed to one of Kepler's proposed investigations by "future mathematicians," the Leibniz principle of creativity in mathematical physics, thus as developed to a certain stage in collaboration with Jean Bernouilli. The second of the two proposals by Kepler to his followers, was the matter of physical-elliptical functions, a subject treated among the generation of Carl F. Gauss. The domain of the issue of "life" was "broken into" by the work of Louis Pasteur, and so on, and on. The aspects of this subject which are specifically relevant to the present discussion here, are the matter of the difference between what is merely animal life, and the unique distinction of the creative-mental powers of the human individual and his, or her society.

Quantification of these respective domains, is subsumed by the principled character of the relevant domain itself. What then becomes immediately interesting, is the functional characteristics of the interaction among the functions of this array of distinctive qualities of physical states. The outcome of considering carefully that array of qualitative states, is that conclusion reached which states that there is a ruling, unifying principle of creativity in the universe in its entirety, as governing the universe as if from the top down. Next, in descending order, is the willful characteristic of human creativity, but such as it bears upon the interaction among the creativities of separate individual persons and the group-actions which they generate. After that, the obvious, descending order of subjects of lesser rank prevails.

The competent development and practice of a physical economy so situated, is at the root of my work as a physical economist. Science is not a subject of mathematics; a mathematics of physical science is a subject of the subject of man. Most of the blunders among economists, can be traced, properly, to a lack of comprehen-

principles in the system of the empiricism founded by Paolo Sarpi, the empiricism of what is known as British Liberalism.

sion of that elementary scientific principle of priorities

The most pertinent of the conclusions to be brought forward here, is that all of our knowledge of the universe occurs in the qualitative form of human creativity, to such effect that what we know of the ontological states in the universe which are lower in scientific order than mankind, are known to us in the form and terms of the study of human willful behavior as the primary feature of all competent scientific practice.

A clearly necessary commentary on what I have just written in the preceding paragraphs follows.

Thus, having presented the points which I have just made above, we can not make decisions respecting the nature of man, from the standpoint of relatively lower forms of life, or of non-life, by choosing either of these latter as being a primary standpoint of reference for experimental knowledge bearing on the nature of mankind. "Man as made in the likeness of the Creator," is the best that man as such can do: all that we really know for our own part, as being a fair approximation of primary truth, is the principle of creativity itself, in the degree it is knowable by man. Everything that we can actually know is knowable to us through our knowledge of the truth about the defects inherent in our senses, the senses which are given to us, not as truth per se, but as the elements of the riddle which we must solve through playing clever tricks on our sense-perceptual capabilities, including, thus, the ability of our senses to take our thoughts to where our senses can not go, through the clever design and use of what we term "scientific instruments." What Riemann marks out as the concluding, third section of his 1854 habilitation dissertation is typical.

# Shift Gears, for a Moment

What "we know," with no apologies to the hoaxster Descartes, is, essentially, that "I" exists. We rely on sense-perceptions, including some qualities of capability which go outside the presumed realm of the famous five, customarily selected types of senseperception.

We are, to that extent, like the migratory creatures which use, unwittingly, the Earth's magnetic field to guide their periodic migrations. We can know that we, too, have powers whose definition goes in a similar direction, excepting the fact that, usually, conscious sense of those powers of perception has not been usually developed by persons up to the present date. For our pur-

poses here, it is sufficient to indicate that the domain of cosmic radiation, particularly the lower frequency radiation which lies within the lower end of aggressiveness, and which could be identified as of types not biologically hostile to human beings, is available to be considered for such purposes. In that direction, we also know, from relevant experimental work, that the physical behavior of living processes does not conform to the same, apparently lawful principles of physical science familiar to nonliving behavior. (Consult your local cucumber, for example.)

Unfortunately, so far, society has been greatly remiss in its lack of atten-

tion to matters found in the context of the subject-matters under our immediate consideration here and now. An example of this is to be found in the long-postponed matter of attention to the fact that our universe exists in a domain, not of space and time, but the universality of that space-time which is expressed as cosmic radiation. There is no proven evidence of the actual existence of "empty" space, unless it were to be found beyond our finite universe's non-bounds, a speculative thought which, for the present moment, enjoys no warrant of practical importance.

This brings our attention back to the essential point in the course of this entire, presently ongoing discussion here. As mankind, we are obliged to recognize what some might regard as an inconvenient truth, the truth that our sense-organs are far removed from the condition of actually knowing; at least that is so for any among us who are of the Riemannian persuasion.

Therefore, let us now examine our own minds within the framework of the presently stated premises of this report thus far.

When old age shall this generation waste, Thou shalt remain, in midst of other woe Than ours, a friend to man, to whom thou say'st. "Beauty is truth, truth beauty,"—that is all Ye know on earth, and all ye need to know.

> —Keats, from "Ode on a Grecian Urn"





"Look at the concluding paragraphs of Percy Bysshe Shelley's 'A Defence of Poetry, 'LaRouche writes. "Compare the content of those paragraphs with the relationship between the poet and the urn in John Keats' 'Ode on a Grecian Urn.'"



Portrait of John Keats (above) by William Hilton; drawing by Keats of the Sosibios vase (ca. 1819); portrait of Shelley by Alfred Clint.

The most unfailing herald, companion, and follower of the awakening of a great people to work a beneficial change in opinion or institution, is poetry. At such periods there is an accumulation of the power of communicating and receiving intense and impassioned conceptions respecting man and nature.

-Shelley, from "A Defence of Poetry"

# "The Captain of My Soul"

Look at the concluding paragraphs of Percy Bysshe Shelley's **A Defence of Poetry**. Compare the content of those paragraphs with the relationship between the poet and the urn in John Keats' Ode on a Grecian Urn. In the first example, a large body of individual persons is gripped by an influence, identifiable as "mass behavior," whose existence is located in something which permeates the whole assembly of persons, primarily, and then penetrates the will of the individual in a subordinate degree. In the other of the two cases, the intimation of life in the images of the urn leaps across the intervening centuries, as if as a kind of immortality of the connection between the past and present. Both examples define processes which share in common bonds which unite the existence of compelling forces acting upon individuals across gaps in space and time, like warships acting in concert out of clear sight of one another, bonded chiefly by the compelling sense of the mission which unites their intentions.

With the radio-technologies of modern warfare, the relevant channels of cosmic radiation are directly

known to one another within the flotilla, but, despite all other considerations, the effect of the human relationship as such remains unchanged in principle although the means of coordination has been changed. The intention thus prevails over the difference in medium employed. The most significant of the avenues of physicalscientific research into the nature of the medium of such or comparable expressions of mass behavior, is, presently what is broadly classed as an aspect of "cosmic radiation." A great nation, whether great and strong, or weak and small, is governed by the same quality of human relationship among the community of its individual parts, a common sense of mission, especially directed mission. Whatever the root, the categorical nature of the phenomenon of mass behavior as such is clearly established. The best definition available so far, has been Shelley's implied definition in the concluding paragraphs of his A Defence of Poetry.

However, in the meantime, we are not helpless in the matter of related expressions of human behavior. Take the extremely provocative case of Helen Keller. I suggest your attention to my other published writings on this area of investigations.

As the widely considered case of the seemingly miraculous accomplishments in the Helen Keller case presents its evidence, the assistance provided to her enabled her to create substitute forms of function to fill up the gap which might be otherwise attributable to her ostensibly lost, "natural" sensory functions. If we could presume that the publicized facts in that case contain no relevant exaggerations or misstatements, then, the very notion of an axiomatic sort of "sense-certainty" is called into doubt. The question thus posed to us presently, is how must we define the relevant kind of design of experiment required for a trustworthy re-examination of the higher implications of the Helen Keller case for today?

There is some essential solution for the core of that challenge. That does not provide us an assured solution for all of the questions which might be attributed to the actual case of Helen Keller. Nevertheless, there is an approach, which the Keller case provokes, which does lead to desirable insights into some extremely important, scientific solutions for the systemic problems posed by the customary reliance on the authority of "sense certainty." The argument goes as follows.

The most crucial of all of the issues of the known history of physical science, is the issue of the ontological basis for the notion of a universal physical principle as such. Such is the challenge posed by the case of Aristotle, and, therefore, also, Euclid. There are, in fact, no physical principles extant in **Euclid's Elements**, but hypotheses *a-priori*, instead.

Paolo Sarpi, the founder of what passes now for modern European sophistry, insists that he is free of the *a-priori* assumptions of the Aristoteleans, but I know that he was lying about this, as the case of the very-much-Aristotelean sophist, Bertrand Russell presents the evidence on that case. When Sarpi had addressed the masses in society, he insisted that he is not an Aristotelean, but, rather what Sarpi suggests, formally, is the medieval William of Ockham (Latin: Occam).

Sarpi's policy respecting the edification of "the masses," is identical with the core argument presented by Adam Smith in Smith's own 1759 **Theory of Moral Sentiments**, that although we humans are "endowed with a very strong desire of those ends [happiness], it has been intrusted to the slow and uncertain determination of our reason to find out the proper means of bringing them about. Nature has directed us to the greater part of these by original and immediate instincts. Hunger, thirst, the passion which unites the two sexes, the love of pleasure, and the dread of pain, prompt us to apply those means for their own sakes, and without any consideration of their tendency to those beneficent ends which the great Director of nature intended to produce by them."

Bertrand Russell, a man expert in the habit of lying, gives away Adam Smith's show, by advancing an underlying assumption contrary to the line of argument presented by Adam Smith.

The truth of the matter, with which neither of that pair has anything to do, was well known to Niccolò Machiavelli, the actual, Sixteenth-century founder of modern strategy. Paolo Sarpi's entire policy of Liberalism, is rooted in Sarpi's opportunist solution for the great failure of The Council of Trent. I have referred to aspects of this matter in an earlier part of this present report, and on some still earlier occasions. I state the case again, now; this time, I refer to the specific situation which Sarpi and the followers of modern Liberalism, such as that of Smith, the British Foreign Office's Jeremy Bentham, and Bertrand Russell, later, reflect.

# Nicholas of Cusa, His Century and Beyond

As the Fourteenth Century's Venice-organized "New Dark Age" 14 did then, and the Venice-centered,

<sup>14.</sup> What I have to say here, at this point in my account, has profound

presently British imperial system of Inter-Alpha Group banking has unleashed presently, the trans-Atlantic region of the world now, is presently teetering at the brink of a sudden, Weimar-Germany-like hyperinflationary triggering of an implosion which is akin, in effect, to what struck down Europe during the Fourteenth-century "New Dark Age." 15 That was a shattering blow, a shock to existing political cultures of Europe, a systemic discontinuity in the ongoing history of European civilization. It was in the setting of this aftermath, that a series of developments, including, very significantly, the challenge represented by Jeanne d'Arc, affected the attempts at a Fifteenth-century Renaissance in a manner which led into the great ecumenical Council of Florence.

There came an accelerating effort at the revival of the significantly shattered Venetian

power. In this setting, elements of certain Catholic orders mustered a murderous form of brutal religious fanaticism organized by a resurgence of Venetian monetarist power built up around the Habsburg house. The effect of these elements within both the church and the Habsburg system, was an eruption of religious warfare which coincided with the event of a relatively massive, and crucial expulsion of Jews from Spain, a development which set off a general epidemic of internal religious warfare in Europe. The insanity of England's Henry VIII, was taken over by the leadership of what is fairly identified as the Venetian intelligence service, as that was expressed in the person of the Francesco Zorzi (a.k.a. English Giorgi) who moved into England in the role of the marriage-counselor of Henry VIII. The organization of the divorce of Henry from his Spanish Habsburg wife, set off the greater explosion

relevance for foreseeing some crucial implications of the presently much-advanced, great, trans-Atlantic, economic and cultural break-down-crisis in progress at the present moment this present report here is being written. The present option, includes that taken by Venice in its decision to detonate the great Fourteenth-century "New Dark Age." Venice, which controlled both the monetary system of Europe, and also its principal dupes, the leading merchant-bankers of northern Italy and the Netherlands, switched the monetary basis of the European banking system, thus precipitating the Fourteenth-century's vastly genocidal "New Dark Age."

of religious warfare throughout Europe which, ulti-

15. E.g., A Distant Mirror of Barbara Tuchman. See also, LPAC's New Dark Age video, http://www.larouchepac.com/node/11851.



The expulsion of the Jews from Spain in 1492, in the context of the resurgence of Venetian power within the Habsburg empire, set off an epidemic of fanatical religious warfare in Europe, which lasted until the 1648 Peace of Westphalia. Shown: "The Expulsion of the Jews from Spain," by Emilio Sala Frances (1889).

mately, virtually crushed the cause of Habsburg Spain.

These developments produced the great crisis within the Catholic Church which led into the prolonged Council of Trent. Trent was an utter failure.

At that point, the influence of Niccolò Machiavelli appeared as a crucial strategic factor in further development of European history of the century-and-a-half of the continuing religious warfare within Europe. Here, in the failure of the Council of Trent, came the influence of the revolutionary figure of the opportunist Paolo Sarpi, a Sarpi free of the encumbrances of principle. But, this was a Sarpi who grasped, and hated, the idea of the change which the rise of the great ecumenical Council of Florence had done to change the very nature of Europe.

There were two leading features of this change in culture which the evil Sarpi and his accomplices concocted with the intention of wrecking both the factions of the great Council of Florence, the faction associated with the founding of modern physical science by the roles of Filippo Brunelleschi and Cardinal Nicholas of Cusa within the context of the great ecumenical Coun-

cil of Florence, and the faction expressed as the Council of Trent.

The key to the outcome of this set of circumstances, was the role which Niccolò Machiavelli had come to play. Machiavelli, who is to be fairly considered as a reflection of Cusa follower Leonardo da Vinci and of the lost cause of the Republic of Florence, had, essentially, created the foundations of modern European military strategy. However, it was the great ecumenical Council of Florence, which, especially through the continuing influence of Cardinal Nicholas of Cusa, had created the founding body of that modern European physical science which had changed the leading culture of Europe in Cusa's time and that of such among his avowed followers as Paolo del Pozzo Toscanelli who had advised Christopher Columbus on the implementation of Cusa's proposal for crossing the oceans, and who gave specific scientific advice to Columbus for crossing the Atlantic (to the opposite shore), scientific advice in the legacy of Cusa typified by the efforts of Luca Pacioli, Leonardo da Vinci and Johannes Kepler. These are typical of the influences associated with Cusa which shaped the culture of modern Europe following the great ecumenical Council of Florence. Machiavelli was a product of the influence of that tradition associated with the legacy of Cusa.

Notably, it is a fact of systemic significance for the case of modern history which I am summarizing here, that Francesco Zorzi, the marriage-counselor of Henry VIII, was the author of a famous attack on the **De Docta Ignorantia** of Cusa.

The keystone of Paolo Sarpi's response to the intrinsic failure of the Council of Trent, is the best choice for a relatively succinct pin-pointing of the guiding notion of Paolo Sarpi's reaction to the argument of Trent. Put as simply, but also accurately as possible within the time permitted here, Sarpi elected to attack both the legacy of Cusa and the contrary policy of Trent. Sarpi recognized that, by recognizing that the military and related strategies of Machiavelli were an implementation of the legacy of Cusa, that he must chart a strategy for himself which would destroy the Habsburg faction through using the secret of the success of a modern economy premised on the work of the Florence Council's adoption of the economic methods of modern European culture while parodying, but also destroying the scientific principles of Cusa with the same blows. He saw that he could create a power in Europe which would be a prostitute for Aristotle, by attacking Aristotle,

Plato, and Cusa all at the same time. Hence the purported resurrection of the silly Occam as a catch-all for the specific form of morally indifferent sort of Satanic sophistry of Paolo Sarpi, the origin of the heritage on which Adam Smith and the British empire were built. He was the author of the policy which launched the Seventeenth-century Thirty Years War.

Obviously, the net effect was not notably distant from Lord Shelburne's dream of a slightly modified revival of ancient Rome, later.

So, the Treaty of Westphalia made possible all that has been good in European civilization ever since. Now, the attempted destruction of the legacy of Westphalia, looms like a darkening sky of doom over not only Europe, but the entire trans-Atlantic region.

It is the compacted lesson in the history of modern European culture which I have just reviewed, which defines the historic setting in which the crucial scientific issues of today's world civilization, especially the trans-Atlantic region most directly, are to be situated.

# A Modern Science of Human Identity

I shall now bring the formal conclusion of this report toward its close through completing the account of the actual human identity which the paradoxical case of Helen Keller provoked.

Pick the following two points of reference in the spectrum of human knowledge. The one point is the set of what are identified as the standard five sense-perceptions. The second is the mind's attempted simulation of the bare sense of personal identity. Here is where Descartes shows himself to be absurd. Think of the approximation of the sense of identity between the mind of the person traveling in a space-ship, who has no contact with the space-time outside the ship but through the medium of the instruments employed by the ship itself.

As I had reported, repeatedly, earlier, the discovery of a physical principle, as in the instance of Johannes Kepler's discovery of the universal principle of gravitation, requires a minimum of mutual negation of two qualities of sense-perception, as in that case of the notions of sight and harmonics, to define a principle which is neither of those two. The confrontation is not sufficient; there must be a proof that that attributed principle is a general case of that type. This assumes the mathematical or equivalent form of a formulation which lends itself to be a form of mathematical or comparable proof suited to be a test of the generality of the adduced can-

didate-principle. However, it is the initial discovery of that as a suspected principle which is the crucial point of "break-through."

The experimental demonstration may be susceptible of a created mathematical formulation, as was the case for Kepler's own discovery of the universal principle of gravitation, but it is that discovery itself, rather than the mathematical formulation, which is expressed as the generation of the notion of that principle.

Here lies the key to the distinction between valid mathematical formulations in general, and a crucial quality of discovery of a principle which can not be deduced, but must be discovered from outside the existing domain of already known mathematical principles. The discovery must precede the possibility of a "mathematical solution" for the discovered notion, as Kepler's discovery, once again, illustrates the point. The discovery must be found outside the domain of existing known factors, rather than as a solution for a new combination of known factors, as the "outsideness" requires the aid of the equivalent of a vicarious hypothesis, as Kepler defined this along his pathway of incremental steps leading toward what turned out to be the discovery of the principle of universal gravitation.

The crucial feature of this process of discovery lies in the quality of "outsideness" of the mind which experiences this process.

Now, review what we have experienced, implicitly in the kind of process described. View this proposition from the vantage-point presented by Bernhard Riemann's habilitation dissertation. Here, in this case, it is the exclusion of deductive mathematics from the defining of an actual physical principle, which is crucial. In other words, that a minimum of two qualities of sense-perception, which are not contained within any single principle of perception, are required to locate any universal principle.

# Some Convenient Considerations

The discovery of principles so defined, creates a mode of action by the human individual which does not depend directly on any single quality of sense-perception, or combination of qualities of mere sense-perceptions as such. Thus, the discovered principle, if it is a valid discovery, "belongs to" the discoverer, or discoverers in combination, rather than to human sense-perception as such. Thus, through the discovery of principle, the human individual acquires a "meaningful"

personal, human identity.

This comes up in the matter of Classical musical counterpoint, as distinct from the popular alternatives for decent music or the related subject of Classical poetry. So, all decent artistic composition depends on the principle of Classical irony, as this standpoint is approximated with a certain attractive degree of excellence in William Empson's **Seven Types of Ambiguity**.

Thus, we have put psychological distance between the human individual and a "thing-like" surrogate for an actually human identity. Broad categories of mental disorders can be attributed to failures due to such "thing-like" surrogates, such as "fetishisms" defined by attachment to a sense-perception or the like. In the instances of such fetishisms, the identity of the human subject is located within the relatively bestial quality of sense-perceptual experience as such, rather than the actually human identity of a person.

# A Crucial Additional Consideration

So far, the dominant feature of my argument on this subject has been confined to treatments of the limited number of five commonly featured varieties of sense-perception, and to the principles which may be adduced from inherently paradoxical juxtapositions of sense-perceptual experiences. Thus far, we have said next to nothing about the effect of adding what are demonstrably additional qualities of sense-perception, such as those additional qualities to be recognized in the large domain of cosmic radiation.

As in the case of bird migration dependent upon a feature of cosmic radiation, there are a large number of types of cosmic radiation, within the relevant ranges, which have such a function specific to one or another type of living entity of either plant or animal life.

One might ask, what might be the relevance of this latter consideration to the case of Helen Keller? I believe that the answer to that question ought to be obvious in what I have written here, thus far.

# To Conclude, for Now

Of the many added questions to be treated under this same title represented in this report, the most urgent to be considered here, the most important at this stage of progress in these matters, are those which pertain to the distinction of practical implications of human creativity, from those of the functions of lower qualities of life.



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"As in the case of bird migration dependent upon a feature of cosmic radiation, there are a large number of types of cosmic radiation, within the relevant ranges, which have a function specific to one or another type of living entity of either plant or animal life.

"One might ask, what might be the relevance of this latter consideration to the case of Helen Keller?"



Library of Congress (1904)

What is already certain, respecting that, is the question of difference in quality of sense of the experience of the emotion associated with the creative powers essential to mature expressions of the mental-emotional function of human identity.

It should be considered as clear, that this is exemplified by the human individual who enjoys an efficiently creative sense of personal identity, rather than mere jolts from occasional creative experiences, jolts which tend, in their cases, to diminish with age, as often prior to the post-adolescence of the late 20s or early 30s. It should be clear, from my own inner qualities of experience in this matter, as from my observations of others, that with the lack of the broadening and extension of the willful use of creative mental potentials in the relatively earlier stages of maturation, the likelihood of development and of perpetuation of actually creative potential diminishes as years pass, or, tends to become restricted in respect to categories of interest.

For me, it follows from my own life-long experience in respect to such matters that we must attribute much of the moral failures of individuals and, most emphatically, cultural strains, to a lack of regard for the role of creativity in defining morality. The cultural disaster which I have observed in the relevant samplings of the trans-Atlantic world, first, since the period of the immediately closing period of World War II and the Truman years inside the United States, and especially

since the assassination of President John F. Kennedy, and worse-and-ever-worse since 1968, bears witness that most of the moral decadence of our society is attributable to the cultivation of a kind of running-away-from those aspects of life which pertain to actual creativity. The willfully motivated moral degeneration in the flight away from serious engagement in the activities associated with Classical music in the Bach tradition and away from actually Classical treatments of poetry, drama, and creative aspects, as distinct from formal-mathematical aspects of physical science, have been undeniable correlatives of the moral and intellectual degeneration of the trans-Atlantic communities of North America and Europe.

We must therefore, think of the moral force of true creativity, and, therefore, of the moral need for a science- and Classical-cultural driver as the key to preserving and enhancing the moral qualities of civilization. It is urgent that we pull back from factors cohering with contrary trends, as a precondition for halting and reversing the moral collapse which grips society, more or less globally, in the presently accelerating world-wide breakdown crisis now.

So far, I have said enough on the matters presented in this report. Let us now reconnoiter, that we might ferret out additional evidence bearing on the broader subject of human and other spectra of cosmic radiation.