# II. Lyndon H. LaRouche

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# On the Subject of Tariffs and Trade

by Lyndon H. LaRouche, Jr.

### Part Two: Physical Science Shapes Economic Progress, and Prices, Too

EIR is republishing this 2004 article in three installments. Part One appeared in Vol. 49, No. 14, April 8, 2022. Part Three will follow in a subsequent issue.

## 3. The Concept of Power

As I have emphasized earlier here, and repeatedly throughout the past fifty-odd years, the fundamental principle underlying all matters of the subject of economy, is the absolute superiority, and separation of the human species over all other forms of living processes. In other words, this is the same notion of the uniqueness of man and woman, when expressed in terms of physical science, as in **Genesis** 1.

The following, interconnected points, regarded as a single conception of principle, are of primary relevance for any competent treatment of matters of economic principles. Any adopted notion which is contrary to that conception, is a kind of elementary incompetence which, if extended in practice over a lapse of time in the order of several generations, will produce a manifest social-economic catastrophe, such as the general break-down-crisis of the present world monetary-system currently in its terminal phase. In earlier history, the speed of the relevant reactions was relatively slower; for example, the transformation of the U.S. from world's leading producer society to today's collapsing wreck-age, has been less than two full generations.

The argument to be made on those premises, is as

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follows.

The effect of the incorporation of realized discovery of universal physical principle within the repertoire of social practice, has an impact corresponding to a genetic up-shift among animal species.

Therefore, mankind, be fruitful, multiply, and assume responsibility for the management of all creatures and things under the Sun! There is no possibility of a competent understanding of either human society, or the troubles for which it has shown itself susceptible, without proceeding from that absolute, "axiomatic"like distinction of man and woman from the beasts. The moral, as well as intellectual incompetence of reductionists, as typified by such sorry, but influential figures of modern academic life as Euler, Lagrange, and Kant, is only one variety of the typical results of the worst possible form of ignorance, today's widespread ignorance of the principled, scientifically definable difference between man and beast.

Those sorry opinions, of such as Euler, Lagrange, Kant, Mach, et al., not only deny the nature of mankind, degrading man to a beast. The so-called "Eighteenth-Century Enlightenment," which empiricist fanatics such as those typify from that time, was politically motivated by the effort to stop the development of the human condition along those lines typified by the impulses from the Fifteenth-Century Renaissance. The false axiomatic ideas respecting man and nature expressed by Euler, et al., were a servant's hod-carrying for such predatory, oligarchical masters as the Anglo-Dutch Liberal system typified by the Eighteenth-Century British East India Company's rise toward becoming a new form of a Roman Empire.

It is only when the intellectual crimes perpetrated

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in, and spread from the mathematics textbooks and classrooms are understood as politically motivated, that the mask is ripped from the face of the reductionist doctrinaire, and the leering hatred of mankind itself displayed without disguise.

Explicitly contrary to the conceptual sterility of the ivory-tower-mathematical argument shared among empiricists such as Euler, Lagrange, and Kant, the original discovery of a universal principle, is not merely an increase in the efficiency of the application of previously known principles deemed universal. It is, as Gauss references the demonstrations by the Pythagoreans, on the doubling of the line, square, and cube, by no other means than geometric construction, the discovery of that power which is expressed, in a unique way, by that specific kind of physical act of construction. Kepler's uniquely original discovery of universal gravitation, as detailed in his 1609 The New Astronomy, is not only of the same quality as the creative act of physical construction in the elementary cases of doubling; Kepler's discovery depends more immediately on the implications of the construction of the Platonic solids, in dividing the universe between two universal phase-spaces, the abiotic and biotic.

In every case, that society which discovers and employs a newly discovered, true universal physical principle of that type, has effected an up-shift of its quality of living, to a *qualitatively* higher form of existence. This includes, more obviously, the notion of a scientific-economic revolution, as merely typified by the passage of social practice of society from the lowest physical state of human life, using sunlight for a fuel, to combustion of wood-stuffs and comparable materials, to mined coal, to the abiotic fossils of natural gas and petroleum, to nuclear fission, to thermonuclear fusion, and, probably, the mastery of the principled implications of matter-antimatter reactions.

One of the most important and destructive forms of widespread ignorance about matters of physical science and of economy, is the falsehood, which the modern classroom has traced from the influence of Aristotle: the reductionist's assumption that power is a result of heat, rather than heat being merely one of the ways in which the effect of power may be expressed. Heat is not, in itself, a cause; it is an effect: the increase of mankind's ability to generate controlled heat, is a footprint of progress, not a step of progress. It is often expressed as a by-product of power; but power itself is essentially of the type expressed by the developing of the science of what is known variously as constructive, or physical geometry, by the Pythagoreans, as by Plato.

#### The World's Deadly Power Shortage

Focus now on one of the most crucial of the practical expressions of those issues, the awesome shortage of capacity to supply power in the U.S.A. (among other nations) today.

The discoveries of universal physical principles within the domains of microphysics (e.g., atomic and nuclear physics), are examples of discovered powers by means of which man is able to employ objects from outside the realm of direct sense-perception, as powers, by means of which mankind's power in the universe is increased qualitatively. To describe this in what will pass today for conventional academic terms: the way mankind has proceeded to the level of nuclear, and toward thermonuclear power, as primary sources of applicable heat, shows the simplest measurable effect of the rise of the human condition above the bestial level of reliance upon solar radiation. This represents an increase of the amount of the heat-effect transmitted across a square kilometer of cross-section of the radiated effect. This measurement is named the "energy-flux density" of the process. At certain critical points in the process of increasing that energy-flux density of man-controlled processes, a qualitative, rather than a merely quantitative change occurs.

Typical of this was the leap upward in the productive powers of labor, and family income, available to the average member of the U.S. population, through the generation of electricity not only for lighting of cities, but as a higher quality of power which began to be supplied to the U.S. as power supplied for operation of rotating machinery, discoveries which were made possible through the original work of such scientists as our own Benjamin Franklin, Ampère, Gauss, Wilhelm Weber, and others.

Those old enough to remember the time when entire factories were still powered by a snarl of shafts and belts, to deliver power from a steam-boiler in the basement, or abutting the building, to the leap in productivity achieved from introduction of electrical motors attached to the function of the individual machine, could recall this leap upward.

It was recognized from the work of Rutherford and others, during the first decade of the Nineteenth Century, that the nuclear power expressed by the radiation from radium represented the future source of power for the world's economy. This represented a rise in the level of cross-sectional energy-flux density to levels of application at which otherwise impossible increases in mankind's power in and over nature could be achieved.

Unfortunately, although the more general feasibility of controlled nuclear fission was recognized during the course of the 1920s, it was only due to the power of nuclear-radiation weaponry, as first emphasized publicly by the utopian H.G. Wells in the preface to a 1913 novel, that the development of controlled nuclear-fission technology was set into motion during the 1930s. While the chief authors of modern nuclear warfare, the utopians H.G. Wells and Bertrand Russell, pushed the immediate development of nuclear fission as a weapon sufficiently terrifying to cause nations to submit to world government, others, as I began to do in early 1947, campaigned politically for the development of nuclear power as a crucial source of needed development of new nations such as India, in particular. By the early 1970s, I was pushing for the superseding of the lower-energy-flux-density capabilities of nuclear fission as a power-source, by the development of controlled thermonuclear fusion.

In the meantime, the neo-Malthusian doctrines of Thomas Huxley's H.G. Wells and Abraham Lincolnhating Lord Russell's grandson Bertrand Russell were at work. The most crucial feature of Russell's influence was his fully conscious role as a Synarchist-like "beastman." Russell was a "beast-man" in the image of that true progenitor of Adolf Hitler's vast crimes against Jewry and others, the notorious Inquisitor Torquemada.<sup>30</sup> Out of Russell's U.S.-based Unification of the Sciences project, came the post-World War II campaign to realize the kind of global utopia depicted by H.G. Wells, as by Russell followers the Huxley brothers, Aldous and Julian, and their fellow-inductee into the psychotomimetic mysteries of Aleister Crowley's theosophical "Gold Dawn," George Orwell: truly men of science, one and all.<sup>31</sup>

The needless dumping of two experimental fissionbombs on the civilian population of two cities of an already defeated Japan, Hiroshima and Nagasaki—continuing the policy behind the needless, and, actually, militarily counterproductive fire-bombing of Hamburg, Dresden, Magdeburg, and so on, in Germany—was intended, by Russell and his kind, not to win the war against Japan, but to terrorize the world into the advent of a turn of humanity downwards, into a bestialized culture, the Nietzschean "Age of Aquarius."

The effect of the growing, paranoid form of fear of the very word "nuclear," spawned by the terror against Hiroshima and Nagasaki, and aggravated, more and more, by the fear of thermonuclear war, was harvested with the 1962 "Cuba Missiles Crisis." The terror struck by a wave of Synarchist International-directed assassinations and attempted assassinations, as by Jacques Soustelle against President Charles de Gaulle, and, especially, the way in which both the assassination of President Kennedy and of its aftermath were handled by the U.S. establishment, terrified the souls of many among an emerging generation of university-bound young adults into a state of virtual political slime-muck.

The cultural-paradigm shift orchestrated by that succession of developments produced the pro-psychedelic "rock-drug-sex counterculture" eruption of the middle through late 1960s, a spectacle of a serpent's nest of writhing, tangled, naked human bodies in Hell, shrieking incoherent babble, all the while hating all that modern economic-technological progress which they believed had bestowed upon them the misfortune to have been born.

So came "Sun Day," and a determination to rid the world of technological progress. Fear of nuclear weap-

<sup>29.</sup> It was the political and economic implications of those advocacies of mine which, chiefly, caused me personally, and also my associates, to be subjected to ferociously hateful defamation and political attacks, from within government and elsewhere, during the course of the 1970s and later.

<sup>30.</sup> When Mephistopheles appeared to Faust, in Christopher Marlowe's **Dr. Faustus**, he wore clerical robes, as Torquemada had done. The most Satanic creatures are those who follow the tradition of the fallen angel, as do the followers of the cult of such as both Torquemada and Hitler's Friedrich Nietzsche in the clergy today. The role of the Iberian Inquisition of Torquemada et al., in the launching of the trans-Atlantic African slave-trade, a practice continued by the Nineteenth-Century Spanish monarchy through and beyond the assassination of President Abraham Lincoln, is a reflection of the same evil which produced a kindred monster in different costume, Adolf Hitler. Mass-murderer Russell is therefore known by the fools of the world as a "great pacifist," or better described as the sexton of a planetary cemetery of all mankind. See the writings of Joseph de Maistre, the leading Synarchist (Martinist) ideologue of the period of the French Revolution and Hitler-model Napo-

leon's tyranny, on the subject of the Inquisition as a model for what became Hitler's fascist tyranny.

<sup>31.</sup> The term "psychedelic," as applied to the London Tavistock Clinic's synthetic ergotamine, LSD, was crafted as a propaganda-trick, to evade the pejorative implications of the originally, frankly descriptive "psychotomimetic" for the induced, psychotic states of mind of certain drugs, and also certain kinds of monotonous, ape-like pseudo-music in the ancient tradition of the Phrygian cult of Dionysos.

ons, became the fear of the hated nuclear fire of Prometheus, as from the poor creatures of the evil Zeus's Olympus. Since the beginning of that spawn of Nashville Agrarians' creation, National Security Advisor Zbigniew Brzezinski, there has been, until recently, a rising chorus of the ritual chanting, "Nuclear power must go!"<sup>32</sup>

Since that time, as the generation which had entered young-adulthood during the early through middle-1960s came into most among the leading positions in society today, the corresponding form of acquired "group-instinct," of "go along to get along" among the otherwise varied components of that generation has taken control of society. Those who are not fanatically opposed to even the very name of "nuclear energy," are afraid to express views which would offend the fanatical adversaries of technological progress.

As a result of those and related factors, we have reached the point that the ability of the U.S. to maintain even its existing levels of supply and of general power is collapsing, without remedy for that dismal outlook on the tables of government. Also, to cope with the new problems posed as needs for more or less revolutionary degrees of technological progress in both basic economic

infrastructure and the production of agricultural and manufactured goods, we require sources of power of qualitative higher primary levels of relative "energyflux density." This need dictates, among other things, return to emphasis on rapid expansion of the use of nuclear-fission power, and aggressive work toward bringing thermonuclear fusion on line as a principal powersource.



U.S. Atomic Energy Commission

To provide revolutionary degrees of technological progress in both basic economic infrastructure and the production of agricultural and manufactured goods, we require sources of power of qualitative higher primary levels of relative "energy-flux density" —notably through rapid expansion of nuclear-fission power, and aggressive work toward bringing thermonuclear fusion on line as a principal power-source.

Without reversing the suppression of nuclear power, civilization as a whole is coming into jeopardy, and that rather rapidly.

For the quick-fix needs of the world, we have a proven type of nuclear power installation, the hightemperature pebble-bed reactor, which should be produced in series-production modes in, preferably, the self-regulating rate of 120-200 megawatts. Its smaller size permits earlier and broader installation, and brings us to the point that we can generate hydrogen-based fuels locally, rather than relying upon the costly bulktransport and related features of low-value-per-ton product in ways which involve a high ratio of transport and other costs of distribution, relative to the value of the product generated at the point of production. The principal waste-product of these synthetic fuels is, chiefly, water.

This application of nuclear power also supports an emphasis on expanded mass-transport of both people and goods, reducing the trend toward using superhighways, more and more, as parking lots during high-traffic hours. It facilitates the use of magnetic-levitation

<sup>32.</sup> The career of Canadian McGill University product Zbigniew Brzezinski began at Harvard University's Department of Government, under the notorious Professor William Yandell Elliott, himself a leading figure of that Ku Klux Klan memorial association known as the Nashville Agrarians. Although Elliott moved Brzezinski out of Harvard into the patronage of Averell Harriman's circles, to make way for a newly adopted chief protégé, Henry A. Kissinger, the long-standing alliance of Brzezinski and Samuel P. Huntington of "Clash of Civilizations" notoriety has persisted since Huntington's perennial doctrine of Waffen-SSmodelled military doctrines, his *The Soldier and the State* echoed by Vice-President Cheney's "preventive nuclear war" dogma. Brzezinski's authorship of a proposal for a "Technetronic" society, is of specially notable relevance, in proposing to substitute the doctrines of Bertrand Russell, Norbert Wiener, and John von Neumann, for both physical science and economic practice of society as a whole.

forms of mass transport of either freight or people, both for urban, intra-urban transport, and as a large shift of present rations of air transport in the less economical range (per ton mile), to maglev along relatively highdensity trunk routes of under 500 miles, thus improving air-transport service in efficiency and economy.

However, apart from all the goals which can be expressed in terms of kilowatt-hours of power supplied, there is the more crucial issue already mentioned here.

#### **Mars and More**

Consider two among the numerous typical types of challenges the coming two generations of mankind must face: the problems posed by the needed exploration of, and certain developments within nearby Solar space (e.g., the Moon and Mars), and by the increasing rate of consumption of certain raw materials we are accustomed to extract from within fossil regions of the Earth's Biosphere. Consider each in turn.

The greatest danger to our space program, apart from those who are opposed to it altogether, is the tendency which has prevailed since just before the 1980s Shuttle disaster, of reducing costs at the expense of safety. It is fair to say that the notion of space-exploration travel currently mooted in the news media and like places, and within the political processes, is foolishly, even dangerously simple-minded. Three overlapping, but distinct issues of policy are critical: *security, capability*, and *mission*.

As to security, in no case should an individual vessel carry a human being from Earth orbit to Mars orbit; and even a flotilla,<sup>33</sup> which could be mutually supporting in interplanetary travel, should not be deployed without continuing acceleration/deceleration over most of the interval of travel.

For related reasons, which include both the role of manned and other exploratory flight, the idea of sending some single object, or even a few coordinated objects from Earth-orbit to Mars-orbit, is proof of incompetence. We must build the capability represented by a supporting infrastructure of space-transport and exploration over the span of relatively frequent flights between Earth and Mars. This means new sources of power deployed for purposes which include powered flights. The building of this infrastructure were not possible without a prior "industrialization" on the Moon. So, we must base our space-exploration policy on nothing less than erecting the necessary supporting intrainner-Solar-space infrastructure of a long-term, continuing Mars-Moon program.

"Cheap discount flights to Mars" exist only in the dreams of fools.

The third, and rather obvious question to be addressed, is: "Why go there at all?" That will lead into the second issue, of the problem of adequate raw materials for us on Earth. The answer to that question does not involve hauling raw materials from space; it involves the lessons about the physics of assuring a future life on Earth, lessons which we must learn, at least in large part, from space-exploration. Our mission is not a junket to Mars; our mission is exploring the Solar system for answers needed for life on Earth, which can not be secured without space exploration.

One should recall the study which showed that the U.S. gained more than ten cents' worth of benefits on Earth, from every penny we spent developing the technology and techniques needed in order to accomplish the manned Moon landing which had been prescribed by President Kennedy. That, however, is only a taste of what is to be accomplished by a broader, mission-oriented space program.

#### In Central and North Asia

Now look at the future problem of raw materials in that light. Consider the following hypothesis, from during the period of the very early 1980s, when I was working on a design for what President Reagan was to name publicly "A Strategic Defense Initiative." It might be argued by some that this was only an hypothesis, but it is one which must be addressed, in any case, and, it is one which points more or less directly to the long-term problem of securing needed raw materials from within the fossilized layers of the Biosphere.

It was clear from consulting relevant scientists, that the Mendeleyev elements composing our Solar system had been generated by the Solar system itself, during a period when our Sun was rotating much faster than today. It was clear that since the estimated thermonuclear fusion of the interior of the Sun itself could not have generated the full Mendeleyev "table," we must look to the "disc" of material which had been placed then as the "shedding of motion" by the younger years of the Sun. My proposal was, that "polarized fusion" within that "disc" could have generated the Mendeleyev

<sup>33.</sup> As was emphasized by von Braun, comparing a Mars mission to Columbus' reliance on a flotilla for following Toscanelli's map in seeking the land on the opposite side of the Atlantic Ocean.

table's components by nuclear fusion, whereas the Sun would have otherwise stopped approximately at Iron; that this was an immediate challenge to be addressed by scientists. Some at Lawrence Livermore Laboratories then agreed that the thesis was a plausible one, on the basis of relevant experimental data on thermonuclear fusion already at hand.

That would signify, following Kepler's original discoveries of the constructive-geometrical form of mathematical-physics composition of the Solar system, that the material produced within the polarized fusion of the disc would have been "fractionally distilled," to be distributed among the available roster of harmonically ordered, potential Keplerian orbits. Gauss' crucial proof of Kepler's

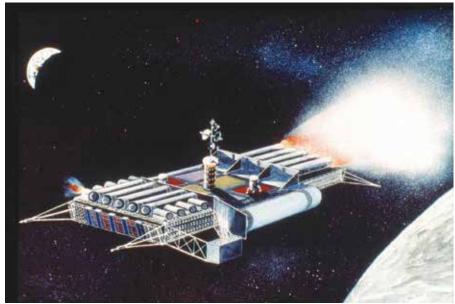


Illustration by Krafft Ehricke

The late space scientist Krafft Ehricke, known as the father of the Centaur rocket, developed the idea of man's "extraterrestrial imperative." His painting shows a freighter transporting industrial materials to and from the orbits of the Earth and Moon, powered with lunar oxygen and aluminum. LaRouche underlines the importance of "industrialization" of the Moon, for a long-term Mars exploration program.

argument, in the matter of Ceres, et al., had encouraged me to firm confidence in this view of Kepler's geometric argument.

This investigation died on the vine, except for my mid-1980s proposal for a Moon-Mars establishment of Los Alamos "science-cities" in the subsurface of Mars and my 1988 national, half-hour TV special, *The Woman on Mars*, of 1988. In the meantime, a new, related track opened up. Some of my work had prompted a collaborator, Professor Robert Moon of Chicago, to reopen his own earlier studies of the constructive geometry of the Mendeleyev periodic table. Then, most unfortunately, Professor Moon died suddenly in Chicago. With his death, the examination of the "Moon Model" for the periodic table, went onto the shelf for a decade.

Meanwhile, another track on the purpose of the Moon Model project began to emerge. In February 1983, during a meeting held as part of my private backchannel discussion of a proposed "strategic defense initiative" with the Soviet government's representative, I had the occasion to warn the Soviet government, that should President Reagan make the offer, which he in fact did make on March 23, 1983, and if the Soviet government were to reject that Reagan offer, as my Soviet channel indicated were almost certain, then we must expect that, for economic reasons, the Soviet economic system would collapse in approximately five years. It actually collapsed within approximately six years.

Later, after Soviet General Secretary Andropov had publicly rejected the President's offer, out of hand, I repeated the warning of a probable Soviet collapse within "about five years." It was for that reason, that, on October 12, 1988, I conducted a Presidential candidate's <u>press conference</u> in West Berlin, at which I set forth the expected reunification of Germany, with Berlin designated as its future capital, under the conditions of an already imminent chain-reaction collapse of the economies of Eastern Europe and then the Soviet Union itself, and proposed a U.S. policy for cooperation in the economic recovery of those nations. That October 1988 press conference was broadcast on U.S. national television a short time later, prior to the November election.

These developments of the 1980s provided the foundation for a 1989 <u>design</u> for what was named a "European Productive Triangle: Berlin, Vienna, Paris," which became the keystone for a 1991-1992 design for a Eurasian Land-Bridge <u>proposal</u> uniting the proposed European Productive Triangle with a network extended to include Russia, China, and India as pivotal reference-points.

The relevant implications of that Land-Bridge design for biogeochemistry topics, are chiefly the following.

The aggressive development of the heavily populated nations of the Eastern, Southeastern, and Southern rim of Asia, poses the long-term question: to what degree can the fossil-based mineral deposits of central and north Asia meet the requirements of the growing, and developing regions of the most populous regions of Asia? At that point, the role of a long-term Moon-Mars exploration mission becomes clear.

Since much of the indispensable mineral wealth embedded within the fossil strata of central and north Asia (and also elsewhere) are limited, how do we face the challenge of overcoming the effects of increasing rates of consumption of these resources by a growing and developing population of east and south Asia, in particular? We do know that most of these deposits were created as the "skeletal" remains of living creatures over up to billions of years. How shall we regenerate what society is consuming? How should we shift the composition of our use of materials, to prevent critical shortages? What are the lawful methods, apart from brute-force techniques, for transmutation of elements and their isotopes?

Faced with that challenge coming up ahead, we need a physical chemistry which does not continue to rely upon blind faith in "magic numbers," to seem to explain away how the Solar system actually generated the repertoire of what is already known as the naturally found periodic table of the Solar system. What do we do? The required approach is multi-faceted; but, the most obvious of these is an intimate study of the physical chemistry of a planetary Solar body which is not the Earth. The study of the Moon, in this way, is indispensable, but by no means sufficient; the Moon is a child of the creation of the Earth. We must get out of the intellectual prison of our current textbooks, and go to Mars, hoping to find the different physical chemistry which will help us to develop a physical chemistry, including a nuclear physical chemistry beyond what we know from studies on Earth.

In this connection, Russia and Kazakhstan have a multi-faceted role which is of special importance for the planet as a whole. Not only is Russia the most experienced nation, scientifically and otherwise, in the special problems of management of central and north Asia; Russia's scientific tradition, since Czar Peter the Great's visits to the Freiberg Academy in Germany's Saxony, and Russia's developments in geology and related matters are of outstanding relevance for the planet as a whole. The traditions of Mendeleyev and Vernadsky are at the center of the relevant Russian scientific tradition today. Kazakhstan is a crucial part of the infrastructural, biogeochemical, and astrophysical program needed to address this challenge.

The scientific form of that challenge is the need to free science from the disorienting, reductionist's grip of the mechanistic concept of "energy," to return to the standpoint of science associated with that concept of powers underlying Kepler's uniquely successful definition of a Solar system whose existence, and continuing development requires emphasis on that principle of hypothesis upon which the very existence of competent science has depended since no later than the time of Pythagoras.

We must view the Solar system in which we live as not a fixed thing, but an ongoing process of development, into which we must intervene within that whole system, as such intervention has prompted all of mankind's successes, as a species, on a single planet, Earth. The relevant argument is as follows.

#### **How Economic Science Works**

In that connection, let us reconsider the way in which physical science works. Think of the doubling, by geometric construction alone, of the line, the square, and the cube. Think of the purely geometric construction of the five Platonic solids. Think of Kepler's discovery of a universal principle of gravitation. Review the way in which discoveries of universal physical principle are made, and proven to be such discoveries.

Anything which is simply perceived as a statistically consistent rule, is *not* a universal physical principle. The discovery, or recognition of a principle begins with recognition of the stubborn occurrence of something observed which defies those rules adduced from simple statistical "repeatability."

Kepler's discovery of universal gravitation, is a prime example of this. In discovering a principle such as gravitation, we have recognized the existence of some regular rule, but a rule of a different quality, a much higher quality, than the rules associated with a "repeatable" observed occurrence. These are the unseen, but demonstrably effective rules which govern the mere shadows of reality presented to us by senseperception. Hence, the *ontological* implications of Gauss' notion of the complex domain. These higher rules are recognized by the creative powers of the human mind. They are rules which operate beyond the reach of sense-perception; but, as Carl Gauss' 1799 paper (*The Fundamental Theorem of Algebra*) exposed the error of Euler and Lagrange, they are more efficient in controlling what we perceive than any ordinary, simply arithmetic sort of statistical rules.

In the practice of any branch of physical science, or Classical artistic composition, the quality we rightly associate with genius, we drive existing human knowledge of some aspect of experience to a point beyond all presently explored limits. We seek to discover a stubborn anomaly, a situation in which reality violates, perceptibly, all of the stock of our presently known, most precious rules. That paradoxical event, that anomaly, that ambiguity, poses a challenge to the creative powers of the mind: What is that unseen creature, that universal physical principle, which is producing that *ontological* paradox?<sup>34</sup>

Thus, to discover those laws, specific to our Solar system, which lie above, below, and beyond what our scientific discoveries thus far have demonstrated, we must go beyond the upper and lower limits of investigations so far. We must discover laws, characteristic of the Solar system, but engaging principles expressed in ways beyond the frontiers of what our experience has enabled us to discover thus far. This means that we must choose the creating of an organized infrastructure of scientific exploration, embracing the Moon, Mars, and the getting back and forth between them, as the frontier of new dimensions of exploration, in search of newly discovered laws of our Solar system and, inclusively, its biogeochemistry. This must be conducted on an astronomical scale, but also, simultaneously, along the frontiers of nuclear microphysics.

What I have just described is a reflection of the fundamental, but unfortunately rarely understood, principle of any competent form of economic science. The progress of man, from the ape-like level of potential population of a few millions living individuals, to more than six billions reported today, is the outcome of the application of an accumulation of discoveries of principles, principles accumulated and, largely, transmitted across many successive generations, and also from one culture to another. The crucial feature of that process of increasing the potential relative population-density of the human species, is the act of original or replicated discovery of universal physical principles of the characteristics I have just, once again, summarized above.

These discoveries act as powers, as Plato, the follower of the Pythagoreans, employs the Classical Greek term dynamis, and as Leibniz, the founder of the modern economic science of physical economy, introduces the German *Kraft* as the appropriate synonym of *dynamis* in its Platonic meaning. Those powers which are so defined as expressions of experimentally validated discoveries of universal physical principles,35 define added dimensions of effective human activity. These principles, as reflected in the technologies derived from them, are the primary source of all increase of the productive powers of labor. The study of that becomes more than a bit more complicated as we examine the intricacies of the social processes involved; but the cited elementary principle itself is preserved intact through all consideration of additional features of the process.

The embedding of these discovered intellectual powers in the culture of a society, is that society's primary capital. However, the effective expression of that primary capital, requires investment in the physical activities, including educational activities, and the physical structures through which those powers are efficiently expressed at the proverbial "points of production and consumption." The activities expressing those levels corresponding to an array of powers, are to be regarded as capital investment: as in basic economic

<sup>34.</sup> The reason I chose Gauss' 1799 *The Fundamental Theorem of Algebra* as the pivotal educational experience of my youth movement of (primarily) young adults in, predominantly, the university-eligible ageinterval 18-25, was that Gauss' attack on Euler, Lagrange, et al., combined with his implicit replication of the argument of the pre-Euclidean Pythagoreans on the line, square, and cube, offers a group of students, as for example in a Socratic dialogue of a class-group of 15-25 students, the most direct, and relatively simplest example of the practical meaning of the term "universal physical principle," and, thus, the simplest kind of illustration of those demonstrable powers, specific to the human mind, which set man apart from, and above the beasts.

<sup>35.</sup> As always with me, my use of "universal physical principles" includes, implicitly, Classical forms of artistic composition. The distinction is, that what we customarily identity as universal physical principles, pertains to the sovereign individual mind's view of the combined abiotic and biotic domains, as experimental domains. Classical artistic composition focuses the attention of the cognitive powers of the individual upon those kinds of universal physical principles which are expressed by social processes as such. For example, the study of history as a study of the experience of generating, transmitting, and applying ideas corresponding to the act of discovery (or re-discovery of original universal physical principles), is the history of social relations being conceptualized as a form of physical science.

infrastructure, in capital of production of goods, and in necessary capital of productive firms and of house-holds.

The prices attributed to these forms of capital must correspond with both the maintenance required to sustain present levels of society's potential relative population-density, and some determined rate of improvement of the society's potential relative population-density. The latter improvement corresponds to what might be termed, for convenience, "social profit."

The included function of sundry protectionist measures, including the crafting of both tariff and trade standards, and taxation policies, or minimum wage levels, and so on, is to set limits (boundary conditions) within which a reasonable expectation of a continued "social profit," so defined, might be assured. Excepting extraordinary circumstances, as during World War II, these protectionist measures are not price-control measures, but do function to the effect of being "fair trade" standards.

The general intent is to increase accumulation of effective physical capital, where needed, or where strongly desired in the national interest, while protecting existing levels of capital, including the *de facto* physical-capital investment in the quality of life of households and labor.

Typical of what is required, is the forms of regulation destroyed under the 1969-1981 administrations which William Yandell Elliott-sponsored Henry A. Kissinger and Zbigniew Brzezinski served as National Security Advisors. We require remedial measures, such as the repeal of the extremely destructive Garn-St Germain and Kemp-Roth legislation. Now, examine the principles underlying that precious, protectionist heritage of our republic, a heritage which those wrongdoers ruined.

## 4. The Price of Production

It is possible to provide a useful illustration of the case to be made here, from the standpoint of reference to the pre-1983 application of the U.S. system of national product and income accounting which had been developed, in significant part, by the late Professor Wassily Leontief. From 1952, until 1983, in my management consulting and other professional activities, I had relied to a significant degree on comparing studies which I had made, with a combination of the U.S. offi-

cial and private statistical and related reports and studies based upon that model of national accounting. In my successful, short-term, late-1956 forecast of the worst U.S. post-war recession, as about to break out by Spring of 1957, my studies of the consumer-credit bubble took into account the way in which that bubble was situated within the economy, as represented by relevant Federal statistics on national product and income.<sup>36</sup> The pattern of my consistently outstanding successes in long-term forecasting, from 1959 onward, demonstrates the conditional usefulness of such forms of analytical reporting in providing the kinds of information needed for the work of the forecaster.<sup>37</sup>

Unfortunately, during 1982-1983, the reporting by the Federal Reserve and Administration went from somewhat problematic, to outright fraud. In a halfhour nationwide TV broadcast of my 1984 Democratic pre-Presidential campaign, I warned of the systemic fraud in official U.S. government reports on the economy, especially frauds on the subject of rates of inflation, and thus publicly terminated the issuance of what had been formerly my eminently successful quarterly forecast reports. Since then, government reports have become frankly and increasingly fraudulent. Reliable information on the overall state of the real economy has virtually vanished from the official summary reports by Fed Chairman Greenspan, et al., replaced by intoxicated admiration of the increasingly deadly, cancerous growth of the Wall-Street-centered financial bubble.

It should also be emphasized, that my principal

<sup>36.</sup> Typical of the situation in 1956, as echoed by the comparable situation today, the nominal valuation of used-car inventory on new car dealers' lots was far in excess of the value of a vehicle of the same make and model, in comparable condition, on the open market. It was this state of affairs, produced by the policies of the Eisenhower Administration's Arthur Burns, et al., which prompted the deep U.S. recession of 1957-1960. Today's U.S. crisis is qualitatively far, far worse than the situation in late 1956, but the situation is nonetheless broadly analogous in important respects.

<sup>37.</sup> My first forecast was a short-term one of late 1956. This was made, as an internal policy-memorandum on an early 1957 recession-crisis, to the consulting firm of which I was a member of the executive staff at that time. My first long-range forecast was presented during 1959-1960, as a continuation of the study made for the notably successful, earlier, near-term forecast of 1956-1957. This forecast came into significantly wide circulation during the late 1960s. Its success, in August 1971, led to my public <u>debate</u> with Professor Abba Lerner that Autumn, a debate which I won, but a victory which led to my becoming considered a dangerous adversary to be isolated and defamed, increasingly, among leading academic economists, certain financier houses, and others, from that time on.

achievements in the theoretical side of the development of my LaRouche-Riemann method, were, in significant degree, the outcome of my grasp of the potential fatal weakness, of linearity, in over-reliance upon the Kondratieff-Leontief approach to analysis of national economies.<sup>38</sup> Actual economic processes are intrinsically non-linear in the sense of Riemannian physical geometry. Nonetheless, provided the teacher and students understand the implications of that distinction, linear models of a type may be used for the introductory phase of education in economic science, as in classrooms. I include that pedagogical approach in developing my argument here.

For purposes of linear approximation, the standard of measure to be used in national-economic estimates intended for crafting policy, is a certain kind of normative standard of physical family income, including all participation in essential public services of basic economic infrastructure. The *average* of actual data is not to be used for the purpose of defining policy; instead,

we must use a standard corresponding to that required of households meeting an adopted synthetic standard, one chosen for a household whose employment expresses a specified level of development of technology employed in production.

This standard is extended as a requirement for all portions of the households.

An explanation of that approach is needed at this point.

#### How Statistics Usually Lie

The most widespread of today's foolishness, by both professionals and non-professionals, in discussing the economy and economic policies, is a fanatical reliance upon what they choose to regard as "statistical facts," which are almost never actually facts in the sense presented, and which are, usually, also the product of a wild-eyed misconception of the nature of what passes for statistics.

As I have already emphasized here, above, no ordinary statistical trend ever shows, or proves a principle of nature. The characteristic failure of Aristotelean and empiricist astronomy, from the Roman Empire's Egyptian hoaxster Claudius Ptolemy, through Copernicus and Tycho Brahe, was the assumption that the apparently consistent orbital pathways, as observed by them or others, corresponded to the knowable laws of the physical universe. In fact, as Kepler demonstrated, it was evidence which stubbornly violated those simplistic statistics of the Aristotelians and empiricists alike, which reflected the existence of some controlling intention, built into the astrophysical processes, an intention which could be identified as a universal physical principle only through the methods of Platonic hypothesis 39

Statistics, at its best, is incapable of showing us anything but the relatively least interesting aspect of experience. All known important progress of the human species, has depended upon attention to evidence which shows us the folly of blind faith in mathematical statistical consistency. It is the statistically unexpected, sudden changes in the pattern of historical events, for example, which challenge the human mind's powers of creative insight, and, thus, prompt, once again, discovery of that controlling "hand of fate" working from behind the curtain of sense-perception. This is the hand which sane men may recognize as of the quality of a universal physical principle: such as universal gravitation. All of the most significant features of an economic process, have the quality of application of newly discovered, relatively long-term effects of the workings of principles, principles which have been operating, apparently, from behind the curtain of the customary forms of statistical analysis.

So, in assessing the cost of producing a certain required quality of cultural development of a typical family household, we must not use those measurements that ignore the actually measured, current real-income levels; but we must not brush aside the need to determine the effects of deviations of actual real-income

<sup>38.</sup> The principal part of my discoveries, first developed during the course of the 1948-1953 interval, was made in rebuttal of the core argument of Norbert Wiener's **Cybernetics** and the closely related notions of "systems analysis" and "artificial intelligence" of John von Neumann. The initial application of my discoveries was made in opposition to that "ivory tower" doctrine of "operations research," of Tjalling Koopmans and others. The latter rebuttal of operations research relied significantly on a study of the influence of Leontief et al. on the appreciation of my differences with the Kondratieff-Leontief notion of "long waves" is indicated at a later point in the discussion here.

<sup>39.</sup> Galileo Galilei, the household lackey of the founder of modern empiricism, Venice's Paolo Sarpi, typifies the empiricists of the Seventeenth and Eighteenth centuries. Galileo's attempt to plagiarize the work of Kepler, by introducing the empiricist's ivory-tower conception of "action at a distance," is typical of empiricism generally.

levels from what is required to sustain the constantly improved performance which society's general interest requires.

There are some obvious illustrations of the point. Education, health care, and conditions of personal life within the household and community, are of crucial importance, such as that determined by quality of housing required to allow efficient privacy of members of the family. We must promote the development of all persons, to produce the quality of capacity, including knowledge (as distinct from mere learning), which is consistent with those levels and rates of scientific-technological, and cultural progress which the leading edge of current national economic activity indicates as needed. We must be educating today's children for adult roles in the much more technologically advanced economy, for example, which they will enter twenty to twenty-five years later. We must be qualifying them, as children and adolescents, for the kinds of new technologies which are currently in the process of emerging.

Too often, even in the case of our own U.S.A., policies of practice, notably including policies of government, are aimed (*post hoc, ergo propter hoc*) to conform to the burdens of past practice, rather than build the foundation for the emerging practice of the future.

There is nothing strange or exaggerated in that statement. Most of the immigrants who came into the U.S. three generations and more ago, landed as poor "greenhorns," working to build a better life for their children and their grandchildren. The not atypical case of the history of an immigrant family of our melting-pot nation, from the underpaid factory worker who entered our nation, to the scientist, physician, and so forth among his or her grandchildren, illustrates my point.

So, that much explanation supplied, our national economic policy must be premised on a standard of what the cost of living of a family household should be, in physical terms, rather than accepting the actual current state of affairs as a standard of reference for study of the economy as a whole.

Thus, the attempt to define the price of labor in terms such as a desire for competitive cheapening of wages through so-called "free trade," is both immoral and, scientifically, insane. Lowering the standard of general education of most young to what someone believes is sufficient for their expected employer's requirements, is as foolish an economic policy, as it is also an immoral practice. Lowering the physical income of the household below the standard associated with such factors as both qualitative and quantitative productivity, would be morally reprehensible in the extreme, and, from the standpoint of promoting physical productivity of a national labor-force, insane. The physical cost of labor, is the cost of producing family households whose labor embodies not only a certain current level of technology and motivation, but also some rate of improvement of those qualities.<sup>40</sup>

That precondition stated, the determining function within a physical economy, is the human activity expressing both a.) the level of technology achieved by the society, and b.) the rate of progress of the further development of that technology through, chiefly, fundamental discoveries of universal physical principle. Consider some of the relatively simpler aspects of this, first.

On the subject of basic economic infrastructure, there is also variability. In the extreme cases, which are not necessarily rare ones, such as inhabiting the desertareas of the Middle East or northern Africa, the costs of maintaining an area as competitively productive and habitable, means an added margin of cost of development of the basic economic infrastructure. However, usually the gains in productivity of the population through effects of developing relatively marginal regions, both per capita and per square kilometer, will more than offset the continuing costs of development of the area as a region of habitation. Our planet-wide object should be an approximately self-sustaining "greening" of desert areas, by aid of development of relevant micro-weather patterns through large-scale development of forests and other green areas.

By these means, the productivity of the entire population, both per capita and per square kilometer, is raised to a higher level. These gains in the totality of the society more than overwhelm the impact of the

<sup>40.</sup> Such valuation of labor is not a self-evident constant, but is variable, according to both the technological potential required by society, and the level of ongoing technological progress to be achieved by that society. In other words, it is not labor *per se* which represents physical value, but developed labor in a developed, and developing society. It is the physical cost of producing that standard quality of labor from the house-holds of a society in a relevant state of development, which represents the true price assignable to the physical income of family households of that labor. Admittedly, under special conditions, such as warfare or economic depression, we may be compelled to postpone the full payment for that quality of labor; however, over the course of a generation or two (e.g., 25-50 years) we must bring the physical income of households up to the level of cultural standard consistent with the adopted goals of technological and related social development.

higher infrastructure costs incurred for making formerly sub-standard territories productive ones. That deduction from the total wealth of the society, which marginal lands always represent, is overcome in this way.

Otherwise, the individual productive enterprise, of agriculture or industry, for example, like the family household, is situated within a larger area whose basic economic infrastructure can not be rationally assigned to individual private enterprise, but must be provided either by government, or government-regulated, sometimes privately-owned, public utilities. This infrastructure's true physical cost of combined operation and maintenance, must be calculated over a span of something in the vicinity of between a quarter and half century. The ratio of physical costs of infrastructure to income of households, is to be so calculated.

In agriculture and industry, for example, the costs of production must include similar estimates of the distribution of physical-capital factors to current operations.

As part of this, we must include a margin for growth. This is expressed as a margin of profit incorporated into the total physical costs of production and household incomes. While this does provide for "horizontal" growth, that is to say on the current level of technology being practiced, the emphasis must be on rate of scientifictechnological progress.

Scientific-technological progress includes taking into account the frictional costs of "technological attrition." It also includes a margin of scientific-technological progress beyond what is absorbed in combating losses in relative productivity attributable to technological attrition. This added margin of scientific-technological progress, is the source of the real net growth of the economy.

The denial that such scientific-technological progress is the source of actual economic net growth of civilization, is the obvious source of the statistical lies permeating the recent decades trends in U.S. policy and public opinion. However, the causes for these trends can not be understood efficiently, without looking into the matter more deeply, as follows.

#### The Crime Which Is Empiricism

Never forget, that, prior to those revolutionary changes in European culture introduced by the Fifteenth-Century Renaissance, all known world cultures were committed, in principle of practice, to forms of society in which the majority of human beings were treated as either wild (e.g., hunted) or herded human cattle. As the cases of Solon, Socrates, and Plato attest, as does the Christianity of the Apostles John and Paul, the best within ancient Greek culture were committed, in contrast to Lycurgus' Sparta, to providing all of society the benefit of the common good (general welfare,  $agap\bar{e}$ ). The idea of goals of a just form of society had existed, as the Apostle Paul's **I Corinthians** 13 attests, but, until that Renaissance, it did not exist as the generalized practice of those principles by any society.<sup>41</sup>

From the aftermath of the reign of Charlemagne, through the close of Europe's Fourteenth-Century "New Dark Age," Europe was dominated by an *ultramontane* (e.g., imperial) world order which was ruled, in fact, by an alliance of maritime Venice's financier oligarchy with Norman chivalry, an alliance which we associate with the bestiality of the Crusades, the bestiality of the Spanish Inquisition's Nero-like mass executions, and as the tradition of bestiality revived by Adolf Hitler's Torquemada-like mass murder of Jews and other selected categories of victims.

The crucial change, toward both the revival and consolidation of the Classical Greek humanist, Christian conception of man and woman, came with the Fifteenth-Century Renaissance. An exemplary part of the leadership for that Renaissance was provided by Cardinal Nicholas of Cusa. Cusa was the author of the *Concordantia Catholica* which contributed a crucial part to the emergence of a system of modern sovereign nation-states; he was also, as Kepler emphasized later, the founder of modern experimental science, beginning with his *De Docta Ignorantia*. In addition, Cusa was the author of the policy of exploration which resulted in Christopher Columbus' re-discovery of the Americas.

It was in that context, that the founding of the first actual modern nation-states committed to the common good (general welfare, common weal) was launched. Louis XI's France and Henry VII's England, became, thus, the models for the establishment of modern sovereign nation-states in general.

During the late Fifteenth Century, Venice and its pro-feudalist allies had already begun to strike back, and that savagely, against this insurgent triumph of

<sup>41.</sup> **I Corinthians** 13 illustrates the point most memorably, that it is universal principles, not codes composed of particular basic laws, which define a morally acceptable behavior among people.

Christianity. During the Sixteenth Century, the reaction became systemic. The virtually Satanic Spanish Inquisition and the religious warfare which dominated Europe during the interval 1511-1648, typify the profeudalist reactionaries' effort to reaffirm world rule by bestiality.

However, the idea of the sovereign nation-state and of scientific progress, could not be eradicated so simply. So, the reactionaries, typified by the neo-Aristotelean followers of Venice's Francesco Zorzi and the new Venetian faction of the followers of Paolo Sarpi, tried a new assault on the threat which the Renaissance had represented for the Venice-Norman tradition. The slyer among the enemies of the Renaissance, such as Venice's Paolo Sarpi, gave up the hope of returning to feudalism by eradicating science altogether. They resorted, instead, to allowing some of the products of modern science to be tolerated, but, on the condition that those scientists who consented to these Venetian reductionist cults were turned into intellectual eunuchs. The spread of Cusa's scientific method was thus banned, as this banning was typified by both Zorzi and the empiricists and their positivist and existentialist outgrowths still today.

That bestiality of the Venice-led reaction against the modern sovereign nation-state, produced both the neo-feudalist Physiocrats and that axiomatically anti-moral, Anglo-Dutch Liberal form of parliamentary democracy's "free trade" dogma. Similarly, the adoption of a virtually inquisitional form of that doctrine of "free trade," that of the Mont Pelerin Society's ultra-simple-minded Milton Friedman, has transformed the U.S. economy, over the recent forty years, from the world's leading productive power, to the mass of bankrupt, rot-ting and ruined, parasitical state of Roman-Empire-style "bread and circuses," today.<sup>42</sup>

The essence of the ruse employed by both of these anti-Renaissance factions, was the denial of the existence of that quality which sets man and woman absolutely apart from and above the beasts. The aim of these anti-Renaissance reactionaries, was to obliterate the notion that there exist discoverable universal physical principles which are not directly discernable by the animal-like aspect of man's nature, sense-perception. The savage, even lunatic attacks on Leibniz by the empiricist fanatic Euler, is the best example of this, since Euler was the most skilled of the ivory-tower mathematicians among those empiricists, and therefore the more consistent sophist in his crafting of the same fraudulent argument proposed by many others, such as his crony and accomplice Maupertuis.

The most significant political expression of this anti-humanistic reductionism of such as Descartes, Locke, Hume, Quesnay, Adam Smith, and Euler, was the Anglo-Dutch Liberal model of parliamentary imperialism. This imperial power was established, as such, by the British East India Company's 1763 triumph over France, and that Company's related triumph in India.

The emergence of the power of the British Empire, especially after 1815, defined the Anglo-Dutch Liberal form of empiricism, with Isaac Newton as its ship's figurehead, as the leading enemy of the Renaissance's legacy through Europe and the Americas. In this process, the extremist expressions of empiricism, as by Hobbes, Locke, Mandeville, Quesnay, Hume, Turgot, Adam Smith, and Jeremy Bentham, were adopted as the basis for the influential Anglo-Dutch Liberal model of a doctrine of political-economy.

During the late Eighteenth Century, the leading opposition to this Anglo-Dutch Liberal prescription for man's bestiality to man, was assembled, as an international force, around the cause of the freedom of the Benjamin Franklin-led U.S. republic. The tradition we represented so was that of the 1648 Treaty of Westphalia, which had ended the Venice-orchestrated religious warfare of 1511-1648. In economic policy, we American patriots represented the legacy of France's great nation-builder, Jean-Baptiste Colbert. In fact, especially from the mid-Eighteenth Century onward, we expressed the constitutional and economic policies of Gottfried Leibniz's devastating refutation of John Locke's pro-slavery doctrine of shareholder value, Leibniz's concept of "the pursuit of happiness," as the latter, defined in Leibniz's New Essays on Human Understanding, became the principled basis for our form of constitutional self-government, and the source of the concept of "the pursuit of happiness" featured in the 1776 Declaration of Independence.

<sup>42.</sup> Cambridge's Mrs. Joan Robinson, whose circles have never been friends of mine, has nonetheless enjoyed my repeated, and hearty endorsement of her fully justified ridicule of the wretched Friedman, as the economist of *post hoc ergo propter hoc*. The Mont Pelerin Society's Friedrich von Hayek defined that association as dedicated to the promotion of the Bernard Mandeville who insisted that promoting freedom for the practice of private vices, as Milton Friedman and George Soros have done, was the road to the prosperity of society. Consistently, von Hayek's accomplice Friedman, like the ugly George Soros, emphatically defended the legalization of the contemporary illegal narcotics traffic of the Colombian FARC and its accomplices.

It was to prevent the spread of the achievements of U.S. liberty from spreading throughout Europe, that the British East India Company, led by Lord Shelburne, organized the French Revolution, and set into motion the Hitler-like warfare and tyranny of Napoleon Bonaparte.

The Congress of Vienna [1814-15—ed.], which celebrated the ruin of the Emperor Napoleon Bonaparte, is fairly called The Sexual Congress of Vienna. While countesses and others were steered by Metternich's Habsburg secret police into providing diverting entertainment for many among the representatives of states gathered there, Metternich and Castlereagh made the leading decisions, which led, in due course, to Lord Palmerston's success in deploying his agent Mazzini, for the mission of toppling Metternich from power.<sup>43</sup>

The Europe which emerged under the rule of that Vienna Congress, dominated a division of power between the British Empire and a neo-feudalist European continent, and isolated and imperiled the continued existence of that constitutional republic we had formed in 1789. It was not until a U.S. led by President Abraham Lincoln freed us from rule by the slaveholder's doctrine of "free trade," that the U.S. emerged rapidly as the greatest single economic power among individual nations in the world, a status which it retained, until the lunacy of "free trade" and "counterculture," which came to grip us about forty years ago.<sup>44</sup>

Admittedly, we came repeatedly under the influence of the London-backed slaveholder faction, as also from the Habsburgs and the slave-trading Nineteenth-Century Spanish monarchy, prior to 1861-1865, and under the influence of pro-Confederacy Presidents Theodore Roosevelt and Woodrow Wilson. Recently, especially since the assassination of President John F. Kennedy, our nation has become the victim of a mimicking of the depraved "free trade" policies of the alien Anglo-Dutch Liberal model.

However, despite those excursions into depravity, we have, until now, remained, genetically, in the political sense of the term, what Franklin's legacy made us, except as we have been, so frequently, the virtually apostate victims of either the evil, over-reaching power of European coalitions which hated our existence, or victims of our own willing, induced self-corruption, as today. Our Constitution, and our conception of an antiBritish East India Company policy known as *the American System of political-economy*, our fundamental opposition to an intrinsically predatory and imperialist Anglo-Dutch Liberalism, is a deeply embedded special character, our patriotic tradition, even today.

Today, we are no longer virtually the "only power" on this planet, as we were until President Harry Truman began to spoil Franklin Roosevelt's achievements. However, the American System of political-economy, which is our constitutional tradition, is the rallyingpoint in tradition around which many nations of the world can be grouped today. This can be done today, on the condition that we dump the imperialistic among some of us, to return to what President Franklin Roosevelt had intended, contrary to the Truman Presidency, had he lived to conduct his own post-war policy.

The purpose of such a coalition must be that which I proposed, and heartily endorsed as the <u>draft</u> for a new, just world economic order, adopted at the August 1976, Colombo meeting of the Non-Aligned nations: to create a just new world economic order among perfectly sovereign nation-states, an order freed from those "free trade" and related policies which have now, nearly thirty years later, brought European civilization as a whole to the verge of willful self-extinction.

The commonly crucial feature of this Anglo-Dutch Liberal model, whether as mathematical physics or political-economy, was the denial of the knowable existence of any universal physical principle beyond the statistical interpretation of mere sense-perception as such. In both of these expressions, the effect was the denial of any knowable quality of the human being by means of which man might be distinguished from a beast. At the same time, as a correlative of this, it was denied that man was capable of discovering, and employing any knowable form of universal physical principle outside the realm enclosed by the experience of sense-perception. In short, man as a fertile creature of ideas, was castrated by the "Ockham's Razor" of Sarpi's empiricism, to produce a moral eunuch, who might admire, and be humbly mystified by the principled artefacts of scientific reason, but could not actually produce them.

The crucial political significance of empiricism, in particular, is that it does as reductionism does in general. It denies, even virtually prohibits that specific quality of man and woman which sets human beings absolutely apart from and above the beasts.

For example, the notorious Physiocrat, Dr. François Quesnay, used his degradation of the laborers on the

<sup>43.</sup> See Rachel and Allen Douglas, *The Roots of the Trust* (1987), unpublished.

<sup>44.</sup> The power of the British monarchy was that of an empire, not a nation.

feudal estate to the same status as cattle, to pretend to show that all of the profit created by the estate was the fruit of the mystical powers of the feudal landlord's title of overlordship. This conceit by the wicked Quesnay was represented by Quesnay's doctrine of laissez-faire, which Adam Smith plagiarized as the dogma of "free trade." The same argument had been made by John Locke, earlier, on behalf of the dogma of "shareholder value" (e.g., property).45 Mandeville, the adopted patron of von Hayek's and Milton Friedman's Mont Pelerin Society, traced the genesis of wealth to the private practice of personal vice, thus choosing Satan as his favorite god. The same argument was made, with slightly different literary packagings, by Adam Smith, Jeremy Bentham, and all other leading ideologues of the Anglo-Dutch Liberal dogmas.

In other words, all of these reductionist ideologues sought to turn back the clock of history, from the high point typified by the Fifteenth-Century Renaissance, back to the form of society in which most people were degraded to the status of either hunted or herded human cattle. The conditioning, one might say "brainwashing," of our young in schools and universities, as elsewhere, into versions of learning which are axiomatic expressions of reductionism, has produced a pervasively stultified state of mind of the population, and of its policy-shaping habits, which repeatedly impels us into forms of mass behavior by which we are repeatedly, nearly destroyed, as by the legacy of Coolidge and Hoover, or the trends of the recent forty years which have brought us to the brink of economic doom today.

The kernel of the problem is, that the idea of the existence of the actual creative powers of the individual human mind is either denied, or mystified in such a crippling way, that the factor of actual human creativity is not featured as a determining factor in the welfare and progress of society as a whole.

This was the criminal role of empiricism, and kindred forms of reductionism, in degrading the conception of man and woman to that of mere beasts. The purpose was to ensure that the majority of the population, even those educated as putative scientists, would think of themselves as in the likeness of human cattle. The latter were induced, as Euler and Lagrange were, to think only as Isaac Newton did, as in the likeness of human cattle: denying the existence of those qualities of discovery which located knowledge of principle outside mere sense-perception: denying truth, hypothesis, as unnecessary, as Newton did. Compare the case of poor Georg Cantor, once a true genius, but, who, after being driven insane by his persecutors, such as Kronecker, proposed the adulation of Isaac Newton, even if unsuccessfully, to Pope Leo XIII!46

As a result of this continuing mass-brainwashing by empiricism, that activity which distinguishes man from the beasts, the process of discovery of fundamental scientific principles, is excluded from the taught principles of economy. In a society putatively dedicated to the profits of usury, such as the Anglo-Dutch Liberal system adopted as his model by Marx, the activity which actually produces such margins of gain, the discovery of scientific principles, is excluded from the description of economic processes.

Acceptance of that reductionist's dogma of "free trade," is the crime for which my fellow-citizens, like poor, demented flagellants, are still, often, punishing themselves.

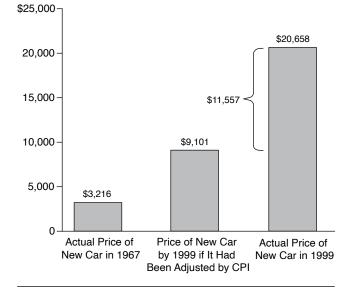
#### What, Then, Is the Financial Price?

"How smart must a voter be? What level of development of the citizen's mind is needed to enable at least a majority of citizens to make intelligent choices most of the time, at least during periods of crisis?" The problem among us has often been the populist fanaticism which

<sup>45.</sup> This doctrine of "property," as adopted by Locke, Quesnay, Mandeville, Adam Smith, et al., is the principal, treasonous feature of the Preamble of the Constitution of the Confederacy, in which the representatives, then, of what we call the Synarchist International today, drew upon Locke to defend chattel slavery as defined under Locke's notion of "right of property." This same doctrine of "property" had been used by the Spanish and Portuguese monarchy, since the beginning of the Sixteenth Century, to authorize the Iberian leadership in creating the trans-Atlantic trade in African slaves. When the Dutch and British took over much of the world, during the late-Seventeenth and Eighteenth centuries, they copied Spanish "logic" on this point. The British East India Company dumped the use of their boats (and those of the United States' treasonous Essex Junto) during the 1790s, in favor of shifting to the more profitable opium trade; at that point, they left the dirty work of the African slave trade to the British puppet, the Nineteenth-Century Spanish monarchy.

<sup>46.</sup> This anti-Leibniz doctrine of Euler, Lagrange, Laplace, Cauchy, et al., was premised upon the successive forms of the essential, anti-Socratic argument of Aristotle, Galileo, Descartes, and Newton. This was reflected in the retort by J. Clerk Maxwell, who, challenged on his refusal to acknowledge his extensive reliance on lifting unacknowledged leading discoveries of Gauss, Weber, Riemann, et al. for his own work, replied, that "we" refuse to accept any geometries but our own, referencing as "our own," the aprioristic ivory-tower dogmas of Aristotle, Galileo, Descartes, Newton, et al. This was the same position taken earlier by the Leibniz-hating fanatics Euler and Lagrange.

#### FIGURE 3 BLS Makes Disappear \$11,557 in Increase in Price of New Car Since 1967



Sources: Department of Commerce's Bureau of Economic Analysis; Department of Labor's Bureau of Labor Statistics; *EIR*.

insists that the level of debate must be brought down to the level of popular opinion, rather than bringing the knowledge of the citizen up to the level needed for the typical citizen to make competent choices, choices which would have tended to prevent the kind of degeneration the U.S. and its economy have undergone during the recent forty years to date.

It is notable that the worst decisions, those responsible for the degeneration of the U.S. from the world's leading producer society of President Kennedy's moments, to the gutted, "post-industrial" ghetto of scant bread and Roman-like circuses, has been led by those who are typical of the nominally best educated and most influential of those who entered universities during the middle to late 1960s. Those of this stratum who have successfully misled the other portions of our citizenry, did so by preying upon the most simpleminded passions of the victims. Such is the result of bringing politics down to "the popular level." The evidence is clear; the following facts are typical of that evidence.

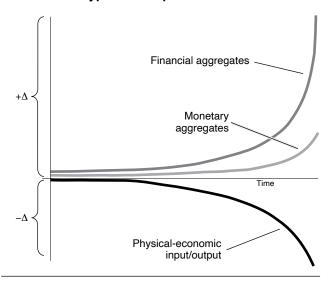
During the post-World War II period, following the establishment of the original Bretton Woods monetary institutions, there has been a continuing general monetary inflation of the U.S. currency, first under President Harry Truman, and, second, under the expression of the influence of Arthur Burns, the early sponsor of the career of the notorious Milton Friedman. Lately, since 1996, this inflation has accelerated into becoming a virtual hyperinflation, reflected, more recently, in the steep devaluation of the U.S. dollar, from an \$0.83 euro to (as of this moment of writing) a \$1.28 euro, amid the soaring of the U.S. national current accounts deficit into the order of \$1 trillion per year, while productive employment in the U.S. continues to collapse.

The mechanisms responsible for these effects are a combination of, first, simple monetary inflation, either by governments or by the complicity of governments; and, second, increasingly massive fraud in U.S. national income estimates, through such flagrantly crooked devices of the Federal Reserve System and Presidency as what is named, variously, by such names as "Quality Adjustment Index" or the marginal utilitarian's "hedonic factors." But for the Quality Adjustment hoax used in official reporting, political factors would not have permitted government to let the U.S. economy degenerate to the degree which it has under Presidents Clinton and Bush.

However, we must not overlook the fact, that the possibility of the continued use of inflationary frauds such as those monetarists' tricks, by governments, has depended upon a monstrous credulity, respecting the nature of value of money, among even ordinary citizens. The need for money, as purchasing (and debt-paying) power, has duped very many among the ordinary citizens into believing that the power of money (or, its want) over their lives, "proves" that the economic value lies within the merely symbolic manifestations of money per se. The galloping spread of "gambling mania," among both ordinary citizens and leading political circles, turning both more or less into stock-market zombies, reflects this already widespread, and currently increasing mental disorder. Sanity in studying modern economy demands, that we distinguish between two kinds of apparent profit, one real, the second a popular delusion.

In the case that a national economy is operating at a net physical-economic loss, it is possible to create the illusion of profitability by funneling large masses of money or credit into financial markets. This occurs as a two-fold process of "pumping up" a popular delusion. First, money in one form or another, is injected into the sectors of government and business which generate credit-creating leverage. Second, that credit-creating power is funneled, as under U.S. Federal Reserve

# FIGURE 4 LaRouche's Typical Collapse Function



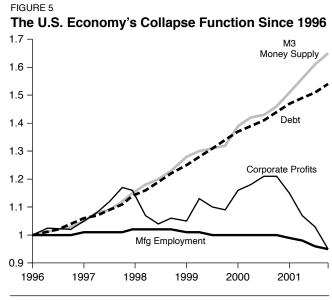
Chairman Alan Greenspan, into focussed sites such as stock-market, bond-market, or real-estate bubbles. Thus, we have the spectacle today, of, even without taking outright fakery into account, a tendency for a rising Dow-Jones and Nasdaq to soar during the shortterm, while the real U.S. economy, and value of the U.S. dollar, are collapsing at what tends to be an accelerating rate.

The role of price-earnings ratios in such markets, creates the delusion of increase of wealth in the categories of investment associated with those essentially nominal, financial-market financial profits. The result is, that President George W. Bush, Jr., and like-minded visitors from Gulliver's Laputa, gasp in awe, pointing to the monstrous cancer coming out of one another's foolish ears, while exclaiming: "See! We are growing!"

When the ratio of the amount of money flowing through financial-profit accounts rises, but, also, while the actual productive activity of the economy is collapsing, we are seeing the makings of a systemic collapse of both the U.S.A. and world economies, not merely as bankrupts, but as systems. This is what is called *a systemic collapse*, meaning that the collapse is an organic part of the design of the economic system, rather than a result of isolable mistakes which have brought about unpleasant, externally-caused, or temporary problems. The cause of the problem lies inside the minds of both the powerful and the simply credulous

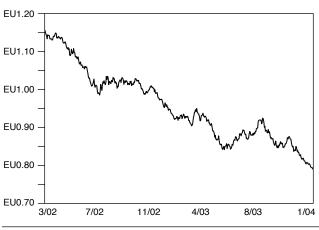
Countdown to a New Architecture Begins

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Source: EIRNS.

#### FIGURE 6 Dollar Plunge Continues (Euros per Dollar)



Source: EIR.

poor alike. In such a case, the longer the terminal collapse of that economy is postponed, the more disastrous the situation becomes, as for the case of the U.S. economy today.

To cut through such masses of delusion as those gripping the minds of most citizens today, we must shift their attention away from nominal money-values as such, to physical values. However, we must not see physical-economic values in terms of discrete individual objects, but, rather, *in terms of the physical processes by means of which the potential relative popula*-

#### tion-density is being increased.

In this latter view, we must not make the reductionist's simplistic blunder of associating "physical," primarily, with individual "physical objects." It is the process, not the thing, which is crucial. It is by the fostering of those actions which occur beyond the reach of senseperception, by the mind, actions which are typified by discovery of universal physical principles, that the processes of production generate those improved kinds of products, and improved processes of production, whose existence defines a real, physical margin of profitability for both the individual enterprise and the economy as a whole.

Thus, the truly fair price, to charge to society, of anything worth producing, is found, mathematically, only within what Gauss defined, in opposition to Euler, Lagrange, et al., as the complex domain. This represents, on the one side, both the obvious activity of production, and the components consumed in that process; and, on the other side, the factor of increase of the rate of generation of wealth produced, in the course of such continuing action.

The process so identified involves, in the first part, several elements of capital: current costs and expenses; capital of the operation in which production is performed; capital required for situating the productive acts as such; basic economic infrastructure, such as power, water, transportation, health care, education, and so on, by which that entire operation, and also others, are supported. For the second part, it represents the "intangible" role of the developed creative powers of the mind of the persons employed. It is the last of these, the so-called "imaginary" component of the functional variable, which represents creative action of the mind, which is the characteristic activity by means of which the possibility of an actual, physical, margin of profit is generated.<sup>47</sup>

The first set of objects are products of the previous creative acts which define the given level of development of the productive process. The second, the creative action of the mind, actually creates the wealth. The first set of objects are tangible subjects of senseperception; the second, is the human cognitive action being performed from beyond the domain of sense-perception. It is that creative action, which distinguishes man from both a beast and a machine; this is the human aspect of economic processes. It is the failure to grasp these crucial functional distinctions within the economic process, which is the chief root of the manifest incompetence of those economic teachings derived from the empiricist schools of argument.

That taken into account, how should government act to shape prices in such a way as to promote progress in the way this notion of the economic function indicates? How should money be defined, issued, and regulated?

Under our Constitution, the currency of the U.S. is issued as a monopoly of the sovereign nation, only by the Executive Branch's Treasurer, as authorized by act of Congress. The authorization to issue currency is then used as public credit, which may be loaned, as debt of the U.S. government for approved categories of purposes.

This sovereign monopoly connotes the authority, duty, and responsibility of the Federal government to defend the value of that currency (as, for example, against systemic inflation), and to regulate the circulation in ways which include the use of the power to tax as among the relevant means employed. Despite the Federal Reserve System, which was, in fact, a corrupt, but tolerated subversion of the clear intent of our Federal Constitution introduced as a design by U.S. agents of the British King (and Emperor) Edward VII, the normal circulation of currency is properly coordinated Federally through a national banking institution, as the first U.S. Treasury Secretary, Alexander Hamilton, described the nature of this intent to the U.S. Congress.

Now, with the avalanche of collapse within the present international banking system, the survival of nations will depend upon the courage of governments which act, in concert, to put today's intrinsically bankrupt central banking systems into receivership for reor-

<sup>47.</sup> Take the case of the Soviet economy as an example. According to the essentially empiricist, radical, virtually anarcho-syndicalist versions of Marx-Engels dogma, for example, it is argued that the creativity of economy flows from the "horny hand" of the laboring "masses," and that the "intelligentsia" (such as scientists) are an unavoidable, unfortunately necessary seed of counterrevolutionary evils. Despite the remarkable achievements of the Soviet scientific intelligentsia, the Soviet economy foundered in the dogmatic pessimism, and economic decadence, which flowed from the simplistic views of Britain's Thomas Huxley and Frederick Engels on the emergence of man from the higher apes. This suicidal, "workerist" doctrine of the anarcho-syndicalist variety of socialist ideologue, also served as the axiomatic basis for the dogmas of Social-Democrats Kautsky and Plekhanov, and also a core of

Lenin's own Bolshevik faction, in their arguments against a "voluntarist" view of history.

ganization in bankruptcy conducted by governments. It would be impossible to induce that intrinsically heteronomic pack of rascals, our present private and central bankers, to generate a viable form of agreement on reorganization of the present world banking system. This means putting the IMF [International Monetary Fund ed.] into receivership by governments, to be recast in the image of the post-War Bretton Woods monetary system. It means, in effect, the institution of national banking, at least for the duration of the crisis.

The required reorganization of these banking and monetary systems must proceed with an awareness of the inherent awkwardness of government direction of economy. Government must craft and implement its role in these matters so as to avoid any significant effects of that awkwardness. Government must limit itself to what government is able to do well, and, thus create the framework favorable to the creative action of individual initiative. Government must limit itself. chiefly at least, to setting the rules of the game, and setting the game itself into motion. On this account, since the present U.S. and world situation is much worse than 1932-1933, we must do more than Franklin Roosevelt did to pull the U.S. out of the depression bequeathed to him by the policies of Coolidge, Andrew Mellon, and Hoover; but we, as government, can not expect to do much better. We shall reach our goals, with a certain awkwardness, waiting for the system we have arranged to "kick in" with its own original adaptations to the combination of general conditions and rules we have set into motion

Therefore, if what I indicate here as necessary measures, do lead to a certain awkwardness in their realization, that is not competent evidence against what the government must do; it is a built-in awkwardness inhering in this not only necessary, but indispensable setting of new rules by government. Do not find fault with the awkwardness of a recovering patient's gait; he is, after all, walking. Therefore, what I am proposing is not one of the rather typical "cockamamy" plans by typical political candidates; it is a change from those policies which have brought our republic (and much of the world) to ruin, to resume walking, however awkwardly, at the place we have fallen, seemingly helplessly.

#### How Do We Change It?

I repeat: We do not really know anything, until we have discovered how to change it. To understand the

problem of the U.S. economy today, we must discover how to organize the form of general economic recovery which uproots the follies of bankers, politicians, and small-time populists alike, during, especially, the recent forty years.

Our presently appropriate view of the notion of national banking, is defined, still, by the role of President Franklin D. Roosevelt in crafting of the Bretton Woods Conference of 1944. Indeed, the calamities we have suffered from the mismanagement of our affairs since about the time of the launching the official U.S. Indo-China war, shows us today how foolish we have been to depart from the concept of a fixed-exchange-rate world monetary-financial system of the type which had been continued through the Presidency of John F. Kennedy, and slightly beyond.

Now, the world's present, floating-exchange-rate monetary-financial system is hopelessly bankrupt. It must be placed into governments-controlled receivership for necessary forms of administration and reorganization. Virtually none of the leading banking institutions of western Europe and the Americas (among other cases) are not implicitly bankrupt presently. Therefore, the first, most immediate objective of intervention by sovereign governments must be stability of the normal functions of society; the second, short- to medium-term objective, must be an increase in productive employment to levels sufficient to bring current accounts of nations into balance; the third objective must be the negotiation of a nested array of long-term sets of protectionist treaty-agreements on credit, tariffs, and trade among a set of leading nations. The latter agreements should range from one to two generations: corresponding to capital cycles of from twenty-five to fifty years.

The possibility of a recovery from the condition presently bequeathed to us by the combination of the floating-exchange-rate IMF system and the wildly aberrant behavior of central banking systems of nations, depends upon a massive supplement of long-term credit for capital formation, with initial emphasis on capital formation in basic economic infrastructure. To sustain such a program of expansion over two generations, as we must, requires a system in which fundamental borrowing costs must be no higher than between 1-2% simple-interest rates. This can be achieved only under conditions defined by a fixed-exchange-rate monetary-financial system. Therefore, this means a "gold reserve system," but not a revival of a British-style (or looney Ezra Pound's) "honest money" sort of gold standard system. This also means a system of long-term trade and tariff agreements among nations, to an effect consistent with such goals as long-term growth of capital formation.

Only government, or concerts of governments, have the power to resist demands by "special treatment" of "special interests," resistance which is indispensable for preventing the abortion of the new system, virtually at birth. Only the power of government to resist the clamor of special private interests, can secure the successful functioning of such a new world monetary-financial system. Therefore, the relevant special interests must learn to behave themselves. The welfare of us all demands nothing less than that.

There is no competent argument for shutting down any program or institution, public or private, which plays an essential part in preventing further injuries to the general welfare. Lowering of the budgets of nations, or political regions of nations, is morally and economically unacceptable. The remedy is cancelling the doctrines of "fiscal austerity" which have already done so much to ruin nations and the general welfare of their people. The policy must be to debride, or suspend what is not relevant to the general welfare, while both increasing the level of total productive employment and shifting the composition of employment, increasingly, toward those activities which are more productive, as measured in physical-economic terms.

Admittedly, part of today's economic problem comes from a shift of employment from useful modes, into either relatively mass unemployment, or downgrading of quality of usefulness of employment. We do have a large accumulation of wasteful forms of employment, as would be expected of a four-decade trend, in Europe and the Americas, of shift from an earlier producer society to a present form of "bread and circuses" culture dominated by increasingly depraved forms of mass entertainment. The needed shift of employment from pathological categories of employment, to productive, combined with the absorption of unemployed (including statistically hidden mass unemployment), are leading resources for increasing the productive activity and output of national economies.

There are some clearly defined options available to us for such a shift into increased and more productive employment. The most impressive is the tendency for long-term cooperation of western continental Europe with a complex centered around the Russia-China-India "strategic triangle" of Eurasia. With large masses of long-term capital formation, base-rates of 1-2% simple interest, in a fixed-exchange-rate system, a fifty-year wave of growth throughout continental Eurasia will be placed immediately on the table for decision-making among states.

Among the most notable features of that prospect, is the indispensable role to be played by large-scale systems of basic economic infrastructure, as in generation and distribution of power, mass transport, large-scale water-management systems, new urban complexes, and a vast overhaul of regions of central and north Asia which are prime sources of essential raw materials for generations to come.

We have similar prospects for the Americas as a whole. Cooperation between the Eurasian and Americas development programs defines a bright prospect for the nations, their populations, and their entrepreneurs, over more than two generations to come. With cooperation among those continental regions, the resources can be generated for assisting Sub-Saharan Africa in escaping the cycle of genocide which grips it today.

To secure success in such ventures, we must establish a system of intermeshed agreements on trade and tariffs, agreements which are designed to protect the formation of capital invested in public and private ventures of importance to the respective nations. This means, for example, a reversal of the lunatic rampage of deregulation unleashed upon the hapless U.S. people and their economy during Zbigniew Brzezinski's 1977-1981 term as National Security Advisor. It can be generally assumed, for the case of the U.S.A., that almost every change made in the field of economy by government, since 1968, was probably as bad as the effects of the rock-drug-sex counter-cultural revolution unleashed in the wake of the 1962 missile-crisis, the assassination of President Kennedy, and the launching of the official U.S. war in Indo-China. In some cases, worse.

If we continue to be unwilling to make the kinds of changes I have indicated here, even in face of the presently onrushing general collapse of the existing world system, then we, and our posterity shall pay an awful price for such reluctance: probably a prolonged, planetary new dark age for humanity.