

EIR

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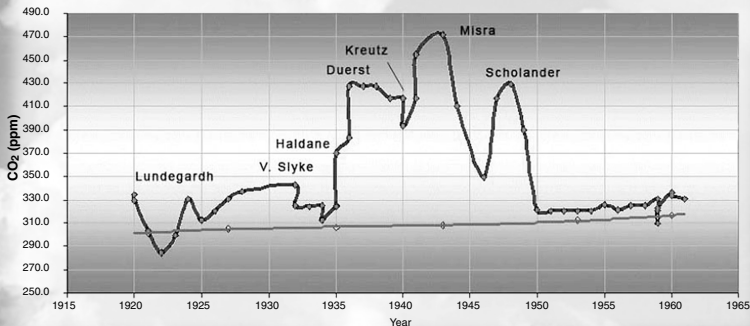
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For Today's Young Adults: Kepler & Cusa
Cheney Fingered in Libby Trial, Congress Must Act
Japan's Interest-Rate Hike Could Crash the System

The Fraud of Global Warming: CO₂ Record Buried Under Gore

Real CO₂ Measurements vs. Global Warmers' Fabrication

—◇— Ice core (fabricated) —■— CO₂ (measured)



EIR

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From the Managing Editor

Why would young adults' mastery of the work of 17th-Century astronomer Johannes Kepler be a matter of the utmost *strategic* importance in the world today?

As readers of *EIR* know, we have been presenting this work of the LaRouche Youth Movement (LYM) over many weeks, and the full project is available at www.wlym.com/kepler. Now, imagine the youth who have worked for 4-5 months on this project, confronting Al Gore with the "inconvenient truth" about his Luddite attack on real science and industry, and you begin to understand where the crux of the matter lies.

Our *Science* feature presents a devastating report on the discovery by Prof. Ernst-Georg Beck of Germany that the claims of the Intergovernmental Panel on Climate Change (IPCC) with respect to atmospheric carbon dioxide concentrations and "global warming," are a fraud. Our package includes a mass leaflet which is being distributed by the LYM—including notably at the Feb. 25 Academy Awards in Hollywood, where Al Gore will be up for an Academy Award for his lying film. Beginning on Feb. 26, the LYM is intensifying its campaign with Congress, the media, and academia in Washington, D.C., leading up to an appearance in Congress by Gore around March 21.

In a short memo on Feb. 23, Lyndon LaRouche chortled that as a result of this exposé, "Baby Boomers will not be actually dying this weekend, as they will have hoped, just almost-drowning in the waters of their own filthy Gore. The floodwaters of their humiliation will touch their lips, but, then, recede, first menacing them with drowning, and denying them that merciful death by drowning in cesspool-water which those Luddites will seek, as their only hope of cessation of their grief. . . ."

LaRouche's *Feature*, "For Today's Young Adults: Kepler & Cusa," approaches these two great Renaissance minds from the methodological standpoint of how to understand what a "universal physical principle" really is, in contradistinction to the Cartesian, Euclidean universe populated by such individuals as Al Gore.

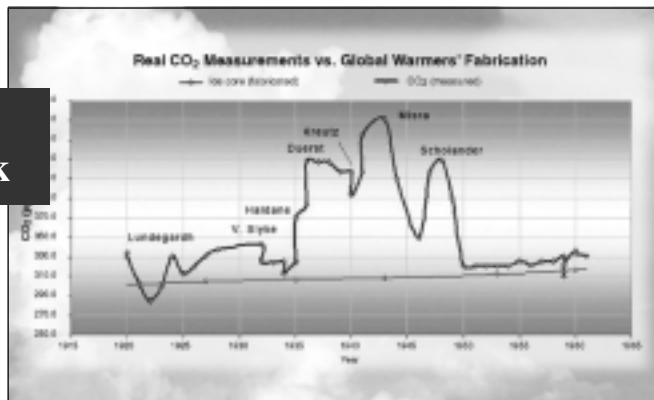
These matters, and the breaking issues of world policymaking, will be the focus of LaRouche's next Washington webcast on March 7 at 1 p.m. Eastern Time (www.larouchepac.com). Don't miss it!

Susan Welsh

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By Lyndon H. LaRouche, Jr. "The special relevance of the presentation of this material at this time, is its bearing on the setting of ongoing special research work in progress by scientific task-force teams presenting the international LaRouche Youth Movement (LYM). My function on this account, is to set the stage upon which those independent actors in the pursuit of science develop and unleash their own powers of creative performance."

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The biggest mistake that Members of Congress are making, in the view of a number of qualified observers, is sitting back during the Lewis Libby trial, and hoping that Special Prosecutor Patrick Fitzgerald will do their job for them.

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Dr. Zeigler is director-general of the International Rice Research Institute. The world's leading rice research center, the IRRI is located in Los Baños, Philippines. It functions as part of the Consultative Group on International Agricultural Research (CGIAR), the "Green Revolution" network for advances in food genetics.

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THE FRAUD OF GLOBAL WARMING

True CO₂ Record Buried Under Gore

by Laurence Hecht, Editor, *21st Century Science & Technology*

The historical record of atmospheric carbon dioxide concentrations, claimed by the Intergovernmental Panel on Climate Change (IPCC) as the justification for greenhouse gas reduction, is a fraud. Research by a Freiburg, Germany professor, Ernst-Georg Beck of the Merian-Schule, shows that the IPCC construed and concocted the pre-1957 CO₂ record from measurements on recently drilled ice cores, ignoring more than 90,000 direct measurements by chemical methods from 1857 to 1957.¹

The IPCC's hoked-up record attempts to prove that CO₂ concentrations have been steadily increasing with the progress of human industrial civilization. Beck's work confirms a wealth of previous investigations which demonstrate that the IPCC cherry-picked its data in an attempt to prove that we must stop industrial development and return to the horse-and-buggy age, or face oppressive heat and melting of the polar ice caps. It shows that the Kyoto Treaty on reduction of greenhouse gases was based on a scientific fraud which violates the laws of the universe, denying the well-established determination of climate by cyclical variations in the Earth-Sun orbital relationship and in the Sun's heat output.

In a thorough review of 175 scientific papers, Professor Beck found that the founders of modern greenhouse theory, Guy Stewart Callendar and Charles David Keeling (a special idol of Al Gore's), had completely ignored careful and sys-

tematic measurements by some of the most famous names of physical chemistry, among them several Nobel Prize winners. Measurements by these chemists showed that today's atmospheric CO₂ concentration of about 380 parts per million (ppm) has been exceeded in the past, including a period from 1936 to 1944, when the CO₂ levels varied from 393.0 to 454.7 ppm.

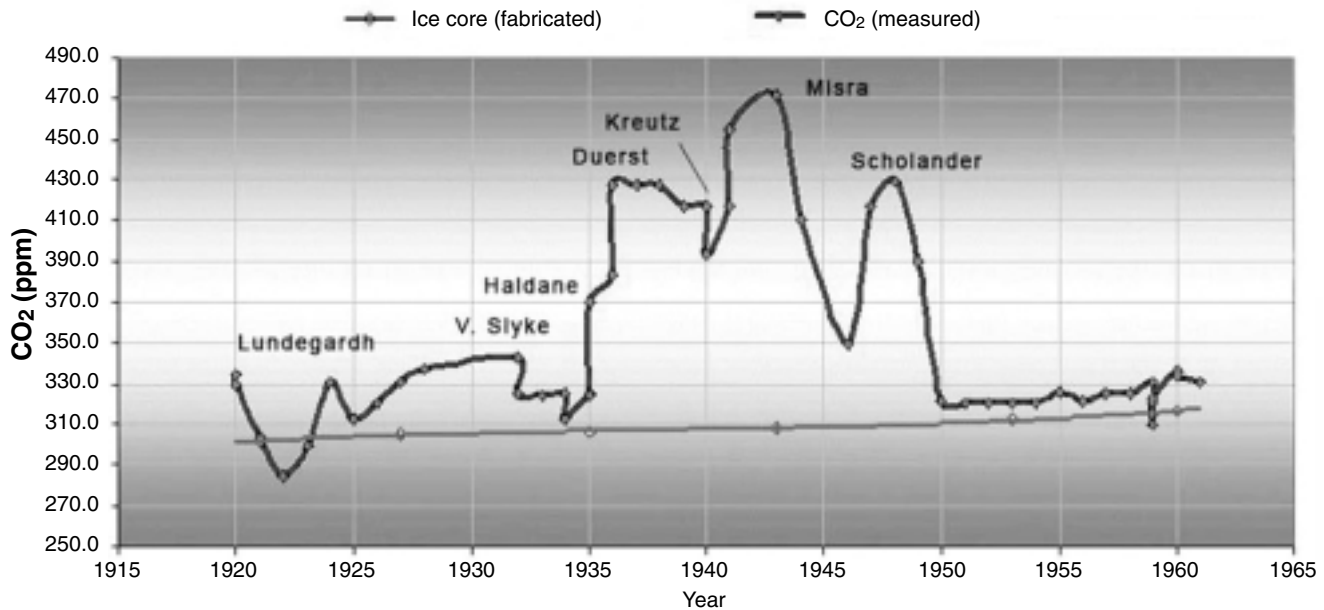
There were also measurements, accurate to within 3%, of 375.00 ppm in 1885 (Hempel in Dresden), 390.0 in 1866 (Gorup, Erlangen), and 416.0 in 1857 and 1858 (von Gilm, Innsbruck). Ironically, although the 1940s increase correlated with a period of average atmospheric warming, Beck and others have shown that the warming *preceded* the increase in CO₂ concentrations.

The data reviewed by Beck came mainly from the Northern Hemisphere, geographically spread from Alaska over Europe to Poona, India, nearly all taken from rural areas or the periphery of towns without contamination by industry, at a measuring height of approximately 2 meters above ground. Evaluation of chemical methods revealed a maximum error of 3% down to 1% in the best cases.

By contrast, the measurements hoked up from ice cores, show a rather steady increase in CO₂ levels, conveniently corresponding to the preconceived idea that increasing industrial activity has produced a steady CO₂ increase. As Beck's collaborator, Dr. Zbigniew Jaworowski, former senior advisor to the Polish radiation monitoring service and a veteran mountaineer who has excavated ice from 17 glaciers on six continents, has shown, the gaseous inclusions in ice cores have no validity as historical proxies for atmospheric concen-

1. "180 years accurate CO₂ air gas analysis by chemical methods (short version)," an unofficial extract, Dipl. Biol. Ernst-Georg Beck, Merian-Schule Freiburg, 8/2006 www.warwickhughes.com/agri/BeckCO2short.pdf, and private communication.

Real CO₂ Measurements vs. Global Warmers' Fabrication



Dipl. Biol. Ernst-Georg Beck, Merian-Schule, Freiburg, August 2006

Actual historical CO₂ measurements (upper line), and the IPCC values concocted from ice cores—a fable designed to convince you that atmospheric CO₂ levels are rising because of industrial activity.

trations. The continual freezing, refreezing, and pressurization of ice columns drastically alters the original atmospheric concentrations of the gas bubbles.²

According to the greenhouse warming theory, the increase of atmospheric CO₂ concentration caused by human activity, such as burning of fossil fuels, acts like the glass in a greenhouse to prevent the re-radiation of solar heat from near the Earth's surface. Although such an effect exists, carbon dioxide is low on the list of greenhouse gases, accounting for at most 2 or 3 percent of the greenhouse effect. By far the most important greenhouse gas is water vapor. However, water in the form of clouds can reflect back solar radiation, causing temperature reduction. There are so many interrelated effects, that correlating global temperature to CO₂ concentration is like attempting to predict the value of a hedge fund by the phases of the Moon.

Caught by Nicholas of Cusa

To concoct a convincing case of such correlation requires ample, sophisticated lying, and the greenhouse theorists have been caught at it. By a delightful historical irony, it could be said that it is the founder of modern science, Cardinal Nicholas of Cusa (1401-1464), who has caught them. Our modern understanding of photosynthesis began when the Flemish researcher Jan Baptist van Helmont took up Cusa's challenge

2. See "Ice Core Data Show No Carbon Dioxide Increase" by Zbigniew Jaworowski and other references at <http://www.21stcenturysciencetech.com> under the topic "Global Warming."

(stated in the "De Staticis" section of his *Idiota de mente*, The Layman: About Mind) to weigh a plant and its soil before and after growth. Van Helmont discovered (circa 1620) that the soil supporting a willow tree, which had grown to 169 pounds in five years, had changed weight by less than a few ounces. Whence did the solid mass of the tree derive? Ironically, Van Helmont, who had introduced the word "gas" to science, mistakenly concluded that the plant's mass had come solely from the water applied.

It took almost two more centuries to uncover the astounding fact that much of the mass of the plant, and all of its structural backbone, derives from the invisible and apparently weightless air, most especially the carbon dioxide component of it. That was the achievement of the revolution in chemistry launched by Lavoisier, and pushed forward by Gay-Lussac, Avogadro, Gerhardt, and others at the beginning of the 19th Century. The ability to place two invisible gases in a balance and compare their weights, proved to be the secret to the determination of atomic weights, and from that the unlocking of the secrets of both the atom and the cell.

Unfortunately for the liars at the IPCC, the measurement of atmospheric CO₂ concentration had been a special focus of chemists since that early 19th Century elaboration of the process of photosynthesis, and their carefully recorded measurements remain with us. The inconvenient truth is that Al Gore still exists, but only fools and Presidential "front-runners," so named for the ample leaks of bodily fluids from their anterior orifices, give serious credence to his emissions.

What Really Causes Climate Change?

by Laurence Hecht

Dynamics of Earth-Sun orbital relationships, and not statistical trends in greenhouse gases, are the principal cause of climate change, as the past 2-million-year record of Ice Ages demonstrates. Although these facts are known to every competently trained climate scientist, they do not seem ever to have penetrated the cranium of Al Gore. Consider first these items:

- Early in February, storms dumped more than 12 feet of snow on upstate Redfield, N.Y., breaking the state record of 10 feet 7 inches made just five years earlier.
- Jan. 3, 2007, a record snowfall buried Anchorage, Alaska, accumulating 57.60 inches.
- Jan. 17, 2006 a record snowfall blanketed northwest Japan, dropping more than 3 meters of snow on some areas. More than 80 people died. The snow started coming down in December, which was the coldest December for many areas since 1946.
- March 2, 2005, temperatures fell to a 100-year low in Germany. The Swiss capital of Bern registered minus 15.6 degrees celsius, its coldest for the season since data began to be collected in 1901. France beat records set in 1971.
- Jan. 5, 2001, National Oceanic and Atmospheric Administration (NOAA) scientists announced that the U.S. national temperature during the November through December two-month period was the coldest such period on record. Forty-three states within the contiguous U.S. recorded below average temperatures during the November-December period.
- Aug. 25, 1999, Mt. Baker, Washington set a record for the most snowfall ever measured in the United States in a single season (1140 inches), NOAA reported.

Thanks to a \$6-billion a year government-funded “climate industry,” whose mission is to convince you that global warming is here, you’ve probably forgotten many of these events. Yet vivid images of lonely polar bears floating on ice, and Inuits telling of warmer than usual summers, haunt your imagination. Such is the power of advertising over an audience little schooled in climate science.

No doubt, a resourceful opponent might assemble anecdotal evidence of recent warm events to counter the cases

we have just presented. He might also argue that the recent decades’ warming trend—that is an upward trend of about one-half degree celsius in the global averaged temperature, most of it over the oceans at night—“proves” his case.

How does the informed citizen decide? Is he forced to choose between competing trend lines, as in a typical modern investment prospectus, hoping that what is going up now will continue to rise, or what is falling, fall?

Fortunately, there is a science of climate which can tell us some things about our past, and also some things, though not all we would wish to know, about our future prospects. By the word *science*, we mean here a rational and rigorously established conception of cause. This, as opposed to the current fad of extrapolation from statistical trend lines, a fad which has become as wildly popular in the global warming as in the hedge funds industry. (Indeed, present trends cannot predict which of these two sources of high-paid employment for the statistically inclined shall disappear first.)

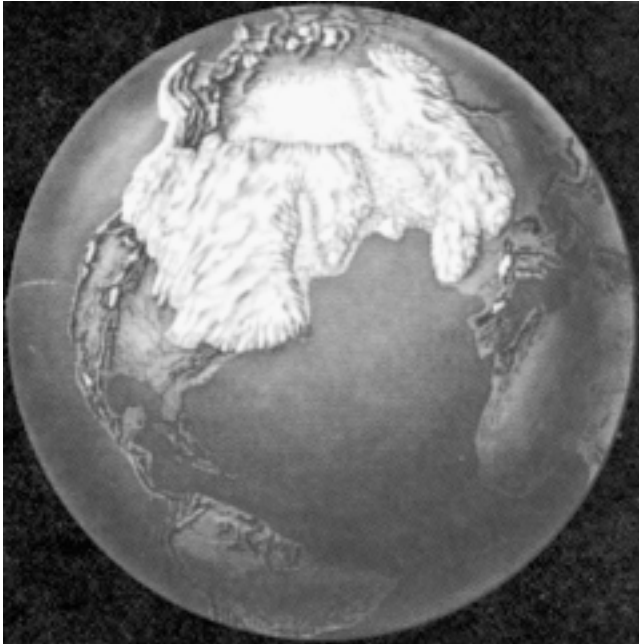
We Are in an Ice Age

Just 12,000 years ago, the North American continent was covered by a sheet of ice, from 1 to 2 miles thick, reaching down to New York City, and spreading across Pennsylvania, through Ohio, Indiana, Illinois, and into the prairie states. Tongues of the glacier reached down from the Rocky Mountains and Appalachian heights at much more southerly locations. As the glacier retreated in the period from approximately 10,000 to 8,000 B.C. the landscape we now know was formed—the Great Lakes, the upper Ohio and Missouri Rivers, the lakes dotting the northern tier, all of which had been buried under ice for 100,000 years. A similar situation prevailed over northern Europe and Russia, with the difference that the ice had retreated about 1,000 years earlier than the North American Laurentide ice sheet.¹

The huge volume of water tied up in these ice sheets had come mostly from the oceans. Sea levels during the period of extended glaciation were 200 to 400 feet lower than today’s, as the recent evidence of ancient cities found underwater off the Indian coastline has again confirmed.

We know these things from the work of geologists and

1. Laurence Hecht, “The Coming (or Present) Ice Age,” *21st Century Science & Technology*, Winter 1993-1994, pp. 22-35. www.21stcenturysciencetech.com/Articles%202005/ComingPresentIceAge.pdf



Anastasia Sotiropoulos, based on CLIMAP

The Northern Hemisphere at the time of the last glacial climax, about 18,000 years ago.

other specialists over the past two centuries. Most of what we report here was known by the early decades of the 20th Century. Correlation and cross-checking of evidence from North America and Eurasia first showed the simultaneous existence of these huge ice sheets. But soon, new evidence established that there had been not one, but several periods of Northern Hemisphere glaciation.

Today we know that in the last 800,000 years, eight successive periods of glaciation, each lasting approximately 100,000 years, have occurred. Between many of these glaciations there occurred a warming period, known as an *interglacial* and lasting approximately 10,000 to 12,000 years, during which the ice retreated back to its resting place in Greenland and the polar regions. All the while, the continent of Antarctica remained covered in ice, as it still does today, holding now about 90% of the world's ice at an average thickness of one and-a-quarter miles.

The Astronomical Determination

What was causing the periodic advance and retreat of the glaciers? In 1910, Vladimir Köppen (1846-1940), a Russian-German meteorologist trained in planetary astronomy and very much acquainted with the work of Kepler, had been musing over the work of two Alpine glaciologists. In their extensive field studies, Albrecht Penck and Eduard Brückner had identified four separate cycles of glacial advance and retreat in the Alps. To try to make sense of their work, Köppen took up a hypothesis that had been first proposed in 1830 by Sir John Herschel, that long-term cyclical variations in the Earth's orbital relationship to the Sun would produce changes

in the amount of solar radiation reaching the Earth.

At almost the same time, a skilled mathematician from the University of Belgrade, Milutin Milankovitch (1879-1958), had independently begun his own investigation of the astronomical theory of climate. In 1920, after nine years of work, Milankovitch published a book in the French language, *The Mathematical Theory of Heat Phenomena Produced by Solar Radiation*. Therein he identified the three major cyclical variables which, some 50 years later, became indisputably recognized as the principal cause of climate change. When Köppen read the book, he sent a postcard to Milankovitch, and a collaboration developed among the two, and Köppen's son-in-law, the astronomer-geologist and daring polar explorer, Alfred Wegener.

The essential point of their work was this: The amount of solar radiation (insolation) reaching the Earth, depends upon the distance of the Earth from the Sun and on the angle of incidence of the Sun's rays upon the Earth's surface. These angles and distances vary over long cycles of tens of thousands of years.

For a glacier to grow, it is only necessary that the amount of snow and ice accumulated over the Winter season not be melted back by the Sun's rays during the warmer months. In the short, cool summers of the high polar latitudes, there may or may not be enough solar radiation to melt back the winter's accumulation. The small changes in insolation, produced by the changing orbital relationships, it was thought, might be just enough to change the delicate balance of glacial stability to one of advance. Once the advance starts, the increased reflectivity of the ice surface, as compared to sea or land cover, cools the local atmosphere further and causes a self-feeding process of glacial growth and spread. This might explain the cycles of the Ice Ages.

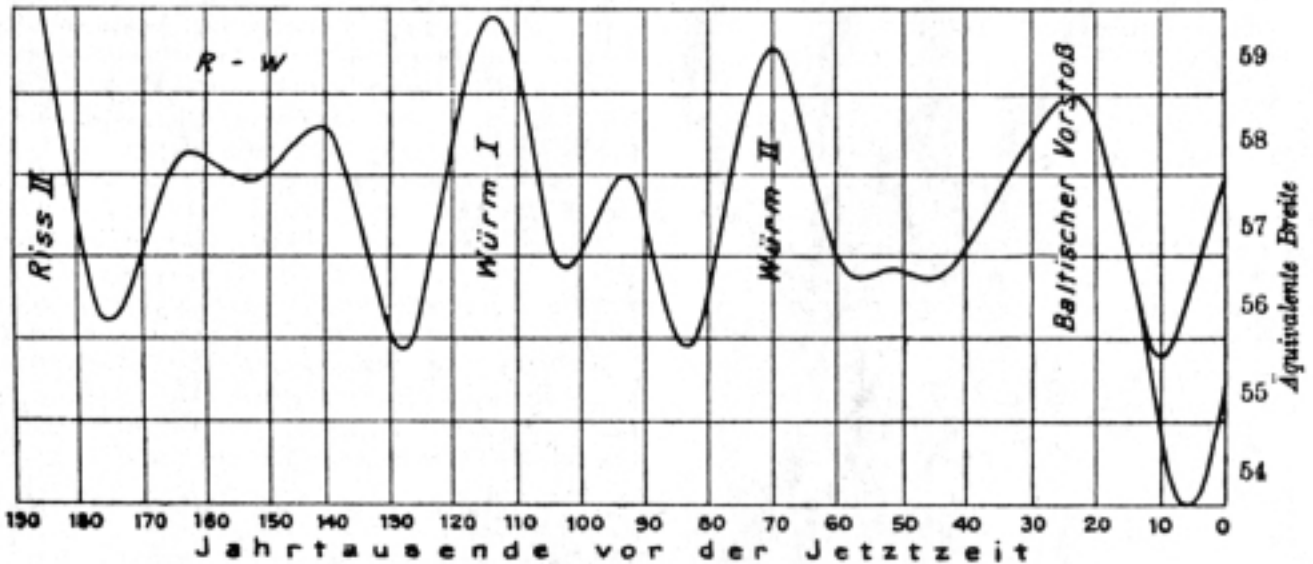
To give an example: As every schoolchild learns, the yearly variation of the seasons is not caused by the change in the Earth's distance from the Sun, but by the inclination of the Earth's axis, which causes the Sun's rays to strike the Earth at an oblique angle, in a manner that varies as the Earth makes its annual path of revolution about the Sun. Were there no axial inclination, there would be no difference of seasons and a much slighter variation in temperature from the Equator to the high latitudes. But the Earth's axial tilt, known technically as the obliquity of the ecliptic, changes on a 40,000-year cycle from 22 to 24.5 degrees. The more inclined the Earth is, the more extreme are the variations between Summer and Winter, particularly in the high northern latitudes where the cycle of glaciation is to be triggered.

Apart from obliquity, two other astronomical cycles which affect insolation were known:

- the 26,000-year period of the precession of the equinox, which, when combined with the advance of the perihelion (the point at which the Earth is closest in its orbit to the Sun) produces a 21,000-year cycle;
- the 90,000 to 100,000-year cycle of variation of the

FIGURE 1

Milankovitch's Radiation Curve for the Last 190,000 Years



This curve of the fluctuation in intensity of solar radiation over time, depending on the orbital parameters, was reproduced by Köppen and Wegener in their pioneering work, *Die Klimate der geologischen Vorzeit* (The Climates of the Geological Past), published in 1924.

eccentricity of the Earth's elliptical orbit.

At the encouragement of Köppen, Milankovitch calculated the effect of the three astronomical cycles on Northern Hemisphere glaciation for 650,000 years into the past and 160,000 years into the future. This came to be known as the Milankovitch-cycle theory of climatic history. Although Milankovitch was still fighting an uphill battle at the time of his death in 1958, within two decades his general theory had become widely accepted.

Pacemaker of the Ice Ages

Much of the corroborating evidence came from the field of paleobiology. An innovative technique of estimating the sea level temperature came from the field of nuclear isotope science. Since the 19th Century, biologists had observed small sea creatures known as foraminifera, which thrive near the ocean surface, form calcareous shells, and die, depositing their fossil shells on the ocean bed in layers known as the *Globigerina ooze*. The ratio of two stable isotopes of oxygen, oxygen-16 and oxygen-18, is very sensitive to the temperature of the sea water in which it is dissolved. The temperature of sea water at a given time could thus be inferred from the relative proportion of these two oxygen isotopes found in the carbonate shells of these fossilized sea creatures. Analysis, by these and other means, of deep-sea core samples taken in the 1970s showed the Milankovitch periodicities of 20,000, 40,000, and 100,000 years, going back for 1.7 million years.

The results were written up in a famous paper by three

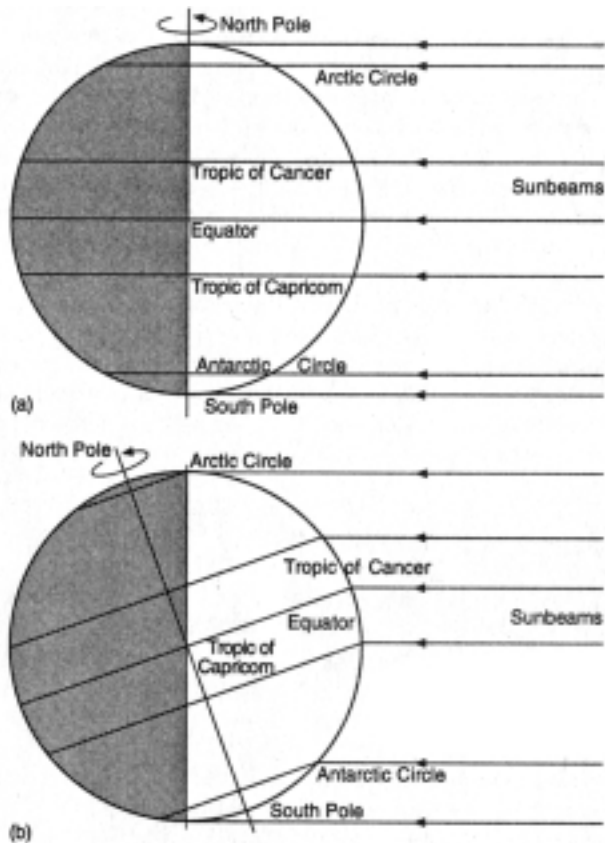
young researchers at Columbia University's Lamont-Doherty Geological Laboratory.² There, Hays, Imbrie, and Shackleton described the orbital variations as "pacemakers of the Ice Ages." The 100,000-year cycle was found to be the strongest, a fact which correlated with other evidence suggesting that the Northern Hemisphere ice sheets had advanced and retreated on a 100,000-year cycle. Within that long cycle, the evidence showed a 20,000-year cycle of temperature change, which was not sufficient to cause full glacial retreat. However when the two cycles compounded, sometimes amplified by low points in the 40,000-year cycle of obliquity, an interglacial would occur. The ice sheet would melt back and retreat up to Greenland and far northerly locations. It would be reversed when the 20,000-year cycle of precession of the equinox reached its maximum, and a new glaciation would initiate.

The astounding thing about this confirmation of the Koppen-Wegener-Milankovitch hypothesis, is that it indicates that we are set for a new advance of the ice sheet. We are now about 11,000 to 12,000 years into the recent interglacial. Obliquity is relatively high at 23.5 degrees, and the Northern Hemisphere Summer is occurring near the point of aphelion, precisely the conditions of reduction in insolation which would tend to produce the onset of a glacial event. The only moderating factor among the astronomical determinants is the eccentricity, which is relatively low. Were the orbital per-

2. J.D. Hays, J. Imbrie, and N.J. Shackleton, 1976. "Variations in the Earth's Orbit: Pacemaker of the Ice Ages," *Science*, Vol. 194, pp. 1121-32.

FIGURE 2

Obliquity and Intensity of the Sun's Rays



Even without a tilt of the axis, the variation in angle of incidence of the Sun's rays (a) would cause the poles to be cooler. Increasing the angle of obliquity amplifies the effect (b).

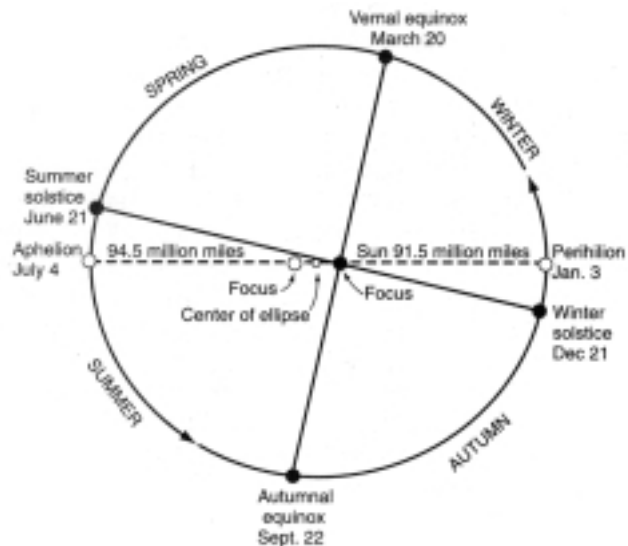
turbations the *sole cause* of the glacial cycle, we should be seeing an ice sheet begin to creep across our high northern latitudes even now. Perhaps we shall.

However, as Milankovitch himself had already recognized, the variations in insolation produced by the orbital changes are not enough, *in themselves*, to drive the enormous shift in climate which a glacial onset represents. The orbital variations must rather be a pacemaker, a pre-amplifier perhaps, which drives, or signals, other events still not known. Many climatologists have attempted to find those other factors, and a large and interesting literature on the subject exists, much of it compiled by the late Columbia University Professor Rhodes Fairbridge when he edited the *Encyclopedia of Earth Sciences*.

Attempts include such far-reaching, yet plausible causes as changes in the Saturn-Jupiter alignment affecting tectonic shifts in the Earth's mantle, the effect of variations in the solar wind on weather systems by mediation of changes in cosmic radiation, volcanic activity, and shifts in Earth's magnetic cycles. A large literature also exists on the effect of shorter-

FIGURE 3

Precession and Location of the Solstice



The precession cycle changes the location on the ellipse where the Winter and Summer solstices occur. The Summer solstice now occurs near aphelion, the point at which the Earth is most distant from the Sun.

term, cyclical variations in the Sun's output, which may act as an amplifier of other cycles.³ The most popular theory today proposes that shifts in the thermohaline circulation, the global ocean current which circulates cold water from the north Atlantic around the cape of Africa to the northeastern Pacific, may be the trigger for the sudden changes which bring on the Ice Ages.

Of all the hypotheses, that of human-produced carbon dioxide as the forcing mechanism for warming is the most deeply and extensively studied, and by far the most discredited. No other hypothesis rests on such flagrant and lying disrespect for data as that illustrated in our accompanying piece on the falsification of the historical CO₂ record. Dollar for dollar, the American taxpayer has never gotten so little and spent so much as on the government's promotion of the hoax known as global warming. NASA Administrator Mike Griffin had the courage to say it. In an interview with the German daily *Frankfurter Allgemeine Zeitung* Jan. 26, Griffin said that despite an annual investment of \$5.5 billion in research on planet Earth, "we have yet to find out whether the present climate change is man-made, or just a short-term vacillation."

The finely tailored suit of global warming has been woven with an invisible silk thread. It is time that Congress and the American people face up to it, lest they find themselves both naked and freezing.

3. For example, the work of Theodore Landscheidt.

FOR TODAY'S YOUNG ADULTS:

Kepler & Cusa

by Lyndon H. LaRouche, Jr.

February 6, 2007

Kepler's discovery of the universal physical principle of gravitation, provides us today with the needed pedagogical typification of the meaning of not only the term "universal physical principle," but the refutation of the absurdity of all of those mathematical-physics and related assumptions, such as those of popular economics dogma of today, which are premised upon what is fairly represented as a Euclidean outlook. Here lies the essential continuation of the crime against man, science, and The Creator, by Wenck et al.

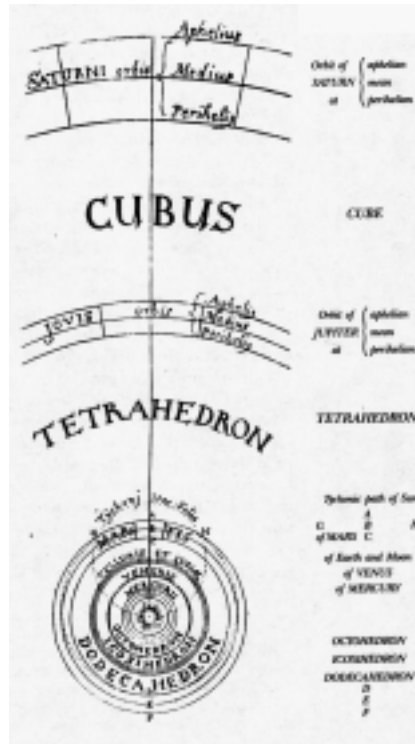
Prologue: For those among us who wish to understand such matters properly, the personal immortality of the sovereign individual human personality, is, at first approximation, formally distinct from the mortal frame which the creative powers of the human mind inhabit.¹ This is demonstrated by the role of the human cognitive function, which is lacking in all known living species other than mankind, but which is peculiar to the biologically expressed individuality of the human person. This is expressed in those immortal, creative mental actions which are, in effect, contrary to the expressed opinions of Britain's T.H. Huxley and Frederick Engels, actions which distinguish the willful increase of the potential relative population-density of the human species, absolutely, from the characteristics of species of the higher apes.

Nonetheless, the mortal human frame is, clearly, functionally appropriate, specifically, for the work of cognition, as no rival species of organism could be.

1. It is to be noted from the outset, that crucial categories implicitly referenced in this writing, refer, inclusively, to the categories defined for experimental science by Academician V.I. Vernadsky's definitions of the respectively *dynamic* Biosphere and Noösphere. Living processes in general, belong to the Biosphere, whereas the function of creative intelligence specifically unique to the human individual (among living creatures) belongs to the domain of the Noösphere. *Dynamics* as defined by Gottfried Leibniz's reading of the Pythagorean/Platonic Greek *dynamis*, and of *dynamics* as defined by the work of Bernhard Riemann, are also implied throughout this piece.



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In his *Docta Ignorantia*, Nicholas of Cusa (right), laid out his “projected program for the creation and development of all competent strains in modern European experimental science.” The most notable among Cusa’s avowed followers was Johannes Kepler (left). In this diagram from his *Harmony of the World* (1619), Kepler shows, by approximation, that the planetary orbits are elliptical, not circular. From this starting point, he derived the harmonic properties of the orbits.

Those are essential facts of even the mere existence of secular society, as much as a belief of any particular religious denomination. Unfortunately, in today’s European cultures, in particular, knowledge of this specific power unique to the individual member of the human species, has been often suppressed, as by the present influence of a new, persistent, pro-Luddite brand of existentialist Sophistry.

Today, that suppression is a contemporary expression of a Sophistry which has been, most notably, an influence bred into the generality of that special generation of the “white collar class,” the “Baby Boomer,” “68er” generation, of Europe and the Americas. That has been, specifically, more narrowly, a pro-existentialist philosophical influence, which was installed widely among the “white collar” segment of those born, in the Americas and in western and central Europe, between approximately 1945 and 1956. It is this implicitly “existentialist,” Baby Boomer” syndrome, as fostered in post-1945 Europe by the Congress for Cultural Freedom (CCF), which had willfully mislaid the fact of the actual connection to that sense of immortality which is implicit in the fundamental principle of our U.S. Federal Constitution, the fundamental principle of its Preamble.²

2. Although this syndrome is fairly described as having the effect of a characteristic of the individual personality, it is rooted in “group behavior,” as a

However, this widespread corruption among the “Baby Boomer” generation’s “white collar” class, and others, is a pathology which is not entirely original to those born in those times and circumstances. The relevant European existentialist currents of today, have been an outgrowth of the heritage of the ancient “oligarchical model” of Babylon, of the Achaemenid Empire, of the Delphi Apollo cult, of Sparta, and of the Roman Empire, Byzantium, and the medieval tyranny of the Venetian financier-oligarchy and its Norman allies. It is the legacy of the Olympian Zeus which was attacked by Aeschylus’ *Prometheus Bound*, in which the figure of the Olympian Zeus serves as the typification of the way in which oligarchical societies and their traditions willfully bestialize the culture of that great majority of humanity over which the oligarchy reigns, up to the present day.

Notably, the United States was the outgrowth of the work of those Europeans who brought the finest, anti-oligarchical, cultural traditions of Europe to the Americas, so that those traditions might be, hopefully, permitted to prosper at a rela-

dynamic feature produced by a social process, and associated with a type of group behavior, rather than being an individual trait expressed outwardly, as such. It is a pathology triggered by a sensed presence of a specific kind of group-relationship, producing what appears to be a different quality of personality in that quality of social setting than in other settings.

tively safe distance from that traditionally “anti-American,” oligarchical culture, which continued to reign in Europe. It has been the continued penetration of the U.S.A., in particular, by what had been, originally, chiefly, the Eighteenth-Century British East India Company’s continuing influence of Anglo-Dutch Liberalism in post-1763 North America, which has been the leading, top-down source of the political and moral corruption encountered within the financier-centered classes of the Anglo-American Liberal Establishment in the U.S.A. and other parts of the Americas, still today.³

Thus, the “Baby Boomer” white-collar type, met in both the Americas and Europe today, expresses a peculiar variety of socially determined, functional and moral impairment of natural human cognitive powers, a variety which is also met, as in ancient and medieval society, as a kind of brutishness—a kind of intellectual “castration,” a loss of intellectual fertility: an induced loss, by means of which oligarchical classes impose a likeness to dumb, “gin-like” Liberal brutishness upon their victims among the so-called lower classes.

Anglo-Dutch and kindred forms of modern “liberalism,” or what is otherwise properly identified, technically, as Twentieth-Century Sophistry, is also a way of inducing a desired quality of irrationality, of relative “dumbing down” of a population; this modern form of Sophistry, is used Liberally as “shackles of the mind” worn by the social classes which are, deceptively, apparently, outwardly free from such more obvious repression of ancient and medieval slaves, serfs, and Jews. The victims of such conditionings are, in that degree, fairly described as relatively more or less de-humanized in their habits of daily life, including, often, their brutish inclinations in religious beliefs.

That fundamental principle of creativity (which is assaulted to such effect by our contemporary Liberal Sophists), is expressed by the same sense of immortality which Plato’s Greek designates as *agapē*, a sense which is reflected in the great principle of the 1648 Treaty of Westphalia. This principle of creativity, is expressed as Gottfried Leibniz’s specifically anti-Locke principle of “the pursuit of happiness,” a principle which is embedded in the core of the U.S. Declaration of Independence, and in the fundamental principle of natural law expressed as the Preamble of the U.S. Federal Constitution, and also expressed as the return to the enforcement of that Preamble led by President Franklin D. Roosevelt in the conduct of national and world affairs.

The “pursuit of happiness” expresses the motives of the immortal soul dwelling within the mortal frame: the happiness bestirred by devotion to a benefit of one’s mortal life for generations yet to come. That is a devotion which was rather typical of the moral American and European prior to the regressive influence of the Congress for Cultural Freedom on the “white collar” generation born during the 1945-1956 interval, a devotion which has been, in the main, lost, to the

3. See Jeff Steinberg “Britain’s Assault on America Revisited” *EIR* Vol. 34, No. 8, Feb. 24, 2007.

presently aging “Baby Boomer” of that heritage today.

The issue of the conflict between truth and Sophistry, of a truth which was virtually ripped out of the childhood and youth among most of the relevant “white collar” types from that 1945-1956 generation, has another, complementary side. Sophistry is a kind of legacy often bestowed by certain theologians, as is shown by an exemplary debate, treated here, in the following pages: a debate which illustrates the antiquity of the issue of European oligarchical traditions of moral corruption so posed to trans-Atlantic society still today.

Introduction

What I say here, expresses a mission which I had intended to craft for publication back during the middle of the 1980s. Known events intervened. Although I have touched frequently on crucial aspects of the same subject-matter of scientific method, repeatedly, during the 1990s and later, the subject of the following commentary on Jasper Hopkins’ *Nicholas of Cusa’s Debate with John Wenck*,⁴ has waited, again and again, for its uttering on a convenient occasion. The recent publication of the LaRouche Youth Movement (LYM)’s report on the discoveries presented by Johannes Kepler in *Harmony of the World*, has provided that occasion.⁵

My own special contribution to this subject-matter, here, is, to the best of my knowledge, predominantly unique. Yet, this contribution itself rests upon the foundations of discoveries respecting the principles of human knowledge made by numerous others who have lived in earlier times, even those beyond known historical reckonings. These have been, most notably, made by those whose work is summed up in the contributions of the Pythagoreans, Socrates, Plato, the Christian Apostles John and Paul, and, for modern times, Nicholas of Cusa, Kepler, Pierre de Fermat, Gottfried Leibniz, and that great successor of Carl F. Gauss, Bernhard Riemann, and also the great Academician V.I. Vernadsky. My own essential contribution, as presented here, must be presented, as I do, in the context of those upon whose shoulders my own discovery has depended.

The special relevance of the presentation of this material at this time, is its bearing on the setting of ongoing special research work in progress by scientific task-force teams presenting the international LaRouche Youth Movement. My function on this account, is to set the stage upon which those independent actors in the pursuit of science develop and unleash their own powers of creative performance.

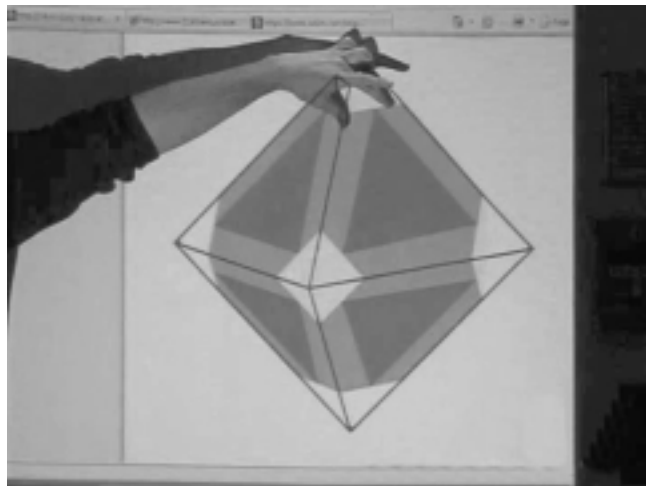
On the subject of the crucial issues posed by Cusa’s science itself, in his *Introduction*, Hopkins’ otherwise adequate treatment of the debate did not address the matter of the substance of human scientific and artistic creativity as such. As

4. Minneapolis: The Arthur J. Banning Press, 1980, 1984), pp. 3-18.

5. See LYM website: <http://wlym.com/~animations/harmonies/index.php>.



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Kepler's work on music and astrophysics emphasizes the unity of physical science and Classical artistic composition. "It is this latter consideration which is essential for a rounded insight into the activity of practicing competent economic science as a branch of physical science." The photo on the left shows LYM scientists Tarranja Dorsey (left) and Megan Beets (right) demonstrating vocally, the "music of the spheres," during a recent four-hour class on Kepler's World Harmony. On the right, a truncated octahedron.

my own work here will make clear, Hopkins' *Introduction* was therefore weak on the side of science itself; in that aspect, it wandered away from the most crucial, relevant issue of scientific method, the kernel of the subject-matter of Cusa's founding of the most crucial prescriptions for the launching of modern physical science. On that account, to fill the gap, it is necessary to take the subject, the actual founding of a competent method for modern physical science, on its own terms, as I do here.

The setting of that issue, is, summarily, as follows.

The work in question, justly defended, in the main, by Hopkins, Cusa's *De Docta Ignorantia*, is, essentially, the first of a series of published works which defines what has been, in fact, the projected program for the creation and development of all competent strains in modern European experimental science. Therefore, *that series of writings on science, by Cusa, could not be competently studied from any standpoint, except from the standpoint of viewing this work of his, as the founding of the practice of modern physical science, as that practice was developed, on foundations he provided, by such leading, avowed followers of Cusa as Luca Pacioli, Leonardo da Vinci, and, most notably, Johannes Kepler, and onward from that, as reflections in the work of such of Kepler's followers as Pierre de Fermat, Gottfried Leibniz, Carl F. Gauss, and Bernhard Riemann, attests to this fact.*

My subject here, is, therefore, the special, highest aspect of experimental science as a whole, the role of the creative functions of human cognitive powers, in generating the increase of the relative population-density of mankind, per capita and per square kilometer: the function of individual human

cognitive powers themselves in shaping the evolution of the planet, Solar System, and beyond. *This may be fairly identified, otherwise, as the essentially spiritual essence which underlies all competent notions of physical science and economy.*

Let me emphasize, once again, that I have been disappointed, not by what Hopkins says, but what he did not treat on this just-stated account; but, my complaint on that account is tempered by my recognition, that the auspices under which he composed his relevant published work, would have tended to warn him against risking certain attacks, from sundry quarters, a risk which is required for competent treatment of Cusa's explicit role in the founding of the modern science of Johannes Kepler et al.

The lurking threat which implicitly constrained Hopkins, like others, is the brutishly political enmity toward Cusa and toward such among his followers as Kepler, not only by the old European oligarchical parties, but, specifically, those modern Liberal institutions established under the leadership of Paolo Sarpi, and promoted by such haters of Kepler and his scientific followers, in particular, as the notorious Robert Fludd and Galileo Galilei, and the modern Anglo-Dutch Liberals generally.

My point here, is essentially, therefore, the following.

The Importance of Cusa for Science

The point is, that the view of, in particular, Nicholas of Cusa's doctrine for science, could not be competently presented without including a focus, essentially, predominantly, on what I have indicated, above, as those core princi-

Harmonies Between Two Planets		Apparent Diurnal Movements		Harmonies Between the Movements of Single Planets
<i>Diverging</i>	<i>Converging</i>			
$\frac{a}{d} = \frac{1}{3}$	$\frac{b}{c} = \frac{1}{2}$	Saturn at aphelion	1'46" a.	1 : 48" : 2'15" = 4 : 5, major third
		at perihelion	2'15" b.	
$\frac{c}{f} = \frac{1}{8}$	$\frac{d}{e} = \frac{5}{24}$	Jupiter at aphelion	4'30" c.	4'35" : 5'30" = 5 : 6, minor third
		at perihelion	5'30" d.	
$\frac{e}{h} = \frac{5}{12}$	$\frac{f}{g} = \frac{2}{3}$	Mars at aphelion	26'14" e.	25'21" : 38'1" = 2 : 3, the fifth
		at perihelion	38'1" f.	
$\frac{g}{k} = \frac{3}{5}$	$\frac{h}{i} = \frac{5}{8}$	Earth at aphelion	57'3" g.	57'28" : 61'18" = 15 : 16, semitone
		at perihelion	61'18" h.	
$\frac{i}{m} = \frac{1}{4}$	$\frac{k}{l} = \frac{3}{5}$	Venus at aphelion	94'50" i.	94'50" : 98'47" = 24 : 25, diesis
		at perihelion	97'37" k.	
		Mercury at aphelion	164'0" l.	164'0" : 394'0" = 5 : 12, octave and minor third
		at perihelion	384'0" m.	

After discovering that the planetary orbits were eccentric, Kepler sought to discover a "more basic principle" that would account for the reason for the particular eccentricities they exhibited. He measured each planet's maximum speed when it was closest to the sun (perihelion), and the minimum speed when the planet was farthest from the sun (aphelion), as if he were observing the planet's motion from the sun itself. Then, comparing the speeds of neighboring planets, he found that the ratios of these intervals corresponded to those intervals which human beings considered harmonic in musical compositions. Shown are a chart of the ratios at perihelion and aphelion (above), and their representations as musical intervals (below), taken from the "Harmony of the World."

[In Modern notation:]

—E. C. JR.]

ples of a competent modern physical science, itself. The needed view must be developed by focusing on the differences between the reality and the mere description of science, on the one side, and, on the other, examination of the fraudulent definitions of that subject which have been expressed as *a priori* assertions among theologians who have been typically ignorant of, or even passionately hostile to the essential discipline required of a competently chosen

dynamic in the progress of physical science.

For example, on the matter of science, many theologians have tended to do as that Sophist, the notorious *a priori* Euclid of Euclid's *Elements* had done, in his mutilation of the original work which he parodied, destructively, from, chiefly, the Pythagoreans and the circles of Socrates and Plato. As cases in point, consider the examples of those who have made the terrible blunder of choosing between two fraudulent views of the universe: the shameless hoax of the Sophist Claudius Ptolemy, on the one side, and the hoax by Paolo Sarpi's lackey Galileo Galilei, on the other.

The widespread ignorance on matters of science among theologians, in particular, bears crucially on the problems inherently risked in the way, as I shall show here, that Hopkins, in his *Introduction*, avoided the crucially relevant, underlying issues of science itself.

For the Christian in the tradition of the Apostle Paul, or Cusa, especially, the new view of the relationship between the Creator and mankind, which the personality and mission of Jesus Christ reflected and embodied, lifts mankind, theologically and scientifically, up from out of purblind spiritual childishness, to a new quality of personal responsibility, a quality actually congruent in practice with the scientifically provable instructions set forth in *Genesis* 1:26-31.⁶ We could not merely adduce a description of true principles of the universe on which we might wish to act, within the limits of *a priori* presumptions. We are responsible for much more than a merely descriptive doctrine; we are responsible for the *efficiently practical* consequences of our choice of method, both for the practical consequences of such belief for mankind, and,

even more, for the well-being of the Creator's universe which we inhabit, and in which we serve.

Consequently, as in the particular case of Christians following in the footsteps of the Apostles John and Paul, we

6. Notably, by the rigorous definitions of Biosphere and Noosphere supplied by the crucial experimental evidence presented by Academician V.I. Vernadsky.

are no longer excused for continuing a historically earlier condition, a condition like that of credulous children. Those Apostles have blessed us with the privilege of adopting, at least implicitly, a fully adult responsibility for the care of all past, present, and future humanity, and of the universe which humanity inhabits. It were, therefore, time, so, for us, too, to grow gratefully out the primitiveness of childish credulous ways, into the moral maturity of a present and future, adult humanity which serves that intention competently.

It should, therefore, follow, on that latter account, that if Cusa were correct in terms of the expressed outcome of his founding of a true quality of modern European science, then, that fact, in and of itself, is the crucial challenge to be delivered to those misguided theologians who had, in varying degrees, attempted to discredit the central principle of the argument presented within what Cusa launched in such locations as his *De Docta Ignorantia*.

After all, the test of an opinion on the Creator's composition of the universe, is a show of proofs of that opinion, proofs which must be extracted from the crucial evidence supplied by the most essential expression of physical science, as in the systematic comprehension of nothing lower than astrophysics. It is only by looking at the set of Cusa works associated with *De Docta Ignorantia* and its aftermath from that standpoint, that we have the basis, in modern science, for adducing whether the theological implications of *De Docta Ignorantia*, do, or do not, correspond to the nature of the powers commanding that actual universe within which Cusa's treatment of the subject-matter of science and theology is to be located.

Finally, as a matter of introduction, I must refer to my own special authority in these matters of science.

My principal achievement in these matters, is twofold in nature. More easily recognized, is my original work respecting *the special ontological position* of a science of physical-economy within the domain of physical science as a whole. Here, there is the matter of the principles of physical economy, as to be recognized as an expression of Riemannian dynamics, in opposition to the popular reliance of statisticians on the mechanistic-statistical methods of radically reductionist outgrowths of Cartesianism. The subtler, but more essential consideration, is my emphasis on the unity of physical science and Classical artistic composition, as the case of Kepler's work on music and astrophysics, combined, already illustrated this. It is this latter consideration which is essential for a rounded insight into the activity of practicing competent economic science as a branch of physical science.

1. Meet Modern Science

For modern civilization, the first crucial experimental test of Cusa's principle for the modern practice of physical science as a whole, came with Johannes Kepler's uniquely original

discovery of the principle of universal gravitation.⁷ The significance of Kepler's discovery of this principle of experimental method, and his ensuing discovery of the harmonic composition of the planetary orbits, typifies the notion of universal principles which should have guided modern European science thereafter. A theologian's differing opinion expressed on those discoveries has often been expressed as a slippery sophistry buried within the theologian's adopted method.⁸

This was a modern change in context of physical science. In earlier known European civilization, for example, the prevalent task was the development of the power of a grouping of some among the individuals in society as a whole. This frequent limitation was expressed in the low physical productivity of the populations, per capita, under the prevalent oligarchical and closely related systems, as in the so-called "Asian model." The significance of the Fifteenth-Century eruption of modern European civilization, as centered in the great ecumenical Council of Florence, as it had been expressed, politically, earlier, by Dante Alighieri's *De Monarchia* and, later, Cusa's *Concordantia Catholica* and *De Docta Ignorantia*, is the qualitative shift of emphasis to the idea of the *commonwealth*, as typified by Louis XI's France and Henry VII's England, rather than the desired advantages provided to a ruling oligarchy. This meant that we required a shift of emphasis, from men and women developing within the confines of the existing conditions of our planet, to man-

7. The work of Cusa et al. in establishing the rebirth of science during the course of the mid-Fifteenth-Century Renaissance, was, to a large degree, a revival of the virtually lost knowledge of the work of the ancient, pre-Sophist, Greek science of Thales, Heraclitus, the Pythagoreans, Socrates, and Plato. This clarification by Cusa et al., laid the foundations for Kepler's establishing a truly universal (i.e., astrophysical) basis for a modern, universal form of physical science.

8. Very few modern scientists have been as self-consciously frank with their readers as Johannes Kepler. For example, after Carl F. Gauss had demolished the systemic attack on Gottfried Leibniz's notion of the infinitesimal by such empiricists as D'Alembert, Euler, and Lagrange, Gauss was never again explicit in his publications on the subject of issues of anti-Euclidean physical geometry, even when that standpoint was, often, the clearly implicit foundation in method for what he did report. It is only with the work of Bernhard Riemann, that these implications of Gauss's direction of methodological approach were presented frankly. In the case of Cusa's *De Docta Ignorantia*, the work of the Cusanus Gesellschaft's Rudolf Haubst has led in opening the doors of scholarship to the deeper roots of Cusa's accomplishments; but, even then, those roots have their own deep antecedents within the scope of Classical European history since the time of Thales, Heraclitus, Solon, the Pythagoreans, and Plato; and even that does not trace the roots far enough into the earlier past. So, Hopkins is confronted with the challenge of exploring the bald fallacy of composition which saturates Wenck's piece and its influence, dealing with both the relatively obvious fallacies of composition, and even cruder errors of assumption in the content and subsequent, historical implications of Wenck's item. As the essential Sophistry expressed by the use of arbitrary (*a priori*) definitions, axioms, and postulates by Euclid, illustrates the problem, we must always probe the actual roots of the assumptions which the *aprioristic* and similar qualities of assertions, which the *a priori* practices are employed to protect.

kind as a whole developing its expanding role in the development of that very universe which we inhabit: the entry into the moral adolescence of humanity, and into the yearning for humanity's yet-to-be-reached true, adult maturity in service of the discoverable intentions of the Creator.

The usual opposition to such needed progress of mankind's self-conception for practice, has been usually ferocious.

For example, modern scientific scrutiny has presented crucial proof that the work of Claudius Ptolemy was always an outright, intentional fraud. This was not merely a matter of Ptolemy's burying the known, truthful evidence presented by Aristarchus of Samos under Ptolemy's intentional lies, and also, similarly, the work of the Pythagoreans earlier: but, also, that Ptolemy, in his concocting fictitious data in support of his argument, was therefore exposing himself as the author of what was a clearly willful hoax. Otherwise, the evidence is that Copernicus honestly failed to get the point; and, although Tycho Brahe did much better work, he, too, failed where Kepler succeeded in a uniquely original way. Thus, as Kepler was the first of the avowed followers of Cusa's prescriptions to actually test a set of principles of the universe as such, it is the work of Kepler, and those who faithfully followed his line of investigations, which presents the type of evidence against which the foresight of Cusa's defining of modern science, as in *De Docta Ignorantia*, is to be tested.

Therefore, as the mathematical physicist Albert Einstein came to make this point, the essence of the actual achievements of modern European physical science, lies in the efficient conception of the human mind's relationship to the development of the universe itself, the astrophysical, as distinct from merely astronomical universe. *The question is: Is the physical universe, as Einstein summarizes this, finite and yet without external bounds, and is that, as such, a conception of what that universe is, as Einstein insists? Is that universe, as Einstein defines it implicitly, characteristically anti-entropic, rather than entropic?*⁹

Einstein's is a conception which an honest modern science has secured from its successes; the essence of a valid form of modern science, is to be located in a process of devel-

9. "Negative entropy" ("negentropy") as presented by Bertrand Russell's dupe, Professor Norbert Wiener, was essentially a hoax, signifying, as in Ludwig Boltzmann's Machian scheme of things, a matter of locally borrowed (abstractly, mathematically) entropy.



“‘Universe’ is, at the start of our inquiries, like the Sphaerics which the Pythagoreans adopted from their Egyptian predecessors: it is the image for the mind of man when looking out, as to above, upon that which envelops all existence within our view. It signifies the oceanic traveler, navigating, through seas and seasons, by the stars.” The Astronomer, by Johannes Vermeer, was painted in 1619, the same year that Kepler published the *Harmony of the World*.

opment of knowledge of true universals from practical origins in the work of Kepler, and beyond, that through the consequences expressed, uniquely, as Gottfried Leibniz defined the mathematical concept of what Kepler's discovery of gravitation had defined as the infinitesimal, and as what Einstein also specified, as the outcome of the work of Bernhard Riemann.

As a matter of contrasts, the incompetence of that work of such Leibniz enemies as de Moivre, D'Alembert, Euler, Lagrange, et al., respecting the fundamental theorem of algebra, is shown as their incompetence was exposed by Carl F. Gauss's 1799 doctoral dissertation. This case, typifies the hoaxes likely to be generated when the standard of true universals is excluded, as Euler and Lagrange did that.¹⁰

After all, “universal” either means an empirically existing, functional “universe,” or the use of the term itself were

10. The issue was the denial of the existence of the infinitesimal, as this error is exemplified by the case of the fanatically deranged Euler.

merely pretentious gobbledegook: whether by those classed as theologians, or anyone else. “Universe” is, at the start of our inquiries, like the *Sphaerics* which the Pythagoreans adopted from their Egyptian predecessors: it is the image for the mind of man when looking out, as to above, upon that which envelops all existence within our view. It signifies the oceanic traveler, navigating, through seas and seasons, by the stars.

It means more than that. It means the discovery of that which is *efficiently invisible to our senses*, but which is, nonetheless, undeniably manifest, in experienced effects, as a universal power of change (i.e., *dynamis*) within the universe. It signifies “change” in the sense of the famous aphorism of Heraclitus and Plato’s grasp of the implications of that aphorism in Plato’s own *Parmenides* dialogue, and in the sense of Leibniz’s and Bernhard Riemann’s successive definition of the role of the Pythagoreans’ and Plato’s principle of *dynamis*, as the concept of the physical universe: as in the form of the modern, *physical dynamics* of the Leibniz calculus, and the *dynamics* of Riemann’s physical hypergeometries.

Thus, before speaking of astrophysical matters, theology is obliged to enter this universal practical domain of *Sphaerics*, the domain of *dynamis*, since the very notion of the human soul, as reflecting the conception of man and woman as proffered in *Genesis* 1:26-31, defines an absolute, ontological distinction, a distinction of powers (*dynamis*), of the human individual, from not only non-living processes, but all lower forms of life.

The ability of the human species to increase, willfully, its potential relative population-density over the course of successive generations, is the empirical test of the proposition that the human individual expresses a distinction which is expressed as a power of the individual person. This is an individual who possesses an essential quality, of a power, of being, which is in some fashion efficiently immortal, as it is distinguished by a power in the likeness of the Creator, to change the universe in which mankind exists: to make such qualitative changes in the relationship of the human species to the universe, and even to change the quality of the universe which our species inhabits, to do that creatively, in a manner like, and in the faithful service of the continuing work of the Creator.

Therefore, it is from this standpoint, that we should define what we should signify by use of the term “universal physical principle.” That question is posed to us, typically, in the manner in which Cusa’s follower Kepler uncovers the efficient existence of an efficiently invisible universal power (*dynamis*) of gravitation, first, in his *The New Astronomy*, and in, *The Harmony of the World*, the implications of the more inclusive picture of the harmonic ordering



The passion of Albert Einstein, the physicist, to discover fundamental scientific principles, also inspired him as a Classical musician, as LaRouche emphasizes the unity of physical science and Classical artistic composition.

of the Solar System.

This accomplishment by Cusa’s follower Kepler, was made in opposition to the legacy of both Cusa’s opponents during Cusa’s own lifetime, and to such later opponents of the method of Cusa and of Kepler as such followers of Fludd and Paolo Sarpi, as Sarpi’s lackey Galileo Galilei. The list of defectives includes those modern empiricists, positivists, and existentialists, who have adopted, in common, those philosophically indifferentist methods of William of Ockham, which Sarpi and his radically reductionist followers, including John Locke, René Descartes, and the frankly wicked Bernard Mandeville, François Quesnay, David Hume, Adam Smith, Leonard Euler, Immanuel Kant, Joseph Lagrange, and Jeremy Bentham, had brought into modern European practice up through the current day.

Albert Einstein’s View

Notably, to understand Albert Einstein’s referenced conclusions respecting the significance of the general accomplishments of the practice of modern science, from Kepler through Riemann: we must acknowledge the evidence that the principle of gravitation, as discovered by Kepler, is “invisible” to mere sense-perception: that, because it is, *efficiently*, as big as the universe, and thus, like every true universal physical principle, it supplies that universe with the quality of boundless finiteness as a whole, but is, also, therefore, in a manner of speaking, so large, that its efficient local expression is, apparently, *ontologically infinitesimal*.¹¹ This implication

11. Since the universe is changing, anti-entropically, through the process of generation of discovery of universal principles. It is the anti-entropy which bounds the universe.

of Kepler's discoveries is then made more efficiently comprehensible, by the explicitly *anti-Euclidean, dynamic, physical hypergeometry* of Bernhard Riemann, as this is to be contrasted with the silly, neo-Euclidean, mechanistic-statistical, mythical universe admired by the modern, empiricist dupes, who have followed the method of Descartes, including those such as Immanuel Kant et al.¹²

This was already the essential view of science, and also of related matters, by such practitioners of the science of *Sphaerics* as the ancient Pythagoreans and the Pythagoreans' allies among the circles of Socrates and Plato. This was in opposition to that incompetent, Aristotelean view of astronomy, as represented by the Roman Sophist and exposed hoaxter Claudius Ptolemy, and by the explicitly Sophist Euclid.¹³

Is Our Universe Dying?

Notably, if we adopt the reductionist view, such as that of Aristotle, we have implicitly adopted the same notion which underlies Friedrich Nietzsche's "God is dead" slogan. For if the Creation were seen as completed, in the sense of "perfected," then we are assuming that the Creator himself were incapable of intervening, willfully, to alter its composition. If, however, we define the universe as *anti-entropic*, as a process which features a lawful ordering in successively higher states of existence through development, we have a universe in which our Sun, in its youth, was a solitary, fast-spinning object in its nook of celestial space, but which generated those higher states of the periodic table from which the planets and other bodies of our Solar System were chiefly composed: a universe representing a *universal anti-entropic principle*. This is a universe, like that of Heraclitus' aphorism, in which Creator and man collaborate in a willful process of development of the universe into higher states: *a universe in which nothing is permanent, except a universal principle of anti-entropic change*. The boundless process of successive, willful acts of creation by individuals in the likeness of the Creator, never ends.

The fundamental principle of reductionism, which permeates the Sophist realm of Euclid's *Elements*, as it does the arbitrary universal principle of Claudius Ptolemy's hoax, is the same "principle" expressed by the satanic Olympian Zeus

12. It is not the action as such, but the dynamics (the physical geometry in which the action is situated) which is primary. Therefore, the crucial work of Bernhard Riemann dates from his 1854 habilitation dissertation: *Über die Hypothesen, Welche der Geometrie zu Grunde liegen in Bernard Riemanns Gesammelte Mathematische Werke*, H. Weber, ed. (New York: Dover Publications reprint edition, 1953). See, also, Lyndon H. LaRouche, Jr. "Vernadsky and Dirichlet's Principle," *EIR*, June 3, 2005. The latter has pervasive relevance throughout this present report.

13. This is noted in passing by Proclus, in his Commentary on Plato's *Parmenides Dialogue*, but is confirmed by any systematic comparison of the method of Euclid's *Elements* with the anti-reductionist, clearly anti-Euclidean method intrinsic to the work of the Pythagoreans and of Plato's circles.

of Aeschylus' *Prometheus Bound*. That was the Zeus who charged Prometheus with the offense of enabling mortal men and women to discover the use of "fire," or, as we might say today, the destiny of mankind to discover and use the principle of controlled nuclear fission. Under that Zeus' reign, all men and women are treated as merely in the specific likeness of cattle, either as herds of tamed cattle to be reared and culled at the owner's pleasure, or wild cattle to be hunted down for sport, even exterminated, as the Legions of an evil ancient Rome often did, and as the youth of Lycurgus' Sparta hunted down helots for sport.

Thus, the Roman Empire prescribed the doctrine of *Prometheus Bound*'s Olympian Zeus, as universal law. This was not only the doctrine of Imperial Rome, but has always been the elementary doctrine of practice of all expressions of what was known, explicitly, to no later than the time of Philip of Macedon, as that "Oligarchical Principle" which permeates the cultures of Europe, top down, and axiomatically, still today.¹⁴

This was also the underlying doctrinal principle of the ancient Sophists and their modern expression as today's Malthusians and those modern "Luddites" called "environmentalists." The same dogmatism of "The Olympian Zeus," has been the systemic characteristic of the imperial law of the ancient Roman and Byzantine empires, the medieval *ultramontane* system under the sway of the Venetian financier oligarchy and its Norman crusading butchers, and of what has emerged as the intrinsically linear, monetarist model of the neo-Venetian, Anglo-Dutch Liberal financiers' British Empire in its sundry phases to date.¹⁵

Although we have crucial elements of information, which reflect creative acts of scientific discovery of physical principles during times prior to the work of science in ancient Classical Greece, and as expressed by ancient cultural strains outside what can be meaningfully classed as European culture,

14. The modern Anglo-Dutch Liberal system derived from the guiding influence of Paolo Sarpi, is a qualified exception to the general rule of most oligarchical systems of earlier European and related history. Sarpi reacted to the evidence that the Venetian financier oligarchy would make a grave strategic error, against its own interests, were it to attempt to turn history back to the Norman-Venetian oligarchical systems of the Thirteenth and early Fourteenth Century. Sarpi adopted the irrationalism of the medieval William of Ockham, as a replacement for the strict formalism of the Aristotelean system. This permitted the existence of some scientific and technological progress in economy, but on the condition that the methods of discovery of fundamental physical principles themselves be crippled, or even suppressed.

15. As I have detailed this in earlier locations, the British Empire, which was established, in fact, as a de facto empire of the British East India Company, by the February 1763 Peace of Paris, is distinguished from the earlier type of Venetian-Norman imperialism by the rise of Paolo Sarpi's "New Venetian party," which adopted the medievalist irrationalism of William of Ockham as the basis for what became known as Anglo-Dutch Liberalism, as a system of imperialist rule by a slime-mold-like financier-oligarchy, whose goal was the establishment of a "unipolar," axiomatically "monetarist" empire of so-called "free trade," an empire modeled on the image of the ancient Tower of Babel.

we know, from the evidence of the existence of human cognitive powers absent in the lower species generally, and relative to the great apes more narrowly, that the creative powers exhibited within the bounds of European civilization, are the same which have always set the human species apart from lower forms of life, that in exactly the terms expressed in celebrated verses of *Genesis* 1:26-31. Against that background, the study of the development of the physical science and Classical modes of artistic composition, presents us with a body of evidence which demonstrates that all principled forms of progress of European civilization, both in science and the role of Classical artistic composition, form a knowably unified, coherent body of knowledge, a body of knowledge which is coherent with the fundamental distinction, the universal physical principle, of distinction of man from beasts.

2. 'Who Am I?': Science & Theology

In the immediately preceding section of this present report, I have already emphasized the importance of recognizing the pernicious role of certain layers of *aprioristic* and kindred presumptions, as these are typified by the definitions, theorems, and postulates of a Euclidean or other reductionist geometry: a geometry by aid of which people usually evade their own *Cartesian-like* doubts about the reality of their existence as conscious persons. The pivotal expression of such pathological impulses, is the notion often referred to as "sense-certainty."

In contrast to the generations born prior to World War II, that problem is a greatly aggravated one today, especially since the middle of the 1960s. Such has been the effect of the successive, post-war waves of degeneration in public and higher education, and also in loss of rationality in popular culture relative to the period under President Franklin Roosevelt's leadership. For example: today, since the late 1940s and 1950s, there is virtually no honest education in the subject of history, relative to what was standard in even respectable public schools during the pre-war generation's youth. Thus, commonly, science as taught under the influence of the 68ers today, is either an articulated gibberish of mere mathematical formulas, for most, or, it is a form of professional higher education saturated with the atrocities solicited from the followers of the most evil man of the Twentieth Century, the Bertrand Russell whose devotees included not only Aldous and Julian Huxley, but also Professor Norbert Wiener (the putative author of the "information theory" hoax) and the John von Neumann who complemented Wiener's nonsense with the mechanistic notion of "artificial intelligence."¹⁶

16. The "cybernetics" project featuring Professor Norbert Wiener of MIT, was steered by Margaret Mead et al., at the Josiah Macy, Jr. Foundation, as a

Largely as a by-product of such axiomatically irrationalist cults as "information theory," popular culture today has been polluted, massively, by the effects on even younger generations, of the "68er" style of mass-brainwashing of the "68ers" generation's modern Luddites' revival of the Delphi Gaia cult's Dionysian, anti-science "environmentalism." The destruction of standards of rational behavior, by the influence of such cults as "information theory," has fostered the spread of depraved, contemporary existentialist fads of the sort met among the academic devotees of Mrs. Lynne Cheney's neo-Fabian, international "new right" ACTA cult. That cult and its like, are rampant in trans-Atlantic academia, complementing paganist forms of enraged religious cults in society at large. The mind of today's typical young adult, even in relatively higher-paid professions, is assaulted by avalanches of more or less popular, impulsive, fragmentary beliefs. Dante Alighieri would see, thus, a world which waits in the anteroom of an onrushing new dark age.

That is the prevalent situation in which the issues treated by Hopkins' referenced work, might seek attention within ostensibly educated strata today. Despite that, the issues themselves, as Hopkins addresses them in the referenced work, exist, and also the deeper issues with which I supplement Hopkins' referenced work here. Despite the added recent sources of difficulty within the body of the public today, even the nominally educated public, the issues are even more important, and urgent, than they ever were before. They are issues which must be treated with the same degree of rigor, perhaps even greater rigor, than would have been required two generations and more ago.¹⁷

The Menace of *Apriorism*

The problem which Hopkins' treatment of the Wenck-Cusa controversy leaves essentially untouched, is the crucially relevant, ontologically very deep, real-life implications of the notion of sense-certainty. This is a problem of scientific method which can not be treated adequately by merely shifting the approach to emphasize the implications of science for theology. We must cast Wenck and his sympathizers *efficiently* aside, if we are to meet those requirements implicit in a competent elaboration of adopted Christian doctrine's bearing on organization of a notion of natural law required for society.

The pathological character of the use of sense-certainty

post-President Franklin Roosevelt project. It was led from the Massachusetts Institute of Technology's R.L.E. program. John von Neumann's "artificial intelligence" program, which was introduced by his posthumously published Yale lectures, was also steered prominently from MIT, an effort associated with Marvin Minsky and Noam Chomsky.

17. Notably, Hopkins' *Nicholas of Cusa's Debate with John Wenck*, was written and published before the principal part of the potential audience for such publications was dying out, and being thus superseded by the rise of the "Baby Boomer" generation to a dominant influence in shaping ostensibly learned as much as popular culture.

in educational and related programs, coincides with the implications of Wenck's attack on Cusa in the following way. A certain amount of essential background on issues of scientific method must be brought into play.

The universe is actually operating on the basis of what are strictly classed as universal physical principles, as Kepler's original discovery of a universal principle of gravitation illustrates the point. The number of such principles is open-ended, that in a fashion which has been clarified for modern science by Bernhard Riemann's work in establishing the principles of the *dynamics* of a physical hypergeometry. The work of Mendeleyev in, most notably, opening the domain of nuclear physics, the work of Louis Pasteur and his followers, through Vernadsky, in defining the principled distinction of the phenomena of living processes, and Vernadsky's posing of the character of human cognition as a category beyond both non-living and living physical-chemical processes, presents us with an image of a pattern of an endless accumulation of discovery of universal physical principles. *Science must proceed always with respect for its own ignorance of such universal principles yet to be discovered. Here, the genius of Cusa's work on Learned Ignorance*, shows up, thus, today.

Since the relevant, fragmentary work of Carl F. Gauss on the subject of hypergeometries, and Riemann's broader development of this field, competent modern physical science

today is located primarily in the successive work of, chiefly, Gottfried Leibniz, Gauss, and Riemann, in exposing the incompetent mechanistic-statistical methods of the empiricist Descartes: that, as a result of Leibniz's re-introduction of the ancient Pythagorean/Platonic concept of *dynamics*. Since Leibniz's attacks on the Cartesian method, on this account, all competent science is premised on the extended use of the Leibnizian principle of *dynamics* as shown by Gauss, but, chiefly developed by Riemann. Today, all competent definitions of economic systems are based on the principles of Riemannian *dynamics*, in opposition to today's residue of inherently incompetent Cartesian mechanical-statistical systems, such as those of Mach, Boltzmann, and the usual present-day economic analyst and forecaster.

This concept of modern *dynamics* was introduced to modern physical science as I have already indicated above, chiefly, by Cardinal Nicholas of Cusa, beginning, most notably, with his *De Docta Ignorantia*. Cusa's method was that explicitly adopted by Johannes Kepler for Kepler's uniquely original founding of modern astrophysics, work which served as the basis for the development of competent trends of discovery and practice in modern physical science. In economics, in particular, the generally employed, intrinsically incompetent methods of forecasting and related analysis, are those of Cartesian mechanical-statistical forecasting, as illustrated by the calamity promoted by the work of Morton Scholes and his associates which led into the celebrated 1998 monetary crisis. Thus, most contemporary official and other leading forecasts are products of intrinsically incompetent methods, which lead, sooner or later, toward intrinsically awful results.

Thus, among its notable other defects, Wenck's argument expresses the same intrinsically stagnant pool of incompetence inherent in reductionist method, the which is the same root-error, as, later, and still today, of Cartesian mechanistic-statistical methods generally. Thus, the result of adopting *aprioristic* notions of principle, is that blind faith in the reality of sense-perceptual experience as such, leads to the problems which underlie the motives of all that opinion which tends to fall into the same niche as Wenck's attack on Cusa's *De Docta Ignorantia*.¹⁸ There lies the importance of exposing the fraud of Wenck and his followers today.

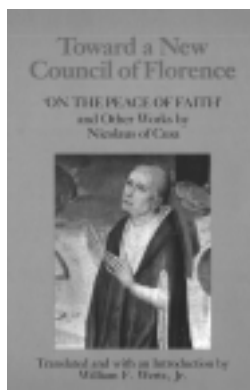
18. Hopkins' book presents us with a Wenck who, in English translation, represents, intellectually, a crude and brutish figure, a figure of more political than theological significance, who would not be worthy of consideration by Hopkins, or by me, except to point attention to the notable poor wretches who, chiefly for political reasons, have referenced Wenck's attack on Cusa as an authoritative source. In these respects, Hopkins' book is adequate for its stated and implicit intentions. My purpose here is to focus on the need to recognize Cusa as not only the founder of modern European experimental science, but to clarify the importance of Cusa for insight into the special significance of the need to define the theological implications of the science of physical economy, as I address that matter explicitly at the appropriate point in this present report.

Toward a New Council of Florence

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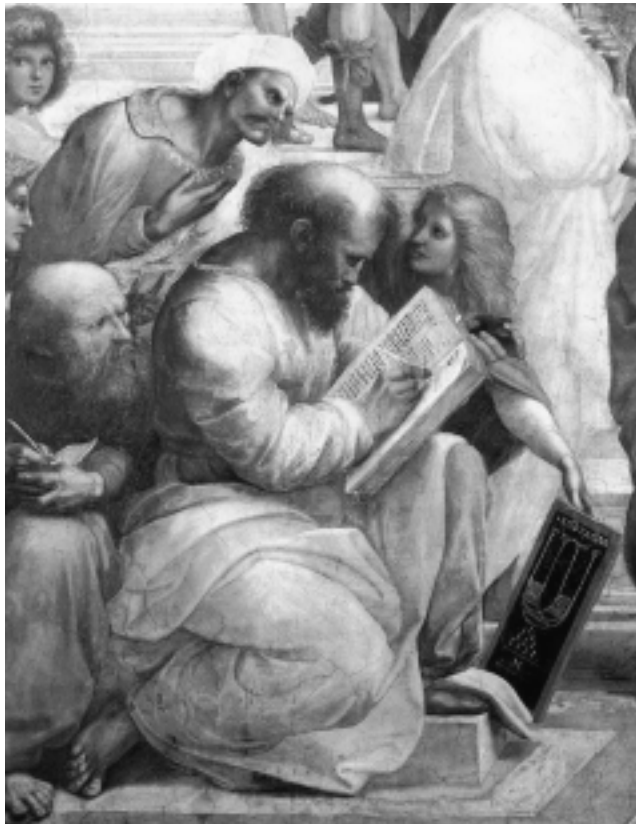
Where *A Priori* Methods Come In

If we treat the human species as it were another animal species, one compared to the higher apes, we must be shocked, today, by the comparison of the relatively fixed potential relative population-density of the population of apes dwelling in their species' appropriate environments, to the increase of the potential relative population-density of the human population today. To sum up that point: What the human species accomplishes by revolutionary improvements in the technology of culture, without any relevant degree of change in human genetics, defines humanity as a species whose characteristic mode of existence expresses a new kind of principle of "genetics" which is absent in all forms of merely animal life.

If we look back at the record of human existence, especially its self-development, over the tens of thousands of years of recent pre-history and history, looking at this from the vantage-point of the social effects of modern scientific progress, and, if we examine this in terms of changes in potential relative population-density, we find the prototype of the quality of change which distinguishes man from beast, in the effects of practiced discoveries of universal physical principles. Once we have taken those discoveries into account, we are left with evidence of progress in potential relative population-density, such as the change, from a feudal society, to a commonwealth form of national social-political system of the type proposed, successively by Dante Alighieri and Nicholas of Cusa, as in Dante's *De Monarchia* and Cusa's *Concordantia Catholica* and *De Docta Ignorantia*. This is the commonwealth form introduced, actually, by France's Louis XI, and copied from Louis by England's Henry VII and Sir Thomas More. We take into account, similarly, the effects of those revolutionary changes in artistic culture which European civilization came to regard as Classical, which have a similar quality of usefulness in promoting improvements of the ability of the population to cooperate in promoting what might be termed clearly "physical" improvements in potential relative population-density.

All of these factors associated with qualitative forms of increase of society's potential relative population-density, have the kind of net effect otherwise typical of valid discoveries of universal physical principle. Indeed, we have demonstrated, experimentally, that the principles of Florentine *bel canto* modes of choral composition and performance according to the J.S. Bach legacy, have, as Johannes Kepler's work shows, a crucial significance as being, effectively, universal physical principles in the domain of astrophysics. Mathematics appears to be indispensable in physics, but without the principles of choral counterpoint defined by the work of J.S. Bach, and the generation of Leonardo da Vinci earlier, there is a lack of the *passion* needed to move discovered principles of what are somewhat misnamed as so-called "physical science," into effective action. Every truly great Classical artist, and every truly sane scientist knows this from experience.

I have an image of Albert Einstein, the physicist, perform-



Since the work of the Pythagoreans, in the field of Sphaerics, "all competent scientific work, in so-called 'physical science' and otherwise, is premised on the notion of universal physically efficient principles of the quality which those Greeks associated with the concept of dynamis."

This detail from Raphael's "School of Athens" (1509) shows Pythagoras surrounded by his students, including Archytas, seated behind him, taking notes. The tablet held by the youth shows Pythagoras' musical harmonies.

ing with his violin, in services conducted at the great Jewish place of worship in Berlin, during the time before Hitler's dictatorship.

The point which I am developing at this juncture in the report, is, crucially, the following.

Since the work of the Pythagoreans, in the field which they and Plato's circles identified as *Sphaerics*, all competent scientific work, in so-called "physical science" and otherwise, is premised on the notion of *universal* physically efficient principles of the quality which those Greeks associated with the concept of *dynamis*, the concept which Leibniz and Riemann, most emphatically, associated with the modern term *dynamics*. This was, in turn, a notion which the relevant Greeks traced to Egyptian astrophysics, an astrophysics established there long before the erection of the great pyramids, an astrophysics with characteristics traced to the functions of astrogation used by a maritime culture within the period of the last great glaciation of the Earth's northern hemisphere.

The simplest demonstration of the distinction of the physical geometry practiced commonly by the Pythagoreans, such as Archytas and the circles of Socrates and Plato, is that the relations among point, line, and solid are in no way “self-evident.” As Archytas’ solution for the construction of the doubling of the cube illustrates the concept of *dynamis* associated with *Sphaerics*, the relations of action within physical space-time are defined by an apparently “external” force of action on that space: the modern notion of physical space-time, as developed from the work of Cusa follower Kepler, and through the later view developed by Albert Einstein. *To draw a line in the sand, and to generate a line of physical displacement in physical space-time, are not equivalent mental actions. Contrary to the modern Sophist Descartes: Space by itself, and time by itself, have no independent real existence in the actions of the real universe.*

The Sophist’s Euclidean system, which was a hoax created in defiance of all earlier Egyptian and Greek physical science, effectively destroyed real science wherever it was permitted to reach. It destroyed science by eliminating respect for the existence of *efficient physical action for change in state*, as the subject of human knowledgeable practice. Thus, reductionist methods such as those of Euclid, effected a change which degraded Classical Greece’s culture, from the levels it had achieved in Magna Graecia and its Athens earlier, backwards toward the ideal represented by the Delphi Gaia-Apollo cult’s Lycurgan Sparta. The effect was to throw Greek civilization backwards, toward the evil state of mind prescribed by the Olympian Zeus of Aeschylus’ *Prometheus Bound*, to a state of society (at least of most among its populations) in which the great majority of men and women were treated as either herded or hunted cattle, denied, through an evil policy of “zero technological growth,” like that of our contemporary “environmentalists,” the right to change their customary practice from that which reigning tyrants had assigned to the general population’s forebears. Even, as by the lunatic “environmentalists” of today, to throw the level of cultural practice and human relations back toward a relatively more brutish state of customary affairs, as this kind of general moral depravity has been imposed, once more, under the sway of the “68ers,” over the recent nearly three decades of today. The hope of the future of mankind now lies in the willful hands of those who will free mankind from this accursed, lunatic “neo-malthusianism” spread among, and by the “Luddites” of so much of the so-called “Baby Boomer” generation today.

Dynamics: From Archytas to Einstein

Modern science was founded as it had to have been founded, in the founding of modern astrophysics by Johannes Kepler. The two most crucial discoveries by Kepler, first, of universal gravitation, and, second, the harmonic composition of the internal ordering of the Solar System, are the foundation

on which all general practice of a competent form of modern science continues to depend.

This set of discoveries by Kepler, gave us the basis for the modern revival, by Leibniz, of that concept of *dynamis* which had been largely buried under the heaps of ashes from the time of Plato’s death, and, more emphatically, since the deaths of Eratosthenes and his collaborator Archimedes, until the outstanding role of Cusa’s relaunching experimental physical science. Leibniz’s introduction of that principle of dynamics, on which all competent modern science now depends, was an outgrowth of Leibniz’s actual development of what Kepler had prescribed as the needed development of a calculus of the infinitesimal, a need identified with the role of the infinitesimal in the function of universal gravitation.

Thus, on foundations provided, respectively, chiefly, by Cusa, Leonardo da Vinci, Kepler, and Pierre de Fermat’s discovery of a principle of least action, Leibniz developed the foundations of an extensive form of universal modern physical science. From this vantage-point, Leibniz, in fact, demolished the pretensions of the Sophist Descartes, and, with the amplification of the calculus by the catenary-cued, universal physical principle of least action, established the principle of *dynamics* on which all competent scientific method has depended, from that time, to the present date.

Nonetheless, despite that accomplishment by Leibniz and such notable followers as Gauss and Riemann, the old pro-oligarchical enemies of human freedom from forms of brutalized chattel indenture, have persisted, even within the provinces of physical science itself. The epitome of that obscene regression within the ranks of modern science and its society, has been the work and passion of the evil Bertrand Russell, and such among his lackeys in the field of science as Norbert Wiener and John von Neumann. Nonetheless, despite the modern Sophists, the indelible accomplishments of modern science, in fundamentals, lives on; the discovery of universal gravitation, by Kepler, is still the most efficient paradigm for making the principal current problems of science apparent. It is from this standpoint that the brutish intellectual wickedness of Wenck becomes clearer.

Kepler’s discovery of the universal physical principle of gravitation, provides us today with the needed pedagogical typification of the meaning of not only the term “universal physical principle,” but the refutation of the absurdity of all of those mathematical-physics and related assumptions, such as those of popular economics dogma of today, which are premised upon what is fairly represented as a Euclidean outlook. Here lies the essential continuation of the crime against man, science, and The Creator, by Wenck et al.

Albert Einstein enjoys full credit for making clear to me, as to others, the fact that Kepler’s discovery of the principle of universal gravitation, defines the universe of physical science as essentially *Riemannian*. That is, as I have stated above, the proof that gravitation is expressed uniquely in the



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“The epitome of that obscene regression within the ranks of modern science and its society, has been the work and passion of the evil Bertrand Russell [left], and such among his lackeys in the field of science as Norbert Wiener [center] and John von Neumann [right].”

local form of a mathematical infinitesimal, as by Kepler, defines gravitation as not only a universal principle, but a principle whose efficiency encompasses the universe. This was not explicitly claimed in those terms by Kepler; but the point was recognized by those, such as Einstein, who were qualified to look back toward the work of Kepler from a relevant historical distance. Implicitly, Kepler already understood this, or an equivalent conclusion.

This concept, as expressed by Einstein, had been already the position taken by Leibniz’s refutation of Descartes, and the refutation, as by Carl F. Gauss’s 1799 doctoral dissertation, of those, such as Euler and Lagrange, who foolishly attempted to deny the infinitesimal implications of the Leibniz discovery of the so-called modern calculus. The implication of Leibniz’s relatively perfected version of the calculus, his catenary-cued universal physical principle of least action, was what was developed later as the Riemannian form of physical hypergeometry, as Einstein was to recognize the relevant connections in his time.

What Riemann accomplished, thus, was the establishment of the notion of a *generalized dynamics*. *Here lies the hard core of proof of the specific charge to be made against Wenck and all the fools who have followed him.*

In the real universe, the increase of the productive powers of labor, as measured per capita and per square kilometer, is made possible through man’s discovery and use of notions which qualify, efficiently, as either universal physical principles, or their derivatives. All such principles, like universal gravitation, bound the universe of our experience. It is the exploration of the practical implications of a concert of universal physical and comparable principles, which enables mankind to increase the expressed power in the uni-

verse which the individual’s or society’s actions gain through application of those principles and of their combined action.

All such principles are invisible to the senses, but their effects, like the effects of gravitation, clearly, are not. These principles are the objects of cognitive insight, a quality of insight unique to the powers of the human individual human mind (and that of the Creator).

Hence, the principle of Learned Ignorance, of Cusa’s De Docta Ignorantia.

As we should know from the progress in scientific discoveries since the Fifteenth Century, as for example, Kepler’s discovery of the principle of gravitation, not only were these revolutionary discoveries, respecting man’s potential power in the universe, known, but the existence of knowably efficient, *but the existence of unknown physical principles was known!* In such cases, as Cusa’s work on science makes this point clear, it is our paradoxical knowledge that something exists as an efficient principle, but is a “something” which we do not yet know, which is the essence of passion, like the passion of great Bachian counterpoint, as expressed by Bach’s great follower, Ludwig van Beethoven, which drives science and human creativity in general.

So, modern civilization explores intra-Solar System space, not because we know what is there, but because we dare not ignore what might exist, and what we must discover, out there beyond our presently available certainties. It was on precisely this account, that Nicholas of Cusa is the founder of all valid currents of modern European physical science. Anyone who opposes his approach on this account, is clearly an adversary of science, and, therefore, also, of the Creator’s intention for mankind.

Dynamics in Economy

It is just for the same reasons underlying my argument in this report thus far, that virtually all economists known to my studies, in the world today, are relatively incompetent in their efforts to treat the most urgent classes of the problems with which the world as a whole is presently confronted. Virtually all such economists rely upon a Cartesian, or Cartesian-like statistical method of treating economic space as mechanically—e.g., kinematically—ordered. Neither the universe, nor any real economy operates according to rules consistent with such a Cartesian method.

This does not signify that none of those economists are good people. Many of them are intelligent and useful, in addition, in some cases, to being good in their intentions. It signifies merely the limited competence of any economist, or kindred professional, who believes in the rightful existence of a monetary-financial system as the foundation of organization of any system of national economy, or relations among sovereign nations in the world at large. The only competent system is a system of physical economy, whose financial relations are organized approximately as the Bretton Woods system was intended to become, as a relatively fixed-exchange-rate, international credit-system, of a quality fit to have pleased our own Henry C. Carey, and Benjamin Franklin and Alexander Hamilton as well.

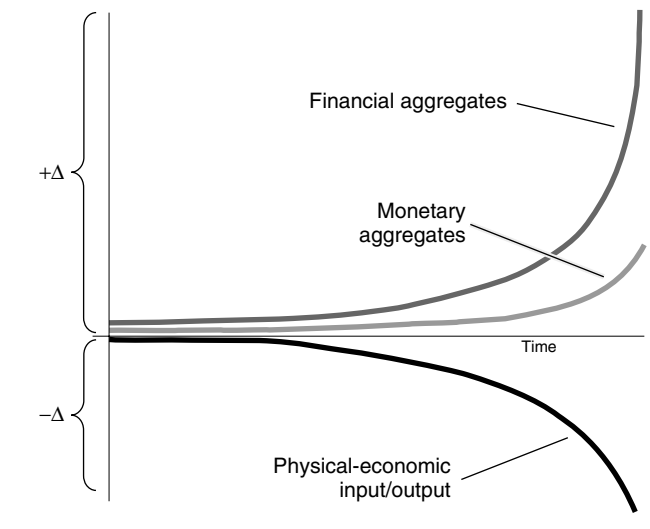
Any existing state of organization of an economy, as if according to prevalent forms of existing guides to action, is inherently doomed by the mere fact that it is operating, more or less, on reliance on an existing, *false* set of implicitly assumed universal principles. The worst of all important economic doctrines, are those premised, like the currently global “free trade” system, on a primary role of usury within any Anglo-Dutch Liberal style in monetary system.

In fact, unless the presently reigning rules of international trade, technology, and monetary affairs are repealed, that more or less immediately, civilization on this planet is, presently, about to disappear for a long time to come. What the date of expiration might be is not certain; it never is, which is one of the collateral reasons that my rivals among customary forecasters are always wrong in respect to the functional course charted by the presently reigning policy-shaping matrices. Nonetheless, we are presently at the verge of a general collapse of civilization throughout the planet as a whole, unless the presently reigning policies of the planet, especially the deadly monetarist and “pro-malthusian” ones, are more or less instantly scrapped, and replaced by more suitable, honest ones.

The real function of physical-economic processes, is not locatable within the scope of statistical kinematics. Competent economic science, and competent national economic policies are premised upon dynamics, not statistical kinematics. *The real function of economies is located in the relevant Riemannian form of the set of dynamics within which the economic process is currently operating.*

FIGURE 1

LaRouche's Typical Collapse Function



Any set of universal physical principles, as Kepler’s discovery of universal gravitation illustrates the notion of such a principle, is to be regarded as a *boundary condition* within which the relevant economy is currently operating: the confines, like the walls of an aquarium, within which the economy is operating.

In any relatively fixed such state of an economy, three general conditions are operating. The rate of change of a capital-intensive form of potential relative population-density, the approach to a boundary-condition defined by a limited range of universal physical principles in use, and the limits imposed by lack of development of the general economic infrastructure in which the economy is operating. These conditions define a relative limit, within which any relatively fixed state of that system is operating. *Briefly:* As the physical-economic process approaches the proximity of those limits, a barrier appears. Unless a relevant, qualitative form of technological change is introduced, the rate of growth of the economy, as measured in physical terms, per capita and per square kilometer, will enter a phase of accelerating slowing of the rate of growth of the economy, and, thereafter, will approach a condition at which the growth becomes negative. As this phase of the process is entered, the rates of change to this effect tend to become hyperbolic, as we are witnessing the complex process of decline and impending breakdown of the U.S. economy throughout the 2001-2007 period of the George W. Bush, Jr. Administration (**Figure 1**).

This threatened breakdown could occur if the economy were simply operating under preexisting trends in policy-shaping, as in the decline of the U.S. economy under President Clinton. It would be qualitatively worse, if the rate of breakdown of the economy were accelerated radically by the

changes in policy, relative to those of the Clinton Administration, which were introduced, again and again, in a reckless and lunatic fashion, under President George W. Bush, Jr., especially a change like the monstrously, ruinously wasteful economic effects of the Bush Administration's war and national security policies.

In fact, the situation is much, much worse than that. Contrary to the myth of British-trained economist Karl Marx, neither "decennial market crises," nor anything like them, were ever scientifically inevitable. Admittedly, crises of approximately that description did occur, as a taxidermist's stuffed animal may look like a living one, but the cause for their occurrence was never inherent features of the modern system of technologically progressive agro-industrial economy. All such crises had specifically political, not economic, underlying causes; all such crises in modern economies were the consequence of political "child abuse" of national economies by rapacious political-financier interests.

Of course, modern economic depressions occurred, like that presently onrushing in the U.S.A. and beyond at the present moment; but, the cause itself was never economic. Rather the cause was always, in net effect, political offenses against the welfare of the economy. The nature of and remedies for such crises and related calamities, must be understood from the standpoint of the science of physical economy; but, the best designed economy, like the best breed of child, will not necessarily withstand the consequences of predatory abuse.

Geopolitics & Economic Crises

The death of President Franklin Roosevelt had been a relative disaster for what had been, otherwise, the prospects of the U.S. economy and for the state of the world in general. Nonetheless, as long as the policies of the U.S. and the international monetary system continued to echo the "protectionist" pattern in international and national affairs continued from the Franklin D. Roosevelt reforms, there was still a trend for net physical growth, per capita, of the nation's and the world's economy. Despite all foolishness under President Truman, and later, this relatively happier state of the U.S. economy continued through the assassination of President John F. Kennedy.

However, the assassination of President Kennedy was the beginning of an existential crisis for the U.S.A. and the security and economic well-being of the world at large. This downward trend had already set in from virtually the day of President Kennedy's inauguration; his assassination unleashed the nightmare which his Presidency had tended to resist, or even contain. Several developments in the policy-shaping of his Administration, including his progressive physical-economic policies, his resistance to the intended extension of the war in Indo-China, and his launching of the commitment to placing a man on the Moon, provided the motives among certain Anglo-American circles for wishing President Kennedy and the prospective future candidacy of his brother, Robert, out

of the way. The Kennedy commitments to a replica of the achievements of the Franklin Roosevelt Administration, were directly opposite to the way in which the relevant Anglo-American financier interests wished matters to proceed—the same Anglo-American-centered financier interests which had brought Mussolini, Adolf Hitler, Franco, and relevant others to power during the period from the Versailles Treaty through Hitler's launching of war.

World Wars I and II, were not inevitable; the preparation and launching of those geopolitical wars, which had been initiated on behalf of the perceived global self-interests of the Anglo-Dutch Liberal faction, had been voluntary interventions against the way the world's affairs were tending to move, since the interval following President Abraham Lincoln's U.S. victory over British Lord Palmerston's Confederacy assets.

Lincoln's victory had realized the intention of former Secretary of State, and President John Quincy Adams's commitment to the consolidation of a sovereign republic lying between two oceans, and its Canadian and Mexico borders. With the developments set firmly in place under the Lincoln Presidency, the U.S.A. had become an independent power which could not be conquered by any invader, excepting externally induced corruption of its policy and morals.

Against this fact of U.S. sovereignty as a continental power, the developments since the time of the U.S. Philadelphia Centennial of 1876, through the British preparations for a geopolitical war against continental Eurasia, U.S.-inspired influences on that continent, were considered a threat to the imperial interests of the Anglo-Dutch Liberal maritime power. This was the view of that power and its accomplices inside and outside the financial centers of the U.S.A. itself. During the course of the 1870s, as typified by the cases of American reforms adopted in Japan, in Bismarck's Germany, in Mendeleyev's and Alexander III's Russia, and elsewhere, imitation of the U.S. economy threatened to build up the economic power of Eurasia to the point that the imperial domination of the world by Anglo-Dutch Liberalism's maritime power was threatened.

The two World Wars of the Twentieth Century were the typical products of the Anglo-Dutch Liberal reaction to geopolitical conflict between the rising, combined independent powers of the U.S.A. and its friends of continental Eurasia, and what Britain's Lord Shelburne had intended to establish as a permanent Anglo-Dutch Liberal world empire to surpass the durability of the Roman Empire.

It was not economic rivalry as such, which prompted Anglo-Dutch Liberal interests' presently continuing imperial-geopolitical commitment to a "one world," unipolar empire (and the presently onrushing, Anglo-Dutch Liberalism-steered, and post-1989, Thatcher-Mitterrand-launched destruction of the U.S.A.'s and continental Europe's economies). It was a conflict between two irreconcilably opposing social systems, the Anglo-Dutch Liberal imperial system

aimed at permanent world government (e.g., “globalization”), versus the concept of a system of respectively perfectly sovereign nation-state republics, as that latter system is typified by the American System as described by the U.S. Treasury Secretary Alexander Hamilton who was shot by a British spy, Lord Shelburne’s and Jeremy Bentham’s Aaron Burr.

There is no inevitability of recent or future cyclical depressions on this planet, but only the opposition, as typified by the expressed outlook of H.G. Wells and Bertrand Russell, to that science-driven economic development which would carry the planet through the impending boundary-layers defined in terms of successive scientific-technological revolutions in world economy. For as long as we persist in the economic policies implicit in our struggle for independence, our Constitution and its provision for a national-credit system, rather than a monetary system, there was never any inherently systemic inevitability of an internally-generated economic crisis within our sovereign republic.

The challenge presented to us by the present world crises, and by the wicked role of a monstrously corrupted U.S. Bush-Cheney Administration, is not any inevitable economic crisis; the challenge comes not any other potent external foe, but the domestic and foreign accomplices of that Administration and its current domestic and foreign policies. Were the U.S. to replace the present Bush-Cheney Administration with a competent new administration—and the means to bring this change about in a constitutional way presently exist—the means of cooperation with leading powers of the world, and others, already exist, at hand, to bring the present economic and other ominous threats to civilization under control, and that rapidly.

Therefore, once we understand who, and what our republic’s ultimate adversary is, and we act accordingly, we are presently situated to get on with the real business of world and national economy to which we should be attending. At that point, the subject of economic policy becomes the subject of a knowledgeable approach to dealing with the challenge of transforming an already largely ruined economy into a healthy, and permanently prosperous one.

The Principle of Prosperity

The proper intention of economic policy, is not to make people rich, but to make them happy, that in the sense that the authors of the U.S. Declaration of Independence chose Gottfried Leibniz’s devastating rebuke to the wicked John Locke, “the pursuit of happiness,” as the avowed essential intention of what we intended to be the reigning policy of our newly created republic.

Since we all die, sooner or later, for sane people, happiness could not lie in reaching the state of death, but in our assurance of a happy outcome of our having lived a life which contributed to the virtuous aspirations of earlier generations, and the benefit of future ones.

To accomplish this, we must develop our physical econ-

omy in a fashion consistent with that definition of happiness. For a clearer understanding of that intention, we should employ the term, “happiness,” as a corollary for the term *agapē* as employed by Plato and the Apostle Paul’s *I Corinthians* 13. This does not mean that we should merely amuse other people, or ourselves; we should rather amuse our Creator, in whose custody our immortality reposes. I am certain that that Creator has a very well developed sense of humor, otherwise how could the prevalent foolishness of living populations be tolerated? Provided that we do our part in moving the development of the universe, and of mankind, forward, He will be amused by our little foolishnesses, as all good parents show loving tolerance for their often foolish children. Happiness lies, for us, in what we do to secure the future of mankind, and what we do to accomplish this by such enterprises as improvements in the liveable state of our planet today, and of our Solar System for times beyond.

So, a loving, wise grandfather tells his grandson: “I helped to build that!”

The characteristic economic challenge to mankind, is the urgency of increasing what may be described as the potential relative population-density, per capita and per square kilometer. To accomplish that, we must take into account the fact, that each discovery of universal physical principle is both a source of increase of the power of the human species, but also a boundary condition which threatens to become a crisis as our activities converge on that boundary as a limit.

Today, the most obvious such principled boundary is represented by the urgency of an accelerated development of the use of nuclear-fission, and the similar urgency of mastery of the technologies associated with thermonuclear fusion. We are now approaching a point at which mankind is about to become “out of resources”; we are approaching a point at which the relative physical costs for providing those resources will accelerate, unless we introduce the more advanced technologies needed to cheapen those relative costs in physical terms. In this respect, with regard to such cases as the dwindling of resources of potable water for human consumption, if we do not unleash the use of high-temperature modes of nuclear-fission-power applications, the condition of much of humanity could become desperate not long ahead.

With that in view, it should be evident that the essential expression of production is the quality of technological progress in modes of physical production which represent a net increase in effective, usable output, per capita and per square kilometer, on which secular progress in science-driven technology advances. It is science as the production of the means of producing the needed superior quality of means of production, as also product, which must be recognized as the underlying principle governing all competent views on the practice of economy.

This is not a required imposition on mankind. The development of the intellectual powers of the human individual, is both the moral obligation of each individual, and the funda-

mental principle of competent notions of economy.

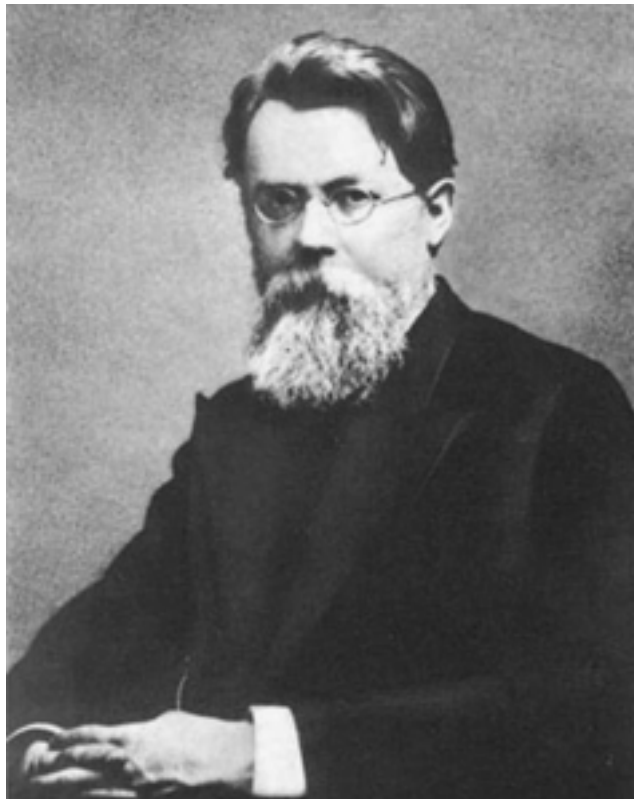
This task can be accomplished only through the promotion of the development, to qualitatively higher states, of the individual in society. This means, of course, precisely what Nicholas of Cusa emphasized as the principle of Learned Ignorance.

What Is the Human Soul?

Academician V.I. Vernadsky, who, in 1935-1936, gave the world a rigorously scientific insight into the nature of life, also provided us with the basis for one of the greatest of all discoveries: How we might define the human soul *ontologically* in respect to Vernadsky's discovery of the relative meaning of life, life as absolutely distinct from non-living processes.¹⁹ At a later point, Vernadsky made a similar argument for the distinction of the human intellect from that relatively lower form of existence, called "life." I referenced this matter in my 2005 *Vernadsky and Dirichlet's Principle*.²⁰ I summarize the aspects of that argument which are relevant for the matter of theology at hand in this presently immediate context.

On the subject of life, Vernadsky stated that although the chemical components participating in living processes, were apparently the same found in the Periodic Table otherwise, the organization of the living processes using this material was dynamically qualitatively different than that of non-living processes. Vernadsky also came to recognize that this distinction of living processes from chemical processes using the same chemical constituents, is a matter of Riemannian dynamics.²¹

As I stressed in the same 2005 report, human creative reason is a specific quality of dynamical principle, which stands above the living processes of the human body which it hosts. So, as life comes only from life, and is never an outgrowth of non-living material as such; so, human creative reason comes only from the superior principle of human reason, and not otherwise from within the confines of living organizations as such. We should say, that the living body of the human individual is of a biological type appropriate for



The Russian scientist V.I. Vernadsky, in 1935-1936, "gave the world a rigorously scientific insight into the nature of life, [and] also provided us with the basis for one of the greatest of all discoveries: How we might define the human soul ontologically in respect to his discovery of the relative meaning of life, life as absolutely distinct from non-living processes."

the support of the dynamic function of human creative reason.

For example, just as a universal physical principle such as gravitation, is, for both Kepler and Leibniz, both extensive as a form of existence as the universe, and, therefore, seemingly infinitesimal in its localized expression, those cognitive functions of the human mind which are properly associated with the functions of universal physical principles, express a universal physical principle higher than that of living processes, as a universal physical principle acting efficiently upon appropriate expressions of living processes. In brief, the intervention of this universal principle of cognition on the relevant biological processes, uses those processes as a medium for its efficient expression.²²

19. Vernadsky's Russian contemporary, A.I. Oparin, wrote a widely appreciated text, published in English as *What Is Life?*, but when we compare Oparin's argument with the essential statement of Vernadsky on this subject dated from the middle of the 1930s, Oparin's argument was clearly in error *ontologically*.

20. Op. cit.

21. Near the close of the 1980s, Professor Robert Moon of the Fusion Energy Foundation, reacted to my argument on the significance of Kepler's *World Harmony* for contemporary physics matters, by returning to the continuation of his own much earlier work in challenging the radically reductionist "magic numbers" doctrine respecting isotopes. This prompted consideration of the deeper implications of the same ordering according to truncated Archimedean solids which arises in Kepler's *World Harmony*. This poses issues of such physical harmonics, as this bears on living chemistry, as matters of relevance for today's emerging "isotope economy."

22. There is clearly something about the physiological basis for the cognitive processes of the human individual mind, which is "resonant" for the function of the quality of human cognition expressed as the discovery of a valid universal physical or ontologically comparable principle of efficient knowledge. However, what is produced by this faculty, is not produced by the physiological basis, except as seeds of a higher quality of existence find the relevant physiological "ground" suitable for the planting of germs of cognition. For example, in typical contemporary classroom education, the pupil is induced to respond to the request for an identification of a physical

Thus, through the synthetic action of universal creative powers of human reason, the relevant aspects of biological processes are used by the dynamic of creative reason, as the dynamic principle of life uses the otherwise inorganic material of living processes.

Thus, the non-living domain, life, and human creative reason, express respectively distinct, but interacting dynamic principles of the universe as a whole.

As Cusa's criticism of the error of Archimedes on the subject of the isoperimetric principle expressed by the circle, echoes the relevant conception, the cognitive powers of the specifically human individual mind are not a secretion of the living body, but a principle which subsumes the living body *dynamically*.

This dynamical principle of human reason, reflects the idea of the image of the Creator. There can be no doubt of this specific comparison, since only the creative human intellect, whose characteristics do not exist in lower forms of life, is capable of participation in the quality of ideas we associate with the person of the Creator. On this account, the fact that creative intellects among human individuals are creative from the vantage-point of the standards of dynamics, we need have no doubt of the existence of the Creator as an intentional being.

It is a correlated matter of significance, that the act of true creativity, in physical science, or Classical modes of artistic composition, or both, is associated with the highest form of pleasure, pleasure expressing a quality we experience as *serenity*, as an *impassioned* sense of *delightful contentment*. The greatest Classical musical compositions, for example, which adhere to the choral principles of Florentine *bel canto* and the counterpoint of J.S. Bach and such adherents as Joseph Haydn, Wolfgang Mozart, and Ludwig van Beethoven, have the marvelous power of touching something resonant within the person. It is the same quality of Classical passion, when experienced in connection with a scientific discovery, which is crucial for science, too.

Cusa's treatment of the circle, in correcting the error of Archimedes, is, therefore, of crucial clinical significance, in our search for insight, for our reaching out in our zeal to touch the substance of the human soul within ourselves, or in others. We, with similar faculty, may smell the evil, or, otherwise, the spiritual void, in one, like the faker working as a huckster in the pulpit, who has, in effect, lost his or her soul, or simply seems never to have had one. I have found that I could often, if not always, "smell"—in the spiritual sense—a faker in my vicinity, and may react, and that appropriately, to that sensation.

Creativity, both Classical artistic creativity and its neces-

principle, by identifying a mathematical formula! For the student, the principle itself does not exist! Such is one of the typical effects of reductionist modes in education.

sary twin, scientific creativity, are not as much a means to an end, as an end, a true *good*, in and of themselves. Be patient; it will do good, when the occasion arises. Creativity, so defined, is the true font of genius, of the great Classical artistic and scientific creations by and for humanity. It is through that good expressed by the act of discovery of a universal physical principle, such as the act of reliving Kepler's discovery of universal gravitation, that the student experiences the ontological quality of individual human existence, the famous "spiritual" quality, which the human personality shares with the Creator. Such is the ontological quality of *spirituality* of appropriately impassioned performance, in Florentine *bel canto*, of a contrapuntal choral work such as Bach's *Jesu, meine Freude*. Such is the creativity of Wolfgang Mozart and Ludwig van Beethoven.

That sense of the human soul is what is entirely absent in the reading of the translation of Wenck provided by Hopkins. It is my excellent judgment on this matter, that that shortcoming was not introduced by Hopkins' scholarly craftsmanship. Similarly, there was never any true creativity expressed in Norbert Wiener's work on the subject of "information theory," nor the argument for "artificial intelligence" by John von Neumann. Those among us who have souls, and know them, are saddened by the "information theorists," in whom, as in the creatures or the author of H.G. Wells' *The Island of Doctor Moreau*, in which activity of the spoor of a nearby human soul is not to be found.

Wenck's Failed Theology

From that vantage-point, we should recognize that Wenck's problem is not so much his expressed difference with Cusa, as much as with his own, unresolved doubts respecting the very idea of God. He wishes to believe that he can portray himself as believing in the Creator, even perhaps passionately, despite what his own document exposes as his implicit lack of a rigorous proof of, or passion for that which he desires to believe. Of all of the works of Cusa which were available to be attacked, it is clinically crucial that Wenck should have chosen Cusa's founding of modern experimental physical science as his target; that choice is singularly, crucially revealing of the existence and nature of Wenck's rather typical own, deeply underlying theological doubts. His polemic against Cusa does not express a mind which knows the Creator.

For example: The notion of the existence of a Creator, is potentially troublesome to almost any would-be believer, or atheist, alike. There is no shame in that itself; there is no shame in the existence of honest ignorance. The risk is that *an unrecognized* ignorance may tempt the misguided human mind, as if out of desperation, to some more or less nominalist, Sophist-like presumption, a presumption which seems to explain away painful doubts, but, actually, pollutes uncertainty with madness. This often goes to the point of a personal expe-

rience of an existential crisis as by professed existentialists as such, respecting one's belief in the reality of one's sense of even the existence of one's self. Unresolved, this may lead to the conception of dangerously false beliefs respecting the notions of human individual mortality and immortality.²³

For example: The very idea of death poses the question of immortality: a question which afflicts every child as soon as the death of a member of the family, or similar event, is experienced.

For example: "Does Cartesian 'I-ness' correspond to an actual, immortal existence?" The existential predicament of Husserl offshoot and Nazi Party philosopher Martin Heidegger, and his neo-Kantian friends without Nazi Party-cards, Horkheimer, Adorno, and the neo-Kantian Arendt, is relevant here: "If so, in what way would this immortality be efficiently expressed after I am dead?" "If I am a soul without a body, even 'thrown,' by reliance on reductionist methods such as those of the Cartesians, into a society of which I am not a functionally integral part, how can an immaterial being, imagining himself living in such a world, act efficiently upon the material universe? Why should a Heidegger, or Descartes, or John Locke, even try?!"

Therefore, for example, for reason of such considerations, what the frequently troubled would-be believer thought his Creator to be, has been a reflection of what his religious belief prompts him to believe about the way in which the universe is organized. This is the case, whether he, or she considers the human individual as either a functional part of that universe, or the universe as merely a vehicle within which he happens to be a passenger at that moment, but to whose actual nature he is otherwise alien.

In modern society, a relevant problem of conception is implied. "Do the presently accepted doctrines of official science permit the included, *efficient* form of existence of an immortal human soul?"

Notably, Wenck's reaction, on this account, to *De Docta Ignorantia*, is not a unique event during that general period of history. Wenck's attempts, which were visibly rooted in political motives of the time, were followed by the attack on Cusa's *De Docta Ignorantia* by no less than the Venetian spy, Zorzi (aka Giorgi), who served in the singularly unpalat-

able role of marriage counselor to that ogre known as England's King Henry VIII.²⁴

For example: During the lifetimes of Cusa and Wenck, the chief enemy against which actual Christianity was obliged to wrestle, was, most immediately, the past and resurgent influence of a Venetian financier oligarchy, an oligarchy which had previously ruled Europe during the period from the time of the Albigensian Crusade, and of the Crusade known as the Norman Conquest, and beyond.

It is notable on this account, that the society of the Norman Crusaders, which was dominated by the role of the Venetian financier-oligarchy, was, systemically, a society cast in the "Spartan" model of the pagan Olympian Zeus portrayed by Aeschylus' *Prometheus Bound*, a so-called "oligarchical" or "traditional" society, in which the majority of human subjects were forbidden to express those creative powers of the individual mind which distinguish the human individual from the beasts, a society in which the image of a reigning God is cast in the image of a beast who is a beast to mankind, as were the Grand Inquisitor Tomás de Torquemada, the revolutionary Martinist freemason Count Joseph de Maistre, and as were the followers of de Maistre, Napoleon Bonaparte, Adolf Hitler, or U.S. Vice-President Dick Cheney today.

So, the conflicts which those contemporaries, and successors of Cusa, Wenck, and Zorzi experienced, were dominated by the process leading, from A.D. 1453 on, into the onrush of what became the A.D. 1492-1648 religious warfare launched through the same Grand Inquisitor, Tomás de Torquemada. This was the Torquemada, who was also the Grand Inquisitor of a perceptive Dostoevsky's novel, who was also used as a model, by Martinist freemasonry's Count Joseph de Maistre, for the defense of the French Reign of Terror, and for de Maistre's design of the remade personality of that Emperor Napoleon Bonaparte who was to serve, later, as the model for the Adolf Hitler tyranny.

This same period, A.D. 1492-1648, was also a period of the transition within Venice, to the hegemonic influence of the empiricist model, imitating the dogma of William of Ockham, as this shift was launched by the Paolo Sarpi who remains the central figure of those currents of modern European culture which are the principal intellectual source of threats to the existence of our constitutional U.S. republic today. Ockham and Sarpi are the special root of the dogmas, based, like gambling advocate Galileo, on the usurious irrationality of statistics of gambling, for both science and theology, of imperial Anglo-Dutch Liberalism. It was against that Anglo-

23. The argument applicable to the case of Wenck, is one also made by Philo of Alexandria, today esteemed as a rabbi and friend of the Apostle Peter, who has been often referenced as an authority by notable Catholic theologians. Philo condemns that doctrine of Aristotle which favors those admirers of Bernard Mandeville, François Quesnay, Adam Smith, Jeremy Bentham, and Satan, who insisted that God's act of Creation, by creating a perfected universe, prevented God Himself from changing it: implicitly leaving the power of change to Satan, or that Whore of Babylon better recognized as the Roman Empire of Capri residents Augustus Caesar and the Tiberius who assigned Pontius Pilate to Judea. The real universe is not Aristotelean, but, rather, conceptually, a Platonic system of continuing (i.e., anti-entropic) creation.

24. In his major work, *Harmonice Mundi*, Francesco Zorzi (Giorgi) attacks Cusa's *De Docta Ignorantia*. In what should become known as the founding statement of Speculative Freemasonry, Zorzi states: "The seeker after the Monas [the one] may retreat into negative theology and the 'Docta Ignorantia,' or he may seek to follow the divine Monas in its expansion into the three Worlds" (cited in Francis A. Yates, *The Rosicrucian Enlightenment* (Oxford: Routledge, 1986).



“Now, eighteen months after the first light, three months after the true day, but a very few days after the pure Sun of that most wonderful study began to shine, nothing restrains me; it is my pleasure to taunt mortal men with the candid acknowledgment that I am stealing the golden vessels of the Egyptians to build a tabernacle to my God from them, far, far away from the boundaries of Egypt. If you forgive me, I shall rejoice; if you are enraged with me, I shall bear it. See, I cast the die, and I write the book. Whether it is to be read by the people of the present or of the future makes no difference: let it await its read for a hundred years, if God Himself has stood ready for six thousand years for one to study Him.” —Johannes Kepler, *Harmony of the World*

Dutch Liberalism which I was, chiefly, impelled to wrestle from childhood on, to the present time.

The political issue of the leading work of Nicholas of Cusa, was the combined effect of Cusa’s outline of the principle of the modern sovereign nation-state republic, as in *Concordantia Catholica*, and the complementary establishment of modern physical science, as in works beginning with his *De Docta Ignorantia*. Both of these contributions to the emergence of modern society, arising from the rot of preceding oligarchical systems of rule, have been, combined as the usual motives for various sorts of attacks on Cusa’s work, including the attacks on Kepler, Leibniz, et al., by the empiricist followers, such as the pro-imperialist Anglo-Dutch Liberals brought into being by Paolo Sarpi’s neo-Ockhamite empiricism.

Reviewing what I have argued in this report, thus far, the trouble with Wenck is that he shares with the evil Olympian Zeus of Aeschylus’ *Prometheus Bound*, the oligarchical intention to degrade the mass of human individuals into virtual, domesticated, or hunted cattle. To deny those persons the right to fulfill their essential obligation as creatures made in the likeness of the Creator, as *Genesis 1* prescribes, and as the pervasive principle of *De Docta Ignorantia* expresses this.

Wenck’s fault is therefore coincident with the charge against Aristotle made by Philo of Alexandria, that Aristotle’s doctrine degrades the role of the Creator Himself to the status of a Personality made impotent by the Hand of His Own Creation of a universe of a fixed order, in which existence of the anti-entropic power of continuing Creation is denied to even the Creator himself, to degrade the Creator Himself. Wenck is a lackey of an oligarchical system, a system which denies the existence of that specific quality of action, as expressed by Cusa’s principle of unknown learning, which defines the human individual as made in the likeness of the Creator.

My own experience with these matters, from childhood and adolescence on, is a relevant illustration of precisely this general nature of the theological dispute expressed by Wenck’s politically motivated attack on Cusa.

3. Euclid: The Relevant Paradox

Review the matter which I have set before us from my own, autobiographical standpoint. Compare that with your own relevant experience. Since the essential challenge before us is care for the fostering of the development of the children into the young adults of a quality required today, look at this from the standpoint of my own relevant, personal experience in treating the challenge to which I point here.

A clear-headed, clinical sort of insight into the roots of such apparent existential paradoxes as those, demands both the adoption of the standpoint of Riemannian dynamics, and, also, a correlated recognition, that Riemannian dynamics is a rebirth, in an amplified form, of what was already understood, as the principle of action of *Sphaerics (dynamis)*—Leibniz’s *dynamics*, and the anti-reductionist physical *dynamics* of Gauss and Riemann, bequeathed to modern times by the relevant ancient Greeks of such persuasions as the Pythagoreans and the other circles of Socrates and Plato.²⁵

25. As I have stressed earlier, here: In competent physical science, there is a necessary distinction between mathematics as such, as is proposed as the characteristic fallacy of the Euclidean, and the mathematics which is employed as the mere message-carrier of physical science. This distinction, which was made emphatically for all competent strains of modern science by Bernhard Riemann, has been given a brilliant broader dimension by the work of Academician V.I. Vernadsky’s experimentally rigorous definition of the distinctions among the non-living, the Biosphere, and the Noösphere.



“On the matter of science, many theologians have tended to do as that Sophist, the notorious apriorist Euclid [shown here] of Euclid’s Elements had done, in his mutilation of the original work which he parodied, destructively, from, chiefly, the Pythagoreans and the circles of Socrates and Plato.”

The essential existential paradoxes embedded in the more customary beliefs of today, are expressed in a pathological form which is equivalent to the radical reductionist’s: “*You can not avoid the inevitable trends in current history.*” The pessimist who expresses that reductionist’s outlook, rejects the idea of acting upon the body of ostensibly axiomatic, apparently reigning assumptions. That pessimist sees himself, or herself, as a statistical-mechanical “blivet” being moved statistically as he, or she were the typical inhabitant of a Boltzmann’s Machian gas system. The popularity of what are intrinsically generally admired mechanistic-statistical economic-trend projections, is typical of a widespread infection of popular and other leading opinion with the pathology of such cultural-existentialist pessimism.

A Lesson From Experience

Probably, the most useful paradigm for pedagogical study on account of that implicitly existentialist form of pessimism,

Prior to Riemann and Vernadsky, this was already systemically characteristic of the methods of physical geometry presented by Kepler in his *The New Astronomy* and *World Harmony*.

is the case of the Sophist Euclid who is known to us, chiefly, through the influence of the teaching of either Euclid’s *Elements* or some derivative. As I have proposed here, take my own experience as illustration.

Somewhere in the course of childhood, I became aware of the existence of the actual cause for my doubt about the source of my own most troublesome sorts of what were largely induced, but also habituated beliefs.

I began to understand this conflict at the time I was confronted with an adolescent’s standard secondary-school course in Plane (pro-Euclidean) Geometry. At that time, after studying the geometry of structural beams at a nearby U.S. Navy base, I had already, like the reformers of the Eiffel Tower more recently, recognized the importance of the role of choices of geometry in optimizing the ratio of strength to weight-of-mass in such structures; but, until that first day in geometry class, I had yet to be efficiently confronted with awareness of the contrary, obviously false implications, of the idea of an abstract geometry which is premised upon so-called Euclidean definitions, axioms, and postulates. Until that day, the idea of a Euclidean *apriorist* matrix, had simply never occurred to me. Therefore, I had the consequent relative advantage of recognizing, more or less immediately, the falseness of Euclidean and similar systems, from the outset of that encounter.

My reaction to this classroom encounter had come two years after I had begun what became a habit of reading from English translations of French and German, in addition to English works of notable Seventeenth- and Eighteenth-Century philosophers. The experience of the encounter with the geometry class had two principal, complementary effects. It steered my attention into what soon became an adherence to the available work of Leibniz, while clarifying my own seemingly instinctive, and powerfully persisting reluctance to accept most of what I had been exposed to as conventional dogma of classroom and larger society alike.

At that time, except for Leibniz’s writings, I had virtually no clear perspective presented to me from available sources, until after my later return from war-time military service. My own views were clear to me, from my adolescence, onward, as were certain essentials I had adopted from Leibniz. However, otherwise, late into my adolescence, I was only increasingly well-informed of the evils of empiricism in general, and Kantianism in particular. My own situation, on this account, reflected the extent to which, most young citizens of that time shared my typically American, healthy contempt for prevalent European oligarchical traditions. I was caught, otherwise, in an environment more or less dominated by the then prevalent, anglophile corruption of U.S. culture. This corruption of my cultural surroundings included the habitats of public and higher education, which were, then, like most popular opinion,

predominantly, virtually a desert of rampant empiricist, or even worse ideology.

My first post-war philosophical reaction, on that account, was my wrestling with the concept of a principle of life as such, a concern merely typified by my wrestling with a text by Pierre Lecomte de Noüy.²⁶ The crucial development, however, was my, subsequent, hostile reaction to the notion of “information theory” which was featured in my otherwise amiable, early 1948 reading of a pre-publication reviewers’ edition of Professor Norbert Wiener’s *Cybernetics*.²⁷ My reaction against the cultish dogma of “information theory” from this reading of Wiener’s work, became, immediately, the central object of my intellectual life, up through the point, in 1952-1953, that successive study of leading writings of Georg Cantor and then Bernard Riemann’s 1854 habilitation dissertation, provoked my defining of the principle of *potential relative population-density*, as the essential functional distinction of the economy of the human individual and his, or her species from that of the beasts.

This reaction against Wiener’s “information theory,” integrated with my continuing concern with the distinction of life from non-living processes, and of ideas of universal physical principle from mere mathematical formalism, was complemented by my fascination with the subject of the role of Classical irony in poetry, prose, and the related effects of Classical musical composition and performance. After wrestling with the thesis of Riemann’s habilitation dissertation, all of these topics were unified for me as facets of a single, subsuming conception. That conception underlies my reaction to Hopkins’ referenced title here. That single conception can be brought into a single focus on the subject of the Sophistry of Euclid’s *Elements*.

During my adolescence, I had already rejected Euclidean geometry, in favor of the influence which notable writings of Leibniz had exerted. The idea of a physical geometry gave my thoughts a certain direction, if not a completed definition of such a geometry, until about the time of my thirtieth birthday, when Riemann’s habilitation dissertation, striking like a lightning bolt, clarified my thoughts on this matter. The essential influences which shaped the direction of my thinking during the 1945-1953 interval, were, first, the notion of living processes and their residues as a distinct physical-space, not simply included in a physics of non-living processes, and, second, from 1948 onward, that, contrary to Wiener, the creative powers of the individual mind were a distinct quality of process, as distinct from both living and non-living processes

26. Pierre Lecomte de Noüy, *Human Destiny* (London: Longmans, Green & Co., 1947).

27. Norbert Wiener (New York: Wiley, 1948). Wiener’s presentation of the notions of design of control mechanisms was most pleasing. It was his philosophy, thoroughly polluted with the influence of Bertrand Russell, which was disgusting.

as living processes were distinct from non-living. Riemann’s habilitation dissertation crystallized this map of reality for me, and paved the way for my later, gradual adoption of the work of Vernadsky, more and more, as key for a more adequate understanding of the universe.

In all of this, from my adolescence on, I was always an advocate of the notion of a principle of Leibnizian dynamics, as opposed to both a Euclidean and a Cartesian mechanistic-statistical system.

Presently, experience and its correlatives have clarified many things for me, a clarification corresponding to Cusa’s concept of “learned ignorance.” The greater part of the advantage gained in this manner, was not individual study as such, but by engagement with some leading scientists of my own and the preceding generation, and others, including my own obligations incurred in my collaboration with my own immediate associates and many others. In all of this, the most crucial step of indispensable “unlearning” has been my recognition of the intrinsically destructive inhuman effects of a belief in the form of Sophistry known as Euclidean geometry.

To understand this effect of the teaching of Euclidean geometry, we should look back to a time when most of the core of ancient knowledge of geometry had been completed, as by the Pythagoreans and the other circles of Socrates and Plato. There is virtually no theorem or related material of any importance which was not correctly understood by these circles, prior to the falsification of that knowledge embodied in what we have today as Euclid’s *Elements*.

That fact should prompt a thinking person to ask himself, or herself, why should Euclid have committed that particular sort of intellectual crime against humanity? As I have already noted, above, the essential answer to that question is that Euclid was a Sophist. The significance of this fact is made accessible through study of surviving evidence of the actual principles of physical geometry as developed by the circles of the Pythagoreans, Socrates, and Plato, during a period concluding with Plato’s death.

The Sophists were the most important of the reductionist cults spawned, chiefly, by the Delphi Apollo cult, which introduced a method, which was later copied by corrupting agencies such as the existentialist fanatics of the Congress for Cultural Freedom, to corrupt the minds of the young people from leading families of Athens in a manner which was imitated in the 1945-1956 conditioning of newborn persons from families of a general middle-class or upper-class white-collar category. All of the worst expressions of the 1968er “Baby Boomer” generation, which have contributed essentially to destroying the economy and social life of the U.S.A. and western and central Europe over the period since Spring-Summer-Autumn 1968, are outcrops from the kind of influence represented by hateful existentialist creatures in the following of Heidegger, Horkheimer, Adorno, Arendt, and the like, and the influence of the British psychological-warfare



EIRNS/George Hollis

For LaRouche, “the most crucial step of indispensable ‘unlearning’ has been my recognition of the intrinsically destructively inhuman effects of a belief in the form of Sophistry known as Euclidean geometry.” Here, he addresses members of the Youth Movement in Leesburg, Virginia, Nov. 18, 2006.

branch’s London Tavistock Clinic.

The importance of Euclid in his lifetime, and up to the present time, has been the use of his teaching of geometry as a way of destroying the creative potential of the human mind. Take this into account, to understand a reading of Euclid, called “information theory” and “artificial intelligence” in destroying the morals and productivity of the minds of U.S. citizens today.

The Pestilence of ‘Environmentalism’

Euclid was a product of precisely that kind of intention and product in his time, and thereafter. The key to understanding this fact is a reference to the actual historical implications of Aeschylus’ *Prometheus Bound*.

Like the virtually identical mass-brainwashing of the leading layer of the “Baby Boomer” generation, in the anti-human, neo-Dionysian “Luddite” cult called “environmentalism,” the idea of “environmentalism” has arisen in the post-1945 interval as a crucial element of a social policy intended to eradicate the existence and influence of the U.S.A. from future world history.

The U.S. battle against the Confederacy was prompted by the British Empire’s launching that Confederacy as a tool of Britain’s Lord Palmerston. Our Civil War was a battle against the British Empire’s avowed intention to break up the U.S.A. into a squabbling set of baronies, whose quarrels would ensure the degradation of the territories’ quarreling elements into a virtual state of bucolic agrarian imbecility of the type spread through the slave-state regions.

The action of the Anglo-Dutch Liberal interests, today, is to realize that same kind of intention, an induced state of a bucolic form of economic imbecility, in the Americas and throughout continental Europe. That is the imperial purpose of the Anglo-Dutch Liberal form of neo-Venetian financier-oligarchical imperialism. That is the meaning of “unipolar world,” of the Tower of Babel called “globalization,” and of the launching of the present U.S. Bush-Cheney puppet regime as the instrument for bringing about the self-destruction of the U.S.A. itself.

It is a clash between two opposing social systems, that of the Anglo-Dutch Liberal form of one-world empire, and the type of sovereign nation-state republic the U.S. was created to become. That was the issue in February 1763, in July 1776, and in the intention of President Franklin Delano Roosevelt for the order of affairs in the post-war world as a whole. Only through the establishment of truly sovereign nation-state republics as the right of all peoples of the world, as President Franklin Roosevelt had intended this, in opposition to Britain’s Winston Churchill, can this planet be a safe place for anyone to live during the generation or two immediately ahead. That is, on the condition that a driving commitment to the realization of the economic benefits of fundamental, scientific, Classical cultural, and technological progress is the moral standard for education, economic policy, and personal morality in times to come.

The implications of the case of the defense of John Wenck by certain circles, up through the present day, are to be recognized in that light.

Libby Trial Fingers Cheney; Now Congress Must Do Its Job

by Edward Spannaus

The biggest mistake that Members of Congress are making, in the view of a number of qualified observers, is sitting back during the Lewis Libby trial, and hoping that Special Prosecutor Patrick Fitzgerald will do their job for them.

No matter what the outcome of the Libby trial, and no matter what further steps Fitzgerald may or may not take after the trial to pursue the Vice President, the Congress has its own unique, independent, and urgent responsibility under the U.S. Constitution, to launch the process immediately, to remove Dick Cheney from office.

What has emerged in the Libby trial concerning Cheney's role in the Valerie Plame affair, is substantial and damning, but it is only one part of the array of impeachable offenses committed by Dick Cheney over the past six years, through which he has subverted the Constitution and abused his powers of office. It is known that Cheney and his office were in the forefront of launching aggressive war, using that war to enrich Cheney and his pals through private contracting boondoggles involving Halliburton and others, promoting torture and abuse of prisoners in violation of U.S. laws and international treaties, promoting the practice of "extraordinary renditions" to abduct suspects and send them to third countries to be tortured, and of course the unprecedented use of "signing statements" by the President to subvert the Constitutional system of separation of powers and checks and balances. The list goes on—but of course, Congress knows all this; its members know the bill of impeachment, because they have attempted to investigate all this in recent years, although under tight restraints which are now loosened as a result of the November elections.

Having made that essential point, we now proceed to briefly look at the growing drumbeat for Cheney's removal, and then to review some of the damning evidence against Cheney which is now part of the public record as a result of the Libby trial.

The Drumbeat Grows

During the last week of the Libby trial, a number of establishment media outlets featured the threat posed to Cheney by the Libby trial and other revelations about him.

- On Feb. 19, the *National Journal* reported that if Libby is found guilty, Federal investigators are likely to probe further to determine if Libby devised a cover story to shield Cheney. The *Journal* added that investigators will probe whether Cheney knew about the leaks of Valerie Plame's CIA identity ahead of time, or encouraged Libby to leak information to reporters about her status. The article cited some of the same material from Libby's description of his conversations with Cheney, which are excerpted below. (See *Documentation*.)

- Also on Feb. 19, MSNBC correspondent David Shuster cited the *National Journal* article, and went on to report: "Legal sources confirm to MSNBC tonight that if Libby is convicted, prosecutors are expected to attempt to revisit Libby's vague testimony about Vice President Cheney. The idea is that prosecutors would seek to flip Libby in order to get at some of the lingering suspicions about the Vice President.×"

- On Feb. 20, the *New York Times* ran a major front-page article entitled, "Trial Spotlights Cheney's Power as an Infighter," reporting that the testimony and evidence in the Libby case is "bringing into bolder relief a portrait of a vice president with free rein to operate inside the White House as he saw fit in order to debunk the charges of a critic of the war in Iraq."

"The evidence in the trial shows Vice President Dick Cheney and Mr. Libby, his former chief of staff, countermanning and even occasionally misleading colleagues at the highest levels of Mr. Bush's inner circle as the two pursued their own goal of clearing the vice president's name in connection with flawed intelligence used in the case of war. . . . Unbeknownst to their colleagues, according to testimony, the



Dick Cheney's handwritten notes, on his copy of the July 6, 2003 Joe Wilson New York Times op-ed which Cheney had clipped and kept on his desk, according to Libby's grand jury testimony. Libby testified that the notes read: "Have they done this sort of thing before? Send an Amb. to answer a question? Do we ordinarily send people out pro bono to work for us? Or did his wife send him on a junket?"

two carried out a covert public relations campaign to defend not only the case for war, but also Mr. Cheney's connection to the flawed intelligence."

- On Feb. 22, ABC News pointed to Cheney as the guilty party behind Scooter Libby. "Is Cheney Next?" was the headline of the published story, which asked, "Could a guilty verdict for a former aide bring further criminal scrutiny of Vice President Dick Cheney?" The answer—"yes"—came from a former deputy to Whitewater independent counsel Kenneth Starr, who said that a natural follow-on to the Libby trial, would be to determine whether Cheney was involved in obstructing justice. He cited Libby's grand jury testimony in which Libby told Cheney, that he had first learned about Valerie Plame from NBC reporter Tim Russert—even though both of them knew that Libby had actually first learned about Plame from Cheney himself. One scenario is that if Libby is convicted, Fitzgerald could then offer leniency to Libby's testimony about Cheney's role.

- The March issue of *Gentleman's Quarterly*, in a feature called "The People v. Richard B. Cheney," laid out a set of potential Articles of Impeachment against the Vice President, for concocting fraudulent intelligence to justify the invasion of Iraq, obstructing the nation's intelligence-gathering institutions, and subverting the authority and functions of Congress by means of the secret proceedings of his Energy Task Force.

Libby: A Scapegoat?

The Libby trial concluded with a mighty thunderclap from Fitzgerald on Feb. 20—which received scant attention from much of the news media. The backdrop was this:

Pursuing their theme that Libby was a scapegoat for others, Libby's lawyers stressed repeatedly that other Administration officials, namely Richard Armitage, Karl Rove, and Ari Fleischer, had told reporters about Valerie Plame, yet the White House was hanging Libby out "as a public scapegoat." Libby's lead lawyer Ted Wells put great emphasis on Cheney's famous "meat grinder" quote, submitted as a trial

exhibit—"Not going to protect one staffer & sacrifice the guy the Pres. [crossed out] that was asked to stick his neck in the meat grinder because of the incompetence of others"—as the best evidence of Libby's state of mind. Wells argued that Libby had no motive to lie; rather, he was just concerned that he was being hung out to dry.

(Isn't it a bit ironic, that the "best evidence" of Libby's state of mind, is a statement written by Dick Cheney?)

As part of their "somebody else did it" line of defense, Libby's lawyers further put the spotlight on Cheney in their closing arguments, with Wells asserting that the prosecution, by its questions, "really tried to put a cloud over Vice President Cheney," by suggesting that Cheney had told Libby to disclose Plame's identity.

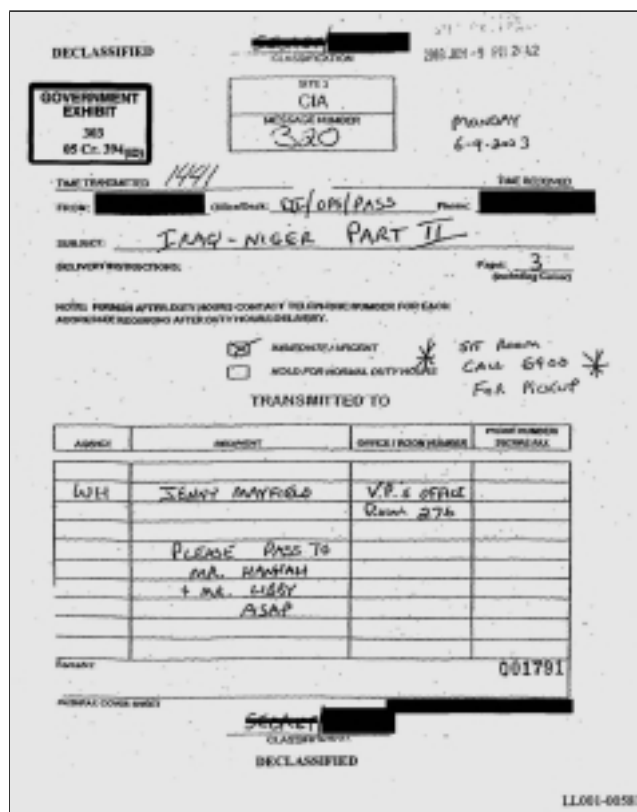
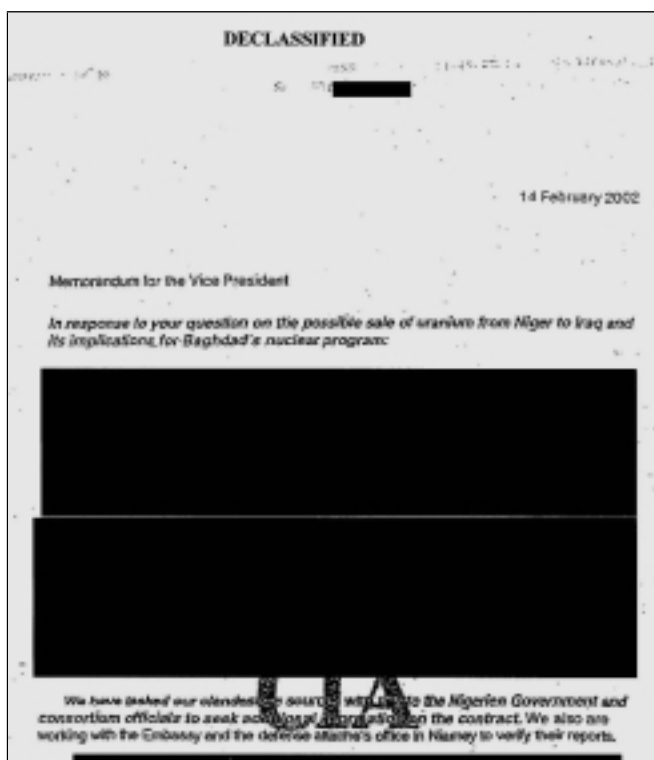
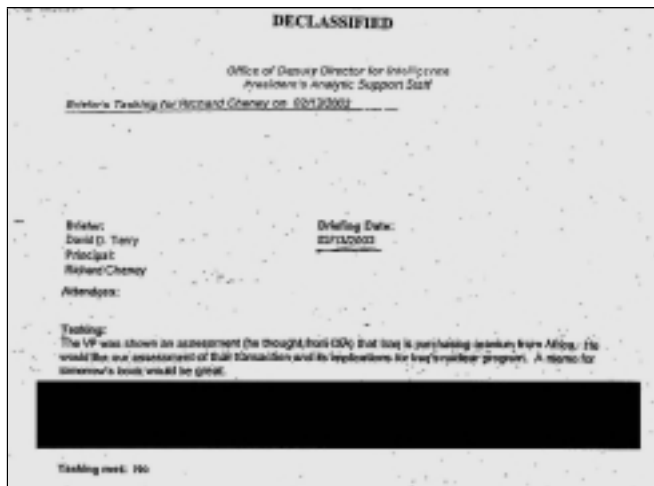
Although trying not to be too obvious in doing exactly what Fitzgerald had accused him of doing—seeking jury nullification—Wells came back again and again to the fact that there was war between the CIA and the White House, and that Libby was taking the fall. "Don't sacrifice Scooter Libby because of how you feel about the war in Iraq, or the Bush Administration," Wells implored the jury in closing.

'A Cloud Over the Vice President'

"There *is* a cloud over the Vice President," Fitzgerald told the jury in his final summation, pointing to Cheney's handwritten notes on his copy of Wilson's *New York Times* op-ed (see illustration), to Cheney's many discussions with Libby about Joe Wilson, and the fact that "the Vice President sent Mr. Libby off to meet with [*Times* reporter] Judith Miller"

"We didn't put that cloud there," Fitzgerald said, emphasizing: "That cloud remains there, because the defendant obstructed justice and lied about what happened. That cloud is something you can't pretend isn't there."

Fitzgerald also highlighted for the jury the fact that Libby discussed his story with Cheney, knowing that the Federal investigation was underway. He's not supposed to be talking to other people, Fitzgerald noted, but "the only person he tells



When Joe Wilson started speaking out about his mission to Niger which debunked the fraudulent Iraq/Niger uranium claim, Cheney insisted that he was not responsible for Wilson's trip and knew nothing about it. These documents show otherwise. On the top left is a note by Cheney's CIA briefer, showing that on Feb. 13, 2002, the Vice President asked for CIA's assessment of reports that Iraq was purchasing uranium from Africa. The document (bottom left) shows that Cheney was informed the very next day, that CIA, in response to "your question" had "tasked our clandestine source with ties to the Nigerian Government" to seek additional information. The document (above) shows that these documents were faxed to Cheney's office on June 9, 2003—four weeks before Wilson's New York Times op-ed.

is the Vice President, the guy who was his source. Think about that."

Throughout the final day, both prosecution and defense lawyers highlighted the fact that all of Libby's contacts with reporters were at Cheney's direction. Defense attorney Wells himself, for example, trying to explain why Libby took two hours out of a busy schedule dealing with urgent national security and terrorism matters on July 12, to meet with Judith Miller, told the jury that the reason Libby did this, was because Cheney had directed him to meet with her and to tell her about the National Intelligence Estimate (see *Documentation*). President Bush had just allegedly declassified the NIE at Cheney's request so that it could be leaked to a reporter, and,

Wells said, "this was a secret mission that only three people in the world knew about—the President, the Vice President, and Scooter Libby."

People Could Get Killed

Although the issue of whether Valerie Plame was a covert agent was excluded as an issue by the judge in the Libby trial—since the crime charged in the case was not the leak of Plame's identity, but Libby's lies to the FBI and the grand jury—Fitzgerald did succeed in featuring it prominently in his closing statement.

In showing why it would have been impossible for Libby to have forgotten all of his conversations about Plame prior

to his mid-July conversation with NBC reporter Tim Russert, Fitzgerald emphasized the uniqueness and the importance of the Plame issue as well: the anger that Cheney and Libby had toward Wilson for undermining their case for the Iraq War.

Among the pre-Russert discussions described by Fitzgerald, was a June 14 meeting with CIA briefer Craig Schmall, in which it was Libby who told Schmall, that Wilson's wife worked for the CIA; Libby asked Schmall why Wilson was told that Cheney had instigated his fact-finding mission to Africa. (See illustrations documenting that it was indeed Cheney's inquiry which was the trigger for Wilson's trip.)

Schmall testified that he had been very alarmed by the exposure of Plame in a Robert Novak syndicated column on July 14, 2003, and that he had told Cheney and Libby that the people Plame had worked with in foreign countries could be harrassed, arrested, tortured, or killed. Therefore, in his closing argument, Fitzgerald simply recalled what Schmall had said, and he told the jury, "if you're talking about something that could get people killed, you'd remember it; that would be important."

‘What Was the Role of the Vice President?’

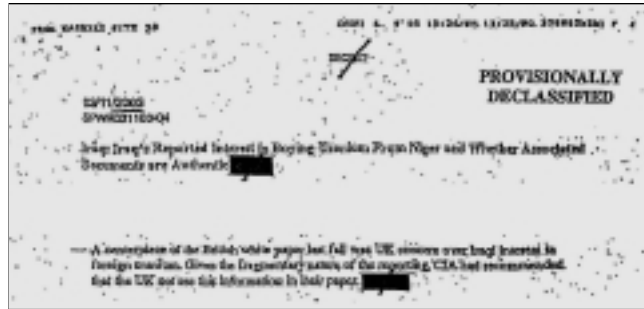
In his closing remarks to the jury, Fitzgerald returned to the theme of the "cloud over the Vice President." "Don't you think that the American people were entitled to some straight answers?" Fitzgerald asked. He pointed out that when a critic of the war (i.e., Joe Wilson) went public, he was smeared, and the fact that his wife worked in the CIA's non-proliferation division was spread all over the newspapers.

"People wanted to know, who did it? What was the role of Mr. Libby? What was the role of the Vice President?" The FBI and the grand jury deserved straight answers, Fitzgerald declared, but instead, Libby "threw sand in [their] eyes," and obstructed justice.

As Fitzgerald said on the day of Libby's indictment, Libby's lying and obstruction of justice had made it impossible for prosecutors to get to the bottom of the underlying subject of their investigation: Who was responsible for the leaking of the identity of Valerie Plame Wilson? Nonetheless, there is now sufficient evidence in the public record—and much more still to be discovered—so that the Congress can launch its own investigation, which can and must lead to the early impeachment of Vice President Cheney.

More New Evidence

In all the hub-bub around the trial, the news media (with the exception of a handful of diligent bloggers), has paid no attention to the documents bearing on the original Niger yellowcake claim, which have been released as trial exhibits. They provide the most extensive record so far, of the sordid pathway through which the bogus claim that Saddam Hussein was seeking uranium ore from Niger, was used to corrupt the intelligence picture in the lead-up to the Iraq War, and was inserted into the President's January 2003 State of the Union address.



The Cheney-Bush Administration justified the infamous 16 words ("The British Government has learned that Saddam Hussein recently sought significant quantities of uranium from Africa") by attributing it to the British, since the CIA and State Department had previously kept it out of U.S. proclamations. This CIA document, dated 3/11/2003, states that the CIA had also urged the British not to go with the Niger claims.

Even though the documents that have just been released provide a more comprehensive picture than that earlier provided by the Senate Select Committee on Intelligence, the paper trail is still quite limited, and contains significant gaps and contradictions. What is still to be determined—which only a competent and thorough Congressional investigation can accomplish—is: (1) Who was really behind the Niger document forgeries, which reportedly were shopped into U.S. agencies through Italian military intelligence? Who from the U.S. side (for example, Michael Ledeen, etc.) was involved? (2) What was the full scope of the parallel intelligence network being run by Cheney's office which extended into the Pentagon via the Office of Special Plans and other nests of corruption?

What Cheney and Libby obviously feared, is that Joe Wilson's revelations would expose not only the Niger yellowcake fraud, but the bigger, uglier reality that lay behind it. Which is what Congress must go after, in the process of removing Cheney from office, so as to prevent this from ever happening again.

Documentation

Here are excerpts from the court transcript of the grand jury testimony of I. Lewis Libby, presented at his trial by special prosecutor Patrick Fitzgerald. The subhead was added by EIR.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

Friday, March 5, 2004

I. LEWIS LIBBY

was called as a witness and, after first being duly sworn by

the Foreperson of the Grand Jury, was examined and testified as follows:

EXAMINATION BY MR. FITZGERALD:

A: . . . In—as we started to go through the week of July 7, after the Wilson report, the Vice President thought it was very important that the NI—what was in the NIE become known publicly . . . the Vice President instructed me to go talk to Judy Miller, to lay this out for her. And I said, that’s a problem, Mr. Vice President, because the NIE is a classified document. And the Vice President said that he would talk to the President and get the President’s approval for us to use the document. . . .

Q: Does that indicate a meeting between you, the Vice President and Stephen Hadley?

A: Yes, sir. . . .

Q: And the next line?

A: Says—this is Steve Hadley saying, no question, it’s better if we leak the NIE.

Q: What does that mean?

A: Steve Hadley is saying that it would be better if we got the NIE out, and “leak” means telling it to—giving it to a reporter to say, you know, here’s something you can write about. It’s like an exclusive or something like that.

Q: And had the NIE been declassified at that point?

A: It had in the sense that the President had told me to go out and use it with Judith Miller. I don’t, I don’t know that Mr. Hadley knew that at that point. . . .

Q:—did you tell Mr. Hadley at the time that you had already in effect leaked the NIE by—with the President’s approval by telling—Judith Miller?

A: I—yeah, I don’t know if it’s leaking once it’s declassified and you’re told to do it. I had talked to Judith Miller about the NIE at the President’s, you know, at, at the President’s approval relayed to me through the Vice President, and I did not tell Mr. Hadley at that time.

Q: And was there any reason why you didn’t tell Mr. Hadley that you had told Ms. Miller about the NIE?

A: I was sitting with the Vice President. The Vice President knew it and chose not to tell Mr. Hadley and so I didn’t change what he had done.

Wednesday, March 24

Q: Do you know if you spoke to the *Wall Street Journal* prior to July 18th about the NIE contents before the July 18th date came around and made the NIE publicly available?

A: I did not.

Q: Do you know who did?

A: Secretary [Paul] Wolfowitz did . . . the week, you know, after July 14, in that week, the Vice President thought we should still try and get the fact of that document out. And so he asked me to talk to the *Wall Street Journal*. We discussed the possibility of talking to the *Wall Street Journal*, to get that out. I don’t have as good a relationship with the *Wall Street Journal* as Secretary Wolfowitz did, and so we talked to Secretary Wolfowitz about—I talked to Secretary Wolfowitz about trying to get that point across, and he undertook to do so. . . .

Q: And so as a result of that conversation you understand that the contents of the NIE were shared with the *Wall Street Journal* the day before they became publicly available, on July 18th. Correct?

A: Yes, sir.

Q: Now, did there come a time when there was a lunch hosted by the Vice President with conservative columnists?

A: Yes, sir.

Q: And was that on July 17th? On July 18th?

A: One of those two days. Yes, sir.

Q: And was that in part an effort by the Vice President to sort of get the story out more, more fully in light of his frustration that Director Tenet’s statement hadn’t been as complete as he would like?

A: I think it was an attempt to get the story out more fully about many issues, including the full statement on what we understood about the NIE. . . .

Q: And during that luncheon with these columnists, do you recall if there was discussion about Mr. Wilson?

A: I think there probably was, sir.

The Coverup

Q: Did you bring it—did you—in late September and early October did you at all bring to Vice President Cheney’s attention, by the way, you should know that I did speak to Cooper, the author of the *Time* magazine article, and we discussed Wilson’s wife. And I spoke to a *Washington Post* reporter and discussed Wilson’s wife. And I talked to Judith Miller and discussed Wilson’s wife. Did you have any conversation where you relayed that information to the Vice President?

A: I think I did. Let me bring you back to that period. I think I did in that there was a conversation I had with the Vice President when all this started coming out and it was this issue as to, you know, who spoke to [Robert] Novak. . . . I went to the Vice President and said, you know, I was not the person who talked to Novak. And he something like, “I know that.” And I said, you know, “I learned this from Tim Russert.” And he sort of tilted his head to the side a little bit and then I may

have in that conversation said, I talked to other—I talked to people about it on the weekend. I don't, I don't remember. . . .

Q: And as best you can recall, you told him that you did not speak to Novak, but that you did speak to Cooper about this issue, but that you had learned the information from Mr. Russert?

A: I think what I told him was I was not the source of the leak to Mr. Novak. That I, that I in fact had heard it from Mr. Russert and that he had told me all—you know, lots of reporters, all the reporters knew about it. And I don't know if I then went on to tell him that I had discussed it with the reporters in—over the, over the July 12th weekend or not. I can't remember.

Q: And you said he tilted your [sic] head. What did you understand—tilted his head, not your head. What did you understand from his gesture or reaction in tilting his head?

A: That the Tim Russert part caught his attention. you know, that he—he reacted as if he didn't know about the Tim Russert thing or he was rehearsing it, or reconsidering it or something like that.

Q: And, and—

A: New, new sort of information. Not something he had been thinking about.

Q: And did he at any time tell you, “Well, you didn't learn it from Tim Russert, you learned it from me? Remember, back in June you and I talked about the wife working—”

A: No.

Q: “—at the CIA?”

A: No. . . .

Q: And were you aware that the President gave a speech in Chicago on October—on or about October 1 saying there's no White House involvement in any leaks whatsoever that he's aware of?

A: Yes, sir.

Q: Were you at all concerned that while the President was stating that there's no White House involvement in any leaks whatsoever, that you were one of the people who may have been referred to in the *Washington Post* column that two officials calling six reporters, that you had spoken to one of the *Time* magazine reporters who indicated they had been told about Wilson's wife and may have done so before July 14th?

A: I was concerned to make sure that the Vice President knew so he could decide what he wanted to do with it, and so I went and told the Vice President that I was not the source of the leak for the Novak column. And as I say, I may have I talked about the other stuff. I'm not sure.

Q: And you were very precise to tell him you weren't the

source of the Novak column. Were you as precise in letting him know that you could have been the source for these other columns?

A: I don't recall. What I—as I said, I'm not sure if I told him about those others at that point. I think that I may have but I don't recall as to what I told him that part. What I recall is he sort of said, you know, “You don't have to tell me, I know that you were not the leak—you were not the source of the leak.”

Q: Did you think it was something that the Vice President and the President would want to know that if an official in the White House had spoken to those reporters which are now being discussed as leaks, that they learned who the person was that spoke with them prior, prior to July 14th?

A: I would have been happy to unburden myself of it, about all of this, and I went to the Vice President and offered to tell him everything I knew, and he didn't want to hear it, and I assumed that I should not go into it. . . .

Q: And when was this conversation with, with Vice President Cheney when he told you, you didn't need to tell him anything?

A: There are actually two, and I don't recall exactly. . . . I went at it once, and then I went at it again later to be I sure that he wanted me to tell him anything. And he wanted—you know, my, my clear sense was he did not want me to go on so I did not go on.

Q: And what was it that led you to go back a second time that made you want to make sure that he knew that you were willing to tell him everything?

A: It was still out there, and there was still talk about it. I had a second conversation with him, or maybe it's a third. . . . I went back to see him and said, you know, I told you something wrong before. It turns out that I have a note that I had heard, heard about this earlier from you and I just—you know, I didn't want to leave you with the wrong, I didn't want to leave you with the wrong statement that I heard about it from Tim Russert. In fact, I had heard about it earlier, but I had forgotten it.

Q: And what did he say?

A: He didn't say much. You know, he said something about, “From me?”, something like that, and tilted his head, something he does commonly, and that was that. . . .

Q: And did he ever indicate to you, other than saying that you don't have to tell him everything, any reason why he didn't want to know?

A: I think one of the times when I went to see him to tell him that I wouldn't be available to him, that I would be out for the day for an FBI interview, or something like that, he said, you know, “Fine,” and held up his hand, you know, “I understand,” and either said or I took from it, you know, we shouldn't talk about the details of this. . . .

The American System

How FDR Reversed the 1933 Banking Crisis

During the bleak Winter months leading up to Franklin Roosevelt's inauguration as President of the United States in March 1933, the nation was sinking into despair, buoyed only by the hope that the new President would take decisive action. The most pressing problem was the accelerating collapse of the banking system, a system which had been rotted by insane speculation but was vitally necessary to the nation's economic health. It was actually a question whether Roosevelt would be inaugurated before all the banks were dead and gone.

As Roosevelt and his staff developed their plans to reorganize the banks, and thus preserve a mechanism for funneling Federal credit to bold new projects, President Hoover and his monetarist advisors were making the situation worse. They even insisted that Roosevelt share in their delusions and endorse their damaging policies. Their attempts to ensnare Roosevelt in joint declarations and premature commitments bedeviled him right up until the time he went to bed on the eve of his inauguration.

On Feb. 21, 1933, President-elect Roosevelt chose William H. Woodin to be his Secretary of the Treasury. Roosevelt made sure that Woodin received daily briefings from the Treasury Department, and personally conferred with him several times a day until they both arrived in Washington, D.C. on March 2. FDR's personal notes explain his thinking.

Roosevelt wrote of these conferences with Woodin that "we both concluded that the banking situation throughout the Nation was becoming so acute that only immediate and drastic measures could save the banks from having to close their own doors. Increasing lines of depositors were withdrawing their funds in gold or gold certificates. A proposal was made to give authority to the Treasury to deposit Government funds directly in any bank—but the Treasury did not have sufficient funds to deposit.

"On my arrival in Washington on the evening of March 2nd, Mr. Woodin told me of a suggestion that the President and I should join in a statement reiterating confidence in the fundamental soundness of American banks, and appealing to depositors to stop withdrawing funds. Many similar appeals and statements—all to the effect that nothing was wrong with the country—had been made during preceding years. Again, I felt that strong, positive, definite action should take the place of appeals."

It was traditional for the President-elect and his family

to visit the outgoing President on the afternoon before the inauguration, but the visit was marred by Herbert Hoover's insistence that Roosevelt publicly approve his policies. If he did, this would mean the abandonment of 90% of the New Deal policies which Roosevelt had promised to the American people when he accepted the Democratic Party's nomination.

The Roosevelt family found themselves sitting on the sidelines while the President-elect was dragooned into an hour-long discussion on the banking crisis, to which Hoover had invited Secretary of the Treasury Ogden Mills and Federal Reserve governor Eugene Meyer, both of them devotees of monetarist policies. The outnumbered Roosevelt refused to be browbeaten into submission.

Roosevelt wrote about that day before his inauguration: "Messages had been coming in all day, reporting that some banks had closed their doors, that some Governors were declaring moratoria, and that more gold was being withdrawn. Later in the evening, by telephone, I told the President that while I was wholly agreeable to his closing all the banks by Proclamation, I could not, as a private citizen, join him in such a Proclamation."

"I told the President, however," continued Roosevelt, "that I believed that he had such authority under the Trading with the Enemy Act. I understood it to be the belief of the President that while some of his advisers had told him that he could do this, others had told him that it would not be legal. I had already asked Senator Thomas J. Walsh, who was to have become my Attorney General, to give me a report on such Presidential authority. As Senator Walsh had died suddenly, however, on March 2d, I had asked Mr. Homer S. Cummings to become Attorney General and had requested him for an opinion. On the evening of March 4th, I received the verbal opinion of the new Attorney General on which I based the Presidential Proclamation signed during the night of March 5th—6th, closing all banks."

During the exponentially collapsing conditions of January, February, and the first few days of March, Roosevelt could only develop, not implement, his plans for saving the banking system, since he was only a private citizen. He had ceased being Governor of New York on Jan. 2. Congressional leaders did ask his opinion on one occasion. "It had been suggested," wrote Roosevelt, "that a general sales tax be imposed to meet the great and growing deficit in the Treasury. For many years I had expressed my opposition to a general sales tax, on the ground that such a tax bore inevitably far more heavily on the poor than on the rich. This I told to the Democratic Congressional leaders. The proposed tax was not pressed."

On the eve of Roosevelt's inauguration, President Hoover telephoned twice, trying to secure Roosevelt's approval of an order restricting bank withdrawals and gold exports. Hoover was determined to keep the United States on the gold standard. He believed he could lure the British, who had abandoned the gold standard, back onto that standard if America held firm.



National Archives

A scene of panic on Wall Street in 1933, as depositors queue up to withdraw their money from the banks. Outgoing President Hoover wanted President-elect Roosevelt to join him in proclaiming that everything was just fine; FDR refused, and moved to take action immediately after his inauguration.

The British and European international investment banks were delighted with this belief, because it enabled them to drain gold out of the United States with the complicity of their Wall Street investment bank allies. As long as America was on the gold standard, it was a cash cow for the British Empire and for European banks in nations that were not on the gold standard. And with less and less gold, a United States on the gold standard would not have enough backing for credit to industry and agriculture to enable it to restart its economy.

Banking Holiday Proclaimed

“By Inauguration Day,” wrote Roosevelt, “practically every bank in the country had either been closed or placed under restrictions by State Proclamations. Federal Reserve banks observed the State holidays, and were also closed on March 4th. All the leading exchanges ceased operations. It can be said that financial and banking business in the United States had stopped.” President Roosevelt’s first Presidential Proclamation, issued the day after his inauguration, called Congress into an extraordinary session which would be held on March 9. But his proclamation proclaiming a bank holiday, although issued on March 6, had actually been the first proclamation drafted.

The bank holiday was to continue until March 9, when the extraordinary session of Congress would be held. On that day, Congress passed the Emergency Banking Act, which extended the bank holiday in order to give the government time to reorganize the banking system. The Act provided for massive influxes of credit into the system by authorizing

banks to issue and sell their preferred stock to the Reconstruction Finance Corp. This permitted them to obtain funds without creating claims superior to the claims of their depositors. The legislation also made it possible for any member bank to meet all demands for currency, so long as it had sound assets, because it could borrow against these assets from the Federal Reserve banks.

“Between March 6th and March 9th,” wrote Roosevelt, “we were busy drafting this legislation in conference with the Congressional leaders, and also devoting ourselves to devising arrangements to permit the banks to meet certain essential payments during the banking holiday.

“The Secretary of the Treasury issued a series of regulations, and distributed them through the Federal Reserve banks, permitting specific types of banking transactions.” Banks were also permitted to perform certain functions required to provide the community with food, medicine and other necessities of life, to relieve distress, and to pay usual salaries and wages; and banks were authorized to accept special trust deposits withdrawable on demand—but all of these regulations prohibited any bank from paying out gold

or gold certificates or permitting any withdrawals of currency for hoarding purposes.”

Restoration of Confidence

At the end of the bank holiday, the banks in the 12 Federal Reserve cities were opened, and on the following day, the sound banks in around 250 cities opened their doors. In succeeding days, sound banks in smaller cities and towns opened. Roosevelt wrote that, “By this time, there had been such restoration of confidence, that as soon as the banks were reopened, a large volume of currency was re-deposited. . . . There was also a rapid return of gold and gold certificates to the Reserve banks and to the Treasury. By the middle of April, deposits in the reporting member banks had increased by \$1 billion, and before the end of June, by more than \$2 billion.”

A reorganized banking system with increased deposits and the ability to call upon Federal credit was an essential precondition for America’s ability to assert her national sovereignty, in order to provide for the general welfare. As President Roosevelt wrote, “The New Deal was fundamentally intended as a modern expression of ideals set forth one hundred and fifty years ago in the Preamble of the Constitution of the United States—‘a more perfect union, justice, domestic tranquility, the common defense, the general welfare and the blessings of liberty to ourselves and our posterity.’ But we were not to be content with merely hoping for these ideals. We were to use the instrumentalities and powers of Government actively to fight for them.”

Momentum for Strike on Iran Threatens To Be Irreversible

by Muriel Mirak-Weissbach

Unless Vice President Dick Cheney and his political influence are removed from Washington immediately, the momentum building towards a U.S. military strike on Iran may become irreversible. Although Cheney has been severely wounded by the combination of domestic pressures, epitomized by the implications of the Lewis Libby trial, and a growing international consensus *against* the permanent war policy associated with the Cheney-Bush regime, as any good hunter knows (and Cheney is not among them), a wounded bear is a dangerous beast and will attack viciously unless neutralized.

According to Washington sources, the planned attack against Iran could come by May. All the pieces are coming into place, from a military standpoint, and the propaganda machines are working overtime to churn out stories of Iranian weapons smuggled into Iraq to be used to kill American GIs. At the same time, however, it must be stressed that the clear recognition of the nature of the war danger and what it would unleash, is prompting powerful political forces, inside the U.S. as well as abroad, especially in Russia, to intervene to prevent a new catastrophe.

The accelerated buildup towards conflict is unfolding just as Tony Blair's Britain has announced its intention to start withdrawing its forces from southern Iraq, thus leaving the U.S., with its "surge" of additional troops, as a sitting duck. Yet the British are also providing the "evidence" for a U.S. attack on Iran (see the Editorial in last week's issue), and apparently positioning themselves to let the U.S. take the brunt, should the attack occur.

Gulf of Tonkin Revisited

With the arrival in the Sea of Oman Feb. 15 of the *USS John C. Stennis* carrier group, which joined the *USS Dwight*

D. Eisenhower, in the Sea of Oman, the military buildup reached a new level, and the *USS Nimitz* is reportedly also on its way. The *Stennis* is backed by a strike group with more than 6,500 sailors and Marines and with additional mine-sweeping ships. Although the official U.S. statement claimed the deployment of the *Stennis* was "to conduct maritime security operations in regional waters, as well as to provide support for ground forces operating in Afghanistan and Iraq," the real target is Iran. With the gathering of numerous naval vessels in the region, the stage would be set for orchestrating an "accidental" confrontation between the U.S. and Iran, which would then be used to motivate a full-scale American pre-emptive attack on Iran.

A high-level U.S. official stated as much publicly. On Feb. 19, the U.S. Fifth Fleet Commander in the Persian Gulf, Vice Adm. Patrick M. Walsh told a small press conference at Fifth Fleet headquarters in Bahrain, that, "what concerns me is miscalculation. That's certainly what we are trying to avoid—a mistake that then boils over into a war." Although he placed the responsibility on Iran's shoulders, he acknowledged the danger of an "incident" which could trigger a war. Walsh pointed to military exercises being conducted by Iran, which he said could threaten innocent ships in international waters, U.S. troops, and neighboring states. He referred specifically to the northern part of the Persian Gulf, where there are two Iraqi oil platforms, and "the incursions from Iran have continued to grow over time." He emphasized that Iranian maneuvers had taken place in busy shipping lanes in the Strait of Hormuz, which is the narrow mouth through which two-fifths of world oil supplies pass.

Walsh said that Iranian sailors had loaded mines onto small mine-laying boats and test-fired a Shahab-3 ballistic



U.S. Navy/Mass Communication Specialist Seaman Kyle D. Gahlau

Dick Cheney waves to the audience aboard the USS Kitty Hawk, during his warmongering visit to Asia on Feb. 21, where he again threatened Iran.

missile into international waters. “The Shahab-3 most recently went into waters very close to the traffic-separation scheme in the straits themselves,” he said in an interview carried by Associated Press. “This gives us concern because innocent passage of vessels now is threatened,” he said.

‘Preparations Have Been Made’

Just days later, on Feb. 21, retired Air Force Col. Sam Gardiner, an expert on Iran, stressed the importance of such military preparations. Speaking at a forum of the Century Foundation in Washington, D.C., on the day of the deadline defined by the UN Security Council Resolution 1737, which called on Iran to stop enrichment of uranium, or face further sanctions, Gardiner said: “I don’t think a decision has been made [by the Bush Administration] to take action against Iran, but preparations have been made.” He said he had come to this conclusion from all available media reports, particularly two actions: sending of three U.S. mine counter-measure ships to the Persian Gulf, and the Pentagon’s announcement on Feb. 14 that 1,000 troops, in addition to the 21,500, would be sent to Iraq. He claimed that 1,000 was the right kind of number for special operations teams to move inside Iran.

New reports appeared at the same time, regarding scenarios for an American attack. The *BBC*, on Feb. 20, cited “diplomatic sources” who said that talk of U.S. negotiations with Iran was merely a “fallback plan,” with the primary attack already decided on. CentCom in Florida, it reported, has already chosen its targets in Iran—which include Iranian air and naval bases, missile facilities, and command-and-control centers—and is only waiting for a “trigger” to launch. The Pentagon denied the report.

Russia Calls the Game

The Russian leadership has made clear that it is acutely aware of the nature of the immediate danger of military conflict between the U.S. and Iran, and, more broadly, of the fact that Russia is among the ultimate targets of the permanent-war faction in the United States. President Vladimir Putin shocked the world with his remarks in this direction, at the World Economic Forum in Davos, Switzerland. Immediately thereafter, Putin discussed the strategic crisis with government leaders in Saudi Arabia, Qatar, and Jordan (see last week’s *EIR*).

Just prior to this visit, Russian Foreign Minister Sergei Lavrov, in an interview to the Lebanese weekly *Al-Watan al-Arabi*, pointed to the danger of the military buildup in the region. “Unfortunately,” he said, “the concentration in this part of the world of significant foreign military contingents and of the newest types of weapons can provoke the use of force. In such a situation, even a small accident, like the one that recently occurred as a result of the collision between a U.S. nuclear submarine and a Japanese tanker, can lead to unpredictable consequences.” He went on:

“We fully share the fears of our Gulf partners that in the case of a confrontation or the enactment of a force-based scenario in the Gulf zone, their states are bound to be jeopardized by a large-scale military, humanitarian, and environmental catastrophe.”

The most explosive statement Lavrov made in the lengthy interview, had to do with the danger that the U.S. might use its forces deployed in Iraq for operations against Syria or Iran. “An escalation of the conflict and its spillover into Iraq will inevitably entail catastrophic consequences, not only for the Middle East,” he said. “I think Washington understands this.” Lavrov added: “We also firmly believe that the MNF [Multi-National Force] in Iraq should act solely in accordance with the mandate of the UN Security Council, which does not provide for any actions outside that country.”

Instead of confrontation, Lavrov urged diplomacy. He said it was Russia’s “principled stand” that the nuclear issue should be “tackled solely by politico-diplomatic methods,” and said Russia was “doing everything for the talks [on Iran’s nuclear program] to begin as soon as possible.” He called for a “direct dialogue between Washington and Tehran” as urged by “representatives of influential political circles in the U.S.,” a reference to the Baker-Hamilton group.

Following the issuance on Feb. 22 of the report on Iran’s program, by International Atomic Energy Agency (IAEA) head Mohammad ElBaradei, which said that Iran had contin-

ued its uranium enrichment activities, Secretary of State Condoleezza Rice began talking about a new UN Security Council resolution to impose further sanctions, and Undersecretary of State Nicholas Burns reportedly rushed to the computer to whip up a draft text. Lavrov had earlier stated that Russia would abide by the IAEA's professional assessment, and Russia's UN Ambassador Vitaly Churkin stated unequivocally that the issue is not new sanctions.

It Takes Two To Dialogue

The Russians are not the only ones to demand negotiations, as a means of averting what they perceive to be a commitment to war. Former weapons inspector Hans Blix, in a Feb. 20 commentary in the *International Herald Tribune*, entitled, "Will the United States Attack Iran?" warned that the Bush Administration was heading for an attack. After reviewing the military buildup, he challenged Washington to follow the North Korean model vis-à-vis Iran. "The U.S. seems able to sit down for talks without demanding that the production of plutonium be stopped prior to the talks, and even to indicate that an agreement could constitute the opening of diplomatic relations and guarantees against attacks in return for denuclearization," he wrote. Citing the Baker-Hamilton report's clear call for opening talks with both Iran and Syria, he noted that that this had been ignored by a Bush Administration which "prefers to talk to Iran and Syria through public statements and military threats. . . ."

ElBaradei also pushed for direct talks between the U.S. and Iran, saying that sanctions and military strikes are the worst policies, since they will only strengthen the hardliners, and, as everyone should know, "you cannot bomb knowledge." He called for both sides to take a "time out," meaning Iran would temporarily suspend its program and the U.S. would not freeze sanctions. He concluded by saying, "It's just a question of how to get both sides to the negotiating table while saving face. The Iranian issue will only be resolved when the U.S. takes a decision to engage Iran directly. . . . The nuclear issue is the tip of the iceberg."

Institutional support for direct talks is evident in both Tehran and Washington, and many see the North Korea agreement as a model for resolution. Foreign Minister Manouchehr Mottaki has repeatedly said Tehran is ready for talks, as has President Mahmoud Ahmadinejad, on condition that there be no pre-conditions posed by the other side, i.e., that the two meet as equals. This has been repeatedly rejected by Rice, who insists enrichment and related activities must first cease.

But, according to the Council on Foreign Relations' Iran expert, Ray Takeyh, speaking at a conference call press conference on Feb. 22, "there is a consensus" in both Washington and Tehran, for talks and setting up diplomatic relations. He said this was across the political spectrum in Iran, and has the blessing of the Supreme Leader Ayatollah Ali Khamenei, while, even in the U.S., some statements have

reflected this view. He admitted, however, that there was a danger of a "war by miscalculation" or "Gulf of Tonkin"-type incident.

On Feb. 22, CNN posted a story by Christiane Amanpour, based on a 90-minute interview she had conducted with an unnamed senior Iranian official, who asserted that he was speaking, in effect, for the Supreme Leader. The official stated that Iran sees the United States as a natural ally (against al-Qaeda) and as a country that has never invaded Iran. "We are not after conflict. We are not after crisis. We are not after war," the official told CNN, "but we don't know whether the same is true in the U.S. or not. If the same is true on the U.S. side," he concluded, "the first step must be to end this vicious cycle that can lead to dangerous action—war." The official warned that right now, both Iran and the U.S. are "afraid of looking weak if we take the first step. We have this fear in common with America. Before contemplating recognition, each side feels it necessary to convince the other side that 'I am not weak.' "

The British Role

But within the Blair-Cheney circles, the policy remains war. This became excruciatingly clear when Ali Larijani, the head of Iran's Supreme National Security Council and chief negotiator on nuclear issues, concluded a series of very successful talks with German Foreign Minister Frank-Walter Steinmeier, EU Foreign Policy chief Javier Solana, and Swiss President Micheline Calmy-Rey in mid-February. Larijani had laid out Iran's case at the Davos conference, then followed up with separate political talks. In Bern, a new proposal was presented discreetly by the Swiss, for facilitating the start of negotiations. According to the *Tehran Times*, the proposal "calls for resuming talks under the condition that Iran halt feeding the centrifuges with processed uranium hexafluoride (UF6) gas." This is according to Foreign Ministry spokesman Mohammad Ali Hosseini. Iranian sources told *EIR* that this may explain why President Ahmadinejad did not announce any further breakthroughs in the program on the Iranian Revolution's anniversary.

The Larijani initiative, however, was followed immediately by press stories geared to throwing cold water on the possibility of negotiations. First, the *Financial Times* of Feb. 13 covered a document allegedly drafted by Solana's staff, saying Iran would inevitably get a bomb, with the implication that talks would be worthless. (The draft had not been endorsed by Solana.) Second, the *Neue Zürcher Zeitung* published a story in its Feb. 17-18 edition, about how the Cheney-Bush crew sabotaged an attempt by Iran, which the Swiss had mediated, to overcome the political conflict back in 2003. The message was clear: don't bother to try to resolve the crisis diplomatically.

Meanwhile, the British, in particular, continue to stoke a U.S. conflict, with their stories, including from Blair himself, about Iran being the source of the IEDs hitting U.S. troops.

Plot Brings Down Italian Government

by Claudio Celani

On Feb. 21, the Italian government of Prime Minister Romano Prodi was brought down by a vote in the Senate on foreign policy. The crisis only underscored the fragility of parliamentary systems which, as Lyndon LaRouche has pointed out, are a compromise resulting from the power of feudal oligarchy on the Old Continent. Just days before the government fell, on Feb. 13, LaRouche had addressed members of the Parliament in Rome, by invitation of leaders of the Partito della Rifondazione Comunista (PRC), who launched an initiative for an “interparliamentary committee for a New Bretton Woods.” The initiative came from Prof. Andrea Ricci, a young PRC Member of Parliament. Ricci’s initiative has already been joined by two undersecretaries of state in the Prodi government, Alfonso Gianni (PRC) and Antonio Lettieri (Margherita party). Lettieri attended the Feb. 13 conference with LaRouche, which took place in the prestigious Cenacolo Hall of the Italian Parliament; also participating was the parliamentary faction leader of the PRC, Gennaro Migliore (see *EIR* Feb. 23 for coverage of the event).

As LaRouche spoke in Rome, the danger of a crisis was already in the air. Politicians of both the government coalition and the opposition, whom LaRouche met privately in Rome, had warned that the Prodi government could go under as a result of a “cattle trade” involving the tiny margin of three votes the center-left coalition had in the Senate. Indeed, the collapse of the Prodi government was the result of an ambush, which had been preceded by an escalation of conflicts within the coalition, but also of heavy foreign interference.

The coalition, as *EIR* had insisted since the Prodi government’s formation in May 2006, had been a catastrophe in domestic policy, although it had implemented an effective shift in foreign policy, away from the blind support for the Bush-Cheney government that had characterized the previous government of Premier Silvio Berlusconi. Italian soldiers were pulled out of Iraq; Italy became deeply involved in the Mideast peace process, including Lebanon; and re-started an independent policy vis-à-vis India, China, and Russia. Furthermore, in a changed climate, several judicial and popular initiatives against the Bush-Cheney policies were able to develop, which the government did not pro-

mote, but also did not sabotage. For example: the trial in Milan against 26 CIA agents who kidnapped an Egyptian imam, Abu Omar, as part of the Bush-Cheney “war on terror”; and the 200,000-strong demonstration in Vicenza on Feb. 17 against plans to upgrade the U.S. military base there as a function of “21st-Century warfare” policies against Third World countries.

A Heated Political Debate

These issues were part of a heated political debate which LaRouche’s intervention in Rome intersected. Before LaRouche’s arrival, U.S. Ambassador Ronald Spogli had rallied five of his colleagues and published an unprecedented open letter in the press, urging the Italian government to “close ranks” with the military coalition in Afghanistan, where Italy has 2,000 troops. Italian Foreign Minister Massimo D’Alema answered sharply, calling this an “irregular” procedure and an external interference into the upcoming parliamentary debate.

The other central issue of the Italian political crisis concerns economic policy. Prodi’s ministers have implemented a series of budget-cutting measures, liberalizations, and privatizations, but, thanks to the opposition of the PRC and of the other “Communist” party, the PdCI, more radical reforms, such as pension privatization, have been stalled.

For these reasons, what the media call the “radical left” in the government—PRC and PdCI—were in the middle of a crossfire from a whole range of forces, from the opposition, the media, and even liberal factions among their putative allies. Several politicians from the center-left coalition exposed a plot to provoke a government crisis, and replace the “radical left” with sections of the current opposition. That explains roughly what happened on Feb. 17, with the addition of a surprise: Giulio Andreotti, the former Prime Minister and one of the most powerful politicians in Italy, who had been consistently critical of Bush-Cheney policies and supportive of D’Alema, voted against the government, thus becoming marginally decisive in provoking the crisis. How the Italian government crisis is now going to unfold from this point on is pure speculation.

In this context, LaRouche’s intervention provided a method for strengthening national unity, through a dialogue among forces which would tend to split on ideological issues, but which would respond positively if challenged at the highest cultural level, with solutions to the strategic and economic crisis based on common principles. The discussion at the Feb. 13 conference, of the 1648 Westphalia Treaty, which ended the Thirty Years War, is an example of that. Similar discussions took place in LaRouche’s private meetings with political representatives of both political blocs. This process was fertilized by the perspective of the “new policy” being implemented in Congress through the LaRouche Youth Movement, and will be continued regardless of the next, provisory political arrangement in Rome.

North Korea Deal Is Tentative Step Ahead

by William Jones

The implementation agreement reached at the conclusion of the fifth session of the six-party talks on North Korea Feb. 13 has helped to significantly reduce the danger of a confrontation on the Korean Peninsula and indicated, in a rather dramatic manner, how the influence of Vice President Dick Cheney has been seriously curtailed. A general revolt against the Cheney policy by former U.S. diplomats with a long association with Asia, as well as a growing revolt in the U.S. military against the “utopian” policy of the Cheneyacs, has helped whittle away the power of this most imperial Vice President. The demonstrations Cheney met with on his most recent trip to Japan, where he was welcomed in Tokyo with shouts from protestors of “Yankee, Go Home!” shows just how far the Cheney policy has gone in diminishing respect for the United States, even in a country like Japan, long deemed a close ally.

The dogged efforts of U.S. Assistant Secretary of State for East Asia and the Pacific, Ambassador Christopher Hill, who was finally permitted to offer the kinds of concessions to the North Koreans which would provide a real reason for them to dismantle their nuclear program, also contributed to the successful outcome of these preliminary talks. And, as all the parties readily admit, without the forceful effort of the Chinese diplomatic team, the North Koreans would have never come back to the negotiating table.

As Hill is quick to emphasize, this is only an initial agreement on the path to what the Bush Administration hopes will be a complete denuclearization of the Korean Peninsula. The Administration is not alone in that desire. China also would be unhappy with a nuclear-armed North Korea, fearing that Japan would then also move to acquire a nuclear capability.

In spite of the difficulties always associated with any dealings with the ever-so-opaque “hermit kingdom,” a deal probably could have been reached much earlier, had Cheney not been allowed to sabotage negotiations. Ever since the Vice President forced then-Secretary of State Colin Powell to “eat his words,” that the new Administration would be following up the efforts made by Clinton in the 1994 Agreed Framework agreement with the D.P.R.K., Cheney has put up roadblocks to diplomacy.

Hysteria Among the Neo-Cons

A change in mood with regard to North Korea was clearly evident in Hill’s visit to Berlin in January, where he engaged

in extensive hours-long discussions with North Korean representatives, and where presumably the details of the implementation agreement were preliminarily worked out. While the official position of the Bush Administration is still that of not engaging in bilateral talks with the North Koreans, except in the context of the multilateral six-party talks (China, South Korea, North Korea, the United States, Russia, and Japan) it is in fact what Hill did in Berlin—and without receiving a reprimand—that moved the situation forward. That former UN Ambassador John Bolton has been so vociferous in his criticism of the agreement negotiated by Hill, indicates the level of hysteria within the neo-con clique over the way they have been sidelined in this latest endeavor.

Elliott Abrams, National Security Council director for the Middle East, also voiced his protest in an e-mail questioning the provision of the agreement that states that the United States would take North Korea off the list of terrorist sponsors. White House Press spokesman Tony Snow later said that Abrams’ concerns had been satisfied after discussions with the “Asia hands” on the NSC. More likely, Abrams had been read the riot act, telling him to concentrate on his own area of responsibility, and let others handle the North Korea issue. In the Berlin talks, Hill also made clear what the United States was prepared to do if the denuclearization was accomplished, including completely normalizing its relations with the D.P.R.K.

The agreement essentially outlined a series of steps to be implemented by the parties within the next 60 days, that would move them in the direction of the commitments they made in the Joint Statement agreed to by all parties in September 2005. North Korea had backed out of that agreement after the U.S. Treasury moved to place sanctions on the Macao-based Banco Delta Asia (BDA), on the pretext that Banco money had been used to finance the North’s nuclear program. Freezing the accounts essentially hamstrung North Korea’s economic reform program, and was a major blow to its economic jugular. The D.P.R.K. insisted that they would not adhere to the September 2005 agreement until the accounts were unfrozen. Hill indicated in a speech to the Brookings Institution on Feb. 22 that the issue with the BDA account would be resolved within 30 days of the agreement. The measures that must be taken by North Korea include:

- Shutting down and sealing the Yongbyon nuclear facility for the purpose of abandoning that plutonium production program;
- Inviting the IAEA to return to the country to conduct all necessary monitoring and verification as agreed between the IAEA and the D.P.R.K.;
- Discussing a list of all the D.P.R.K.’s nuclear programs and materials, including the plutonium extracted from fuel rods that will be abandoned pursuant to the Joint Statement.

The last issue could provide a stumbling block, Hill indicated. While the Bush Administration says it is in possession of information indicating that the D.P.R.K. has made pur-

chases that could be used to build a nuclear facility that utilized highly enriched uranium rather than plutonium, the North Koreans deny that they have built, or are in the processing of building, such a facility. The D.P.R.K. has, however, agreed to discuss whatever information Washington may have on such a program.

The negotiations ran into a roadblock toward the end of the final negotiating session when the North Koreans increased their demand for fuel oil over and above the 50,000 tons per year that the United States (together with its partners) was prepared to provide. This was the amount that had been decided upon in the original 1994 Agreed Framework worked out with the Clinton Administration, and was also the figure used in the September 2005 Joint Statement. But Bush was not prepared to contribute more than the previous Clinton agreement, which has been lambasted by the Bush Administration as a “sell-out” to the North Koreans. For a short time, it seemed that these talks too would end in a stalemate, but a compromise was reached: The agreement now includes a provision that the partners will provide up to 1 million tons of heavy fuel oil when the North Koreans begin to meet some of their own commitments in the agreement.

The Bush Administration has also committed itself to normalizing relations with North Korea and eventually brokering a peace treaty with the country, officially putting an end to the state of siege stemming from the Korean War. The Bush Administration is also prepared to begin the process of removing the designation of the D.P.R.K. as a state-sponsor of terrorism, and advance the process of terminating the application of the Trading with the Enemy Act with respect to North Korea.

Overcoming the Japan-Korea Hurdle

Another complicating factor in reaching a final agreement involves the conflict between Japan and North Korea over Japanese citizens who have been abducted by the North to be trained as spies. Hill indicated that he had more bilateral meetings with the Japanese than with any other delegation, coaxing them forward on the road that they were probably not so eager to travel. One of the working groups which was created, will deal with the normalization of the D.P.R.K.-Japan relations.

Five working groups were set up to deal with various aspects of the agreement: 1) denuclearization of the Korean peninsula; 2) normalization of U.S.-D.P.R.K. relations; 3) normalization of Japan-D.P.R.K. relations; 4) economy and energy cooperation; and 5) the creation of a Northeast Asia peace and security mechanism. In connection with the last working group, it is hoped that the six-party format can be transformed into a more permanent framework for regional



State Department

Ambassador Christopher Hill, shown here at a State Department briefing last July, overcame outright sabotage from the Vice President's office, to reach an initial agreement on North Korea at Six-Party talks on Feb. 13.

cooperation, similar to what ASEAN has been for the countries of Southeast Asia. This has been a prime goal for China, as well as for the United States; both would see such an organization as a major factor of stability in the Northeast Asia region.

For South Korea, a successful agreement would mean that it could continue on a path toward eventual reunification with the North. Already, one day after the Feb. 13 agreement was announced, South Korea announced that the ministerial level talks with the D.P.R.K., which had broken down in the middle of North Korea's July 2006 missile launches, would resume shortly.

The parties are scheduled to meet again on March 19 to review the progress after the first 30 days, and to lay out the path for the second stage, which will begin when all the requirements of the first 60 days have been met. The 50,000 tons of fuel oil will be delivered to the D.P.R.K. during the first phase, and the 950,000 additional tons will be sequenced for delivery during the second phase of the process.

While the outlook for a resolution of the North Korean crisis seems particularly bright at the present moment, there is still a way to go, and obstacles remain on the path to a final resolution. As Hill said at Brookings, “There are no victory laps yet.” The step-by-step procedure leaves a lot of room for problems to arise at every step of the process. The whims of the mercurial North Korean leader may also prevent the process from proceeding smoothly. And until Cheney is removed from office, he will continue to attempt to kick over the card table, even after all the hands have been dealt.

Japan's Interest-Rate Hike Could Collapse the System

by Helga Zepp-LaRouche

This article has been translated from German, and subheads have been added.

Despite the illusions of small investors who are being led by the nose, allowing themselves to be blinded by record numbers on the stock markets; and despite the promises of countless analysts, that the decision of the Japanese central bank to raise interest rates from 0.25 to 0.5% would have only an insubstantial influence on the so-called “carry-trade,” this rate increase could actually have a dramatic effect on the world financial system, and could even generate a systemic collapse. “There is nothing in the global financial system, that is not ultimately connected to this yen carry-trade,” said a continental European banker.

There are, worldwide, between \$500 and \$600 billion in investments outside Japan, which took place with the help of cheap yen credits, benefitting from the favorable interest rates. If the yen now starts to rise, on the basis of the rise in interest rates, the effect would be much greater than 0.25%. The main beneficiaries of the carry-trade are the big banks, hedge funds, and equity funds, whose derivatives trading has led recently to a worldwide pyramiding of all segments of the market. The gigantic bubble of the casino-economy has to grow; that is, it must make profits, and for this it requires a continuous flow of liquidity. At the moment that these capital streams start to flow in the opposite direction, because of the changed interest rates and exchange rates, panic and an interlinked cluster of risks could lead to a meltdown of the system.

Who Is Really To Blame?

A widespread misconception exists, that behind the “financial locusts”—which are massively participating in the

carry-trade, and which are now snapping up everything that's not nailed down, including in Germany, from *Mittelstand* [small and medium-sized] enterprises—there lurks somehow “the U.S.A.” and “Wall Street.” Indeed they are involved; but as the *Economist* reported in its Feb. 3-9 issue, in an article headlined “Britannia Redux: A special report on Britain,” the City of London boasts that it is henceforth the most important financial center in the world, and thus the British Empire has been revived in the form of globalization.

And London is not the capital city of a normal nation, but also that of the Commonwealth, to which, for example, the Cayman Islands, Bermuda, and the Bahamas belong. And



The City of London touts the re-emergence of the British Empire, in the new world of globalization.

according to the the CIMA, financial authority of the Cayman Islands, 7,481 of the 9,000 worldwide hedge funds are registered in the Cayman Islands, a British Crown Colony. These so-called offshore markets are subject to no banking oversight or regulation on the part of central banks or governments. In 1993, the “Mutual Fund Law” was passed, according to which the simplified establishment or registration of hedge funds in a deregulated system should be facilitated. The goal was that the Cayman Islands—which have already been, since the beginning of the bubble economy, with the creation of the Euro-dollar market, an Eldorado of uncontrolled credit creation—should be made into even more of a pivot of the “finance industry.”

Since the middle of the 1990s, the hedge funds were advised to have their financial operations registered in the Cay-

man Islands, where they could operate outside national laws and regulation. In this way, the hedge funds got the biggest share in the British financial system. In the course of time, the banks that had initially been the main credit sources for the hedge funds, became increasingly consolidated with these funds, which now, through their takeovers, are exploiting and sucking out the wealth of many nations.

How the Locust Funds Operate

A report by the consulting firm McKinsey & Co., from January of this year, points out that Wall Street and the U.S. are losing out to London as the center of world finance. And this is a matter of insanely huge arrangements: The Bank for International Settlements (BIS) reports that there are \$370 trillion in outstanding so-called over-the-counter

BoE, Not BoJ, May Pop the Carry-Trade

The “yen carry-trade” in currency markets is at 97% of its highest volume ever; the Swiss franc carry-trade, about one-third the size, is at 93% of its record volume. As much as \$250 billion worth of yen annually, may be being borrowed out of Bank of Japan currency emissions for speculation worldwide—BoJ’s discount rate has only just been raised from 0.25% to 0.50%, compared to 5.25% for the Federal Reserve and Bank of England (BoE). Speculators or central banks playing the carry-trade make 1) that rate difference, just in overnight bank lending—potentially much more than in other kinds of speculation—and 2) additional profit from the steady cheapening of the yen against other major currencies, which the carry-trade brings with it. One fund manager acknowledged, “If you didn’t have a yen carry-trade on, you didn’t make money last year [2006]” in international currency trading.

Combined with the equally huge dollar-printing surge of the Federal Reserve’s M3 money supply—for which there have been no published figures for a year, but is estimated by one economist to be growing at over 11% annually—the yen carry-trade is the ultimate source of the apparently vast liquidity, or “leverage,” feeding global financial bubbles.

The flood of reserves out of the yen has gone into sterling, euros, and dollars; but first and foremost, into sterling. While the total volume of international currency reserves held by central banks has multiplied incredibly since 1995—from \$1.3 trillion to \$4.8 trillion—the sterling portion of it has risen from under 3% to 4.3%. But

much more leverage-giving, in the 30% of those central bank reserves which are invested in bank lending, and not in government bonds, the proportion of sterling has risen rapidly to 12%. And the center of hedge-fund activity has shifted toward London and Britain’s Cayman Islands tax havens.

What might turn the carry-trade’s large, “free” profit margins into losses and a “reversed leverage” crash? Closing the interest rate differentials, *and* a reversal in the constant cheapening of the yen. The Bank of Japan is in no position to cause this. It was under so much pressure over the Feb. 21 interest-rate hike, that it printed and emitted 2.1 trillion yen (about \$18 billion worth) into the banking system the previous day, to keep the yen from rising—and so far, it has not. Swiss National Bank head Jean-Pierre Roth attacked the carry-trade in the Swiss franc on Feb. 22, and warned of a round of rate increases, but the Swiss also have relatively little leverage.

But the Bank of England, and the City of London, increasingly in the driver’s seat in overnight reserves and as a world financial center—*could* pop the carry-trade, by starting a plunge in the pound which would torpedo the dollar. The BoE is threatening. Twice in the past month, BoE governor Mervyn King has issued statements or reports, calculated to send the pound sliding from its landmark highs of late January.

Last time the carry-trade was at record levels and then was punctured and quickly “unwound”—in 1998, with the Russian GKO bond default and subsequent LTCM hedge-fund meltdown—the dollar fell by 20% over the following two years. Lyndon LaRouche has warned repeatedly that London, and some stupid U.S. economic interests—are threatening to trigger a *further* 20% dollar plunge, and international monetary and financial chaos.

—Paul Gallagher

(OTC) derivatives. The largest type of derivatives are interest-rate derivatives, with \$262 trillion, of which 34% are handled in London, and 24% in New York and Chicago. The third-largest category of derivatives is the \$38 trillion in foreign-exchange (currency) derivatives, of which 49% are handled in London, and only 16% in New York. And these bubbles are increasing at such an insane tempo that their assets in 2006 grew around 63% (!) in London, and “only” 13% in the United States.

But no one, no government, and no central bank, knows the real dimensions of the financial activities of the “financial locusts,” who suck the guts out of valuable industrial firms and other objects of speculation worldwide, for their own profit, and then leave them in ruin. Because there is no transparency for these activities, as German Finance Minister Peer Steinbrück has many times complained. And if one accounts for the enormous volume of loot taken by these “robbers and plunderers” (to quote a spokesman for the British GBM trade union), it is not surprising that Great Britain and the U.S. Administration have, so far, directly opposed all efforts for re-regulation of this predatory monster.

When [Social Democratic leader] Franz Müntefering in the Summer of 2005, first enunciated the concept of “locusts” for the hedge funds and equity funds, he was absurdly accused by the international financial press of anti-Semitism. Since

then, they have constructed the myth that Germany, through these statements and its repeated demands for transparency or even regulation, has caused irreparable damage. In truth, this is a veiled slander campaign by the international financial circles, which John Perkins described in his book *Confessions of an Economic Hit Man*, which is well worth reading.

The fact is, that the completely lawless piracy of the locusts has not only led to enormous losses of public property, but also the limitless greed of the speculation-driven willingness to take risks, poses the greatest danger to the world financial system in a long time. The enormously increasing volume of the carry-trade, backed by the ascent of the hedge funds, could at any moment detonate the system, for the locusts coldbloodedly make use of the fact, that interest rates do not fluctuate with supply and demand, but are fixed by the central banks. Since Japan went along with the pressure from Washington and London to keep its interest-rate rises minimal, for years there has been a de facto zero interest-rate policy, which allowed a spiral of speculation to take off by means of the carry-trade, pumping liquidity into the various bubbles. But now, eight members of the Board of the Japanese central bank have shown more interest in the stability of the yen than in the potential chain reaction that these interest-rate increases could let loose.

In September 1998, as a result of the Russian state’s default in August, the LTCM hedge fund, which was at that time the world’s largest, threaten to go bankrupt, which in turn threatened the meltdown of the world financial system, as the BIS said in its annual report. Only because the 16 largest banks in the world put together a giant bailout fund of over \$4 billion for the LTCM hedge fund, which stabilized over \$100 billion in derivatives, was a crash of the system averted.

Since then, the number of hedge funds and the volume of their raids has grown many-fold. The global financial system, with its totally over-indebted banks, is today a minefield, in which literally thousands of mines are going off and could set off a mega-collapse. Thus, for example, a new war against Iran would be the death-knell for the financial system, which would throw the world into chaos, and it cannot be excluded that part of the financial oligarchy sees this as the only way to try to keep their control, or to prevent their replacement by those who are oriented toward the common good.

A New Bretton Woods Now!

There is only one way out: a U.S. government liberated from Cheney and Bush must, together with Russia, China, and India, place on the agenda a new organization of the global financial architecture, in the tradition of Franklin D. Roosevelt, as Lyndon LaRouche has proposed, and as is currently being discussed in the American Congress. The hedge funds, equity funds, and their virtual assets will have no place in such a new system. The best thing that the nations of Europe could do in their own interests, is to work for this New Bretton Woods.

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—Friedrich List

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Bush Biofuel Junket to Ibero-America Aims To Ensnare Region in Insanity

by Cynthia R. Rush

When George W. Bush begins his five-nation tour of Ibero-America March 8 to promote the swindle of biofuel development as the region's economic salvation, he will be embarking on a mission absolutely in keeping with the totally insane character of his Presidency.

Since 2001, the Bush-Cheney regime has insulted, provoked, and trampled on the region, primarily using the International Monetary Fund's globalization policies devised by the Anglo-Dutch financiers that pull the Administration's strings. The global financial system is in systemic meltdown, and plans for an expanding war in Southwest Asia threaten to wipe out civilization itself. U.S. statesman Lyndon LaRouche has put forward the programmatic approach that could bring the world back from the brink. But the synarchist controllers of the loonies in the White House are instead peddling an "ethanol revolution" that will transport the U.S. and the world—not to nirvana but straight to hell.

In the case of Ibero-America, Bush has announced himself ready to listen and learn, to "engage" the region, as Under Secretary of State Nicholas Burns described it during his Feb. 6-7 trip to Brazil and Argentina. It is through biofuels, the Bush team argues, that the United States will be able to regain the influence it has lost in the region.

Bush will promote this biofuel madness in all the countries on his tour—Brazil, Uruguay, Colombia, Guatemala, and Mexico—but his controllers are singling out economic powerhouse Brazil for special attention. On Feb. 6, just as the White House was announcing the itinerary for Bush's March 8-14 trip—Brazil will be his first stop—Nicholas Burns and Secretary of State Condoleezza Rice's special energy adviser Greg Manuel were in Brazil to whip up support for the "strategic alliance" the Administration intends to sign with President Lula da Silva, based on these two countries' position as the world's leading producers of ethanol. Biofuel, Burns said, "is now the symbolic centerpiece" of U.S. relations with Brazil!

This is the way to address the pressing problems of poverty and unemployment in Brazil and Ibero-America, Burns said, and the United States and Brazil will do it together. The Inter-American Ethanol Commission, set up in December 2006 by the President's brother, former Florida Gov. Jeb Bush, goes so far as to predict that Ibero-American integration will be forged by . . . ethanol! Brother Jeb will also play a

prominent role in the "General Staff for ethanol" that the White House has set up to oversee the biofuel alliance with Brazil.

What Are They Smoking?

There are two aspects to the biofuel "solution" that highlight its incompetence—not to mention its genocidal implications.

First, that this has nothing to do with any real concept of physical economy is made clear by the fact that the same hedge funds and financial derivatives that have fueled the growth of the global speculative bubble and yen carry trade that are about to burst, are now focussing their greed on the international biofuels racket, to create an equally unstable "biofuels bubble." At a Feb. 1 conference in London on the "European Biodiesel Market," financial consultant Robert Outram aptly noted that "the interest from financial organizations to invest in the biofuels industry can be viewed with great similarity to the dot.com bubble that burst at the turn of the century."

High levels of international financial synarchy are running this game. Speculator George Soros, the big agricultural cartels—Cargill, Archer Daniels Midland (ADM), Bunge, Louis Dreyfus—and hedge and private equity funds based in London or in its offshore banking havens in the Cayman Islands, Hong Kong or Bermuda, are pouring money into the scam, salivating at the prospects of making quick money.

Speaking Feb. 20 at a conference on "Global Dynamics of Biofuels," sponsored by the Woodrow Wilson Center in Washington, State Department energy advisor Greg Manuel, who had just returned from Brazil, spilled the beans. Prefacing his remarks with the explanation that he had come from the private sector, where he worked for J.P. Morgan and as a venture capitalist in Silicon Valley, Manuel noted that "this [biofuel] industry isn't really all that different. Equity is the key . . . it's all asset driven."

Later, like other panelists, Manuel would defend the role of the hedge funds and speculators who are pouring money into Brazil's biofuel sector. "Every new market has speculators. . . . Is there a bubble? Perhaps," he said. But that's the way the free market works. He emphasized that government should play as minimal a role in this racket as possible, leaving

it instead in the hands of the financiers who know what to do.

Anxious to get in on the act, Wall Street investment banks are planning to hold an “Ethanol Finance and Investment Summit” March 19-21, including speakers from Goldman Sachs, Morgan Stanley, and Citigroup Venture Capital International, among others. An April 16-17 “Wall Street Green Trading Summit,” will have a special session on “Biofuels Trading Markets,” along with all manner of “green financing” topics. A “green hedge fund” has already been launched in London.

Secondly, as *EIR* has documented (see the Jan. 26, 2007 issue), biofuels themselves are a fraud. This is not real science, of the kind the LaRouche Youth Movement (LYM) has demonstrated with its groundbreaking work on rediscovering the universal physical principles proven by the great 17th-Century scientist Johannes Kepler. Rather, biofuels represents *primitive accumulation*, typified by the British colonial plantation model, that also dominated the U.S. South leading into the 1861-1865 Civil War. This has nothing to do with the American System principle of defending the general welfare. It is raw materials looting and destruction of the labor force through slave labor, while building only that infrastructure needed to facilitate the looting.

Getting It Right . . .

Most Ibero-American governments have pretty competently addressed the lunacy of the IMF’s speculative free-market policies and what they have done both to their economies and political stability. This is why, in recent years, the informal grouping dubbed the “Presidents’ Club” has used a series of regional summits and close cooperation to formulate alternatives to the bankrupt IMF system.

On Feb. 21, Argentine President Néstor Kirchner and his Venezuelan counterpart Hugo Chávez announced in Puerto Ordaz, Venezuela that their governments had signed a memorandum of understanding to create the Bank of the South, as the kernel of a new continental entity to finance development, including great industrial and infrastructure projects.

Kirchner, who has provided important leadership to the Presidents’ Club, underscored that while the new entity begins as a bilateral association, all Ibero-American nations are invited to join as soon as they are able. Ecuador’s Finance Minister Eduardo Patiño, who was in Caracas the same day, immediately announced his government’s willingness to join.

In his Feb. 21 remarks from Venezuela, Kirchner explained that the Bank of the South will have a “different philosophy” from the IMF, whose policies became a “real punishment” for many nations.

The Bank of the South must promote the “financing of basic investments that are fundamental for Latin American integration,” Kirchner said, “to resolve [nations’] structural problems and allow them to develop.” And, he warned, “If the Bank of the South becomes just one more financial entity, it will mean another failure for the region.”

. . . And Getting It Wrong

But getting it right on the criminality of the IMF’s free-market and anti-nation-state policies won’t help if Ibero-American governments swallow the biofuel hoax that the same financial oligarchs behind the Fund are peddling as a great “transformational” revolution. They will be wiped off the face of the planet. Yet even those governments that are sanest on economic policy, such as Argentina, have gotten swept up in the biofuel craze.

Giant Brazil, which likes to boast of its “greatness,” is perhaps the worst. Brazil is crucial in the drive for Ibero-American integration, and has ambitious plans to build nuclear plants and to enrich uranium. But President Lula da Silva has at the same time allowed the deadly pragmatism that has often been Brazil’s downfall, to lead him to embrace the harebrained idea that Brazil can become an energy-independent superpower by “planting the oil of the future”—ethanol.

In his Jan. 26 speech at the Davos World Economic Forum, Lula made a big pitch for biofuel development, particularly urging the United States to help poor countries finance crops used in ethanol production, which, he claimed, would not only produce clean fuel, but also generate jobs and income in those nations. Enthralled with the Bush Administration’s “Strategic Biofuels Program,” that will also include other nations of Central and South America, the Lula government is reportedly organizing an international conference in late February to establish technical guidelines to classify ethanol as a “globalized commodity” that can be traded on international markets, just as oil and soy are today.

According to the Brazilian Central Bank, foreign investment into the ethanol sector increased by 3,000% in 2006. George Soros, Cargill, ADM, and a host of financial predators largely based in offshore banking paradises are at the top of the list. Lula may have delusions of Brazil becoming “Brasilia-Arabia,” but the vultures pouring money into Brazilian ethanol, intend to use the slave labor-based sugar cane industry to make big profits while grinding up the work force in the process.

With good reason, cane cutters in Brazil’s impoverished Northeast refer to sugar as “satanic sugar.” It is backbreaking work, for very little pay, miserable living conditions, and lives plagued by malnutrition and illiteracy. Job security doesn’t exist. And farmers who grow crops for human consumption, and are forced off the land by expanding sugar, soy, or castor bean production for ethanol, usually end up in urban slums.

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A Green Trap Germans Should Not Walk Into

by Rainer Apel

When the “red-green” alliance of Social Democrats (SPD) and Greens fell apart in the Summer of 2005, there was hope that it would also mean the end of the seven-year nightmare of irrational pro-ecology government policies since 1998, the most spectacular incident being the decision, in 2000, to exit from nuclear power totally, by 2021. There was hope that the campaign against the “locust” funds, the hedge and equity funds, which the Social Democrats waged during that election Summer, would bring the SPD back to a pro-industrial orientation. But only a few weeks after the September 2005 election, which resulted in a Grand Coalition government, the “young SPD” staged a coup against party chairman Franz Müntefering, the author of the anti-“locust” polemics, replacing him and a good part of the party executive with ecological fanatics. One year after that, this new SPD leadership presented a draft for a party program, which proclaimed an arrangement with the very locust funds that had been attacked.

The degree to which the “new” SPD is out of touch with reality, can be seen in their assessment that the U.S. elections of November 2006 were won by the Al Gore-George Soros faction.

The other established political parties of Germany are also getting brainwashed into the perception that “alternative” technologies are the treasures of the future. The Greens have always opposed nuclear technology and industrial production, and this also goes for the Linkspartei, a conglomerate of leftists and radical ecologists formed in the Spring of 2005. The liberal Free Democrats, who were at least verbal supporters of nuclear power, are becoming an ecology party, as are the two Christian Democratic parties, the CDU and CSU.

Both parties, the CDU (which is present in 15 of the 16 German states) and the CSU (the autonomous Christian Democrats’ section in Bavaria) are preparing new party platforms, and special attention should be paid to the role of outright neo-cons. The drive for biofuels has been visible in interviews given by CDU chairwoman and Chancellor of Germany Angela Merkel, as well as Hamburg Mayor Ole von Beust, since mid-January. Merkel has reiterated her view that “global warming” and the CO₂ emissions represent a threat to mankind no less powerful than Islamic terrorism, in speeches at the Munich Security Conference (Feb. 10) and the European Parliament (Feb. 13), and at a meeting with Britain’s Prime Minister Tony Blair in Berlin on Feb. 14. “We will have a new generation of biofuels,” Merkel said, adding that she

wants to make the June G-8 Summit in Heiligendamm, Germany, a “breakthrough for climate protection.”

Follow the Money Trail

Von Beust has said repeatedly in interviews that he was influenced by Al Gore’s book and movie, *An Inconvenient Truth*; North Rhine-Westphalia governor Jürgen Rüttgers, a fan of California governor Arnold Schwarzenegger, said the latter’s decrees against pollution have impressed him very much. Arnie has been advised by Hermann Scheer, the Social Democrats’ guru of solar energy, and president of Euro-Solar, the umbrella organization of solar energy firms in Europe. Furthermore, hardline neo-con Friedbert Pflueger, in Berlin on Feb. 9, denounced nuclear power as a “transition technology that man cannot master,” advocating that the CDU “must become much greener.” On Feb. 13, Markus Soeder, party manager of the CSU, said that “industry will make a lot of money, with environmental products.” Marie-Luise Doett, chief ecology affairs spokeswoman of the CDU in the national parliament, is also a leading sponsor of the INSM, the prime neo-con propaganda lobby for social welfare takedown in Germany.

The remarks by the latter two politicians provide a hint about the origins of this “greening” of the Christian Democrats, namely the banking and corporate interests behind the biofuels drive, with hedge and equity funds pumping tens of billions of dollars into “green” technology.

Greenies Oppose Roosevelt’s New Deal

But with the aforementioned Hermann Scheer, the situation turns even more revealing. In the late 1990s, Scheer said that the state should launch a job-creation scheme on the basis of a giant biomass program funded by the ecology tax and other taxes. About 600,000 new jobs could be created by such a program, which Scheer claimed was the “only meaningful” way of dealing with rising mass unemployment and the decline of traditional industry. He argued that whereas during the Great Depression, Franklin Roosevelt’s New Deal focused on creating jobs in industry and infrastructure, the solution today has to be through post-industrial, pro-ecology projects—“a Green New Deal.”

One of Scheer’s closest allies inside the SPD is Andrea Nahles, who launched the inner-party coup against Müntefering in 2005. An anti-Roosevelt thrust is the core of this policy, which has intensified since the U.S. midterm elections. During the Spring of 2005, a number of articles in the *Frankfurter Allgemeine Zeitung*, the daily mouthpiece of the monetarist banking interests, noted that the revival of FDR’s tradition in Germany is the goal of the LaRouche movement.

The challenge will be accepted by the LaRouche movement in Germany, which is issuing a pamphlet that will identify the powers behind the destabilization of Germany, and will warn Germans against walking into the “green” trap laid out by the “locust” funds.

Leading Crop Scientist Warns Of Potential Rice Crisis

Dr. Robert S. Zeigler, director-general of the International Rice Research Institute (IRRI), on Dec. 6, 2006, gave a “Newsmaker Presentation,” at the National Press Club in Washington, D.C., titled “Super-Sizing Another Two Billion Consumers: A Contrarian View of Poverty, Agriculture, and Economic Development in India, China, and Asia.” We report key points of this presentation, and provide excerpts from a follow-up interview with EIR reporters Mike Billington and Marcia Merry Baker.

The IRRI, the world’s leading rice research center, is located in Los Baños, Philippines. Founded in 1960, it is a non-profit, autonomous agency, with activities in ten other nations; it functions as part of the Consultative Group on International Agricultural Research (CGIAR), the “Green Revolution” network for advances in food genetics. The CGIAR’s Annual General Meeting took place in Washington, D.C., in December 2006.

Dr. Zeigler, an internationally respected plant patholo-



IRRI

Robert S. Zeigler, Director-General, International Rice Research Institute, in a rice test plot, Los Baños, Philippines.

gist with more than 20 years’ experience in agricultural research in the developing world, became the director-general of IRRI in April 2005.

He called a press briefing in Washington, D.C., on Dec. 6 to sound the alarm on a potential rice crisis. Rice stocks have collapsed by half in the past five years, he reported, while funds for the urgent research needed to expand yields have been cut by more than 50%.

News reports carry numerous articles about the “exploding wealth” in Asia, Dr. Zeigler said, but the fact is that hundreds of millions of desperately poor people in Asia are already facing increasing rates of vitamin and mineral deficiencies due to a lack of basic nutrition, ruining millions of potentially productive lives. Most shockingly, Dr. Zeigler showed that, despite the horrendous food and nutrition crisis in Africa, the hunger crisis in Asia is far worse, not only in total numbers of victims, but also as a percentage of the population.

As Dr. Zeigler said in the interview below, he is a scientist, and he knows that poverty and hunger can be overcome, if the world shows the scientific and political will to do so.

Baker: You have worked your whole life to develop ways to increase grain output, and worked with people committed to that, yet the axiom of GATT and then the World Trade Organization—and here I resort to “GATT-speak”—is that “you shouldn’t have national grain reserves or world carry-overs, because it is ‘trade-distorting.’” However, as you and others point out, we face grain stocks so low, it means potential “food shocks.”

Zeigler: Look at prices. My concern is that we’re on the brink of that—in the next couple of years, some countries are going to find it difficult to obtain rice. And they need to import it.

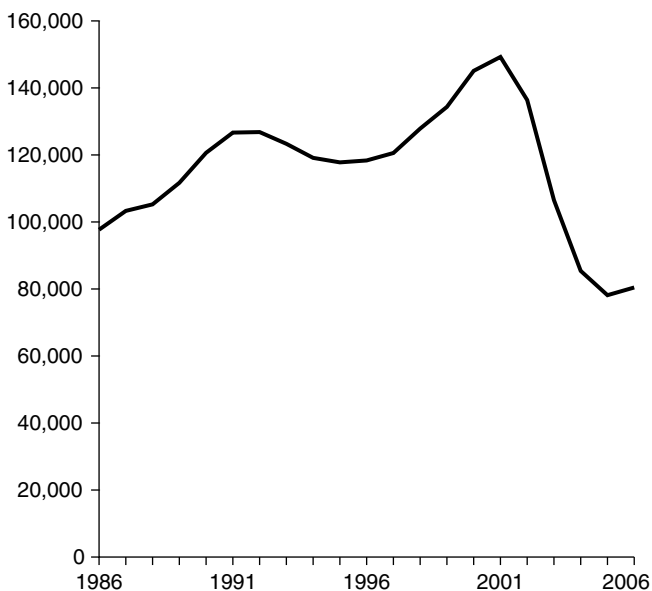
A lot of countries are importing now, but they are not importing very much. The Philippines is an importer. Indonesia is an importer. All the African countries are importers. China has gone on the market for rice recently. In Latin America, probably all but Brazil and Colombia are importers. I am not sure about Peru. Europe is obviously an importer.

Baker: That’s rice; then you can look at wheat and corn and

FIGURE 1

World's Ending Stocks of Rice, 1986-2006

(Millions of Metric Tons)



Source: UN Food and Agriculture Organization.

see other particularities, but it all adds up to low stocks, from production levels being below consumption levels—which also have been below the dietary intake levels really required.

Zeigler: Yes, what happens is that people just eat less at some point. And the people who are eating less are the poor.

Billington: So, even without taking into account the imminence of the collapse of the global financial bubble, and the chaos that can ensue, do you think that the current pace of this rice drawdown situation, and the lack of the kind of investments in R&D to solve it, mean that, in just a few years, we're going to be facing a rice crisis?

Zeigler: I think there's a real possibility of that. To highlight another problem, there hasn't been significant investment in irrigation infrastructure since the late 1980s.

Baker: In the 1960s, Mexico was going gangbusters on hydraulics projects, and then it stopped.

Zeigler: Well, look at what's happening in the wheat-growing area of Mexico. The numbers have dropped horribly. They've had some bad droughts. In 1985, the investment in irrigation infrastructure started to drop off. In the 1990s, there was almost none. Look at the Asian Development Bank, the World Bank, and the loan portfolios; you are going to see hardly any irrigation projects.

Baker: Then there is the stampede for biofuels.

Zeigler: We don't know what the impact of the big biofuel "lemming" reaction is. A friend of mine at the University of Nebraska sent me some figures a few weeks ago, for which they just did some back-of-the-envelope calculations on the likelihood of having to import corn into Illinois, Iowa, and Nebraska!

Baker: There's talk of even importing biomass—sugar from the Dominican Republic and elsewhere in the Caribbean, besides the talk about a breakthrough on cellulosic biomass for biofuels.

Zeigler: Are they going to bring in refined cane sugar? Or bagasse or molasses?

Baker: Maybe molasses as in the 18th Century. In the meantime, the mood among farmers in Iowa and elsewhere is kind of energized demoralization. They say, "I'm fed up with not making any money farming for 40 years, so I'll get what I can. I'm demoralized. I know it's not a good national policy. But I'm a farmer and I need some money. So I'll go along with the craze—the rapture of ethanol."

Billington: The politicians are going along with it. Think of the impact this is going to have when the farce is blown. As you have pointed out, you've created an infrastructure to go along with this. What kind of damage do you already have in this very short period of time?

Zeigler: If we can eventually develop some bacteria that will digest cellulose and lignin, then we can probably grow switchgrass and so on, but this is still wild speculation. I don't know what the energy equations would be for that.

Baker: Well, since we have known for 30 years what the energy equations are for uranium and thorium, we know we could properly feed everyone for a change by taking the right energy policy path.

Zeigler: Yes. I always wondered, when I was in college, why people were opposed to nuclear power. That was the politically correct thing in the early 1970s, in the late '60s. But I could never figure out what the issue was. You have issues of managing the waste, but that seemed to be a manageable problem.

Baker: In 1997, Gurdev S. Khush, from IRRI, gave a Washington, D.C., press briefing on what was called the next "Super Rice." Where does that stand?

Zeigler: Today's *Economist* [Dec. 9, 2006] had an article on one of our, what we call, frontier projects. It's an interesting process of technology development, where not everything works the way you hope it will. We had the idea behind the super rice, which was to redesign the architecture of the rice plant, to make it with larger panicles, and more and larger grains.

And when they did that—they succeeded—the assumption was that the rice plant was capable of filling all the grains



Dr. John Sheehy of the IRRI examines rice plants. A row of maize stands behind him.

Ariel Javellana/IRRI

Engineering Maize C4 Into Rice

One of the most promising approaches to give a large boost of productivity to rice, would be the successful incorporation of maize CO₂-concentrating C4 photosynthetic pathways into rice plants, using genetic engineering techniques.

Many scientists are looking at ways to do this, and some progress has occurred with the overexpression of C4 enzymes in C3 plants, but the ultimate goal—significantly boosting photosynthetic efficiency—has not yet been reached. The main problem lies in the anatomical arrangement of C4 plants. Most C4 plants, including maize, break up photosynthetic activity into two cell types, with C4 photosynthetic processes occurring in a different cell type than C3 photosynthetic processes: There is a separation in space between the CO₂-uptake processes and the CO₂ delivery site, with complex biochemical reactions occurring along the way. C3 plants as a rule do not have those qualities of structural complexity, and the challenge will be to mimic this complexity within one cell type, the mesophyll cell.

—Chris Craig

that it could create. It turns out that it couldn't. The grain wasn't filled.

So we're now looking at the possibility of working with the photosynthetic mechanisms of rice. Let's see if I can explain this briefly: There are two kinds of photosynthesis in plants: something called C3 and, much more recently evolved, something called C4.

Baker: "More recently," meaning when?

Zeigler: Tens of millions of years ago. After the grasses evolved, some developed a C4 kind of photosynthesis and some developed the C3 kind. Actually, it's evolved independently about 50 times in the plant kingdom, just using different mechanisms.

The C4, which is what's in maize and sugar cane, is much more efficient. And we're looking at how we can put that into rice. It's a real man-on-the-moon kind of thing, but I think we can do it.

Baker: Does it have to do with leaf area? Or is it internal?

Zeigler: It's internal. It's the way the plant organizes itself within the leaf and the kinds of enzymes it uses. There's a nice write-up in the *Economist*.

Baker: This is still along the lines of what Dr. Khush was talking of, in terms of the traits involved. On this matter of the grains filling out, do you perhaps already have some type that, even if it all isn't filled out, is still a superior-yielding plant?

Zeigler: Yes. We just developed—it came out in a paper in



IRRI's development of a rice plant that can withstand 14 days of submersibility will help food production in countries like Bangladesh, where flooding is a problem.

IRRI

Nature in August—a rice that is tolerant of flooding. Rice grows in standing water—about 12 to 20 inches deep—and it's quite happy. But, if it gets completely flooded, it drowns, just like any other plant. So we have developed a rice that will tolerate 14 days of complete submergence, which is a big problem in areas of Bangladesh, eastern India, along the Indo-Gangetic Plain, and in the inland valleys of Africa. So that's a huge breakthrough. What's interesting is that we've done the very basic discovery science in parallel with targetting varieties that we know farmers will grow. Several varieties are being evaluated in farmers' fields now, in areas where flooding is a repetitive problem. This is a problem every year on about 10 million hectares.

Billington: You said in your presentation that, in India in particular, in the land in the Ganges where they are using groundwater, the water levels are being pushed down, And they need to intensify in the rainfed areas.

Zeigler: What is happening is that the water tables are dropping severely.

Billington: Do they have to subsidize fuel for the pumping of water?

Zeigler: The electricity for pumping is free, so, essentially, the water is free. But that's just not a sustainable system. And they've actually been growing rice there for only less than 40 years.

Billington: When there wasn't water?

Zeigler: Well, there wasn't water, but also the rice wasn't very high-yielding. But, with the new rice that was so high-

yielding coming in, rice became very profitable, especially if the water is free. So that's a granary of India. Many rice types are being produced. If rice drops out of that area, that will cause some problems.

Baker: So, in the recent history of rice innovations, would you say that IR8 was the first one that came in? And that it resulted in such high-yield cropping and profitability in India and elsewhere so that now IR8 is extensive?

Zeigler: The IRRI was founded in 1960. The 40th anniversary of the release of IR8 was Nov. 26, 2006. IR8 and its progeny and varieties that developed from it are called semidwarf rice varieties. Dwarfs are very small, but the semidwarfs are about three feet high. Very robust. You push them over, and they just spring right back. They have tough straw.

IR8 was the first one to go out. It wasn't perfect. It had regular grain quality. It was susceptible to a number of diseases and insects, but it yielded like mad. It outyielded the traditional varieties by more than double.

Baker: What does that mean, in a place such as India; how many tons per hectare, after IR8 is in?

Zeigler: It depends where in India, but up in the Punjab, Haryana, they can get seven tons per hectare. Before that, you'd get a ton and a half or two tons. But, in some places, such as in Yunnan, China, where you have cool nights and it's in the higher latitudes, your days are longer, and you can get 10 or 12 tons.

Baker: So those are still advances from the semidwarf IR8, and we are looking forward to more breakthroughs, some-

times called “miracle rice.” What would you like to see, if you could succeed with the C4 process and everything you want?

Zeigler: What we’re expecting in the C4 is to get anywhere from a 30 to 50% increase in yield. That would mean that we could get over ten tons per hectare—that’s what we’re looking for—in the tropics, in the wet season. The real yield challenges are in the tropics, where you have a lot of cloud cover in the rainy season. You don’t get as much sunlight; you don’t get as much photosynthesis. Your nights are warm, so the plant burns up a lot of its own energy at night because it’s not capturing sunlight, so it’s just keeping itself going. The way organisms work, the warmer it gets, the faster metabolism goes, and the faster they burn up energy.

Baker: Resources are being cut way back, to fund the CGIAR network, for developing new productive varieties of food crops?

Zeigler: In real terms over the last, let’s say, ten years, there has been a slight increase in total funding to the Consultative Group on International Agricultural Research—the 15 centers. In inflation-adjusted dollars, there has been a slight increase in total funding, but the nature of that funding has changed completely.

In the beginning, IRRI’s funding was 100% unrestricted, that is, we were given the money and expected to go out and do the job. We’re a research organization, and the donors felt that we knew how to do research better than they did. Then, over the last 15 years or so, what’s happened is that, for the CGIAR system overall, we’re now down to about 40% of our funding being unrestricted. IRRI’s is a little bit better; it’s about 50%. It used to be 100% and now it’s down to 50%. In addition, our total budget is down, in real dollars, about 50%.

Baker: Yet, at least half the world’s people depend on rice.

Zeigler: Yes, and our budget is going down. And, of course, half of that money is what’s called “restricted” funding. The problem with restricted funding is that it’s generally for much more short-term kind of work. It’s almost like development money. So, the funds that are going into the kinds of research that will yield your benefits seven, eight, nine, or ten years from now are being curtailed (drastically) across the system. And it’s not just that the research is being cut back; we’re losing human resources. People are leaving, maybe going to the private sector or elsewhere. They’re retiring and not being replaced. This is eroding our capacity to ask the really important questions that need to be asked, and we are not having a chance to make a major difference.

Baker: What about the non-rice crops? The tubers and all the other specialties? What about cassava?

Zeigler: It’s even worse. Two centers work on it. One is in Cali, Colombia, an institution called CIAT. Another is IITA, in Ibadan, Nigeria. Money for cassava is down to almost nothing. And it’s a major staple.



The rice that changed the world: IR8. IRRI’s first rice variety, released in 1966, “was to tropical rices what the Model T Ford was to automobiles—a rugged variety that could go almost anywhere,” IRRI announced.

Billington: One of your slides at the Press Club contrasted the money going for R&D in private companies versus the money going to CGIAR centers.

Zeigler: Well, they [the privates] very legitimately need to make profit and need to give a return to their shareholders, so they identify research projects that will produce a product they can sell for a profit and that means they are going to sell to farmers who have the power to purchase and who see the value in the product. So, that’s going to very strongly skew the kinds of projects that will pass through their internal evaluation process.

Baker: One fierce impediment to developing food genetics for the public good is that there have been sweeping changes in U.S. patent laws on this. In the 1930s, the traditional principle was, in effect, that no patent rights to food crops were permitted. You could have rights to some new ornamentals, but not food. Then, in recent decades, this all changed. In 1992, a key law was enacted allowing private rights. In 2001, a Supreme Court decision ratified extensive and unprecedented private patenting of food crop improvements. In effect, this amounts to control over “the means to life,” and is against the American tradition of law.

Zeigler: Fortunately this can only be done in the U.S. under certain circumstances. After all, if it exists in nature, how can it be considered to be novel! But I know there have been wholesale filings on straight gene sequences. When you submit a filing, you have to give some use for it, but sequence-only claims are not now being allowed. This heavy filing has also led to a lot of confusion and worry, when in reality a patent is only an issue if you need to do your work in countries in which the patent is valid and where the issued claims might be relevant. For most developing countries, the patents are not in force at home. The only infringement threat might come in their exports. I've got nothing against patenting a product, if you create a product. But you can't patent the gene that yields that product. If you are clever enough to put several genes together, you can patent that particular combination, using those things. If somebody else wants to use them, and put them together they should be free to—you don't patent bricks!



ARS/USDA

Wheat stem rust, Puccinia graminis, a highly virulent strain, present on the Arabian Peninsula, after it emerged in East Africa in 1999. For over 50 years, the varieties of wheat in use worldwide had been bred to be rust-free, but the new outbreak threatens to spread around the globe. In the mid-1950s, a related wheat rust destroyed 40% of the U.S. crop.

Baker: The patenting matter must make research difficult.

Zeigler: It makes everybody nervous about exchanging plant material, because they are worried that somebody else will take a patent out on it and, for example, they would not be able to even use their own varieties. Recently, there was the "International Treaty for Plant Genetic Resources for Food and Agriculture." Basically, it determines how materials are handled. When people started patenting plants, everybody got scared. There were no rules. Now there are rules, so people are beginning to exchange more materials. So that also contributed to the problem of limiting germplasm exchange. People were afraid that companies were going to patent everything, and then sue people when they used their own stuff.

I think that we're a little better off now as the treaty is coming into force.

Baker: This patent control goes hand in hand with the spread of monoculture internationally. Look at soy, and the fast-changing, extreme situation in Brazil and Argentina, where a huge amount of area has been thrown into soy monoculture. Then, we saw soy rust show up from Asia.

In terms of vulnerability to the disease, from the plant pathology point of view, what principle would you bring out for the layman? What is the story on the new wheat rust?

Zeigler: Basically, wheat farmers around the world are depending on just one major gene to protect against rust, and that's recently been overcome, in East Africa. I'm not sure where it was first discovered—I think it was in Uganda, just a few years ago. It's wheat stem rust, and it's spread all over East Africa. The concern is that, if it gets into South Asia, moves across India, and into China, and up through Turkey, and then into the U.S., eventually, it could be devastating.

Baker: Was there only one variety?

Zeigler: It's not the varieties, it's the gene—the resistance gene.

Baker: How did it come about that the type of wheat grown was all of the kind that has this one resistance gene?

Zeigler: Because everyone wants stem rust resistance. CIMMYT (the International Maize and Wheat Improvement Center), our sister center, developed lines that had this gene, and then these lines were used for parents and crosses, and selected for resistance to stem rust.

Baker: If the CGIAR had enough funding tomorrow that could get your staffing and your labs and so forth to the levels you want, then would you be tracking such a contingency as this rust?

Zeigler: This is the thing: It's not what might happen; it did happen! It wasn't picked up earlier. In centers such as CIMMYT and IRRI, we have had one of the most wonderful sets of global networks, in which we would exchange germplasm, our breeding lines, etc., and among those, there are what we call nurseries, in which you might have, say, 20 lines of grow-outs. Some of these have specific purposes, and some of these actually monitor the presence of diseases around the world, so you can have an idea when something is changing.

But, in the mid-1990s, funding dried up for those kinds of networks. Funding was withdrawn. We're keeping what is called the International Network for the Genetic Evaluation of Rice alive on a shoestring, out of our unrestricted money, because we think it is so important to have that mechanism. Essentially, it is an early warning system

all over the world. That's something we can barely keep alive.

Baker: Yet the cost of these contingency measures is nothing compared with the cost of disease outbreak, even famine.

Zeigler: What happened is that the wheat network, because of the lack of funding, became—I don't even know if it is functioning anymore. So, something like this [wheat stem rust outbreak] happens, and it doesn't really come to the fore. If we had caught something early enough, we could have responded much earlier.

Basically, what you would do, at that site, where the new race of rust virus is, is set up field trials there, and you can do

The funds that are going into the kinds of research that will yield benefits seven, eight, nine, ten years from now, are being curtailed drastically. . . . People are leaving, going to the private sector, or retiring, and not being replaced. It's eroding our capacity to ask the really important questions, and having a chance of making a major difference.

breeding there to find a line that is resistant to that strain. I'm not sure how likely it is that you will, but what you can do is carry out more sophisticated genetic analysis of that fungus, find out where it changed, how it changed, and, in the case of wheat, although it is difficult, start looking for resistance in other related cereals. Look in barley, small grains, and then say, OK, is there some way we can move the resistance strain over to wheat?

Baker: And CIMMYT was the kick-off, in the 1960s, to all the Green Revolution work in wheat and rice and the whole network that became the CGIAR.

Zeigler: CIMMYT is nearly broke. It almost went bankrupt a couple of years ago, and it's still in rough shape. And, this year [2006], the European Union is not contributing its \$27 million to the system.

Billington: You said at the press conference that the EU is boycotting the whole year because it is fighting with the World Bank?

Zeigler: The situation is, the World Bank has a trust fund that manages donations to the CGIAR system. Then, the Sec-

retariat of the Bank distributes funds to the centers according to the contributors' wishes. Now, they changed the rules to this trust fund such that the Bank accepts none of the liability, or responsibility, for any of the funds that are distributed. That goes against the EU rules, so it cannot give money to any entity that is not accountable for it.

I said in October: Look, IRRI is an international organization. The EU can give the money to us and we will distribute it to the centers. We will accept responsibility for reporting and so on. They said no.

Baker: What is going to happen with this wheat rust?

Zeigler: It is airborne. It is going to spread. CIMMYT is trying to start a global rust initiative, but it just can't get enough funding for it. It's the sort of thing that has the support of U.S. wheat growers and such.

Billington: Does this kind of thing come through the U.S. Agency for International Development?

Zeigler: USAID and the USDA can give some. It's an issue of interest to U.S. farmers, to U.S. agriculture, so they can support some work. There's a cereal rust lab at the University of Minnesota, a USDA lab.

Baker: In botany, you are talking about continuing to develop new traits, new resistances, new productivity, new yields—really, as a way of life?

Zeigler: I'm a scientist. I believe that, if we do things right, we can actually live in a wonderful world. I do believe that we can, with the proper management of resources, have a decent living for everybody. What I would see is that we could produce what we need for a world population of 9 or 10 billion, on less land, and using less water than we do now. Environmentally, it could be wonderful.

We should be able—this is another one of our harebrained schemes and I'm not sure we'll get anybody to fund it—to make rice and wheat and maize a little more like soybeans, which can produce their own nitrogen fertilizer, fix it out of the atmosphere.

Legumes have a neat trick. They associate with some specialized bacteria that take nitrogen from the air—which is 80% of the atmosphere—and transform it into a form that can be used so that you don't have to add nitrogen fertilizer. So, if you can get the cereals to do that—

You see that one of the big environmental problems in China is that they are just dumping nitrogen fertilizer on their crops, and it is polluting their groundwater. You get nitrates in the groundwater, so that it's toxic. You get nitrate runoff into the rivers, and you get algal blooms and all kinds of other problems. So, we're also looking at how we can turn rice into a plant that can create its own fertilizer.

Baker: Could nitrogen fixing in cereals be developed in the next 20 years?



Cornell University

*Late blight, caused by the oomycete *Phytophthora infestans*, wiped out Irish potato crops, and millions of the Irish as well, from 1845-49.*

Zeigler: It might take a little longer. The timing's probably a tough call.

Baker: So, you are really talking about engineering plant life. If you could go ahead and have all the means at hand to operate field tests constantly, and to know when rust or some disease shows up, and know when we have to act, what would you do?

How about answering this in terms of going back to the 1840s potato famine in Ireland? If we had had in place then all the means for testing, and then, one day, we saw a few rotten potatoes show up in the 1830s, before the disease spread in the 1840s, could something have been done? Of course, I am asking a reductionist question about the technical side. We understand that monoculture dependence on the potato to begin with was forced on Ireland. But could such plant protection work in principle?

Zeigler: Yes, I think that's exactly right. We would have seen that the varieties being grown were susceptible and that, under the right weather conditions, we could have a catastrophe. So, therefore, we would begin a program—we would have an ongoing program to constantly improve the resistance to these diseases.

Baker: Fungus and rot and bacteria?

Zeigler: Bacteria and viruses, whatever. At IRRI, our funding cuts have sharply diminished what has been our core strength: host-plant resistance. We've had to cut back on that. And, I am desperately trying to find a way to get funds to rebuild this, because we're below critical mass in my opinion.

Baker: If you at IRRI are below that, what about elsewhere?

Does Peru have the world potato research? You are a flagship, so, if you're in bad shape, they're in really bad shape.

Zeigler: Yes. A number of centers are far worse off than we are.

Baker: In recent years, there have been warnings of a potato outbreak—in Russia or elsewhere.

Zeigler: Yes. I think it's only a matter of time for potatoes. The reason is that the late blight pathogen of potato—what used to be called a fungus—is very interesting in that it has sex. It has two different mating types. When potatoes were distributed around the world, only one mating type went with them. So, potato late-blight fungus has gone without sex for several hundred years or more.

Billington: That gives a new meaning to Mr. Potato Head.

Zeigler: That could lead to all kinds of comments! But then, in the last 20 years or so, or less, it's been demonstrated that the other mating type has spread. What that means is that, when you have only one mating type, you don't have any sexual recombination—no reshuffling of genes.

Baker: So you don't get mutations?

Zeigler: Well, you get mutations. But you can only have mutations. That's your only way of genetic change. If you have sex, you have mutation, plus you reshuffle the deck every generation.

Baker: Did the dispersion of just one sex go outward from Peru, from Mexico, or from where?

Zeigler: As in most areas, there is a bit of scientific debate about this. Most of the world believes that the other mating type came out of Mexico—the Toluca Valley, just west of Mexico City. Some Peruvians and Bolivians claim that they have evidence that it was present in the Andean valleys of southern Peru and Bolivia.

But that mating type is spreading around the world, and, as it spreads, the potential of pathogenic variation within the late-blight Irish famine potato fungus goes through the roof. And, you had big losses in the U.S. already. Upstate New York had some very bad occurrences in the 1990s and early 2000s.

Billington: So it's only a matter of time for it to blow up? And, again, people aren't working on it properly?

Zeigler: People are working on it, but there's not that much money for this stuff.

Baker: Is soy rust an example of that too? In other words, the kinds of things you'd be working on routinely, if you had

Henry Wallace: Science To End Hunger Forever

In early 1941, Henry A. Wallace, then Vice-President-elect for Franklin Delano Roosevelt, took steps to launch what became the Mexico-based International Center for Research in Wheat and Corn (CYMMIT), which produced the Green Revolution for those crops, and became the flagship institution for the Consultative Group on International Agriculture Research (CGIAR).

The CYMMIT project was one among the many economic initiatives of the FDR period, all associated with the principle that scientific breakthroughs can be deliberately fostered, to cause continual advances in agricultural production. This was a personal creed of Wallace, who served two terms as Secretary of Agriculture (1933-40) in the FDR Administration, as FDR's Vice President (1941-45), as Secretary of Commerce (1945-46), and fulfilled many special functions during World War II, including co-chairman of the Manhattan Project, and chairman of Economic Warfare for the War Mobilization Board.

Wallace repeatedly stated that science, coupled with related economic policies, especially food reserves and decent conditions for family farming, can eliminate hunger and want throughout the world.

Three programs of the Wallace/FDR period are most important for consideration today, given the policy morass in Washington, D.C. around bio-foolery, and the world food stock crisis.

1. Crop and livestock genetics can and must be vigilantly advanced, in the service of the public good, not under private cartel control.

2. National and international food reserves are essential to protect populations in times of disaster.

3. High-tech, family-run farms are essential for the national interest, so therefore, the Federal government must be sure that the farmer has infrastructure (water, transportation, communications, education), affordable inputs (machinery, fuel, electricity, chemicals), and an income that is based on prices covering his costs—a “parity” policy. This runs directly counter to globalization.

In 1936 and 1937, two successive volumes of the *Yearbook of Agriculture*, published annually by the U.S. Department of Agriculture, were titled, “Better Plants and Animals,” and dedicated to genetics. Wallace, in the preface to the 1937 volume, wrote:

“Life is always changing because environment is always changing. There are always new types of diseases, new insect pests, changes in soil fertility, changes in consumer demands. The work of the plant and animal breeders is directed to meeting these changes. It has only just begun. . .

“If genetics enables us to outdo nature’s own efforts, it is because it is in the truest sense a science of cooperation with nature. We want to do different things than nature does—for example, in the creation of hogs with plump hams, or wheat-X-grass hybrids with plump seeds—but we have to learn nature’s methods of doing them. I think that more knowledge of how to cooperate with nature for our own good is the greatest need of the world today.”

Wallace himself was a master plant and animal geneticist. In 1923 he developed the first commercially viable corn hybrid, and in 1926 founded what became the Pioneer Hi-Bred International seed company.

But he himself regarded as his most successful achievement, the 1938 law for a U.S. “ever normal granary,” to store up grain in surplus years to cover lean years. He wanted this internationally, and said, moreover, that “after adequate storage supplies of wheat, corn and other grains have been established, it becomes the part of wisdom to conduct further storage operations in the soil rather than in the grain bin,” foreseeing advances in soil fertility and crop science to end hunger forever. (Jan. 26, 1937, National Farm and Home radio)

For more on Wallace, see Lyndon H. LaRouche, Jr., “The Geometry of the Henry Wallace Nomination,” and Robert L. Baker, “Henry Wallace Would Never Have Dropped the Bomb on Japan,” *EIR*, Nov. 7, 2003.

—Robert L. Baker



Henry Wallace

the normal precautionary R&D under way, are not getting done? Soybean rust, for example, came to South America from Asia, arriving in 2001; it showed up in Argentina in 2003. Then, in 2004, it arrived in North America on the winds of the hurricanes. Now, the fungus has spread all across the United States.

Zeigler: Yes. It showed up in Brazil and so on. And, when you get just the right growing-season conditions, you can have your soybean crop just go *pphhhhtttt!*

Baker: Of course, someone can say: Don't worry, we can take care of it with this or that treatment. But, if you look at

land-use patterns, and see how people switched to soybeans under increasing monoculture, and marginalization of farming under free trade, this is not a snap. For example, the Delmarva Peninsula, which once produced mixed crops for the Washington/Baltimore metropolitan area, has gone over to soy. Then, the rust hit. So, you are piling onto family farmers—who have come to depend on off-farm jobs to continue farming—sudden extra costs for fungicide. In addition, off-farm jobs are disappearing as de-industrialization worsens in the United States. Look at Michigan, Ohio, and Indiana.

Billington: What about the avian flu?

Zeigler: It's a very serious concern. The implications of a jump to humans are enormous, just in terms of labor. What if 20 or 25% of your population is down during harvest time? Even if you have "only" a 2% death rate, if you have 25 or 50% of your population falling ill, your infrastructure and your processes could grind to a halt. And, is there a point at which they are not re-startable, some of them? I don't know.

Baker: A Malaysian expert is working on food supply plans for the contingency of not having poultry for animal protein in the national diet. He is thinking of legumes to substitute. He is worried that the know-how involved in cropping isn't even present among the population anymore. They don't know how to farm. But you are saying that, beyond that, the people may not be there at all, skilled or not, for beans, rice, and anything?

Zeigler: It could be a nightmare scenario. I remember when I insisted on having an influenza plan at IRRI. I also insisted on buying enough tamiflu for all of our employees and our dependents, so that we wouldn't shut down or have our critical services shut down. Some said it was a waste of money.

But you have to be forward thinking, and you have to plan for the worst, and hope it never happens. The scenario is terrible, especially in places like all over Southeast Asia, where the medical support is not what it needs to be to handle something like this.

Baker: Yes. Look at SARS. Here in Washington, D.C., near Dulles International Airport, the local county hospital handled SARS perfectly; they did a perfect response job when cases of infectious disease showed up. But, that can't be taken as par for the world. Sadly, it's the exception.

Baker: With your friendship with Dr. Norman Borlaug and the early leaders of the CGIAR network, do you have an interest in or recollections from them of the history of sound R&D and food policy? It was Franklin Delano Roosevelt's Vice-President, Henry Wallace, who was personally involved in corn and other genetics, who originated what became the CGIAR, the first research center in Mexico, now called CIMMYT.

Zeigler: Our history in rice is reasonably rich. We are coming up on our 50th anniversary. We were founded in 1960.

IRRI has started developing an oral history. We are interviewing all the old-timers who are still alive. Hank Beachall is still alive. He won the World Food Prize.

The IRRI farm manager was right down the road from us. We never interviewed him, and he died. He had been there since the first day. We will interview his wife, and she will fill us in on a lot. So we're in the process of trying to collect this story.

Baker: What about your own background? Why do you call IRRI the "crown jewel" of the CGIAR network?

Zeigler: Well, it depends if you're a "rice guy!" My major professor at Cornell was a potato guy. And I did my thesis on cassava because I was in the Peace Corps in Zaire, from 1972 to 1974. I first went to the University of Illinois, then the Peace Corps, then back to graduate work in plant ecology at Oregon State.

I think, when I went to the Peace Corps, I didn't know that plants got diseases! But, when I was in Africa, there was an outbreak of disease of cassava, and that was a staple food. There was famine. I became interested in plant disease because there was this epidemic.

I had studied biology at the University of Illinois. I have always been interested in agriculture because of my family's farming in Pennsylvania. I would spend the summers on the farm. I got into agriculture, liked it; and I got into plant pathology. As an undergraduate, I got into plant ecology. I thought it was really interesting.

I was reading Paul Ehrlich's books, William Paddock's books—reading the stories of global agricultural collapse. And it didn't happen. And it didn't happen because of institutions like IRRI. People solved the problems.

Billington: Ehrlich and others didn't think it was possible to solve problems.

Zeigler: I am one of these guys who thinks it is possible. I think I have history on my side. Of course, history has been on other people's sides; there were a few hundred years of dark ages; there have been big-time collapses.

Billington: We have to get people to think at that level. We're at one of those moments when the world is going to go one way or the other.

Zeigler: I was intrigued, and I certainly bought their arguments at the beginning. I participated in organizing the first Earth Day in Illinois. But then quickly, I guess subconsciously, I decided to pursue science and try to make a difference in the world.

References

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Editorial

A Moment of Truth Has Arrived

Two major events from the week of Feb. 19 underscore the fact that the Anglo-Dutch oligarchy, centered in the City of London, has arrived at a moment of truth which would determine, in very short order, whether the planet is plunged into a civilizational Dark Age. Very few people around the world have the faintest idea that this is happening—and among those who do, only Lyndon LaRouche has a clear idea of what can and must be done to politically defeat this horror.

First, there was the arrival in the Sea of Oman on Feb. 15 of the *USS Stennis*-led second U.S. Navy carrier group. Thus the naval assets are in place in the Persian Gulf region to orchestrate a premeditated “accidental” confrontation between the United States and Iran, which could trigger an American pre-emptive attack on Iran. This danger is being trumpeted worldwide, from the BBC, to the head of the U.S. Naval Forces Central Command, Vice Adm. Patrick M. Walsh.

Second, there was the decision by the Bank of Japan, to raise interest rates, thus moving Japan closer to the abandonment of the pivotal yen carry trade. This trade—by which mega-banks have been borrowing at near-zero interest rates in Japan, in order to reap the benefits of higher rates elsewhere—has been at the very center of the John Law-style financial bubble which characterizes the world economic “prosperity” that Bush Administration officials like to talk about, and which the Anglo-Dutch financial oligarchy has used to sustain its looting operations. This step has ominous implications for a near-term collapse of the system.

Such events portend an immediate breaking point at which crucial decisions have to be made by world governments, and the populations to which they are responsible. The financial system, and the political system, have reached a boundary condition, and the question is: Who will dominate the world system that now emerges? Since the American Revolution, there has basically been a dual power situation—with republican America on the one side, and the Anglo-Dutch on the other. Now, one side or the other has to prevail.

If the Anglo-Dutch maintain their control, they are prepared to move ahead with their intention to destroy

the United States. There are differences within the City of London crowd about how to proceed with this objective. One grouping would like to pull the plug all at once, and see the nation-state which it has always hated, be rubbed in the dust. Another, however, fears that a dramatic crisis might in fact trigger the kind of reflex that the early 1930s crisis did—the return of an FDR-like figure who would tap the republican heritage of the American population, and put the United States back on a Constitutional course that would eliminate the power of the supranational “money-changers.”

The decisive shift reflected in the Nov. 7, 2006 elections in the United States, has set the stage for the revival of the American republican tradition. Spearheaded by the New Politics which the LaRouche Youth Movement set in motion, this change has created momentum toward ridding the U.S. government of Cheney and Bush, and thus restoring the U.S. Presidency to a position of respect and competence to deal with the world crisis.

Already, one can see positive reactions to the U.S. shift throughout the rest of the world. Russian President Putin’s intervention in Munich, the meeting of Russia, China, and India in New Delhi, and the Six-Party deal on North Korea, all reflect a new international strategic geometry, which is moving to box in the Anglo-Dutch war faction. Such an environment is potentially very supportive of the moves, led by LaRouche, to remove Cheney, then Bush. Once that is done, the U.S. can proceed with an alliance with Russia, China, and India to craft a political solution, based on what FDR did with the war mobilization, and the creation of the Bretton Woods fixed-exchange-rate system.

There is no alternative to dealing with this full strategic picture. Tweaking the financial regulatory system, or launching months-long investigations, won’t work. Patriots of all countries must understand the Anglo-Dutch predatory succubus as their enemy, and act to protect their people.

A moment of truth has arrived. LaRouche’s webcast of March 7 (beginning at 1 pm Eastern Time at www.larouchepac.com) will give you further guidance, and should not be missed.