EIRFeature

THE POPULAR PITS OF CURRENT SUPERSTITION

The Dance of the Bio-Fools

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They met, and married, during a seance. She was the spectre. It was what he believed to be the low cost of feeding her, which he, despite her complaining ways, found most attractive.

In any way in which you may choose to calculate, only fraudulent arithmetic could have built a case in defense of the current promotion of what are currently called "bio-fuels." Believers in the cult of "bio-fools," have no one as much as themselves, against whom to complain for the inevitable outcome of continuing such a policy. This is already the leading fact of that situation, even before taking into account the assured, mass-murderously costly effects of continuing the repeated introduction of that policy: effects on the food supply, and, therefore, also, on the life-expectancy of human beings generally. I recommend the use of that term of opprobrium, "bio-fools," or, "biofooled"; I do this not to be cruel, but, rather, because these are the kindest among the truthful euphemisms available.

The current fad of "bio-foolism," is a sort of fraud which is inherent, to similar effect, in what some fellows might admire, as the allure

of a prostitute carrying a probably fatal type of communicable disease. The risk should have been immediately obvious to anyone with even a modicum of scientific competence, had they not been compromised by what was for them the lure of a tempting opportunity. Consequently, among dupes of biofoolery, there are probably relatively few adult human beings who actually care much, at that moment, whether, or not, there is any sense in the concept of "bio-fuels." Usually, among the motives met in support of this scheme, as among compulsive gamblers, there is chiefly the fanatical opportunist's reckless, and also more or less demented, mere wish to believe.

For many among these culpable ones, the specific choice

of motive is a sly, "I think I can gain a profit (or a vote in the next election, from this swindle)." For fanatics of that same general quality of degeneracy shared with today's "neo-cons," this offers yet another chance to bring the standard of popular belief and behavior of society, toward a level of species-morality lower than that of noble chlorophyll: in fact, to approximately the systemic cultural level of charcoal.

My associates are currently producing a more than adequate body of first-pass evidence, in exposing crucial aspects of that biofuel fraud which has also taken over the minds of relevant dupes within the Congress and some state legislatures.¹ In this present location, my own task is to add something of deeper relevance, going qualitatively beyond the necessary tasks which my associates are fulfilling. My duty in that, is to introduce the subject of a deep quality of heathen immorality, an immorality which the bio-fuel hoax reflects in the corrupted manner of the thinking which has

been induced by current cultural trends, among many dupes from among today's world's population generally.

It should be noted, that, in a relevant docket, the fraud of



^{1.} The monstrously destructive effects of a general promotion of the use of so-called "bio-fuels" is documented in the published reports of my associates.



Pieter Brueghel the Elder's "The Alchemist" (detail).

"bio-fuels" could also be classified under the heading of "mass murder." It is, in fact, a peculiar form of mass murder, that promoted by such means as inducing the intended victims to submit in the fashion of those individual members of a mob who have volunteered to assist in their own lynching, or guillotining.

1. The Hoax Called 'Thermodynamics'

There are two qualitatively distinct levels to the hoax called "bio-fuels." On the surface, the argument which is presented on behalf of "bio-fuel" promotion, is a simple swindle imposed upon the gaping-mouthed variety of credulous fellows among us. In its nastier, ostensibly more sophisticated expression, the "bio-fuel" swindle has deeper, more ominous, moral implications for the existence of the human species generally. It is those latter implications which are addressed by me here. The key word for that deeper hoax, is "thermodynamics."

The subject known as "thermodynamics" today, was officially brought into circulation, beginning 1850, by Lord Kelvin, Rudolf Clausius, and the mathematician Hermann Grassmann, among other authors of what was to become the hoax known as "The Second Law of Thermodynamics."² The pretext on which this concoction was premised, initially, was a perverted reading of an excellent work by the Ecole Polytechnique-related French scientist Sadi N.F. Carnot, his 1824 "Reflections on the Motive Force of Power."³

Professor William Draper Harkin's follower, and my since-deceased collaborator in the Fusion Energy Foundation, Professor Robert Moon). Ironically, Riemann's approach to electrodynamics was launched by work in which he had participated with Heinrich Weber's brother, Wilhelm, with support of Carl F. Gauss. The issue here is one of method: the outcome of Leibniz's dynamics in the scientific method of Riemann, versus the reductionist (neo-Cartesian) method of Clausius, Grassmann, J.C. Maxwell, et al., and of the still more radically reductionist followers of Ernst Mach, such as Ludwig Boltzmann. This is the reductionist method in thermodynamics, that of treating a merely frequent effect as a mere mathematician's nominalist substitute for a physical principle; this latter ontological perversion is the root of a later, worse doctrine, that of such devotees of Bertrand Russell as Norbert Wiener and John von Neumann, that latter a doctrine far more radically incompetent than that of the authors of the so-called "Second Law." The fundamental methodological fallacy of Clausius' and Grassmann's argument, is illustrated by their ignorance of what should be studied by all modern students of physical science, as the crucial implications of Johannes Kepler's treatment of the subject of the equant, and, therefore, of the role of actual dynamics in Leibniz's uniquely original, anti-Cartesian development of the calculus of the Keplerian infinitesimal.

3. The famous scientific and military genius, officially France's "Organizer of Victory," Lazare Carnot (1753-1823), had been associated with Gaspard Monge's founding and development of the Ecole Polytechnique, then the world's leading scientific association, and, in that same capacity, had been associated with Germany's Alexander von Humboldt. Among the circles of the Ecole Polytechnique, was the Sadi Carnot (1796-1832), who crafted his own "Reflections." The Carnot family tradition was continued by Sadi M.F. Carnot. Notably, Carnot was the President of France who was assassinated in 1894. President Carnot's assassination was the second of a trio of events, beginning with the ouster of Germany's Chancellor Bismarck, and concluding with the Dreyfus case, which set into motion the launching, by Britain's Prince Edward Albert (later Edward VII), of what became the geopolitical scheme known as World War I.

^{2.} An implicit, principled mathematical challenge to Rudolf Clausius's concoction, was delivered by Bernhard Riemann in his 1858 "Ein Beitrag zur Elektrodynamik," which was, in turn, challenged, on behalf of Clausius, by a Hermann Grassmann who was supported in this by the editor of *Riemanns Werke*, Heinrich Weber. Riemann's referenced work was premised on a line of development in electrodynamics (as this development was emphasized by

Sadi N.F. Carnot (not to be confused with President Sadi M.F. Carnot) had presented a valuable conception; but, a quarter-century later, Clausius and Kelvin attached an onto-logically fraudulent interpretation to that evidence. The hoax authored by Kelvin, Clausius, Grassmann, et al. became known as "thermodynamics."⁴

To understand the nature, and the present-day effects, of the hoax of Clausius, Kelvin, Grassmann, et al., we must review the specific peculiarities and related conflicts within the history of European science, since that science's roots in the work of such ancient Greek figures as Thales, Heracleitus, the Pythagoreans, and Plato.

The Historical Background

The most notable of the "genetically" European origins of Clausius' and Kelvin's pathological concoction, is the development of mechanistic methods, as by the ancient Greek Sophists, such as the celebrated Euclid of *Euclid's Elements*.

Competent European science had been born, long before Euclid, within the bounds of development of astrophysics, and also astronavigation, by predecessors who included such as the designers of the Great Pyramids in ancient Egypt. The Egyptians' relevant Greek followers, are typified by the Pythagoreans and the circles of Plato. The method of those Classical Greek scientists, had been known in those ancient times as *Sphaerics*. *Sphaerics* is also the basis for the method of Gottfried Leibniz, which Leibniz named "dynamics," after the ancient Greek *dynamis*, in his refutation of the incompetent, mechanistic method of René Descartes.⁵ This was also the method of Bernhard Riemann, as expressed by Riemann's famous 1854 habilitation dissertation, and in his later development of the concept of physical hypergeometries.⁶

In *Sphaerics*, there were no axiomatic or similar qualities of formal presumptions, none like those which were akin to the ontological presumptions which have become associated, even in more modern times, with those fictional notions of aprioristic definitions, axioms, and postulates associated with Sophist follower Euclid's tradition.

The ancient founders of what became the only valid current of European science, had looked up to the night-time skies, as the great navigators of Egypt and its predecessors had done. To them, the night-time sky was as if it were the interior of a great sphere, on which the stars seemed to have been painted, against which background those objects which the Greeks saw as "wanderers," planets, moved.⁷

As Albert Einstein came to agree: to relive what the Egyptian and related founders of the method of *Sphaerics* had experienced, it were sufficient to work one's way, with some time spent helpfully at even a modest telescope, through the pages of relevant writings, on astronomy, of Kepler, beginning his *Mysterium Cosmographicum*.

For competent such observers, such as the ancient Greek practitioners of *Sphaerics*, no *a priori* assumptions were to be tolerated. No line could be generated merely as an extension of a point. No surface could be generated merely as an implicitly deductive extension of a line. No solid could be generated merely as an implicitly deductive extension of a surface. *For each of those successive developments, some principled form of efficient physical action* (dynamis) *was required*, as the great Archytas and the other circles of Plato laid the foundations for all competent strains of development of physical science since that time.⁸

As the great Eratosthenes emphasized, from his own reflections circa 200 B.C., Archytas' construction of the dou-

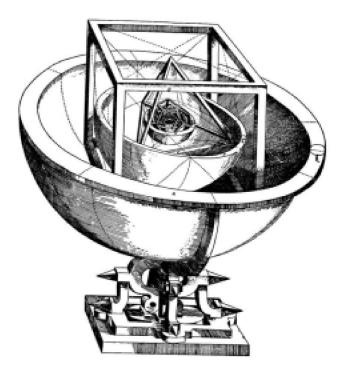
^{4.} The attribution of entropy as a principle of nature, is the crux of the fraud which Clausius, Grassmann, Kelvin, Helmholtz, Maxwell, and the Machians attributed to what have been classed as thermodynamical processes. The introduction of a reductionist approach, in and of itself, embeds entropy implicitly in the conceptual system; making this explicit, as in the so-called "Second Law," transforms an offense born of ignorance, into a matter of criminal intention. Heat is essentially an effect. In first approximation, the significance of "heat" lies in the relative "energy-flux-density" expressed as the quality of heat-action. For example, "heat" expressed as the action of chlorophyll, is of a higher order than the heat obtained by burning of fuels created through the action of chlorophyll. Hence, the fraud of "bio-fuelishness."

^{5.} Cf. in *Gottfried Wilhelm Leibniz: Philosophical Papers and Letters,* Leroy Loemker, ed.: "Critical Thoughts on the General Part of the Principles of Descartes" (1692), pp. 383-412; and "Specimen Dynamicum," pp. 435-452).

^{6. &}quot;Über die Hypothesen, welche der Geometrie zu Grunde liegen," *Bernhard Riemanns Gesammelte Mathematische Werke*, H. Weber, ed. (New York: Dover Publications reprint edition, 1953), also (Vaduz, Liechtenstein: Sändig Reprint Verlag Hans R. Wohlend).

^{7.} The long lapse of time preceding the general melting of the most recent period of general glaciation (as in Europe and North America, for example) presents us a very complex series of developments, including the fall of the levels of oceans to about four hundred feet below levels typical of the recent three to five thousands of years. The invasion of the freshwater lake by a wave of Atlantic-Mediterranean sea water, called the Black Sea, is fairly described as a "watershed" event of relevance for the movement of maritime civilizations into the estuaries of large rivers, and the subsequent, long process of upstream development of organized forms of civilizations moving upstream and inland. Retrospectively datable calendars, such as those referenced by Bal Gangadhar Tilak's Orion and Arctic Home in the Vedas, show identifiable influence of ocean-travelling maritime cultures dating from as long as eight thousand years ago, and earlier. Notable, from the Second Millennium B.C. coastal sites along the Mediterranean, the most civilized cultures were maritime cultures, like those of Cyrenaica, which tended, in Europe itself, to be fortified against hostile inhabitants of the interior. We are still engaged in a long wave of development, from coastal regions and major riparian regions upstream, from domination by a maritime culture, toward the full development of a truly land-based culture.

^{8.} The convenient desk-top reference on this general subject, is Selections Illustrating *The History of Greek Mathematics*, Ivor Thomas, trans., Vols. I and II (Cambridge, Mass.: Harvard University Press, 1939-1980). This is to be contrasted with interesting, but problematic, Neoplatonic commentators, such as Pappus and Proclus. However, even Ivor Thomas's work must be approached with at least as much caution as he repeatedly recommends to his readers. The only remedy for this predicament, is to repeat the reported discoveries *de novo*, oneself, such that the beliefs obtained are, in fact, truly your own.



Kepler's first-approximation view of the geometry of the planetary orbits, from the Mysterium Cosmographicum. Each Platonic solid is nested in a sphere, which defines the radius of the orbits. His later discovery of the ellipticity of the orbits resulted in a more complex conception, which he developed in The Harmony of the World.

bling of the cube, had provided the student the pivotal reliving of the original experience leading to a comprehension of the meaning of an efficiently *physical geometry*, as absolutely opposed to a merely formal geometry, such as those of *apriorists* such as the Sophist Euclid.⁹

The resurrection of science in post-medieval Europe, which occurred as the birth of a competent modern physical science, was implicit in the work of Brunelleschi, and was formally launched, as to specifications of principle, by relevant works of Nicholas of Cusa, beginning with his *De Docta Ignorantia*. Cusa is explicitly echoed by Johannes Kepler's founding of a systemically comprehensive physical science. The result of Kepler's and related initiatives, is presented implicitly, by Gottfried Leibniz's uniquely original discovery of the calculus of the infinitesimal, in following the intention of Kepler explicitly on this specific point. These events typify modern European science's revival and extension of the science of *Sphaerics* associated with the circles of Archytas and Plato.

The history of the modern science associated with its founding, occurs as by the work of the Fifteenth-Century Renaissance leaders such as Filippo Brunelleschi who used the catenary as a principle of construction, and by the founder of the general concept of modern science, Cardinal Nicholas of Cusa.

However, the birth of modern civilization, in Cusa's Fifteenth Century, was challenged, and remains so, still to the present day, by a revival of the relics of a medieval past, a neo-feudalist reaction against civilization typified by Grand Inquisitor Tomás de Torquemada. Rabid anti-Semite and Moslem-hater Torquemada's effort to return to the Dark Ages, like the same spirit expressed by Moslem-hater Samuel P. Huntington and others, today, marked the opening of a fresh interval of what had been a medieval quality of inquisitional, neo-feudalist, mass-murderous terror, from 1492 through the 1648 Treaty of Westphalia.¹⁰

Following 1648, France, under the leadership of Cardinal Mazarin's protégé Jean-Baptiste Colbert, set the pace for a great eruption of scientific progress en masse. However, even then, the folly of Louis XIV's entrapment of France in the Dutch wars, opened the gates for the neo-Venetian rise of the Anglo-Dutch India companies to a position, from February 1763 onward, of global leader in imperial maritime power which was significantly threatened only by the rise of the U.S.A. This Anglo-Dutch Liberal system was an imperial form of specifically *geopolitical* financier power. That is the financier power expressed today as the drive to bring about the self-destruction of the U.S.A. through the complicity of the action of the warfare and economic-monetary-financial policies of today's pet goats of the ultra-decadent Bush-Cheney Administration.¹¹

From Kepler Through Riemann

Looking back toward the origins of modern science from today, it was Johannes Kepler, working explicitly from the

^{9.} This defines, implicitly, an anti-Euclidean geometry, as opposed to what is presented academically as a merely non-Euclidean geometry of the type associated with the work of Lobatchevsky and the younger Bolyai. Riemann's 1854 habilitation dissertation defines a modern, anti-Euclidean mode in physical geometry, leading, through the issues of Abelian functions, to those truly dynamic modes of physical (rather than merely formal) hypergeometries, on which a competent modern science of physical economy depends absolutely.

^{10.} As the British Empire has used wars which it orchestrated among the nations of Europe, and elsewhere, in the past: to weaken the potential, continental forces of opposition to a global maritime imperialism, so, today's geopolitics, such as that of two "world wars" of the Twentieth Century, has evoked the specter of a menace attributed to a billion or more Moslems, just as the ancient Byzantine Empire, and its Venetian successor used anti-Semitism and Moslem-hating to maintain imperial power over the nations of continental Europe.

^{11.} The Anglo-Dutch Liberal system was developed, under the influence of the New Venice party of Paolo Sarpi, in simulation of the precedent set by the medieval, *ultramontane* alliance of the slime-mold-like Venetian financieroligarchy with its favorite armed instrument, the Norman chivalry. For strategic reasons, the late-Seventeenth-Century Venetian financier oligarchy developed its Anglo-Dutch cover as a financier-maritime power. Anglo-Dutch Liberalism is the result, to the present date. "Globalization" is the current name for imperialism in that Venetian and Anglo-Dutch Liberal tradition.

standpoint provided chiefly by Nicholas of Cusa, who laid the foundations of all competent strains within a body of universalizing practice known as modern physical science; we have the following:

This set of connections was identified in a most relevant fashion by the Albert Einstein of his own later years, who emphasized that the foundations of competent modern science are to be located in the work of Kepler, and the development of what Kepler had founded as expressed in the work of Bernhard Riemann.

Yet, as experiences of the late 1970s and the sweep of the 1980s, within the ranks of a leading scientific association, the Fusion Energy Foundation, attest, the great majority of even leading nuclear physicists and related professionals of that time, had either never possessed, or had lost some crucial elements of comprehension of these deeper historic foundations of modern European physical science!

Among the majority of these circles, there was more shallow gossip, than actual knowledge of those discoveries which had been made, originally, by Kepler. These were discoveries on which all competent modern physical science depends, still today. However, until the recent decade or so, there were virtually no available and competent English translations of those works, by Kepler, which still constitute the foundations of all competent future developments in modern mathematical physics. Worse, the modern science curriculum, for public schools and universities, had been crafted by the malice prevalent among a kind of "Babylonian priesthood" exerting topdown control over the standards of the accepted doctrine on which the careers of scientists and the like depended. Careers depended less on the evidence of the experimental laboratory, and more on the "Laputa-like," officially decreed dogma practiced at the blackboard.

A crude and superstition-ridden reductionism, traced as a matter of religious credulities, such as belief in the work of the black-magic specialist Isaac Newton, has often crippled even what were otherwise genuine accomplishments of most leading scientists of the Twentieth Century. Still today, a virtual "Babylonian priesthood" dominates the peer-review institutions, crippling science and its educational programs, now, in worse degree than during the time of the Fusion Energy Foundation's deliberations.¹²

Typically, actually scientific method, as teams of the LaRouche Youth Movement (LYM) have experienced this for themselves, is the crucial example, demonstrated by Jo-



EIRNS/Jen Yuen

John Maynard Keynes, who opened Isaac Newton's secret chest of works on alchemy and magic, declared that "Newton was not the first of the Age of Reason. He was the last of the magicians, the last of the Babylonians and Sumerians..." (lecture on "Newton, the Man," 1946).

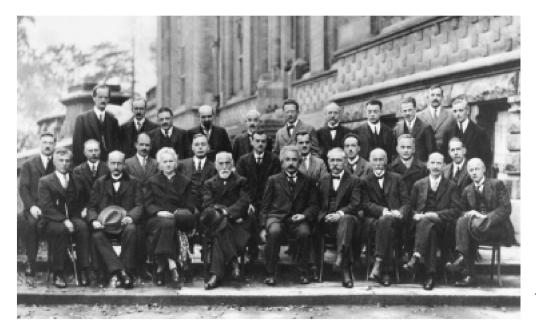
hannes Kepler, of the problematic attempt to define Solar orbits in a manner congruent with the notion of an equant. All comprehensive notions of a competent modern physical science are implicitly embedded in the implications of the problematic nature of the assumption of the *equant*.¹³ It is this discovery by Kepler, which provided modern science with a rigorously defined notion of the ontologically efficient actuality of what is rightly considered a universal physical principle, such as gravitation. It was Kepler's recognition of the fallacy of the equant which, according to Kepler's account, prompted Kepler's conception of the infinitesimal reflection in the very small, by a universal principle in the very large. All competent modern science is premised on an apriorism-free notion of a universe defined by a process of development among a set of universal physical principles of the same, experimentally defined, ontological quality, in themselves, as Kepler's notion of universal gravitation.¹⁴

Thus we have the image, as Albert Einstein emphasized, of a universe which is finite but unbounded. This universe is characterized, in action, by universal principles which have been gathered, dynamically, under the sway of a subsuming universal principle of anti-entropic physical action.

^{12.} A consideration of the papers from the chest of Isaac Newton, by John Maynard Keynes, gave the world an insight into the actual mind of a Sir Isaac Newton who was actually a kind of stuffed dummy, prefiguring Jeremy Bentham, used as a figurehead for the work of such more skillful hoaxsters as Galileo-follower Hooke who did the actual work officially attributed to a virtual "Mortimer Snerd," Member of Parliament Isaac "Open the Window" Newton. The "Newton project" was a scheme devised by a Venetian cleric resident in Paris, Antonio Conti, for inserting a thinly disguised version of French Cartesianism into London.

^{13.} E.g., Johannes Kepler, *The New Astronomy*, trans. by W.H. Donahue (Cambridge, U.K.: Cambridge University Press, 1992). See also *Appendix* to this article, and animations at www.wlym.com/~animations/.

^{14.} Thus, Einstein's notion of the universe as finite, but without external bounds.



The 1927 Solvay Conference. Einstein (fifth from the right on the first row) warned his fanatical empiricist opponents: God does not cast dice with the universe.

Look at Kepler's work on this account, as Albert Einstein came to define all competent modern science, as encompassed essentially by developments from Kepler through Bernhard Riemann.

Kepler's discovery of the functional principle governing the alignments of the Sun, Earth, and Mars, has been the actual birth of the practice of a competent modern physical science, and, therefore, also, of a science of physical economy. We treat the fraud of "bio-foolery" here from the standpoint of the implications already embedded in the way in which Kepler discovered the physical nature of universal physical principles in the paradoxical implications of attention to the matter of the *equant*.

2. Universal Physical Principles

As contemporary Americans should have learned from our nation's painful experience with the shock of those 1998 calamities caused by LTCM's greedy reliance on the Black-Scholes formula: as Albert Einstein warned the fanatics of the Solvay Conferences, the Creator does not cast dice with the universe.

It should not surprise any actually thinking person, that mankind's known experience has shown, that the concept of *universal physical principles* was developed as an outcome of what were called, properly, *astrophysics:* the outcome of the application of what were otherwise apparently merely astronomy, but nonetheless reflected the application to such matters of practice as transoceanic and related navigation. The Earth on which our species has been known to reside, is situated under the heavens. We are situated, thus, within the apparent realm of a great spherical domain, our universe. That is the viewpoint from which the notion of universal physical principles was developed by the Egyptian and other predecessors of the Classical Greek civilization of Thales, Solon, the Pythagoreans, and Plato.

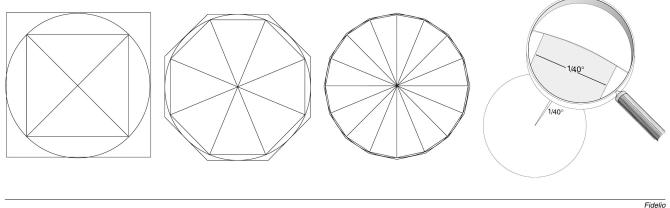
The crucial distinction here, is a practical one. Does that universe change in respect to its manifest principles? If so: what orders the changes?

The empiricist dupes of the Isaac Newton cult, such as de Moivre, d'Alembert, Leonhard Euler, and Joseph Lagrange, argued, implicitly, but emphatically, that the universe is fixed, as all mechanistic-statistical systems are fixed: unchangeable in respect to principle. Carl F. Gauss, writing in his 1799 doctoral dissertation, not only disagreed with the empiricists, but virtually demolished their opinion scientifically. The universe, contrary to the empiricists and their like, is not entropic; it is essentially *dynamic* and therefore *anti-entropic*, and anti-Euclidean, in respect to its characteristic physical geometry.

A universal physical principle, is a law of the universe which bounds observable action within the perceived universe of events, but, which is, nonetheless, neither a discrete object of the senses, nor of the mechanistic-statistical form of kinematic interaction among moving parts. Such, for example, is the anti-mechanistic, dynamic nature of the principle of universal gravitation, as this was first discovered by Johannes Kepler.

This notion of a dynamic principle of gravitation, came to Kepler, emphatically, through the influence on him of the work of Cardinal Nicholas of Cusa. For example, Cusa had reported, as in one among his written sermons, that he had discovered a fallacy in the argument of Archimedes on the subject of the circle (**Figure 1**). Rather than viewed as the convergence of a series of regular polygons on a circle as its

FIGURE 1 Quadrature of the Circle



Nicholas of Cusa showed that Archimedes' attempt at "quadrature of the circle"—to approximate the value of pi—was ontologically incompetent. The first three drawings show the process of estimating the area of a square approximately equal to that of a given circle, as the average area of two regular polygons. In the last drawing, although the inscribed polygon of 2¹⁶ sides may seem to closely approximate a circle in area, it actually contains a devastating paradox. There are slightly more than 182 angles of the inscribed polygon within each degree of circular arc.

implied limit, the well-ordered set of regular polygons must be seen as determined by a universal principle of least action, a set which may be expressed, under appropriate circumstances, in respect to its *ontological* contrast with the form of a primarily circular perimeter.¹⁵

To those of us who, like Cusa, Kepler, and Leibniz, have been made familiar with the work of Plato et al. within the practice of *Sphaerics*, as Theaetetus' discovery of the completion of the series of five regular Platonic solids typifies this knowledge, there is nothing terribly surprising in Cusa's announcement of the needed correction of Archimedes' argument on the subject of the circle. However, for such followers of Cusa as Luca Pacioli, Leonardo da Vinci, and Kepler, this rediscovery by Cusa was crucial. However, it was the attention to the significance of the set of five regular solids referenced in Plato's *Timaeus*, which was crucial for the discoveries by Kepler.¹⁶ The valid form of modern conception of universal physical principles is traced, thus, essentially from Plato, especially from the *Timaeus*. That concept is also embedded, implicitly, in the publications of Cusa; however, the idea of a universal physical principle was established for modern times by those among Kepler's discoveries in the field which uniquely express the idea of a *universe*: the field called astronomy, or, better said, astrophysics.¹⁷ Kepler's uniquely original discovery of gravitation, first for the case of the Sun, Earth, and Mars, and, later, for the harmonic composition of the Solar system as he knew it, is the foundation of a competent modern physical science; this is a universal science rooted, rigorously, in the domain of what are sometimes termed either "unique" (as by Riemann) or, in the usage of some others, "crucial" physical experiments.

The issues of efficient universal principle, so posed for experimental approaches, lie within the domain of what are, respectively, the immeasurably small and large, alike. When confronted with such issues of universal physical principle and their practical implications, as in defining the experimental domain of physical economy, the mechanistic approaches inhering in the prejudices typified by a Euclidean or Cartesian geometry break down, and, thus, present such approaches as hopeless failures in the domain of relevant practice.

This prevailing conceptual failure in the informed view of most modern scientific method, still today, is no accident. The failure has been intentional, as I have detailed the history of this problem in locations published earlier. The point to be made on this account, is of such crucial significance for treating the subject at hand, that I must now restate the relevant argument afresh, in the present context, the

^{15.} Our present knowledge on this matter is to the credit of the work of the late Father Haubst of the Cusanus Gesellschaft. The referenced fact showed up in Haubst's attention to documentation of written sermons by Cusa. Helga Zepp-LaRouche's access to this crucial piece of information came through her decades-long association with Haubst, in connection with her studies of the work of Cusa and Friedrich Schiller. (Helga shares common Mosel origins and affinities with both Haubst and Cusa.) Otherwise, my own knowledge of Archimedes on the subjects of the circle and parabola, came through a pained working-through of relevant portions of a French edition of Archimedes' collected works.

^{16.} The completed process of discovery of the uniqueness of what are named the five "Platonic Solids," was accomplished by a celebrated case of Socrates' pupil Theaetetus. The first phase was accomplished by the Pythagoreans in Syracuse; but, the complete argument is traced to the Theaetetus who was a celebrated mathematician of his time. The name "Platonic Solids" refers to the celebrity which this subject occupies within Plato's *Timaeus* dialogue. Actually, we must proceed further, as Kepler did, to the role of truncated Archimedian solids, to uncover some crucial features of the way in which the physical universe is organized in the small.

^{17.} Cusa had already referenced the pre-Ptolemy Aristarchus of Samos' discovery that the planets orbit the Sun.

deeper, ostensibly thermodynamic implications of the current "bio-fuels" hoax.

Galileo's Leanings

To understand, and, hopefully, cure, the most widespread corruption in taught science today, it is most useful that we take into account the role of a man who was a nasty, and also influential rogue for his time, Galileo Galilei. We must understand, thus, the rot which Galileo, such among his successors as René Descartes, and the largely fictive figure of Sir Isaac Newton, expressed in forms such as the already referenced Eighteenth-Century cases of de Moivre, d'Alembert, Euler, and Lagrange, and, also, Laplace, Augustin Cauchy, et al.

Galileo Galilei's access to some of Johannes Kepler's work-in-progress, had come through Kepler's correspondence, on the subject of musical tuning, with Galileo's father. Galileo, as an adult, was a hoaxster and a household lackey of the infamous founder of that New Venetian party, Paolo Sarpi, from which the Anglo-Dutch Liberalism of today invaded relevant parts of northern Europe, that during the span of the late Sixteenth, through early and late Seventeenth centuries. Sarpi himself played a key role in the English Cecil faction's virtually sending a still very fertile William Shakespeare, into a proverbial "Coventry," during his last years of his life. This was a consequence of installing Sir Francis Bacon as a power under King James I of England. Sarpi's lackey, Galileo, personally trained Thomas Hobbes. Otherwise, Galileo paralleled the scurrilous role of Robert Fludd in the then-current campaign of attempted defamation of the work of Kepler. Galileo's crude bowdlerization of the work of Kepler, played a key role in the fraudulent English claims attributed to the literary output of the cult of "true believers" built up around black magic-specialist Isaac Newton.¹⁸

Galileo's own principal accomplishment, putting aside his sundry hoaxes in the name of science, was that of an advisor, on the subject of the reductionist mathematics of gambling, to inveterate gamblers with notable financial means. On that account, there is a line reaching from this side of Galileo's enterprise, then, into the follies of the likes and dupes of LTCM's Morton Scholes and Ben Bernanke today. In Galileo's method, the lie is, that either God, or some rival of the Deity, plays dice with mankind's fate. Indeed, there is a relevant, essential connection between this aspect of Galileo's activities, and the pseudo-scientific apologies of such kindred liars and hoaxsters as Bernard Mandeville, François Quesnay, and plagiarist hoaxster Adam Smith, on the subject of the Anglo-Dutch Liberal view of monetary-financial processes. This specifically empiricist ideology, as merely typified by Galileo, Descartes, and their influence, pervades not only generally accepted monetary-financial thinking, but also the axiomatic assumptions underlying most taught formal scientific method still today.

Therefore, at this point, we must consider a highly relevant point, for today's future, a point which I have, admittedly, addressed, rather frequently, in earlier publications: the systemic implications of the influence of Paolo Sarpi in the crafting of what has become modern Europe's continuing experience with Anglo-Dutch Liberalism and its expression as a form of neo-medieval imperialism.

The essential elements of the relevant historical process leading into the emergence of Anglo-Dutch Liberalism, and the development of that Liberalism into the form which has dominated the world increasingly, during most decades, since London's triumph over continental Europe at the February 1763 Peace of Paris, is, in summary, the following. Although I have elaborated this emergence of what is called "geopolitics" in a variety of earlier locations, it is necessary, for clarity on the subject at hand, to restate that history for its relevance at precisely this point in the present report.

'The Oligarchical Model'

The history of today's form of globally extended civilization since the downfall of Athens, that in its own folly of the Peloponnesian War, is, chiefly, a history of European imperialism. By "imperialism" we should mean, here, the triumph of what is called "the oligarchical model" over the republicanism associated with the historical memory of Solon of Athens.¹⁹ The most notable expressions of this "genetic" strain of imperialism which emerged in the aftermath of both Alexander the Great's victory on the plains of Arbela, and the misfortune for mankind of his subsequent death, are the

^{18.} The "Isaac Newton" hoax polluting science education still today, was actually of Venetian provenance. (Cf. Lyndon H. LaRouche, Jr., "How Bertrand Russell Became an Evil Man," Fidelio, Fall 1994.) The operation, which was pivoted on the figure of Gottfried Leibniz, from the latter quarter of the Seventeenth Century, to the close of the Eighteenth, was centered around a study which Leibniz was obliged to conduct on behalf of the feudalist claims of that House of Hannover to which Leibniz was placed in service during the latter part of his life. All sorts of Venetian agents were deployed within Italy, into Germany, and into France, on this account; but, the one most notable for the case at hand, was a certain Abbé Antonio Conti, who was operating from Paris during most of his adult life, until his death in 1749. Conti became famous in Paris as a devout follower of René Descartes, and, later, during the first half of the Eighteenth Century, as the coordinator of a Europe-wide network of anti-Leibniz salons, featuring accomplices such as Voltaire, d'Alembert, Leonhard Euler, Maupertuis, Joseph Lagrange, et al., and also the London operation which produced the synthetic personality of "black magic" specialist Sir Isaac Newton. Conti's crucial part in this dirty business, was his authorship of a scheme, based in Paris, to create a "synthetic Descartes" in England, a hoax which featured the Rev. Samuel Clarke (see Loemker, op. cit., pp. 675-721). Since strong anti-France sentiments were prevalent in England at the relevant time (see H. Graham Lowry, How the Nation Was Won [Washington, D.C.: Executive Intelligence Review, 1988]), a synthetic Descartes, Newton, was produced with assistance from actual English scientists such as Hooke, and with a relatively large reliance

on the intellectual legacy of hoaxster Galileo Galilei. The named targets of Carl F. Gauss's 1799 doctoral dissertation were typical of the agents of the British "neo-Cartesians" manufactured under the auspices of the Conti network of salons.

^{19.} See Friedrich Schiller's Jena lecture on the opposing, republican versus oligarchical systems systems of Solon and Lycurgus.

Roman Empire, Byzantium, the medieval, *ultramontane* system of the Crusaders, and the emergence of the Anglo-Dutch Liberals' attempt, *as now*, to bring on a descendant of the *ultramontane*, Crusaders' system. We meet that effect of that history of imperialism today, in the City of London's geopolitical use of assets such as Vice-President Dick Cheney et al. "Globalization," as it is being advanced today, is a precise expression of the Anglo-Dutch Liberals' neo-Venetian form of intended global imperial rule. This is the key to the "geopolitical warfare" which is using the implicitly treasonous U.S. Bush-Cheney Administration and the international neo-conservative network, as its most immediate, principal, pro-"globalization" weapon of intended destruction of the U.S.A. today.

The key to understanding this present, Anglo-Dutch geopolitical threat to both the U.S.A. in particular, and civilization in general, is to be traced, by those who are competent in the history of specifically European culture, to the concept of the "Persian model," or, generically, the "oligarchical model," which had been put forward in the context of the rise of the power of Macedon in the aftermath of the Peloponnesian War. Formally, King Philip of Macedon, unlike his heir and leading political adversary, Alexander the Great, was a conspiring partner of the Persian Empire. The nasty scheme afoot involved Aristotle, an asset of King Philip's faction, who was also an agent, in fact, of the cult of Delphi, and personal enemy of Alexander the Great.

As it is known among scholars, Alexander had a great victory over the sundry allies of his father's scheme, but died, probably of a kind of poisoning, an act of either assassination, or massive calumny, to which uncomfortable figures among the oligarchy's more capable adversaries appear to be more or less prone up to the present day.²⁰

The relevant scheme, known during the span of King Philip and of the most effective Alexander the Great, as the project of Alexander's foes for creating a two-phase, Western and Eastern, world empire, was associated with the name of what was termed both "the Persian model," or, generically, "the oligarchical model." The Persian Empire was destroyed, but the model persisted: to the present da.²¹ On the subject of efficient forms of real-life conspiracies in history: in the usual discussion of this set of historical facts, misleading emphasis is placed on the supposition of an actually existent, or merely presumed conspiracy created by persons which appear to be colliding within a Cartesian mechanistic-statistical manifold; whereas, in fact, the really important, efficient conspiracies in history, are defined by conflicting ideas of principle, as in the case of the organic difference between the tradition of the U.S. Declaration of Independence and Federal Constitution, on the one side, and, on the opposing side, the specifically Venetian-style oligarchical "constitution" prevalent among Anglo-Dutch Liberals. It is ideas, not simple plots, whose conflicts shape the potential for action, in which the main course of history lies.

The most common source of both foolish forms, and allegations of conspiracies, is a lack of epistemological competence in the crafting of the opinions so expressed.

This point, respecting the ontological characteristics of actual conspiracies within society, is specific to the distinction of the human being from the ape, and of society as a process, from lower species and groups of species generally. Conspiracy, as a functional expression of the role of principled ideas within history, is the most natural form of existence of and among human societies. A sane view of the role of conspiracy in society, partakes of the qualities of development of the adult human individual mind which are essential in the functioning of physical science and Classical artistic composition alike. The man, or woman who does not "believe in conspiracy theories," is therefore showing us a lack of his, or her capacity to function rationally within society.

Thus, the truth of the conspiracy associated with the developments of the century following the close of the Peloponnesian War, lies in those leading ideas associated, on the one side, with developments within the pro-oligarchical Delphi cult of the Pythian Apollo, and typified, on the opposing side, by Solon of Athens, and by Plato and his legacy.

The idea of the oligarchical principle of that time, is preserved for reference as the surviving portion of Aeschylus' *Prometheus Bound*. The Olympian Zeus of *Prometheus Bound* is the image of the tyrannical figure, like such creations of Carl Schmitt as Adolf Hitler's dictatorship, and also, the related theory of "the role of the executive" adopted in practice by the George W. Bush Presidency. That tradition, which is to be traced, inclusively, to the Olympian Zeus of Aeschylus' drama, threatens the mass of the human population with personal and general degradation to the condition of virtually brainless cattle of a Nazi Nuremberg Rally. The threat is expressed just as the Olympian Zeus banned the use of forms of power such as the use of fire (and of nuclear fission) from ordinary human use. It is the notion that the reigning, privi-

^{20.} To its fearful opponents, the oligarchy says, in a fashion all its own: "Be impotent, play the fool, and we may not torture and kill you, as an example to others, as we have murdered or otherwise ruined so many among our capable adversaries until now. You may enjoy being our nominal adversary, as long as you are a foolishly impotent one!"

^{21.} It is relevant history, that Alexander was a Cyrenaican on his mother's side, and, as his strategically crucial visit to the temple of Ammon in Cyrenaica attests, of the persuasion shared among the followers of Plato through the death of the famous Cyrenaican product of the Athens Platonic Academy, Eratosthenes, later. Cyrenaica had become, even before Plato's time, a center of maritime culture, and of the navigational technology employed by Egypt for ocean-going flotillas of large wooden ships. From approximately the Seventh Century B.C., the Egyptian maritime culture, as typified by the role of Cyrenaica, was allied with the Etruscan and Ionian sea-going culture against the enemy forces centered upon Tyre. It was the Cyrenaican priest-

hood's rallying to the cause of Alexander which unleashed the series of developments, within Egypt and elsewhere, which led to the defeat of Tyre, and the subsequent doom of the Persian Empire.



leged few, as in the system of Bernard Mandeville, must succeed, that the rest of society be relegated to a policy of "devil take the hindmost."

This same pro-oligarchical dogma, is the prevalent existentialist doctrine, the doctrine of the 1933-1945 system in which Nazi existentialist Martin Heidegger played his part, at Freiburg, in his policy of banning actual ideas from the deliberations of society, as Theodor Adorno and Hannah Arendt did, in their fashion, in the post-war *The Authoritarian Personality*. The catch-phrase, "I don't believe in conspiracy-theories," has become the hallmark symptom of the brainwashed zombie walking in, dripping, arms stretched forward, from the waters of a "black lagoon."

It is the power to develop and act upon ideas of the same type expressed as experimentally validated discoveries of universal physical principles, and Classical forms of ideas of artistic culture (as distinct from the humanoid simulation of the "cultures" of simians, and of rhesus monkeys in a cage), which distinguishes human beings, and their cultures, from the habituated dispositions of lower forms of life. Under the reign of the oligarchical principle, the mass of society's humanity is divided, chiefly, between "tame cattle," to be herded and culled in due course, and "wild cattle," to be hunted down for sport of the sort currently pursued by the alliance of Blair, Bush, and Cheney, in the regions of Southwest Asia.

The internal distinction of globally extended European

civilization, as traced from the rise of ancient Classical Greece, is the presently continuing conflict between those who express that commitment in law common to Solon of Athens and our Federal Constitution's Preamble, and, on the opposing side, those whose idea of society's organization is based on the arbitrary supremacy of some medley of reigning oligarchical classes. Imperialism today is called "globalization," an empire headquartered in the habitats of the Anglo-Dutch Liberals' neo-Venetian financier-oligarchy.

Sarpi's New Venice Strategy

From its earliest traces, as an influence of Asian culture on the emerging, ancient European civilization, "imperialism" was always a specific name for developments within a larger, inclusive category, as expressed as "globalization" today. Popular romantic sentiment attempts to define an empire as a product of an emperor, whereas, in real history, an emperor, as an institution, may, or may not be a feature of an empire. The *ultramontane* system of the Venetian financier-oligarchy and its Norman-chivalry appendage, is a case in point; so is the case of "globalization" today. The characteristic feature of an empire lies in the role of the relevant oligarchy, not the special institutions which that oligarchy may choose to

employ, or reject.

For example, in historic ancient Greece, the "empire" was an expression of the Delphi Apollo-cult.

A glance at the ruins of the site, still today, catches the indicative features. First, surrounding the temple itself, there are small structures, nominally representing the wealth of each of a set of Greek cities. These sites were, in effect, treasuries. Then, look to a nearby coast, whence the ships associated with the Delphi site's financier interests conducted a form of commerce also reminiscent of the manner in which the Venetian financier-oligarchy of medieval Europe controlled the *ultramontane* imperial system's maritime heart, including what had been a Delphic colony developed slightly upriver from the mouth of the Tiber, on a bastion centered in the Hills of Rome, a piece which had been carved out of the territory of Delphi's western Mediterranean rival, the Etruscans.

For example, after the Roman Emperor Diocletian had prudently divided the decadent Roman Empire into respectively eastern and western components, thus parodying the oligarchical-model project from the time of Philip of Macedon, Diocletian's protégé, the Emperor Constantine, attempted to capture the Christians as appendages of the Roman Imperial Pantheon (by claiming, as at Nicea, the authority of Pontifex Maximus, to appoint, and direct the bishops). The constant effort of the Byzantine Emperor, was to claim impe-



Temples at Delphi. The site's financier interests conducted a form of commerce similar to the later Venetian financieroligarchy.

rial command, including exclusive power, denied to mere kings, to define the principles of law, using, thus, the attempted control over the Christian churches as the instrument of imperial rule: a system which ended only with the crisis of the Papacy during the course of the mid-Fourteenth-Century collapse of the *ultramontane* system into that century's socalled "New Dark Age."

For example: although the Venetian-ruled *ultramontane* system appointed the Habsburgs, after the ouster of the Anjou in Sicily, as successors to the destroyed remnant, the Hohenstaufen reign of Frederick II and his ill-fated heirs, of Charlemagne's system of Europe: the imperial system of Rome was never successfully restored in its Caesarian form after the rise of the medieval Venetian financier-oligarchy as a power superior to the shattered Byzantine system. Since the rise of Venice to a superior position over the Byzantium over which it triumphed, and looted and destroyed, the oligarchical system has been continued in the Venetian mode of the Anglo-Dutch Liberal system of financier tyranny. It is, thus, continued under the rubric of a post-nation-state system called "globalization" today.

However, there have been two successive models of Venice's dominant role as a financier-oligarchical imperium-infact: the reign, not of the emperor, but of the *stiletto*.

The first concluded with the reverberating aftermath of the collapse of the Lombard banking-house of Bardi; the first was reborn, in the sense of Bram Stoker's *Dracula*, with the Fall of Constantinople and rise of the modern institution of the Grand Inquisitor under Spain's Tomás de Torquemada; but, Torquemada's intent was expressed more cleverly, when it, itself, was reformed under the leadership of the "New Venice" party led by Paolo Sarpi. Subsequently, Sarpi's New Venice underwent an adaptive metamorphosis, during the course of Europe's Seventeenth Century, emerging as an inside component of the Anglo-Dutch Liberal system of financier-oligarchical form of imperial role. In 1763, at the conclusion of the Anglo-Dutch Liberals' successful orchestration of what was called "The Seven Years War," the Anglo-Dutch Liberal system of London-centered financier-oligarchical power, became the new world empire, which has now lately expressed itself afresh, geopolitically, in the ruin its influence has made of our U.S.A., in the intended form of "globalization."

In the modern history of England, the ouster of King Richard III, had brought an echo of the commonwealth system of France's Louis XI into a suddenly modern England under Henry VII. This English commonwealth was undermined, from within, by the role of a Venetian party represented, at that time, by the Venetian marriage-counsellor, Zorzi (aka Giorgi), to King Henry VIII. However, a second takeover of the British monarchy occurred under King James I, at the direction of the New Venetian party's Paolo Sarpi.

Although Venice did much to ruin the efforts to found the new system of sovereign nation-states over the interval 1492-1648,²² the often massive setbacks to civilization under the influence of the Inquisition and Habsburgs had not been able to defeat the existence, and stubbornly progressive physicaleconomic and other development of the young, European nation-state system in either Europe, or among the colonies in the Americas. From the viewpoint of Paolo Sarpi, the theo-

^{22.} From the launching of the pogrom against Jewry, by the Nazi-like Grand Inquisitor Tomás de Torquemada, in 1492, through the 1648 Peace of West-phalia.



Paolo Sarpi, the "Godfather" of Galileo, who directed the metamorphosis of Venetian power into Anglo-Dutch Liberalism. His aims were to maintain oligarchical control of science, while destroying the emerging nation-states.

logical-philosophical dogmas of the ancient Roman, Byzantine, and medieval systems had failed to show their ability to uproot that new system of building of sovereign nation-states which had been set into motion around the mid-Fifteenth-Century great ecumenical Council of Florence. For Sarpi, this meant that the Aristotle who had been resurrected by the Roman Empire was an incompetent instrument for meeting the challenge represented by the role of the emergent sovereign nation-state systems in the revival of Classical physical scientific and artistic thinking.

So, just as Paolo Sarpi went back to the systemic medieval irrationalism of William of Ockham, the British enemies of U.S. President Franklin D. Roosevelt, and their U.S. accomplices, turned, at the moment of Roosevelt's death, to the radical irrationalism of the "Frankfurt School" and related existentialists.

These existentialist and related influences were adopted as instruments for crafting the cultural policies which have now, helped by the Baby Boomers, virtually destroyed science and art in the U.S.A. and Europe, replacing them with an attempted, systemic codification of rabidly Dionysian irrationalism (what some among the inmates of the London Tavistock Clinic have adopted as the view of insanity as a form of freedom) of the followers of Voltaire, the Marquis de Sade, and, as the playwright emphasized, the brutish French lunatic (and agent of the British Foreign Office's "secret committee," Jeremy Bentham), Marat. These influences are rooted otherwise in the dogmas of Friedrich Nietzsche et al., as they were employed in imposing the U.S.-created Congress for Cultural Freedom upon war-torn post-1945 western and central Europe. The same kind of mass-brainwashing was done to the new generation of middle-class Americans born between, approximately, 1945 and 1956.

The precedent for these strategic policies of existentialists' mass-insanity introduced to post-1945 middle-class Europeans and Americans, shared the same rooted, strategic intention as the Liberalism, which came to be termed "empiricism" among the followers of Paolo Sarpi's "New Venice" policy.

Intermezzo: The Real Brutish Empire

Paolo Sarpi's victory brings our account into an intermezzo: look, from the late Sixteenth Century, into the relatively future domain of the post-1688 history of the rise and establishment of a British Empire, known otherwise as the Anglo-Dutch Liberal imperial system. To understand the present, we must first leap ahead to a vantage-point within the yet-to-be experienced future, and, from that vantage-point, look back to the present, to view the future as oncoming. The method required for such exercises in forecasting, is the abandonment of the standpoint of mechanistic-statistical forecasting from the present, by attention to those boundaryconditions, lying within the approaching future, which contain the available choices of outcome of the present. This is the method of long-range physical-economic forecasting required for competent capital budgets; and the same method which Kepler employed to discover gravitation; and, also, other matters of universal physical principle.

This is, thus, the specifically *dynamic* method of all competent scientific work, and of all competent forecasting in history.

The concept of "geopolitics" emerged under British Prince of Wales Edward Albert, in the run-up to what became known as "World War I." The function attached to that terminology, came to be recognized in a reaction of the British Empire to the defeat of Lord Palmerston's schemes against both the U.S.A. and President Benito Juárez's Mexico. The U.S.A., under President Lincoln, had emerged, during the course of 1863-1865, as a continental power, from the Atlantic to the Pacific, which could not be defeated by military means, but only by the kind of corruption which is characteristic, in the extreme, of the Bush-Cheney Administration of today.

The driving strategic issue, for Prince Edward Albert's Britain, was the rapid spread, especially in the aftermath of







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Britain's Bertrand Russell (center) bemoaned the fact that, as a man who came of age when Benjamin Disraeli (left) and William Gladstone (right) "still confronted each other amid Victorian solidities," the British Empire seemed eternal, and he could never feel at home in a world dominated by America.

the 1876 U.S. Philadelphia Centennial Exposition, of the model of the American System of political-economy into the principal nations of Central and South America, and many among those of Eurasia, such as Bismarck's Germany, the Russia of Czar Alexander III, Meiji Restoration Japan, and others. The British imperial reaction to these developments, was expressed by the tradition of the ruling imperial faction of Britain, those Anglo-Dutch Liberal financier interests which had been associated, earlier, with Lord Shelburne's British East India Company and Barings Bank, which had established its position as an imperial maritime power with the February 1763 Peace of Paris.

As the evil Bertrand Russell put the point:

As for public life, when I first became politically conscious, Gladstone and Disraeli still confronted each other amid Victorian solidities, the British Empire seemed eternal, a threat to British naval supremacy was unthinkable. . . . For an old man, with such a background, it is difficult to feel at home in a world of . . . American supremacy.²³

The Anglo-Dutch Liberal system which had been established in England under the predator William of Orange, had gained its February 1763 position as a privately owned imperial power, through orchestrating a series of ruinous wars in the continent of Europe, a series culminating in that so-called "Seven Years War" which established the existence of Lord Shelburne's East India Company as an imperial power. Despite the virtual defeat which that British Empire suffered, temporarily, in its efforts to crush the independence of the United States of America, the British Empire was able to recover, and triumph, through its orchestration, through crucial assistance from the instrument of the specifically Martinist freemasonry, of what became known, from July 14, 1789 on, as the succession of the French Revolution and the ruin of all British rivals on the continent of Europe, that by means of the Napoleonic Wars.

List some begats. Jeremy Bentham was the instrument of Lord Shelburne. Bentham was the controller of the Haileybury school which spawned the anti-American economic doctrines of the British system, and also spawned Karl Marx's career as an economist. Bentham ran the secret intelligence arm of the British Foreign Office, and passed his baton to a successor, Lord Palmerston. Bentham's target in the Americas (apart from his virtual ownership of the traitor Aaron Burr) had been South America, where the foundations for Palmerston's top-down control over the subversive networks of Young Europe and of Young America were laid, through the Mazzini who also sponsored and virtually owned Karl Marx. Palmerston thus created what became the Confederacy, and orchestrated the role of his puppet Napoleon III of France in the implanting of a mass-murderous Habsburg dictator in Mexico.

The defeat of Palmerston's operations, a defeat which depended crucially on the role of President Abraham Lincoln, turned the tables on Britain's imperial ambitions, globally.

The reaction to this development from Prince Edward

^{23.} As excerpted in Carol White et al., *The New Dark Ages Conspiracy* (New York: New Benjamin Franklin House, 1980), p. 77.

Albert's London, was the determination to isolate, and, hopefully, destroy the U.S. political-economic system, through unleashing an inherently mass-destructive conflict on the continent of Eurasia. The intent was to eradicate the potential of developing nations of Eurasia for following the American model as seen from abroad in terms of the outcome of President Lincoln's victory. London's initial orchestration of what it had intended to become the so-called "Second World War," had, from the early through middle 1930s, expressed the same underlying intention as Edward VII's role in designing World War I: "to finish the uncompleted job," so to speak.

In actuality, the war was won through the initiatives of the U.S.A.'s President Franklin Roosevelt; therefore, with that President's death, the Empire moved its assets within the U.S.A. to undo the U.S. victory as soon as that might become possible; it took London more than two decades, to wreck the Roosevelt's Bretton Woods, fixed-exchange-rate monetary system.

The sudden turn against the policies of U.S. President Franklin Roosevelt, under the Truman Administration, expressed the New York City-based hand of Anglo-Dutch Liberal imperial interests, interests committed to the victory of the Anglo-Dutch Liberal interests over the U.S.A.

All these facts are true; yet, they, by themselves, are all too simple, too easily misinterpreted from the vantage-point of those naive creatures who view the world in the terms of a mechanistic-statistical system of percussive interactions among individuals, and, therefore, leave the efficient role of true ideas, ideas akin in quality to those of competent physical science, out of account. Human beings are not percussively interacting billiard-balls; at least, they should not be such wretched toys as that.

These reflections on recent history, bring us back to the subject of Paolo Sarpi's empiricist revolution. What had been the past which had brought Paolo Sarpi's future into being?

Sarpi's Empiricist Revolution

Back during Europe's Sixteenth Century, the new situation which prompted the majority of the Venice-centered financier-oligarchy to go over to support for Sarpi's New Venice party, was defined chiefly by two critical factors of change introduced to European culture as a whole by the developments associated with the mid-Fifteenth-Century great ecumenical Council of Florence. The first factor, was the creation of the modern sovereign nation-state, otherwise known as the commonwealth; the second, the revival, after approximately two millennia under the hegemony of the oligarchical model, and a millennium-and-a-half since the deaths of the Platonic Academy's Eratosthenes, and also his correspondent Archimedes, of the principled form of scientific progress which had been centered, in Plato's time, in the Pythagorean movement.

Look at that new situation at the beginning of Europe's Sixteenth Century, as it would have been viewed by Niccolò Machiavelli, as he described the situation in his *The Prince* and his *Discourses on the First Ten Books of Titus Livius*.



Niccolò Machiavelli. The future development of the Venice of Paolo Sarpi "casts its prescient shadow" upon his writing of the Discourses on Titus Livius. Any effort to continue the old Venetian model, against the tides of modern European nationalism was clearly doomed.

Until the A.D. 1453 Fall of Constantinople, Italy had been inspired in a fashion which must be compared with the relatively optimistic state of mind of Percy Shelley, writing his In Defence of Poetry in 1821.²⁴ The rise of the influence of Nicholas of Cusa, through the aftermath of the Fall of Constantinople, is paralleled in a significant degree by the later eruption of the Classical movement in Germany and beyond, as inspired and led by Abraham Kästner, his protégé Gotthold Lessing, and Lessing's great friend Moses Mendelssohn. Then, at a point early in the Nineteenth Century, roughly coinciding with the death of the greatest voice of German Classicism in that time, Friedrich Schiller, and especially after the 1815 Congress of Vienna, Europe passed over from the high point of cultural optimism, coinciding with the time of the victorious U.S. War of Independence, into the state of cultural pessimism of the post-Vienna Congress, as this change was expressed by Prince Metternich's not-so-secret admirer and correspondent, the proto-fascist G.W.F. Hegel.

Then, for Heinrich Heine, the enemy was the Romantic School, which had arisen around the victories of Napoleon Bonaparte, and had now triumphed; Heine lived, and attempted to find a mode of action under the knout of the twin evils of Kantianism and the Romantic School, which Heine hated. So, Machiavelli, in a kindred setting, after 1512, had found himself plummeted, as Sir Thomas More had been plunged from being a mind as if from a better age, that of King Henry VII, into the tasks posed by the ugly time under

^{24.} Written in 1840, but first published by Mary W. Shelley in her collection of the 1840 *Essays, Letters From Abroad, Translations and Fragments* (London: Edward Moxon, 1840).



Sir Thomas More, portrait by Hans Holbein. More's political journey spanned the better age of King Henry VII, into the ugly time of Henry VIII.

King Henry VIII. It is against such a perspective, that the relevant meat, for our purposes here, might be extracted from Machiavelli's *Discourses on the First Ten Books of Titus Livius*.

Look from the inside of Europe's Sixteenth Century, at the situation in which certain trappings of the Venice at the beginning of that century, led the followers of Sarpi into those New Venice policies of Paris-based Abbé Antonio Conti, which dominated the process of emergence of the Anglo-Dutch Liberal guise of a New Venetianism, under William of Orange, at the close of the Seventeenth Century. With that set of benchmarks taken into account, what is the lesson of Machiavelli's *Discourses* for the Venice of Paolo Sarpi? What is the prescience of the future, the boundary condition lying in the future, which casts its prescient shadow of the future upon the Machiavelli in the act of writing those *Discourses*?

The answer to that set of questions which I have been posing in the most recent pages, lies in the domain of dynamics, as distinct from the "and, then . . ." world-outlook of the mechanistic-statistical approach to forecasting and analysis.

The course of history is determined, over the medium to long term, by the boundary conditions which the course of the relevant portion of history is approaching. Thus, from the standpoint of the mechanical-statistical forecaster: it is the future which is always shaping the present. The destiny expressed by Sarpi's gaining supremacy over the policies of old Venice during the late Sixteenth Century, was already shaping the course of the Sixteenth Century from A.D. 1492 onward. It was not creating an "inevitable," but defining the forks in the road of choice, at which the choice of destiny will be made—just as the current fate of the principle of long-range capital budgeting will now determine whether or not the U.S.A., and much else, continues to exist much longer. The turbulent signs of a crucial future outcome, are expressed in that view of Machiavelli's Discourses which we may adopt by looking at Machiavelli as he is writing what we read when we turn now to his pages he had written then.

In other words, how did Johannes Kepler discover gravitation?

That, it should be emphasized here and now, is the way in which we must foresee the qualitative changes impending within our own presently oncoming situation, as we look forward in time, as now.

Despite the deep setbacks to the Golden Renaissance expressed in the Fall of Constantinople and the Nazi-like orgy unleashed in 1492 by Spain's Grand Inquisitor Tomás de Torquemada,²⁵ the combination of the collapse of the medieval Venetian-Norman system, combined with the achievements of the mid-Fifteenth-Century Renaissance, had produced virtually irreversible "structural" changes in European culture. After the great ecumenical Council of Florence, the commonwealth principle and the associated principle of the sovereign nation-state, had introduced included deep-going, revolutionary effects in culture, effects which were irreversible over the course of the generations next to come. The fascist-like reaction, as merely typified by Grand Inquisitor Tomás de Torquemada's Inquisition, was a reaction against the Renaissance, but it was exactly a reaction against a fundamental, axiomatic change which had been effected in the character of European culture.

The "Old Venice" faction behind Torquemada, hated, but also greatly underestimated the profundity of the change which the Council of Florence had effected.

In Machiavelli's *Discourses*, reflecting the continuing Sixteenth-Century crisis expressed in events of A.D. 1512,

^{25.} The connection of Torquemada to the Adolf Hitler model is not strained. Torquemada was used by the leading Martinist freemason Count Joseph de Maistre for designing the new personality which de Maistre created for, and presented to Napoleon Bonaparte. It was that model of Bonaparte based on the precedent of the murderous anti-Semite Torquemada, which was used explicitly for the crafting of the synthetic personality of the anti-Semitic Nazi dictator Adolf Hitler, the same model stretched into Chile's Pinochet dictatorship and its expression in the death-squad operations of the early 1970s in the Southern Cone of South America.

Machiavelli reflects not only the defeat of his particular cause of that occasion, the alliance with the France of Leonardo da Vinci; but, it also reflects the doom of any effort to continue the old Venetian model against the tides of modern European nationalism which had been unleashed by the great ecumenical Council of Florence. The defeated forces of his time, of which Machiavelli had been a part, had been turned back, but not eliminated. The *Discourses* reflected then, and now, the strategic realities of that time which the heirs of Machiavelli's enemies could not escape. The role of the people, especially those of the changes embodied in the emerging technological and related social development of the cities, were a force of reality to which the new Venetians must either adapt, or fail.

Sarpi's adaptation, his revolution, was expressed as the Liberalism of what we fairly and simply identify here as his New Venice party, thus introducing what became the surrogate for Venetian power which came to be known as Seventeenth- and Eighteenth-Century Anglo-Dutch Liberalism of Walpole, Shelburne, and their Nineteenth-Century British imperialist followers. That was the monetarist Liberalism against which the U.S. War of Independence was fought, and against which the Preamble of the U.S. Federal Constitution was adopted as the banner of the defenders of civilization against the evils of imperial Liberalism.

Sarpi's Liberal revolution was not a revolution against Venice, but a commitment to the promotion of the continuation of the power of the Venetian financier oligarchy in a new, often, but not always, ostensibly Protestant mode. It was, in fact, essentially neither Protestant nor Catholic, but actually the pagan worship of the tyranny of money. It was a revolution in the policies of practice of the Venetian financier oligarchy, a revolution in the methods of warfare, a revolution which the institution of the Venetian financier oligarchy came to adopt as the practice needed to cope with the new kind of threat which had been established by the reverberations of the great ecumenical Council of Florence.

The Principle of Liberalism

Were man the higher ape which both T.H. Huxley and his contemporary Frederick Engels defined mankind as being, the planet would not have sustained more than a few millions living representatives of that species on any occasion of the recent two millions years. The distinction of man from ape, is, essentially, the distinction which the Russian Academy of Sciences' V.I. Vernadsky makes between *Biosphere* and *Noösphere*. Here lies the crux of the issue which occupied Sarpi's attention.

Both sides of the Sixteenth-Century controversy between the old and new factions of the Venetian financier oligarchy agreed, essentially, with the evil pagan deity, the Olympian Zeus of Aeschylus' *Prometheus Bound*. Both agreed that the maintenance of the power of the oligarchical model of society depended on the relative bestialization of the subordinated majority of the human population. Both agreed, in principle, with the doctrine of the early Nineteenth-Century "machine breakers," and the dionysiac so-called "environmentalist" fanatics of our "Baby Boomer" strata, that the idea of scientific revolutionary progress for its own sake must be curbed, even uprooted and reversed.

However, under the Roman Empire, this heritage of the cult of the Olympian Zeus and Lycurgus' Sparta was made an axiom of the Roman system. To this end, the cult of Aristotle and of the Sophist Euclid became a state-sponsored religious doctrine.

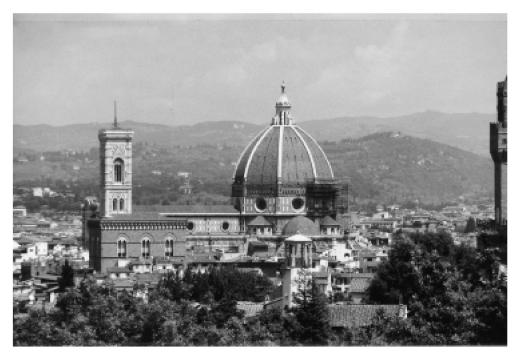
This did not mean no progress at all; it meant that the majority of humanity must be condemned to peaceful contentment with those relative states of servitude, such as slavery or virtual serfdom, in which the lower classes were not permitted to deviate from a hereditary level of relative technological stagnation worthy of T.H. Huxley's and Frederick Engels' "higher apes."²⁶ To this end, Roman imperial culture adopted the Aristotelean Sophistry of Euclid, as in the case of the hoaxster Claudius Ptolemy. Through the imperial channels of the Roman Empire from the Emperor Constantine onward, this doctrinal legacy of the Delphi Apollo cult's Olympian Zeus was introduced as a factor even within the teachings of Christianity.

These issues had been central to those proceedings of the Church Councils leading into the recreation of a savaged Papacy in the context of the Fifteenth-Century Council of Florence around a principle of Christian humanism. Nicholas of Cusa's three leading doctrines, his *Concordantia Catholica* (the establishment of a system of ecumenically associated sovereign nation-states (the commonwealth principle), his *De Docta Ignorantia* (the rebirth of a physical science freed from the dungeons of scientifically illiterate dogmatism), and his ecumenical dialogue *De Pace Fidei*, emerged from the leading circles of that Council as the liberation of mankind from the legacies of empires.

The Venetian financier-oligarchy had based its attempted comeback on wrecking those three features of the Renaissance's great revival of both the Christian church, and of the dignity of the human individual soul in society. The plot which accomplished the betrayal of Constantinople, was at the center of the Venetian "counter-revolution" against the Renaissance.

The ironical fact, as the exemplary cases of France's Louis XI and, his follower, England's Henry VII, attest, is that the policies of that exemplary genius Cardinal Nicholas of Cusa had infected society with a new power of the human individual per capita and per square kilometer. The right to be freed from the slave's shackles of perverted dogmas like those of Claudius Ptolemy's astronomical hoax, had ignited the spark

^{26.} The absurdity of Engels' doctrine of "the opposable thumb," attests, like his absurd "Anti-Dühring," to a certain "religious-like" fanaticism, as much his disposition for reckless scientific illiteracy, as his fanaticism against Gotthold Lessing, Bismarck, and Henry C. Carey.



The Cathedral of Florence. Nicholas of Cusa's three leading doctrines of statecraft, science, and ecumenical dialogue, emerged from the mid-15th-Century Council of Florence, as the liberation of mankind from the legacy of empires.

of true humanity in the ranks of typical individuals within society. This unleashing of the right to express those powers of creativity which set the human individual above the beasts, created a form of society more powerful, physically, per capita and per square kilometer, than European civilization had experienced since the rise of the Roman Empire from about the close of Second Punic War.

Through the time of Machiavelli, no follower of Nicholas of Cusa expressed this unleashing of the innate scientific and artistic creativity of individual human nature better than Cusa's avowed follower Leonardo da Vinci, and no one after Leonardo more consummately than the founder of a systematic form of practiced science, Johannes Kepler. When we read the *Discourses* against the background which I have presented so far in this present chapter of the report, we must recognize the military and related strategic implications of what Machiavelli writes there. However, we must read this against the background of the scientific and cultural revolution set into motion by the insurgency of the political and social revolution associated with the commonwealth principle expressed by the cases of Louis XI and Henry VII.

So, Paolo Sarpi and his lackey Galileo followed the work of Johannes Kepler very attentively. They would plagiarize, but then bowdlerize Kepler's discoveries, but, then, they would work to suppress knowledge of the original work which they had maliciously plagiarized in this fashion.

What the New Venice party of Sarpi and Galileo recognized, was that their forces must not fail to keep up with the technological capabilities which modern European science was generating. Otherwise, the forces of modern civilization would crush the Venetian faction by the latter's default. However, they were fanatically dedicated to suppressing knowledge of the methods by which scientific progress was actually generated, if they were to prevent progress from overwhelming the oligarchical interest which the Venetian faction represented.

The included result was the phenomenon of "textbookbased" education. In other words, the promotion of "doctrinization" under a hierarchy of a "scientific" and "artisticcultural" set of Babylonian-like priesthoods, for whom knowledge is something transmitted, according to "canons," chiefly by the laying-on of hands. This was the essence of Paolo Sarpi's adoption of the legacy of the medieval irrationalist William of Ockham: innovation is allowed, but it must be worshipped in the guise of a neo-Sophist "mystery religion," as the irrationalism-rooted doctrines of Galileo, Sir Francis Bacon, Thomas Hobbes, Descartes, John Locke, the frankly pro-Satanist Bernard Mandeville, David Hume, François Quesnay, and Shelburne's Adam Smith, and frankly pro-Satanic Jeremy Bentham typify this.

Out of this came the Nineteenth-Century irrationalist dogmas of positivism, and the more radical Twentieth-Century fits of utter moral depravity associated with Bertrand Russell, and the existentialist cults of the followers of Husserl et al. Physical science might be tolerated, but on the condition that the roots of man's power of discovery of efficient universal physical-science and Classical-artistic works be cloaked in those wildly arbitrary, ultimately dionysiac forms of existentialist mysticism which are reflected in the extreme by the contemporary lunatic mysticism of an Alan Greenspan and Ben Bernanke and those purely predatory, modern successors of the John Law cult, contemporary "hedge funds." For the latter creatures, there are no universal physical principles, but only wildly reductionist accumulations of mathematical formulas employed, as in the Black-Scholes dogma of LCTM, as substitutes for actually human thinking.

In the Affirmative

As the friend of the Apostle Peter, Philo of Alexandria, emphasized, the Aristotelean substitute for "God" was the architect, and thus the victim of an unchangeable design of His own making. It was presumed by the Gnostics, that, since Satan had subscribed to no such contract, the Aristotelean God was free to careen, rarely hindered, throughout the world of mortal man's existence. Contrary to such foolish doctrines, the Creator has not failed mankind; rather, mankind has often betrayed his Creator. For some among us, this is clear, but is still "heady stuff" for most living among us still today.

This was very heady stuff for those who wound up the silly black-magic specialist Sir Isaac Newton, attributing curiously perverse sayings to their puppet. They put into the written script they supplied for him, the notion that the Creator had wound up the world, like a clock, and was, thereafter, unoccupied, except, as Gottfried Leibniz pointed out, to be aroused, from time to time, to rewind the clock again.

Such beliefs as those are an insult to both the Creator and man, insults which are all the more consistent with the intentions of the doctrine of Paolo Sarpi's empiricism: the doctrine of the Satan known otherwise as the Olympian Zeus of Aeschylus' *Prometheus Bound*, that man may not know the act of discovery of any universal physical principle. Rather, as the pro-Satanic plagiarist, and empiricist Adam Smith wrote, in the following tell-tale excerpt from his 1759 *Theory of the Moral Sentiments:*

... the care of the universal happiness of all rational and sensible beings, is the business of God and not of man.... Nature has directed us to the greater part of these by original and immediate instincts. Hunger, thirst, the passion which unites the two sexes, the love of pleasure and the dread of pain, prompt us to apply those means for their own sakes, and without any consideration of their tendency to those beneficent ends which the great Director of nature intended to produce by them.

Gnostic heathen such as René Descartes, John Locke, Bernard Mandeville, François Quesnay, and plagiarist Adam Smith, deny the existence of that quality, unique to the Creator and the individual human mind, to discover, and to employ the universal physical principles which must guide us in fulfilling what are specified as Mosaic obligations in *Genesis* 1: 26-31. As V.I. Vernadsky demonstrated rigorously, by means of experimental physical science, the principles of living processes define a higher physical phase-space domain of the work of living processes, the Biosphere; and the principles of



The ornate grave of black-magic specialist Sir Isaac Newton in Westminster Abbey, London.

human cognition set the human individual and society above the level of merely living processes, the Noösphere, in which latter the discovery of knowable forms of universal physical principles lie. Such is the case for Kepler's uniquely original discovery of the infinite but infinitesimal effect of universal gravitation. The efficient discovery of such principles, and the replication of that experience, expresses the absolute separation of man from self-avowed beasts such as pathetic Sir Isaac Newton and disgustingly wicked Bernard Mandeville and Adam Smith.

Satan, therefore, can sleep, for as long as Paolo Sarpi remains on duty in places such as the White House or the offices of that Presiding representative of Vice, Dick Cheney.

It is those creative powers inherent in the individual human mind, which, when nourished to fruitfulness, define the human individual as a being expressed in the form of a mortal living body, but whose essential distinction is that of an implicitly immortal cognitive being. This irony is actually encountered typically in the immortality of the action of transmission of those immortally truthful ideas respecting the process of unbounded Creation, the universe in which mankind exists. There are ideas expressed in the form of the discovery and application of universal physical and Classical



How have so many notable members of the U.S. Congress been lured into the delusion called "bio-fuels"? Here, Sen. John Thune (R-S.D.), left, and Rep. Jeff Fortenberry (R-Neb.) jump on the ethanol bandwagon, in 2006.

artistic principles. It is the beauty and passion which Classical artistic composition imparts to the act of discovery, and recognition of the work of propagating knowable universal physical principles, which, in their united practice, distinguish man essentially from beast.

There is nothing unknowable in the act of discovery of a valid universal physical principle, nor in the principle itself.

Unlike that brutish worshipper of the Satanic Zeus, Tomás de Torquemada, the witty servant of Satan, such as the follower of the empiricist Paolo Sarpi, does not object to science; rather, he adopts it, and sodomizes it. Unlike the Aristotelean, who refuses to accept a reality which is contrary to his dogma, a reality which the Aristotelean can defend only by brute force, the sly Mephistopheles, the follower of Paolo Sarpi, like Charles Dickens' portrait of the character "Uriah Heep," or the manipulators portrayed in Oscar Wilde's *Portrait of Dorian Grey*, adopts the child, and gives that victim Sarpi's choice for its true name, the name of empiricism, done in order to cause it to bring about its own destruction, through the child's foolish adoption of that awarded academic or kindred heritage.

That is the way in which notable members of the U.S. Congress and others, have been lured into the delusion called "bio-fuels."

3. The Power Inhering in Ideas

The virtually criminal thing which Clausius, Grassmann, Kelvin, et al., did to the work of Sadi Carnot, was to take an expression of the quality of the human mind, the effect of the practice of the discovery of universal physical principles of the same quality as Kepler's discovery of universal gravitation, and to treat the effects of such principles in the way in which the satanic Sarpi's lackey Galileo had attempted sodomic rape on the body of Kepler's discoveries of the Creator's universal physical principle.

In this matter, as I shall show here, the discoveries of V.I. Vernadsky, respecting both the Biosphere and Noösphere, are of crucial significance for exposing the fraud permeating the "biofuels" hoax.

First, I proceed now with some essential observations on the way in which a credulous popular opinion tends to propel political figures and other citizens, into a state of virtual stupefaction on the subject of "bio-fuels."

The purpose of my address in this

present report, is, as on similar occasions, to assist the work of the citizen who wishes to be freed from susceptibility to the lure of such swindles of the type I have addressed here. On this account, it may be said fairly, that the worst sin of the typical citizen is that citizen's customary pride in his or her own affirmation of small-mindedness. For example, think of: "Bring things down to my level; I am a practical man!"

That commonplace, and, frankly, corrupting sentiment, is to be recognized as the principled issue of the clinical case crafted and addressed in a famous short story of Daniel Vincent Benet, the case of *The Devil and Daniel Webster*. For my liking of truthful history, Benet gives Webster himself far too much credit, but the tale is a good one, the well-told work of an accomplished artist of his craft.

It is, on that account, very often, the small-minded, and therefore inherently mistaken notion of self-interest of the individual infected with the sometime fatal folly of so-called "common sense," which bedevils those among us, such as myself, who must look, again and again, with compassionate horror at what the majority among our citizens so often do to themselves, and also to our civilization. What they often do, also, to their families, and our republic, in their self-stupefying insistence on bringing the discussion of serious matters of scientific and kindred qualities of principle, "down to earth," the earth in which the believer, even our nation, might be consequently interred, all too soon. Nothing better illustrates this, and, sooner or later, more dramatically, than the sly stupidity of seeing a certain self-interest in promoting the cause of "bio-fuels."

So, the sly New Englander of Benet's tale, accepts the moral equivalent of the lure of "bio-fuels" as portrayed by a slyer "Mr. Scratch" (as of "come up with the Scratch" notability), and thus leaves it to us (such as me), who are less easily gulled into popular sentimentalities, to rescue the poor dupe from the fate which a "Mr. Scratch" had intended for him all along. Therefore, I beg of you, don't be just another poor sucker, a "bio-fool"!

The same populist folly exhibited by "Mr. Scratch's" down-to-earth dupe, is also encountered on a relatively higher level of intellectual life, as by the graduated student in scientific studies, who has accepted the proposition of graduating with honors conferred by an academic version of "Professor Scratch," rather than taking into account the pulsations in the factional histories of cultures, which prompt some to adopt this, or that particular sort of taught formulation, or set of formulations, rather than another more or less equally available. So, the "wish to believe" is the underlying premise of the counterfeit dogma which often passes for accepted scientific wisdom. How often have I heard the duped Sophist's asserted premise, "But, I have to believe. . . ."

As what should have been recognized, from what I have already referenced, once again, in this report, as a certain pulsation among conflicting epistemologies in the pulsations of ancient through contemporary European scientific and artistic traditions, competent scientific and related thinking must seek a higher level of judgment respecting what often pass for "authoritative," but mistaken premises of particular systems of belief. In other words, Socratic judgment, as the methods of the Pythagoreans and Plato typify such higher standpoints in search for truth in belief. The most efficient modern reminder of this essential precaution, is none other than is stated explicitly as the very title of Bernhard Riemann's 1854 habilitation dissertation, "On the Hypotheses Which Underlie Geometry," as that title itself is underscored, for purposes of precision, by the opening three paragraphs of that same work.

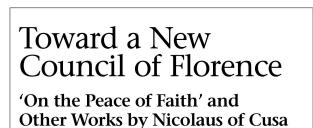
It is of notable practical political relevance for this occasion, that I began the second phase of the development of what is known internationally as the "LaRouche Youth Movement (LYM)" by asserting that scientific education would not succeed in what should be its intended service to statecraft, unless the principles of counterpoint associated with the exemplary J.S. Bach's *Jesu, meine Freude*, were treated as an integral, driving feature of the work of reliving the discovery of certain most essential experiences of scientific discovery. It is the passion which is bestirred by the role of the Pythagorean comma in coherent expressions of well-tempered counterpoint, as in the challenge of performing a Florentine bel canto expression of this Bach work, which brings the passionate element of truthfulness, as a habit, to the work of seeking scientific truthfulness. The typically passable scientist these days dreams in black and white; the accomplished Classical musical performer dreams in color. It is the point at which the two coincide, that belief becomes real, becomes truthful in quality.

True science, like Classical artistic work in the legacy

of Leonardo da Vinci, Raphael Sanzio, Rembrandt, and J.S. Bach, Wolfgang Amadeus Mozart, Beethoven, et al., unites the life of the mind with reference to commonly underlying principles which encompass the sweep of everything we know truthfully about the experience of the development of the cultures expressed as science and Classical art over the entire span of known European civilization to date—and into cultures beyond that. This principle is what separates true science, and true artistic culture, from the monkey's tricks which often pass as substitutes for science and for popular entertainments today.

Therefore, my mission has been to rally the essentials of the history of European (and some other) scientific and political-cultural progress over approximately the recent three thousand years, and some essential elements from earlier points. The challenge has been to view the historical developments traceable in those terms as if from top down. The goal has been to see this history in a functionally unified way with respect to persistently underlying essentials.

This has been helped by collaboration with my wife and others in Europe, as, notably, her important original contributions to the understanding of the great ecumenical Council of Florence and the role of Nicholas of Cusa in general, and in respect to Cusa's crucially specific role in launching the policy of trans-Atlantic and other trans-oceanic explorations, and in prompting, directly, but posthumously, the first voyage of



Translations of seminal writings of the 15th-century Roman Catholic Cardinal Nicolaus of Cusa, who, through his work and writings, contributed more than anyone else to the launching of the European Golden Renaissance. The title of the book, *Toward a New Council of Florence,* expresses our purpose in publishing it: to spark a new Renaissance today.

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Lyndon LaRouche with members of the LaRouche Youth Movement, after a webcast in Washington, D.C. LaRouche's two-pronged approach to the education of the LYM, is to master the scientific breakthroughs of Kepler, Gauss, and Riemann on the one hand, and the principles of counterpart of J.S. Bach on the other: thus to bring "the passionate element of truthfulness, as a habit, to the work of seeking scientific truthfulness."

EIRNS/Stuart Lewi

Christopher Columbus. This has been similarly complemented by her extensive studies of the work of Friedrich Schiller, which played a leading part in developing our deeper understanding of the European roots of the American Revolution.

The history of European civilization, and also the roots of that civilization in more broadly defined, earlier millennia, have provided me with a genuinely happy life within my own inner experience. That happiness has been premised on a sense of human existence in total as a comprehensible process of the struggle for the upward development of the human condition. The human species is one species, with no essential divisions, but only a varying, interacting historical-cultural experience, an experience which is underlain, to a determining effect, by an implicit convergence upon a common future goal approached by what are often those differing routes of travel which present us today with the need for enforcing the principle of the sovereign nation-state, in defense against sundry past and present attempts to ruin mankind by descent into the virtual Hell of some new, "globalized" echo of a Tower of Babel.

In all, the most important consideration has been, for me, to escape that damnable pettiness of spirit and opinion which passes for so-called "popular opinion" today, that damnable pettiness which is the subject, in unity of effect, of Benet's battle against the devil of populism, from outset to conclusion, in his *Devil and Daniel Webster*. Such is the challenge of saving the souls of the "bio-fooled" from the Hell their opportunistic folly threatens to bring upon themselves, as upon our nation and broader society as a whole, as well.

Now, Back to Dynamics

In his 1935-1936 and later writings on the subject of Biogeochemistry, the founder of that branch of physical science, V.I. Vernadsky, emphasized that, whereas living processes were apparently composed of the same chemical elements as non-living, the organization of the process of living processes reflected a principle absent from the domain of what were intrinsically non-living processes.²⁷ This statement by Vernadsky gave crucial experimental-scientific substance to the notion of *a universal physical principle of life*, as subsuming a qualitatively different universal phase-space than nonliving processes. This was, and remains, the only competent definition of the existence of a *Biosphere*.

To comparable effect, Vernadsky later introduced the concept of the *Noösphere*, as a domain in which a living process, the human species, differed qualitatively from the bounds of the *Biosphere* in a manner comparable to the distinction of the domain of the Biosphere from characteristically non-living (e.g., sub-biotic) processes. This notion of the *Noösphere* supplied us a physical definition of what are properly classified as the *noëtic* processes of the human intel-

^{27.} He included the residues of living processes within the domain of the Biosphere's Biogeochemistry. Cf. Lyndon H. LaRouche, Jr. "Vernadsky & Dirichlet's Principle," *Executive Intelligence Review (EIR)*, June 3, 2005.

lect, those actually creative potential powers of the individual human mind which set the member of the human species absolutely apart from all other known types of living processes.

These comparisons point our attention to the subject of chlorophyll, represented by a plaque of pollywog-shaped molecules, which transform the sunlight absorbed, at a low energy-flux-density, by the molecule's "antenna-like" feature, into the relatively high energy-flux-density of the pulse, emitted from within the central atom of the "head" of that plaque, the pulse of relatively higher energy-flux-density than that of incident sunlight, the density which is required to separate the oxygen and carbon of carbon dioxide.

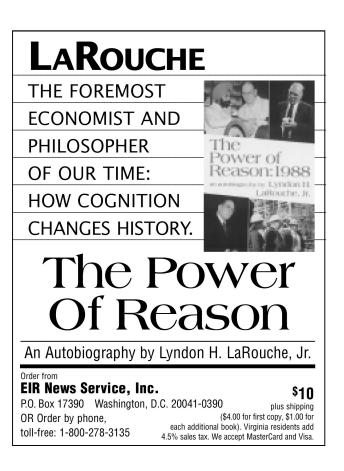
Thus, the greater the amount of carbon dioxide available to this function of chlorophyll, the lower the relative mean temperature of the environment, and also the greater the recycling of water-moisture throughout the ecology. Grasses are useful on this account, but the performance of trees is the source of an effect much more pleasing to the local inhabitants, as my views on this matter of policy respecting hybrid mango-trees, coincided with those of Prime Minister Indira Gandhi at a relevant point in past time.²⁸ So much for the lunatic cult belief in the pagan religious dogma of "greenhouse gases," which appear, in fact, to be usefully supplied in large volumes from the mouths of so-called "ecologists."

In broader terms, the function of power is not located essentially in the number of calories counted, but the relative "energy-flux-density" of the power supplied. The ingenious work of lowly chlorophyll in creating a habitable environment for human life and its nourishment and other comforts, only illustrates a general principle pervading the entirety of any competent teaching and practice of the science of physical economy, and the policy-shaping of any even relatively sane modern government.

In general, apart from living processes as such, the power of mankind to exist, as measurable per capita and per square kilometer of the Earth's surface conditions, has always depended upon progress in forms of power employed, from relatively lower to qualitatively higher "energy-flux densities." For example, today, the continued existence of a human population of the planet comparable to the present trend, requires a shift from the level of combustion of petroleum and natural gas, to fission-power, immediately, thermonuclearfusion as a primary resource in the generation or so ahead, and, for the future dealing with our Solar system, of some mastery of the implications of the much higher density implied in a so-called "matter-antimatter" reaction.

As the case of chlorophyll merely illustrates a related, crucially significant point, the development of the Solar system, in which we presently exist, is traced to the evolution of the Solar system from a beginning as a solitary, fast-spinning, young Sun (Sun of what can be explored as a later topic of discussion). The emergence of what became known as the periodic table of elements, as the development of the planetary system itself, reflects the same anti-entropic vector of development which we meet in the contribution which chlorophyll's development has made to the possibility of human life here.

Hence, for this and related reasons, it should be implicitly clear, that the so-called "Second Law of Thermodynamics" is to be recognized as completely fraudulent when presented as what is claimed to be general principle of physical processes. Were that truly a physical principle, the Solar system would have started with the existence of mankind, and worked its way downward, perhaps presently reaching to the level of the reign of worms today, and, thence, non-living processes generally, with the universe as a whole ending up in a grump-



^{28.} During a relevant visit to India, I was the visiting guest of the Delhi agricultural institute, which supplied me an included tour of the development of a hybrid variety of mango trees which fruited efficiently, and, reportedly, every year. Since a certain change in policy earlier had impelled the farmers of southern India to cut down local trees for fuel, there had been a brutal increase in the mean temperature-level of the relevant region. It was obvious to me that this showed, yet once again, the urgent need for development of nuclear power, to replace the occupation of the railway system with the ruinous transport of coal, and also indicated the use of the improved mango tree, which no farmer would wish to cut down for fuel, to aid in reversing the noxious rise in mean temperature in that southern region. I passed my opinion to an associate of Mrs. Gandhi, who delighted me with the report that she was of a similar persuasion.

ily passive state of "universal heat-death."

In short, it was the role of so-called "energy-flux-density," as this notion came into wider scientific usage among nuclear scientists during the 1970s and 1980s, which is the determining consideration in all policy-treatments on the subject of power.

However, the issues posed for consideration here do not end with that.

This brings our attention, once again, to the subject of *dynamics*.

The attempt to use an element of the Biosphere, foodstuffs, for abiotic power, would not be that far distant in annals of either science or morality, from raising and eating one's children as a practical matter of producing food.

As already emphasized, the principle of *dynamics* appears in the history of European science as the central principle, *dynamis*, of the work of the Pythagoreans and the related circles of Socrates and Plato.²⁹ It is introduced in this respect by Leibniz, in Leibniz's demolition of the incompetent mechanistic outlook and method of René Descartes, as Descartes' and Newton's followers. However, the same usage, by Leibniz, appears again, explicitly, in Riemann's later development of Gaussian hypergeometries into the physical hypergeometric form,³⁰ which is already implicitly the method of Riemann's 1854 habilitation dissertation. This latter notion of the role of dynamics in physical (rather than merely mathematically formal) hypergeometries, lies at the core of competent methods of long-range dynamic forms of economic forecasting for today.

Essentially, as the opening paragraphs of Riemann's 1854 habilitation dissertation already imply, the notion of universal physical principles, such as Kepler's development of the discovery of a universal principle of gravitation, correspond to the subject of the hypotheses treated in the 1854 presentation.

In summary of that provisional point, any universal physical principle, such as the principle of universal gravitation originally discovered by Kepler, defines an object as large as the unbounded universe (as of Albert Einstein) itself, yet, as fine-grained a principle of action as a virtually absolute infinitesimal. It was Kepler's recognition that the efficient action of this universal principle must be located within the bounds of an infinitesimal, which prompted Kepler to prescribe the development of a specifically infinitesimal calculus to future mathematicians, and Leibniz to develop precisely such a solution, beginning the report on the subject placed with a Paris publisher in 1676, and concluding with his introduction of the concepts of a catenary-cued universal principle of a dynamic mode of physical least action, approximately the close of Seventeenth and the beginning of the Eighteenth Century.

The consequent view of matters of physical science today, including those of physical economies, is that the real world of our experience is bounded, as if "externally," by universal physical principles comparable to Kepler's discovery of universal gravitation. Implicitly, the domain is a finite universe, without *external* boundaries, but bounded *internally* by the extent of the reach of universal physical principles. *Hence: a finite, but not externally bounded universe.*

Biotic and Cognitive Powers

So far, insofar as our argument has resorted to the approximation of treating the universe as if all were a matter of simply abiotic phase-space, we must now turn to some relevant brief, but crucially important observations on the matter of the Biosphere and Noösphere, respectively.

Never has man been able to demonstrate the generation of life from non-living processes, nor the generation of human cognitive powers in any form of life but human individuals. Thus, life exists as a universal principle, whose power lies outside the abiotic domain, but which is capable of organizing the abiotic domain. Thus, those cognitive powers of the individual human mind which are associated with validatable discoveries of efficient principle in science and Classical art forms, are outside, but act efficiently upon the biotic and abiotic domains.

So, the "history" of our planet is one of an ongoing transformation of its total mass, in which the Biosphere prevails. Similarly, that history shows the Noösphere as increasing at a generally accelerating rate, in mass, relative to both the Biosphere and the planet as a whole.

Life and cognition are relatively distinct universal physical principles, in which cognition infects the appropriate biological stratum in the Biosphere, and the planet as a whole becomes more and more an expression of a living process.

On this account, the attempt to use an element of the Biosphere, foodstuffs, for abiotic power, would not be that far distant in annals of either science or morality, from raising and eating one's children as a practical matter of producing food.

Therefore, until we have considered that challenge, the next to most interesting feature of that arrangement, remains that each added discovery of yet another universal physical principle, defines a universe which is still of the finite, but unbounded quality, but is changed by the will of mankind to

^{29.} The crucial Theaetetus, as his role was noted earlier here, appears, as a pupil of Socrates, as a typical, and leading central figure of the work of Plato's own circles and followers.

^{30.} *Gauss Werke, Vol. VIII*, pp. 99-117, in the first of two notes by Fricke appearing there.

the extent that man's will imposes that discovered principle within that universe. Thus, in that specific sense, such principles give the efficiently existing universe a newly selfbounded character, if and when mankind acts to apply those principles, as changes, to the universe as it had existed efficiently a moment before. The physical geometry which that arrangement implies, defines an intrinsically anti-entropic universe. It is a universe in which the Sun generates a planetary system, and in which the development of that planetary system provides a foundation for the expression of living processes, which, in turn, create the premises for the calling into play of the creative powers of the individual human being as an increasingly powerful force for change within the Solar system—ultimately—as a whole.

This is the quality of a universe which corresponds to the role of dynamics of willful action by individual minds within the bounds of Vernadsky's Noösphere.

The existence of society is thus bounded by the power which discovered principles in use afford humanity, as measured per capita and per square kilometer of surface-area of the planet as a whole, and, also, therefore, any significant region of that planet. The possibility of continued human existence depends, thus, on the discovery and application of new physical principles, principles which are ordered, at least predominantly so, according to a principle of universal antientropy in an anti-Euclidean physical universe.

At any time and place in this process, the expressed principle of action required is of the form which is excluded, axiomatically, by reductionists such as the Cartesians and the school of Clausius-Kelvin thermodynamics and its radically positivist successors, such as the followers of the rabid ideologues Ernst Mach (e.g., Ludwig Boltzmann) and, most emphatically, Bertrand Russell (e.g., Norbert Wiener and John von Neumann).

In this order of universal affairs, anti-entropy is the pervasive rule of principle.

In this universe, the radically reductionist, modern Malthusian of the cult of "global warming," the cult of the followers of Kelvin et al., is the expression of nothing which is not comparable to Satan himself.

Each state of existence of society, is bounded, anti-entropically, by the requirement of development of the physical power of mankind, per capita and per square kilometer, as measurable, in pedagogical approximations, as "energy-fluxdensity" per capita and per square kilometer. As the presently existing boundary is approached, that condition reacts upon the process contained within such boundaries. This requires a change in society's behavior, a change in the direction of the equivalent of an increase of the "energy-flux-density" per capita and per square kilometer. This means a new category of technologically revolutionary advances, and an increasing ration of the total population devoted to labor on behalf of such characteristically anti-entropic modes of scientific and congruent cultural progress, as distinct from other functions.

This advantage were not possible to secure, within the

adoption of a conception of mankind which is consistent with this thus-summarized view of the intrinsically antientropic characteristic of a continuously viable sort of selfconscious self-conception of the adult individual person in society.

This is the practical meaning of dynamics, for the purpose of crafting U.S.A. and other nations' policies today.

Thus, on the bottom line, the promotion of bio-fuels is not only stupid; in the eyes of the Creator, it is also evil.