## **IV. From Lyndon LaRouche**

October 19, 1998

# SCRAPPING THE USUAL ACADEMIC FRAUDS 'Go With the Flow': Why Scholars Lied About Ulysses' Transatlantic Crossing

by Lyndon H. LaRouche, Jr.

The recent attention to the evidence bearing upon the 233-231 B.C. attempt to circumnavigate our planet, that by Egyptian associates of the Plato Academy's great Eratosthenes, should impel us to recast, in a richer way, the thesis on maritime culture which I presented in a publication written about sixteen years ago. Several benefits, of the utmost general scientific, *and also global, contemporary political importance,* are implicitly located in the outcome of such renewed attention to this subject-matter.

The core of the thesis on which I premised that report, is the elementary, physical-economic paradox, that it would have been impossible to generate civilization out of a process which were functionally defined as occurring within the limits of land-centered "hunting and gathering" cultures. As I argued, in that document: To obtain the culturally usable energythroughput required, to effect the phase-shift from an inland-based, predominantly "hunting-and-gathering," to an urban-centered culture, could not have occurred except through an intermediating process, the intervention by maritime cultures on an oceanic, or even trans-oceanic scale. The amount of effectively available bio-energy throughput, generatable within an inland-based "hunting and gathering" mode, would not be sufficient to permit a succession of phase-shifts to such ultimate effect.

In other words, that widely taught doctrine is false, which asserts that a series of cultural phase-shifts, marked by a transition from "hunting and gathering,"

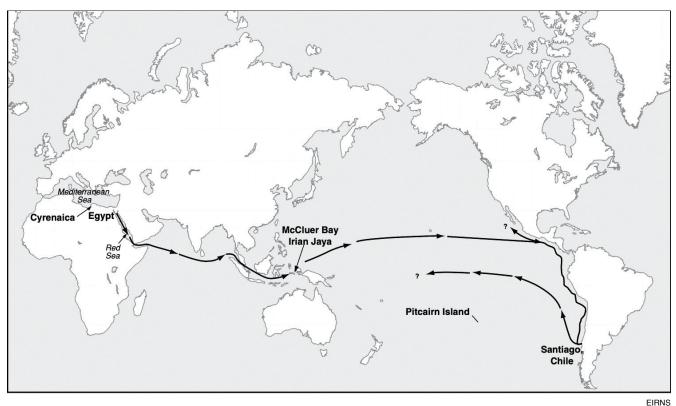
Editor's Note: *EIR* first published this article in Vol. 25, No. 46, November 20, 1998, pp. 14-22.

through "riparian," or so-called "hydraulic" cultures, defines the origins of the emergence of known early civilizations in general. Not only is that doctrine false; it has been, largely, a willful hoax of modern British and related origins.<sup>1</sup> As the representatives of the Hansa might have said to their friends upstream, along the Rhine and Elbe rivers, the appearance of the great river cultures could have occurred, only as a by-product of a preceding, relatively advanced development of maritime cultures on an oceanic, or even trans-oceanic scale.

Until I began, during my studies of the 1950s, to redefine a cultural anthropology, axiomatically, from the standpoint of a Riemannian view of the ordering of physical-economic phase-shifts, this as an application of my earlier discoveries, the approach which I adopted to those issues had evidently never been considered prior to that time, certainly not in any of the references in the English-speaking literature with which I was acquainted. None among those generally known academic doctrines, had recognized what should have been the obvious, the relevant, unresolved paradoxes of doctrines of anthropology which are generally taught still today.

As I stressed then, this point is heavily underscored by the fact of the effects of glaciation cycles. The massive changes in climates and levels of oceans, during the ebb and flow of glaciation, are to be stressed on this account. These glacial cycles are that leading long-cycle feature determined by the Solar system as a whole (not developments defined within the bounds of Earth), which determines the pulsations of alternating ice-ages and warming periods. They are

#### Possible Route of the Egyptian Journey in 232 B.C.



dominant among the circumstances which must have defined the potential bounds for the possible courses of development of human existence, since as far back, at least, as two millions years to date. From such circumstances, certain conclusions follow.<sup>2</sup>

The only consistent mode of existence under which developments leading into so-called "riparian" cultures could have occurred, was the kinds of maritime cultures which, in addition to other possible considerations, might have bridged a period of up to approximately 100,000 of the glacial years preceding the 19,000-4,000 B.C. contraction of the most recent long period of extensive glaciation: during a period in which ocean levels were sometimes as much as several hundred feet lower than during historical times.

Such an hypothesis already strongly suggests, that the dominant strains of culture emerging into those historical times dated to the present interglacial interval, notably between 6,000 B.C. and the present, must have been offshoots of the kinds of maritime cultures associated with a distribution of the branches of the main channels of the preceding 100,000 years of human cultural development, through the media of maritime cultures.

The principal language-groups known to fit that

description, are four: 1) A Dravidian language-group, a leading Indian Ocean group, 2) An Indo-European (Aryan) language Polar-Sea group specific to the last cyclical period of greatly increased glaciation, 3) An East Asia (Pacific) group associated with China's origins, and 4) A virtually semi-lost, trans-Atlantic group. The last is linked to an "Atlas," "Peoples of the Sea" culture, which, according to Egyptian (and Plato's and Diodorus Siculus') secondary sources, had colonized the savage Berbers as early as 12,000 years ago.<sup>3</sup>

This latter group, including traces of a pre-Indo-European Iberian language, was recommended for further study by the Humboldt brothers. The latter are typified by trans-Atlantic traces found within some of the "pre-Columbian" languages of Central America, whose cultural decline is seen in that degenerative collapse of the preceding, "pre-Columbian," Mayan and other urbanized cultures of the Americas, the which is the predominant long-range trend typical (with isolatable incidents of outside Pacific interventions, such as the Quiche Mayan) of a period extended from no later than 1,000 B.C., until the general revival of the culture of the Americas, from Europe, in the aftermath of A.D. 1492.

In Classical European literature, the Transatlantic voyage of Ulysses, putatively datable to the period of the Trojan wars, serves as a benchmark of reference. By comparing the initial outward voyages of Columbus, in a craft comparable in performance to craft used by Ulysses (or, of Captain Rata of the Egyptian Pacific expedition of 233-231 B.C.), the Odyssey describes a route beyond the Straits of Gibraltar along the same currents later used by Columbus. The return of Ulysses to his home describes a complementary journey, by similar means, from the Caribbean, up the Gulf Stream, to the northern coast of continental Europe, and across continental Europe, to a relatively short sail to his home. One would have thought anyone rooted in English maritime culture would have recognized such obvious evidence. Certainly, the extensive other evidence of Greek and Egyptian awareness of an Atlantic civilization, should have been taken into account in reading the Homeric epics. One ought to have asked, why are the British anthropologists and others so all-damned fanatical about insisting upon a contrary view, upon their arbitrary opinion which is willfully conjectural at its least worst?

Then, consider the accumulated evidence, since the 1880s, to the present effect of showing the use of a language otherwise specific to Cyrenaica, in the Pacific region known to us as Polynesia.<sup>4</sup> This connection, documented from the early Hellenistic period, must be considered in light of the known interactions, as in the Dravidian culture of Sumer, of Middle East cultures with a known, Dravidian maritime culture which had dominated the Indian Ocean and adjoining regions until about 2,500 B.C.<sup>5</sup> That case illustrates the point to be examined. The case of the Thai language, a language of a Chinese stock, but overlain today with interactions with the Aryan-Dravidian impacts upon Southeast Asia cultures generally, prompts our attention to the subject of language-group-typified language-cultural interactions.

### **Dirty British Minds**

To understand the pseudo-science which dominates British anthropology and related topics today, return to the dirtied dust of Mesopotamia, a place long the object of questionable adulation by superstitious, dirty British minds, especially among British Protestant fundamentalist witchcraft cults of the British Israelite variety.

The line of argument introduced here, as in that document of approximately sixteen years ago, goes

against what is still, presently, generally accepted doctrines respecting ancient history, and many other, functionally related topics. This state of affairs is to be studied from the standpoint of the empiricist's (and modern Aristotelean's) myth of a "Copernican Revolution." The latter is the fairy-tale which teaches that it was Copernicus and, after him, Paolo Sarpi's personal lackey, Galileo Galilei, who turned tradition around, by suggesting that the Earth orbits the Sun. The Egyptian voyage of 233-231 B.C., the attempted circumnavigation of the planet by associates of Eratosthenes, underscores the other, conclusive evidence, which demonstrates what an awful lie the myth of the "Copernican Revolution" has always been. (Copernicus himself, was not a fraud, of course; but, the inventors of the myth of "The Copernican Revolution" were.)

We could not understand adequately, the task posed as implications of the Columbus project, if we believed that any literate person from among the past two thousand years of European civilization, actually believed that the Sun orbits the Earth, unless he or she were either a foolish or lying fanatic, or one of the latter's dupes. All the relevant leading scientific minds of European civilization, since no later than between the times of Thales and Eratosthenes, knew, and had proven, or relied upon, the fact that the Earth orbits the Sun. Claudius Ptolemy, and his followers, down through the Seventeenth Century, were simply either wittingly outright liars, or, virtually the same thing, ordinary gossips. Indeed, the same "solar hypothesis" known to, and proven afresh by Eratosthenes, was transmitted to become the knowledge of that Fifteenth-Century Cardinal Nicholas of Cusa, who founded modern experimental physical science. It was a professed, and actual follower of Cusa, Johannes Kepler, who went qualitatively further than Eratosthenes had, to supply the modern crucial-experimental proof for the actual organization of our Solar system.6

That is not the end of that matter. Most of the frauds taught as anthropology, history, and so on, in the academic curricula today, were corrupted, more or less axiomatically, by adaptations to the utterly irrational, specifically gnostic, or kindred type of anti-Christian religious conviction. Typical of such gnostics and equivalent types, are persons who supported either the implications of accepting the fable of Copernicus and Galileo, or a related, astronomical lunacy: the paired doctrine, that civilization began in Mesopotamia, and that lunar calendars were the basis for the later development of solar calendars. When one digs into the commonplace fallacies of most academic textbooks and classrooms today, one is, at first, shocked, and, later, disgusted, by the degree to which such a vast ration of received academic doctrines are derived from the impulse to teach nothing which offends the three myths we have just identified: 1) That Claudius Ptolemy was an honest astronomer; 2) That civilization began in Mesopotamia; and 3) The delusion, that solar astronomical calendars were an outgrowth of the earlier development of lunar calendars.

From this point on, most of the readers of the memorandum written sixteen years ago, either know the truthfulness of the points I now register, concerning so-called "British," or brutish science, or have some knowledge of the standpoint from which I present the case. To that purpose, the argument to be made on this account, is situated as follows.

- The birth of modern European civilization, 1. including the emergence of the modern nationstate, occurred during the Fifteenth Century, in a process centered about the developments leading into, during, and immediately beyond the great ecumenical Council of Florence. This process is identified by the term "Golden Renaissance." The birth of modern physical (experimental) science, of the nation-state, the accomplishments and benefits of modern scientific and technological progress, and the uplifting of increasing portions of Europe's population from the bestial conditions inherent in the anti-nation-state, feudal order, were, each and all, specific results of this anti-Aristotelean Golden Renaissance, and nothing else. This Renaissance is the watershed of all fundamental scientific, cultural, and political progress since; nothing since even begins to approach the quality, or crucial importance, of progress effected during the period associated with the great ecumenical Council of Florence.
- 2. The characteristic feature of the Golden Renaissance and its accomplishments in science, statecraft, and cultural improvement of populations generally, was the revival of the Classical Greek tradition of Plato, reversing significantly that earlier anti-Augustinian popularization of Aristotle in western Europe, which had occurred under the influence of the Venice-steered Welf League factions of the

Thirteenth and Fourteenth Centuries.<sup>7</sup>

3. It would be a fraud by anyone who has actually read the writings of Dante Alighieri, to suggest that the Platonic tradition was virtually unknown to Thirteenth-Century Europe. One must understand not only how, but why the depredations of the Venice-steered Welf League ("The Black Guelph") plunged Europe into that prolonged "New Dark Age" which brought Europe, and the Papacy, into a vastly depopulated state of physical and moral collapse, during the middle of the Fourteenth Century.<sup>8</sup> Only when the Golden Renaissance is understood from the standpoint of an insurgency against the pure evil of the Venicesteered Welf League, can modern European history's characteristic features be understood. The factor typified by the presently continuing heritages of the Venice-linked Welf League of the Thirteenth and Fourteenth Centuries, requires that we interpolate the crucial point on that matter at this juncture, before turning to the remainder of the list of points.

This latter point is the key to a set of phenomena appropriately termed "dirty British minds." In other words, with rare exceptions, British science, British theology, and related other academic studies, have been dominated, since the Seventeenth Century, by a usually fanatical emphasis upon the development and insinuation of pseudo-scientific mythologies, mythologies which are designed, like Paolo Sarpi's invention of that Ockhamite hoax known as English and British empiricism, otherwise known as British philosophical liberalism, to serve the special strategic interest of the London-centered, neo-Venetian British financier oligarchy's global factional concerns.

Thus, scientists and scholars pursuing their careers within institutions dominated by the reach of this British myth-making, are careful not to offend the local pagans' household gods of Aristoteleanism and empiricism. In short, such scientists have learned to sing, assuredly not for the sake of music, but for their dinners. In franker, less kindly words: they have learned when to lie.<sup>9</sup> To understand the related issues of anthropology, one must first recognize the origins of what defines British, anti-nation-state, financieroligarchical cultural and related strategic self-interest today.

#### **Two Versions of Imperial Law**

The key to all of the leading developments constituting actual medieval and modern European history, is the issue of law which erupted as the point of Thirteenth-Century conflict between the Welf League, on the one side, and the Holy Roman Emperor Frederick II and his heirs, on the opposing side. Formally, both of these factions of European feudalism, were committed to a notion of the form of imperial law which medieval Europe had inherited from the imperial tradition of Babylon, and from such successors of evil Babylon as the Roman and Byzantine empires. This is the notion of imperial law addressed by Professor von der Heydte's Die Geburtsstunde des souveränen Staates. It was a conflict of the form of a struggle for survival between two empires, one "Ghibelline" (Waibling, Hohenstaufen), and the other "Guelph" (Welf). The actual, substantive issue of that conflict over the content of the then prevailing principles of international law, between Welf League and Emperor Frederick II, is underlined in blood by that event to which later, Nineteenth-Century Italian patriots such as Giuseppe Verdi referred as "The Sicilian Vespers."

The issue thus, was not yet a conflict between empire and nation-state, but, rather, between two axiomatically opposing notions of imperial law. The Welf League represented the anti-Christian, or specifically gnostic reading of imperial law; the forces associated with Frederick II's faction, including, notably, Dante Alighieri, represented a Christian reform of Roman and Byzantine forms of imperial law. The one, the gnostics' Welf League, said to the chattels, "Submit to your feudal degradation to the culture and condition of human cattle now; you get your reward in the next life." The Christian principle of the mortal self dwelling in the simultaneity of eternity, is opposite to the gnostic dogma characteristic of the Welf League.

The underlying, axiomatic issue, was a conflict respecting the manner in which the choice of notion of the nature of the human individual, determined the governing principle of law of nations. The crucial issue was, that the oligarchs of the Welf League, like the extremists among the Protestant fundamentalist cults of Britain (and the "Elmer Gantrys" of the U.S.A.) today, insisted that mortal man does not "possess the divine spark of reason," but is, rather, a hopelessly degraded, worthless creature, whose debasement and self-degradation make it attractive for purposes of the Creator's post-mortal redemption of such wretches. Thus, the Welf League, like the pagan Emperor Constantine earlier, rejected the notion called in Latin the *Filioque*; they rejected man as they had rejected Christ. Their view is typical of the specifically anti-Christian, oligarchical, or gnostic definition of "human nature."

The Christian principle, in opposition to the racialism inhering axiomatically in modern Zionist dogma, is that all men and women are equally made in the image of the Creator, endowed with the "divine spark of Reason," this without distinction on account of perceived differences among race or nationality, and that natural law must be so defined. The individual person, like Christ, dwells in the simultaneity of eternity; there, in the simultaneity of eternity, the purpose of the individual's mortal existence is resolved. Mortal man does not exist to be tested, as if in some freemasonic ritual: the mortal individual incarnate, exists to act efficiently in mortal life, for that cause which is the simultaneity of eternity. It is therefore the duty of the law of nations to protect and nurture this "divine spark of creative reason" within the mortal existence and action of each and every individual. This, as we shall elaborate below, was the core issue of the war between the two imperial factions of the Thirteenth Century; this is the core issue of the struggle against the primary evils of today's world, the implicitly satanic evils of "free trade" and "globalization."

The anti-Welf League faction, the faction of Dante, said the law must exist to serve the cause of uplifting the people into participants in the process of selfgovernment of society, that no portion of humanity can be subjected to that condition of human cattle which is typified by the pro-feudalist Physiocratic doctrine of *laissez-faire*. The role of Frederick II's policy for the development of Sicily, as for Alfonso Sabio in Iberia, typifies the Christian view, in which persons can not be lawfully degraded, as serfdom does, to the status of human cattle. Dante's writings, on language-policy and in *De Monarchia*, typify the Christian view expressed within the framework of Frederick II's anti-Welf League policy.

Frederick II did not create the notion of the modern nation-state republic; that came just less than two centuries later. Nicholas of Cusa was the discoverer of the ecumenical principle upon which the modern nation-state republic is premised. Frederick, like his successor Dante Alighieri, posed only the issues of Christian justice, implying other issues which it was



Dante In Purgatory, a painting by Domenico di Michelino after Alesso Baldovinetti.

left to the Golden Renaissance to solve.

It was only later, chiefly through the role of Nicholas of Cusa from within the conciliar movement, that the ironies of Dante's De Monarchia were effectively addressed, and that conception of law established, the which revokes all notions of imperial law. Hence, in principle, from Cusa's role as a Cardinal of the restored Papacy, through to Pope John Paul II, the unity of faith is lawfully rooted in reason, as opposed to the arbitrary authority commonly traditional to the imperial law of Mesopotamia, Rome, and the Byzantium of Constantine and Justinian. It was Nicholas of Cusa, who solved the paradox of law left to him by predecessors such as Abelard of Paris and Dante Alighieri. Thus, the modern form of sovereign nation-state republic was brought into being in that form later expressed by U.S. President Abraham Lincoln's defense of the U.S. Federal constitutional republic, against the neo-feudalist degenerates of the Confederacy, and against today's implicitly treasonous, oligarchical U.S. Federalist Society.

Thus, when the Welf League and its accomplices used the brutish Charles of Anjou for the bloody suppression of the people of Sicily, the anti-Welf League forces, continuing the policy of Frederick II, prepared, and conducted the "Sicilian Vespers," a connection deeply appreciated by Giuseppe Verdi. Verdi, a defender of Italy's belated creation as a modern nation-state republic, was right in recognizing the connection between the "Sicilian Vespers," conducted under one notion of international law, and the modern nation-state as exemplified by Lincoln's United States, the latter the beneficiary of the Golden Renaissance's revolution in respect to principles of law. Cusa, above all others, had discovered that bridge from one to the other notion of law, to the law reflected in Leibniz's principle of "life, liberty, and the pursuit of happiness," and the Preamble of the U.S. Federal Constitution.

Unfortunately, the triumph of feudal reaction, in the defeat of the League of Cambrai, unleashed a temporary, if friction-riven alliance, between the two principal factions of the European oligarchy: the financier oligarchy centered on Venice,<sup>10</sup> and the landed aristocracy. Since 1509-1511, the modern history of European civilization has been, thus far, an endless strife between the modern sovereign nation-state and the political heirs of that Thirteen-Century Welf League, the which collapsed all of European civilization into the

"New Dark Age" of the Fourteenth Century.

Only in the creation of what has been, thereafter, the ever-besieged and internally embattled United States, was that lawful model of political economy established, the which approaches the Golden Renaissance standard for a Christian notion of natural law. Since 1789, especially since the aftermath of President Lincoln's victories over Lord Palmerston's puppets, the Confederacy and Maximilian's tyranny in Mexico, other states have either wrought constitutions and political economies in imitation of the U.S.A., or have used that model for parliamentary reforms of government, measures which Power in the contract of the c

Johannes Kepler (from Frankfurt University's Pictures of Famous Physicists webpage).

somewhat tamed the continuation of oligarchical rule without actually overturning it. Since the founding of the U.S. republic, the continuing object of our nation's principal and continuing mortal adversary, the British monarchy, has been to eradicate both the United States' Constitution and every other nation-state economy from this planet, forever.

The temporary, Kissinger-like, Hobbesian quality of the alliance between Castlereagh's rentier-oligarchical Britain and Metternich's openly reactionary Holy Alliance, typifies the continued heritage of the Welf League in modern European civilization, up to the present day. The present-day dogmas of "free trade" (e.g., financier-oligarchy) and "globalization" (a harking back to the Thirteenth-Century Welf League), are nothing other than a modern guise for the feudal tradition of the Welf League, and for the evil tradition of the Roman Emperor Diocletian earlier—the Diocletian who bequeathed to his successor, Constantine, the pragmatic advice, that it were more efficient to confuse and corrupt the Christians, as that Mephistopheles, pagan Pontifex Maximus Constantine, did in fact, than to continue to slaughter them.

#### History as a Principle of Action

Underlying all that we have said, or touched upon

here, so far, there is an essential principle. The array of topics woven into our account thus far, has been composed with that principle in view, that as the subject-matter to be brought thus into focus. Perhaps, nothing better simply illustrates the principle more than the implications of the 233-231 B.C. attempted circumnavigation. The characteristic form of action which defines the existence of our human species, is the act of creation by means of which a validatable discovery of physical principle is generated within the sovereign cognitive processes of the individual's mind It is that characteristic form of action, which defines the physical relationship between our

species and the universe as a whole. It is the change in the behavior of the human hand, through a validatable, revolutionary discovery of principle generated within the individual's sovereign cognitive processes, which is the quality and form of action which defines the nature and the potential of our species for continued existence. It is that form of action which defines, if you please, the Kepler-Gauss orbit of history, of the development, or doom of nations and cultures. The case of the attempted circumnavigation is an example which contains all of the essential elements of an illustration of that principle.

At an earlier point in this report, we reviewed three points in summary. With the remarks in the foregoing paragraph, we have now come to a fourth. 4. Since Gottfried Leibniz's 1672-1676 creation of a calculus, that according to requirements previously defined by Kepler, it has been clear to all competent scientists and related scholars, that the characteristic of the Solar system's Keplerian orbits is expressed as what Leibniz termed as the characteristically "non-constant curvature" of processes in the infinitesimally small interval of action. In modern language, this notion of Leibniz's, defines the strictly proper usage of the term "non-linear." In all non-linear processes, the characteristic action expresses an ordering of crucially experimentally validatable, successive changes of physi-

cal (or, equivalent) state; no formal mathematics of the axiomatic form associated with Galileo, Descartes, Newton, Euler, Lagrange, Laplace, Cauchy, Clausius, Grassmann, et al., can represent such a characteristic. In Riemann's terms, in the closing statement of his Über die Hypothesen. welche der Geometrie zu Grunde liegen, in such cases "we must depart the domain of mathematics, for the realm of physics." It is in the ordering of successive changes of physical state, the which, by their nature, lie be-



*Gottfried Leibniz by Christoph Bernhard Francke.* 

yond deductive-inductive methods of formal mathematics, that the comprehension of such ordered changes of change of state must lie. This is shown, if only negatively, in formal terms, by the fact that any change of state corresponds, mathematically speaking, to the introduction of a new "dimension," resulting, thus, in the abandonment of previously established mathematics, for a new manifold, whose characteristic action must be determined experimentally, not *a priori*. These changes of state belong to the domain of a Gauss-Riemann hypergeometry; their representation requires a Riemannian comprehension of the general

problem posed by multiply-connected manifolds.<sup>11</sup> The characteristic of all human history (and pre-history), is a principle of action of this general class. It is only from this standpoint, that the crucial historical implications of the 233-231 B.C. attempt at circumnavigation can be adequately appreciated.

5. This characteristic action, which defines the nature of man, in contrast to all other living forms, is located primarily in a specific kind of sovereignly cognitive action by the relevant individual human mind. This action is typified by the role of Plato's Socratic method. This action is prompted by recognition that a

> paradox pervades some existing body of belief, to such effect, that no solution for that paradox can be found within the province of that troubled domain of belief. The solution can be found only through those sovereign cognitive (creative) powers of cognition, the which Immanuel Kant insisted, autobiographically, do not exist. The generation of an hypothetical solution to the paradox, through the agency of these cognitive powers, if validated by crucial experimental means, constitutes both a solution to the relevant paradox, and a new universal principle of physical, or Classical-artistic forms of general knowledge within that specific *culture*. This type of intrinsically

non-linear, anti-entropic action, the creative action of crucially validatable acts of sovereign individuals' cognition, is the elementary characteristic of human nature, that which distinguishes the human individual from even the amiably playful beast, and also from unplayful, morbid philosophers such as Descartes, Locke, Hume, Hume's prodigal son, Kant, and Hegel.

6. There is more, as the internal and related evidence bearing upon Captain Rata's voyage illustrates such further connections. Once we have recognized that human nature is expressed by validatable forms of sovereign cognitive actions by individual minds, we are confronted by the duty of discovering how ideas which can not be communicated beyond the sovereign precincts of the individual mind, may be replicated as recognizable experiences by the minds of other individuals. The Humboldt program of Classical-humanist secondary education, illustrates with relative excellence the same principle central to Plato's Socratic method, and to the teaching practices of the Brothers of the Common Life and the Oratorians. The latter method presents, as an individually replicatable experience, a specific individual act of cognition, and also repre-

sents the way in which the replication of that individual cognitive experience may be replicated. It is that replication of validatable discoveries of principle, by means of which ideas are transmitted for practice, cumulatively, to successive generations. That is human nature, that is the nature of history as the history of ideas associated with such principles, and that is the characteristic action by means of which mankind's relationship to the universe is defined.

The very special distinction of Rata's voyage, which places it, in world-historical importance, above all modern discovery and exploration of the Americas combined, on this specific account, is navigator Maui's attention to the work of Eratosthenes within the surviving records of that voyage. Here is science in action. Here is man's

nature expressed in world-encompassing fullness of scope. Here is the relationship between man's nature and our species' increase of its power over the universe, expressed in a most appropriate, distilled form. Here, the legacy of Plato shines above the ages. Here, we are pained by proof, of how little the progress, and how rare the precious gains in principle, of mankind, during the nearly 2,400 years since the trial of Socrates, and the more than 2,200 years since Captain Rata's voyage.

When we employ that image of the work of Plato's Academy, to reach beyond the customary smallness of most of even the leading academic minds of our century, to look up and grasp the implications of hundreds of thousands of years of human experience and development prior to all of ancient, medieval, and modern history, a certain, most fruitful humility overwhelms us. We see ourselves rightly, as individuals pausing for a moment, to deliver something needed, to, as from, the simultaneity of eternity.

### 'Where Did We Get the Groceries?'

Where did mankind find the cultivated species and varieties of fruits and vegetables, upon which our lives and those of our livestock chiefly depend today? An important question; to discuss history without considering the answer, is a contradiction in terms. In 1982, I was hosted for several hours by the New Delhi agricultural research center, where important aspects of that part of history are kept as living and other evidence.



A mosaic from the ruins of Pompeii depicting Plato's Academy.

To go directly to the heart of this exemplary question, consider the following.

The commonplace incompetence of even academic opinion, is the custom of defining action as between two consecutive arrays of events within the same phase-space. This is, in other words, today's customary, if also incompetent, linear view, a customarily stated, or merely implied pagan's faith, in perfection of linearity in the infinitesimally small. As we have stressed here, above, it is indispensable to define action otherwise, as a phase-shift from one state to a different state, across a non-linear gulf of separation between the two. Thus, respecting the matter of that development of foodstuffs needed to establish the preconditions for urban-centered civilization, we must pass over all linear notions of "practical, how to" explanations. We must focus upon the fact, that the transformation in our potential foodstocks was essentially a fruit of many successive discoveries of principle. This distinction between the merely imaginary "practical" and the real, the scientific, is exemplified by the relationship between Captain Rata's voyage, and certain explicit, crucial features of navigator Maui's role in making the successfully revolutionary features of that voyage possible.

Modern academic and news-media Babbits, like Newcomen Society Yahoos, make much of offering what they present as plausible conjectures, that with what passes for a knowing look. Usually, in fact, they attempt to explain away everything, and yet actually explain nothing. Like the practical actions taken under the direction of Captain Rata, all of the crucial features of that voyage's revolutionary achievements were reflections of, products of the application of discovered principles, the discoveries of physical principle by Eratosthenes most notably. This same is true of all that human progress which is characterized by a necessary change of state in knowledge for practice.

In such matters, as the Rata voyage illustrates the point, we must proceed from an understanding of the nature of human cognition. It is the compelling paradoxes which experience of a recent state of human practice, presents as challenges to the sovereign creative powers of relevant individual minds, which are the general precondition for all advances in human knowledge and practice. The relevant folly of education and educated opinion today, is that a lack of the rigor which a Socratic form of Classical-humanist education supplies, by obliging the student to learn nothing whose original discovery of principle the student has not replicated for himself, prompts contemporary popular conceit to persuade itself it has explained away cheaply (as by looking it up on the Internet) what it has rendered itself virtually incapable of understanding. Specifically, customary education, and kindred varieties of mere gossip about "information," evade the adducible evidence that each quality of progress in the results of human practice was preceded by, and an outgrowth of an accumulated density of validatable discoveries of physical, or cognate principle.

The case of Rata's voyage, situated as I have done here, is an exceptionally valuable object-lesson for understanding better, the necessary principles of law within and among nations, for remedying the threatened, onrushing doom which threatens civilization with the close of this present century.

#### Endnotes

1. British anthropology as such, appeared as an offshoot of the French positivists' "ethnology." As shown through researches conducted by Anton Chaitkin, in follow-up of earlier studies by Alan Salisbury, the leading branch of English-speaking anthropology was the so-called American school of cultural anthropology, introduced to the U.S.A., during the 1840s, as a form of French ethnology, by British agent (and U.S. Treasury Secretary under Presidents Thomas Jefferson and James Madison) Albert Gallatin. The hoaxster Morgan of Ancient Society, who is known for his influence in shaping the incompetent anthropological thinking of Karl Marx and Frederick Engels on this and related matters, was an agent deployed by British agent Gallatin's seizure of control over the Washington, D.C. Smithsonian Institution. The American School of anthropology, based at the New York American Museum of Natural History and Columbia University, was the result. This was all an outgrowth of the "noble savage" cult of the Abbé Antonio Conti's Eighteenth-Century "Enlightenment." The fact that the initially leading influences of ethnology/anthropology were in the Americas (e.g., Mexico, the U.S.A.) was chiefly a reflection of London-directed efforts to prevent the development of the western portion of the U.S.A., and also to impede the influence of modern civilization in the Spanish-speaking Americas. It was with the spread of the imperial Francophone and Anglophone cults which France and Britain developed as the cornerstones of their colonial policies for Africa, that British cultural anthropology assumed its present relative weight. However, the same degraded British mind-set was otherwise established as the British Israelite cult which London's Seventeenth-Century, Protestant fundamentalists, and others, practiced then and later, under the rubric of archeology, in the "Biblical lands" of the Middle East.

2. At the time this was being drafted, an associate, Bruce Director, wrote a brief report summarizing our cumulative work on this point. What the defenders of Newton and Euler have refused to recognize, to the last report, is that the organization of the Solar system is that presented by Kepler. The fussing about Titius-Bode calculations, as substitutes for Kepler's estimates, arises out of the same formal mathematical error used to bolster the Clarke-Euler-Cauchy fallacy, the false assertion that we might fairly estimate that actions within relatively infinitesimal intervals of action are linear. Kepler came to recognize that the Solar system, and, implicitly, the universe at large, is composed as a multiply-connected manifold of what we must recognize today as of the Gauss-Riemann type. This is the same issue of scientific method, that of a Riemannian multiply-connected manifold, upon which all of my fundamental work of the past forty-six years has been premised. For example, during the early 1980s, I insisted, that the thermonuclear fusion which produced the composition of the Solar system as a whole, can be explained only from the standpoint of the implications of Kepler's so-called laws respecting the "shedding" of spin during the earlier life of our Sun, not a gravitational-fusion model of a squatting Sun. The principal determination of global changes in Earth's weather, is either by changes in behavior of the Sun, or, like glacial cycles, and associated long cycles of cooling and warming, by the multiply-connected determination of the orbital characteristics of the Solar system as a whole.

3. We must treat such accounts as approximations of what might have been, under other historic, or pre-historic circumstances, a more precise documentation. We should treat such accounts as of a "more than, less than" precision, at most. They are indicative of something important, whose exact importance is to be determined later. In the meantime, they are too significant to be ignored, but not precise enough to be over-interpreted. Meanwhile, there are significant bits of corroborating evidence to support the gist of these secondary reports on the content of earlier, presently unavailable sources. On this issue of method, see a more precise approach to such matters, below.

4. Notably, the Ionian Greeks were an integral part of the same group of Peoples of the Sea associated with Egypt-linked Cyrenaica. The Etruscans were rivals of the Canaanites (Phoenicians and Carthaginians), and de facto allies of Egypt-linked Cyrenaica. Just as the Ionian seamen were the leading ally of Egypt, against Tyre, in the eastern Mediterranean, the Etruscans were the leading ally of Egypt against Carthage, in the western Mediterranean. For related reasons, the Romans attempted virtual genocide against any actual memories of the living culture of their Etruscan victims. Chiefly, only the Etruscans' grave-sites survived this Latin genocide. Not only is Plato's Theaetetus associated with Cyrenaic origins, as well as Eratosthenes; Cyrenaica played a leading role in the Egypt-centered maritime culture of the Mediterranean, and beyond, and was also noted for its navigators and other mathematicians. Whereas the Latins acquired their technologies through conquest, the Greeks were the principal immediate source of all the valid ideas Latin culture acquired. In their time, the Etruscans represented a culture qualitatively superior to that of the Latins, as did the people of Magna Graecia, and, evidently, also the Italian speakers of that time. There is a notable relationship between the practice of geographic discovery, and the development of the propensity for acquiring and generating validatable ideas.

5. The primary sources show Sumer to be a settlement by a non-Semitic, "black-headed people," of the Dravidian language-group. The internal evidence corresponds to Herodotus' accounts of a Subcontinent-based (Shatki-Siva) maritime culture of the Dravidian language-group, which Herodotus associates with such locales as Yemen (Aththar), Ishtar (Mesopotamia), and Canaanite (Astarte). The Isis-Osiris cult is recognized as part of the same cultural set, as also the Phrygian Cybele-Dionysos, and Delphi Gaea-Python (Apollo) cult. The gross evidence is, that the Subcontinent-based branch of this Dravidian-language-group culture, associated with Harappa, went into decline during a period corresponding to some time during the Third Millennium B.C., a period corresponding to the growing influx of the Indo-European, Vedic culture, originating proximately from a relatively less arid period in Central Asia. The Semitic cultures of more recent times are by-products of the interaction between Egyptian culture and Dravidian-based influences such as those encountered in the Akkadians, Yemen, Ethiopia, and Canaan. Thus, whereas the original Hebrew, Mosaic faith is associated with Egypt, the Hebrew tradition following the first Babylonian captivity (accounting the Persian as the second Babylonian captivity) is mixed, syncretically, with the imposition of elements of the pagan mythologies of the Akkadians.

6. It was not until the successive work of Kepler, Leibniz, Gauss, and Riemann, that the deeper implications of Eratosthenes' "sieve" could be placed in terms of physics. Gauss's approach to determining the asteroid orbits has its roots in Eratosthenes' establishing the ecliptic as the basis for oceanic navigation. These two features of Eratosthenes' work, anticipate both the notion of a generalized multiply-connected manifold, and, as Georg Cantor implicitly showed, the higher implications lurking behind Eratosthenes' sieve. Mankind has made much progress since Ptolemaic Egypt of Eratosthenes' and Archimedes' time, but we must not exaggerate the progress of science since then. Two points are to be made. First, from the standpoint of method, only a few crucial points of progress in method have actually been made; second, there have been numerous detours, outright falsifications, and retrogressions incorporated, as if on an equal footing, with the actual achievements of modern science.

7. Thomas Aquinas' notable achievement was to raise a standard, to the purpose of obliging a politically hegemonic, pro-Aristotle culture of his time to submit to the doctrinal legacy of St. Augustine: to accept the products of reason, if not yet reason itself. The comparison of the writings of both, and relevant Encyclicals of Pope John Paul II, makes the point clear in practice.

8. The introduction of gnosticism, together with Aristotle, into western Europe came chiefly from the Emperor Constantine's Byzantine tradition. The motive for this is found in the Code of Constantine's predecessor, Diocletian, whose social-economic dogma prescribed both a zerotechnological-growth social order, and the axiomatic premises for what emerged out of Rome's "Dark Age," as western European feudalism. Virtually all gnostic cults, including those, such as Pietro Pomponazzi's mortalist doctrine, were introduced to western Europe from Byzantium, either directly, or through Gasparo Contarini's Venice and his teacher's, Pomponazzi's Padua. The pivotal element in this process of corruption, was Venice's controlling role in the crusades, and the role of the victors of the Fourth Crusade, in particular, in launching the Welf League's insurgency against the Hohenstaufen in mid-Thirteenth-Century Europe.

9. Typical of such political corruption of our universities and learned professions, is the Clarke-Euler-Cauchy-Clausius dogma of "linearity in the infinitesimally small." No graduate of even competent secondary training in Euclidean geometry could not readily recognize the fraud of Euler's celebrated defense of Clarke's argument against Leibniz on this point. Euler's fraudulent pretense at proof rests absolutely upon including the theorem, linearity, as an axiom of that geometry upon which the proof of the supposed theorem depends absolutely. The theorem is false in any case. The objection to such clear proof of Euler's *petitio principii* hoax, is the career-wise academic's posture of indignation, the transparent sophistry: "You can't say that about Newton, Euler, or [proven plagiarist] Cauchy!" The faculty of reason is excluded from the composition of such pure fustian as those wild fits of hand-caught-in-the-cookie-jar indignation.

10. Venice remained the dominant political and financial power, in Europe and the adjoining Mediterranean region, from the early Thirteenth Century, until the mid-Eighteenth Century. Formally, Venice's power ended with Napoleon Bonaparte's occupation of that state. Actually, Venice's financier oligarchy had already shifted the political center of its Europe-wide financier faction to the Netherlands and London, during the interval between the 1688-1689 usurpation of the English throne, by William of Orange, and the 1714 accession of one of William of Orange's protégés, George I, to the newly established British throne, where the Devil squats still, to the present day.

11. This must necessarily be the case, since in effecting discoveries of principle, we are encountering previously unapprehended dimensionalities of our universe, in its characteristic expression as a multiplyconnected manifold of the Gauss-Riemann type. The change in empirically adducible characteristic of a newly apprehended part of such a manifold, will necessarily reflect the efficient role of aspects of that still greater manifold yet to be more fully apprehended. As Riemann stressed, notably in his habilitation dissertation, such empirical reflections pertain to the further extremes of scale where scientific progress incurs: both at the greater astrophysical, and yet ever-smaller microphysical domains. In the infinitesimally small, therefore, the measurement of the principled characteristic of action, always includes, implicitly, a higher, yet unknown cardinality than the present comprehension apprehends, and the quantitative feature of this type of axiomatically non-linear characteristic must be apprehended experimentally, not a priori. This characteristic is located conceptually, axiomatically, in the ordering of changes of physical state of human practice associated with applicable discovery of a newly uncovered physical principle. In other words, expressed as "non-constant curvature" in the infinitesimally small. This was the method of Gauss, in his calculation of the principal asteroids' Keplerian orbits.