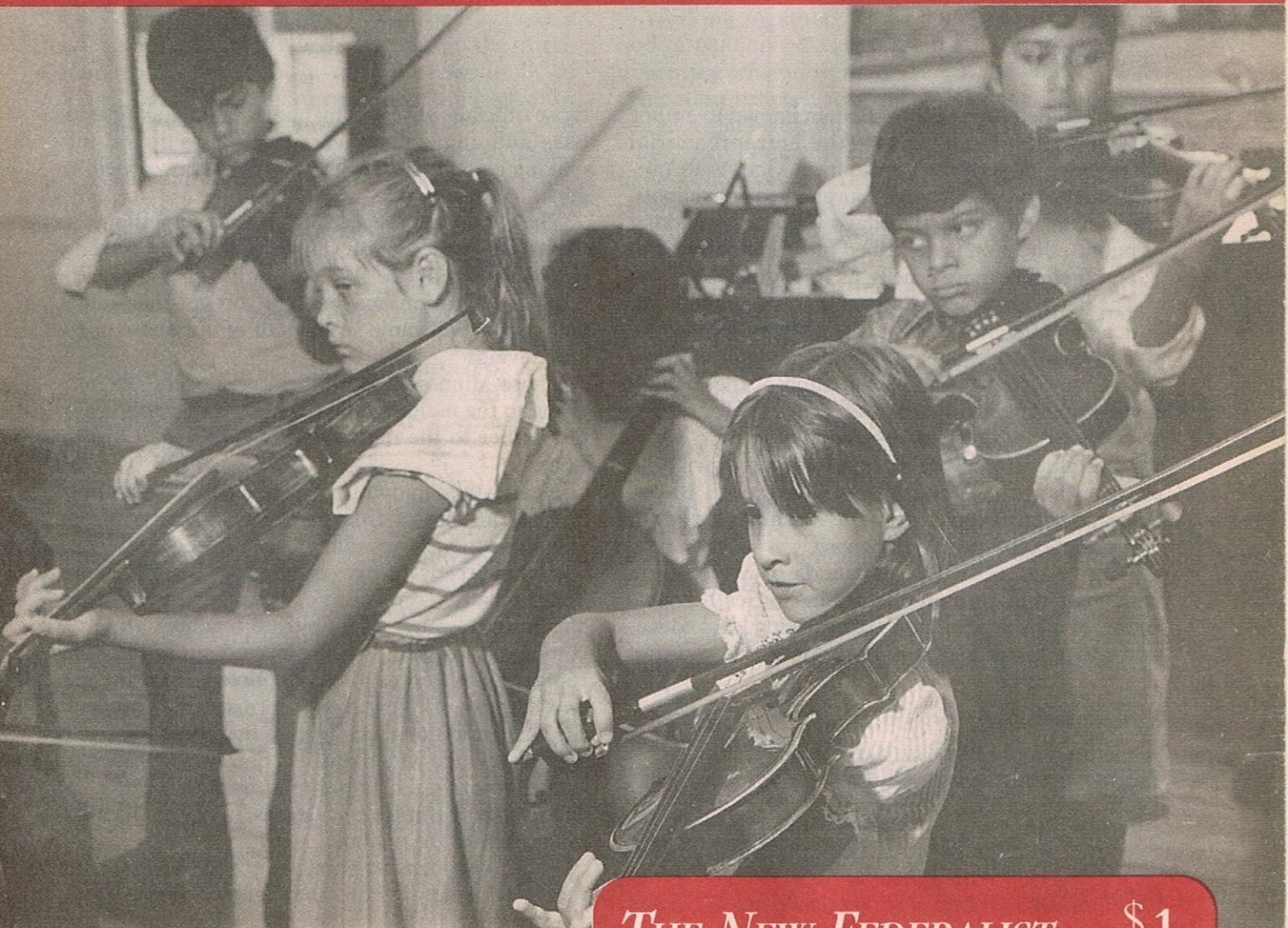


CREATIVITY

In Science, School, and Song

Why OBE and Privatization Must Be Defeated

by Lyndon H. LaRouche, Jr.



THE NEW FEDERALIST

\$1

CREATIVITY

In Science, School, and Song

by Lyndon H. LaRouche, Jr.

In the nineteenth-century Britain known to author Robert Louis Stevenson, the entrepreneurial practice of suffocating innocent victims to provide salable corpses to Edinburgh medical schools, was called "burking."¹ In today's U.S.A., the burking of public education is described more euphemistically, and therefore more cruelly, as "privatization."

The better part of \$1 trillions is spent annually for education budgets in the United States today. The size of this budget has attracted financial vultures still hungry from their 1980s looting of the nation's savings and loan institutions, and from their presently crisis-ridden derivatives swindle. A new, widespread educational policy of "dumbing-down" the nation's pupils, often called "Outcome Based Education" (OBE),² has given these bandits the key to many a schoolhouse's bank deposit.

As a result of OBE, the friends of Minnesota's wise-guy-linked Humphrey machine, or feather merchants of a kindred kidney, are besieging local education officials across the nation. More and more of

those officials, obsessed by both a falling tax-revenue base and angry tax-payers, are being duped into making a contract with these present-day carpetbaggers.

The carpetbaggers' sales pitch runs something like this: "I can get it for you wholesale at the private educational warehouse. We can hold the line on the costs of education, maybe help you cut the budget. Our profits will come strictly out of our share of the cost-savings."

Those Minnesota and other "privatizers" are now doing to the nation's public schools, what this crowd did earlier to the nation's savings and loan institutions.

Unless this epidemic of privatization is stopped before the end of this school year, many public school systems throughout the United States are doomed already to irreversibly long-term collapse. The virtually irreplaceable, maturing, and rapidly shrinking number of employed teachers which is competent to teach, is being levered out of the classroom, perhaps never to return. Already, over the past two decades of "New Age" reforms, large chunks of the basic traditional curriculum have been uprooted. The pitiful little which remains of competence within present curricula, is being suffocated, either by Minnesota's "Burkes and Hares," or their ilk from other parts of the nation.

Think of American public education as like a formerly rich field of grain. That happier condition was

© December 1994

for more information, contact the publisher:

THE NEW FEDERALIST, P.O. Box 889, Leesburg, VA
22075 703-777-9451

ON THE COVER: Young violinists at work. Photograph:
EIRNSStuart Lewis.
NPP94-504

last seen back in the 1960s years of the National Science Foundation assistance to quality teacher education. Now, the same fields are suffering the effects of prolonged periods of drought, lack of fertilization, defective seed, and generally poor maintenance. The locust-hordes, the privatizers have come; unless the relevant pesticide is applied very soon, there will be nothing left of either the fields or of the minds of the upcoming generation of young Americans. Next to go, will be the farm itself, leaving a dust-bowl relic to the pleasure of whatever miserable weeds might enjoy those deprived circumstances.

The frantic parents cry out: "How could they let this happen?"

"Madam, Sir," comes the reply, "'They' would not allow these swindlers to rip off our education tax-dollars, if 'they' did not wish our children to be made stupid."

The parents' grief turns to anger: "Who are 'they'?" "They' are the people behind OBE. 'They' includes a particularly nasty little hate-group, the Anti-Defamation League, which you may recognize by its initials: ADL. The ADL's version of the package for dumbing-down your children is published as the 'A World of Difference' program.³ If you wish to understand who and what are behind these hoaxes, one place to look is the Education Department at Harvard University. In this case, 'Harvard' means the late Professor B. F. Skinner, and racists such as Jensen, Shockley, Herrnstein,⁴ and Herrnstein's highly controversial co-author, Professor Charles Murray.⁵

"Explain more about those carpetbaggers?"

"The history of New York City slumlord operations shows the the techniques of the 'privatization' swindle in education.

"Back during the 1960s, for example, whenever certain New York City real-estate speculators wished to turn a run-down slum-housing area into part of a package for some new high-rise building-project, the first step was to evict their slum-tenants, and to secure a reduction in taxes on the existing structure. The quickest and cheapest way to secure these blessings of usury was to have a financially successful arson. The slickest way to bring about the arson, was to have some street gang slipped suitable favors.

"Barring the odd exception here and there, the motive of those Neros of the New York slumlord class was not the fires themselves; their motive was the earlier profits they expected from getting rid of unwanted tenants and taxable structures. The same principle applies to the present epidemic of 'privatization.'

"For obvious reasons, a wave of arson against the public schools of America's children is not a smart political move. A much less risky method has been found to accomplish the same ultimate end-result. Let local government hire bandits such as Minnesota savings-and-loan-raider types, or marauders from other parts of the country, to despoil school budgets with their privatization schemes.

"Some citizens may believe doing that to our children is criminal; but, so far, like the sale of derivatives, it is still a legalized swindle. It is less spectacular, and slower than sending the school up in flames one night, but it has the same ultimate effect.

"Now, let us focus upon the people who are really behind this legalized looting of the education tax dollars. Look at those powerful institutions which are behind this so-called 'Outcome Based Education.' "

"Okay."

Who is 'Burking' Your Child's Mind?

Working together, the peddlers of privatization and of Outcome Based Education are deliberately destroying what most Americans of the World War II generation believed was the civil right of every citizen to a good education. The assistance in obtaining a university education supplied to returning veterans under what was called the "GI Bill of Rights," was considered then a significant step toward making that civil right a reality for all. It was that mood among President John F. Kennedy's generation of returning veterans, which made possible the brilliant, if limited success of the Civil Rights Movement during the middle 1960s.⁶

Now, a group of plotters inside the United Nations Organization has come together with racists at Harvard University.⁷ This poses questions which the typical concerned parent has not been able to answer. What are the motives of these "de-schoolers," as the followers of Ivan Illich were known at the beginning of the 1970s? Why would wealthy family names, commonly associated with some of the most powerfully competitive industries of the world, join up with a pack of seedy eccentrics, the likes of Illich, to destroy the very educational system upon which the productivity of the U.S. labor-force depends?

What is the psychology of people like those wicked wealthy families backing the late Friedrich von Hayek's and Milton Friedman's Mont Pelerin Society in this attack upon education? Ask why the United States fought justified wars against the British monarchy; ask why Henry A. Kissinger's idol, the Holy Alliance's Prince Clement Metternich, hated our United States.⁸ There you will find why admirers of

such anachronisms as the British monarchy and Metternich's Holy Alliance have hateful opposition to the right of every child to be educated up to a modern standard of literacy.

A few facts about the political history of public education in western Europe and the United States point to the actual motives for the attempted burking of our children's minds. As briefly as possible, the essential facts which you must know are the following.

From the beginning of history, until about 1812-1815, the time of the United States' second war against the British monarchy, about 90 percent or more of the households of every society lived in a condition of rural toil. Prior to modern European history, over 90 percent of humanity existed in a condition only a little better than that of cattle. Until the American Revolution changed the course of world history, that 90 percent or more was ruled over by a relatively small number of powerful families, under an administration performed by the lackeys of those oligarchical families; those at the bottom of the heap lived as serfs, or even slaves.

The change associated with that American Revolution came late in history; even when the change came, it emerged slowly into practice.

It began about 2,700 years ago, on the western coasts of Anatolia: The Greek city-states of Ionia launched a struggle to free mankind of the long oligarchical tradition of "asiatic society's" system of serfdom and slavery. The later conflict between Solon's reforms at Athens and the Sparta tradition of slave-society, represented an effort by co-thinkers of Solon to bring mankind out of that asiatic tradition of Babylon and Tyre. The work of Plato's Academy at Athens was the forerunner of a further struggle for freedom, a struggle for civil rights of all mankind, which began with the ministry of Jesus Christ.

Even then, it was not before 2,000 years ago, that the idea that all human beings are politically equal by birth was first spread among the peoples of the Roman Empire by the first Christian evangelists, especially the Apostle Paul. As Augustine emphasizes that fact, Christianity, arising in an eastern Mediterranean littoral which had become Greek-speaking over the approximate three centuries since Alexander the Great's victories, took up all of the noble contributions of the Greek heritage and imbued this knowledge with a Christian spirit.

However, even then, the nominally Christian western European region remained oligarchical in the form of its political and social institutions, until modern times. Even in the parts of the world which were nominally Christian, this idea of universal polit-

ical equality of the individual personality before God, was not presented as a policy of statecraft until the Renaissance which erupted in the middle of the Fifteenth Century, introduced by leaders of the A.D. 1439-1440 Council of Florence.

The issues of educational policy posed by OBE can not be understood competently until they are situated against the background of that historical conflict between freedom and the Babylonian oligarchical tradition.

Our United States was created in struggle against the forces of the oligarchical tradition in Europe, against not only the evil of the British monarchy, but also the tyranny of those so-called "conservatives" typified by Prince Clement Metternich's Holy Alliance. Our pioneering in the effort to bring a Christian form of Classical Humanist education to every child and maturing adolescent, beginning with the seventeenth-century Massachusetts Bay Colony, was perceived in Europe as the gage of defiance thrown into the bloody face of every oligarchical "conservative" tyrant of this planet, from England's William of Orange through Metternich. It was that struggle of our forefathers, for the freedom to practice scientific progress, and to provide Classical Humanist education to all its citizens, which enraged the British monarchy and the Metternich "Conservatives" more than anything else.

During this presently passing century, that evil, against which our young republic's battles for freedom were fought, took the form of the so-called "Conservative Revolution." This presently continuing "Conservative Revolution" of the 1920s found its roots in the nineteenth-century Romantics and other irrationalists such as: the notorious Madame de Staël; G. W. F. Hegel and Friedrich Karl Savigny; Oxford Venetian John Ruskin; Friedrich Nietzsche, the professed "anti-Christ"; and the theosophist movement of Madame Blavatsky and the avowed satanist Aleister Crowley. This "Conservative Revolution," of figures such as Richard von Coudenhove-Kalergi and Moeller van den Bruck, gave us the Nazis Adolf Hitler and Martin Heidegger, and also the Mont Pelerin Society of Friedrich von Hayek and Professor Milton Friedman.⁹

The present international center of that Conservative Revolution movement is the Worldwide Fund for Nature of the British Royal Consort, Prince Philip Mountbatten.¹⁰ It is an oligarchical, anti-science, anti-progress movement, a movement of the kind of people, such as Prince Philip, who put man down to the same level as the wild beasts and cattle. Locally, that enemy is the American "neo-conservative" movement represented by such ostensibly

diverse specimens as the Anti-Defamation League, Professor Charles Murray, and proto-fascist demagogues such as Virginia Senate candidate Oliver North.

These "Conservative Revolution" types, are truly "reactionaries," in the literal sense of that term.

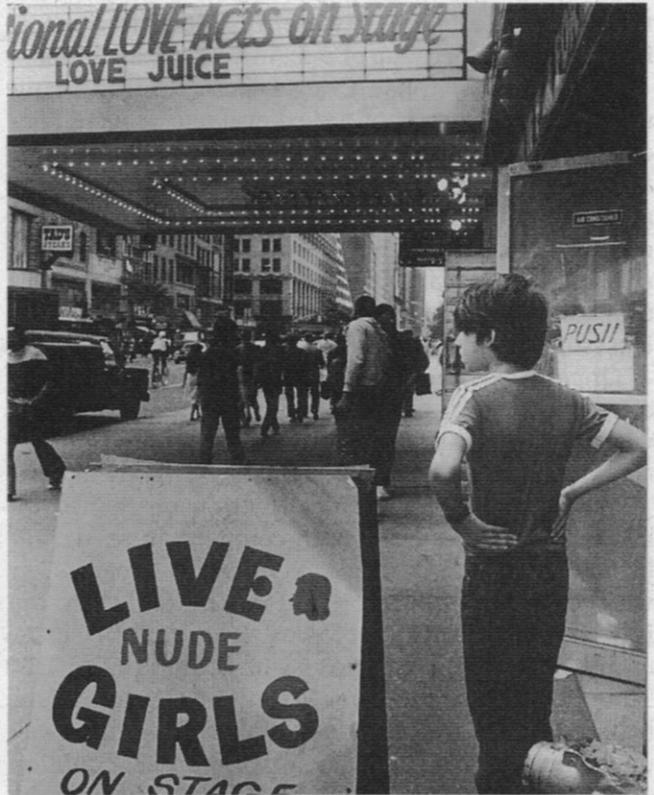
These scornable types are the "Miniver Cheevys" of our troubled times. They yearn for a bygone age, a

"The right of the citizen to become a qualified citizen, through a foundation in the needed form of Classical Humanist education, is the only durable remedy for the ills of the existing political system."



EIRNS Carlos de Hoyos

The products of America's collapsing public school system: punk protesters at an anti-nuclear rally in New York City; wandering in New York City's 42nd Street pornography district; engrossed in violence and sex-saturated comic books.



EIRNS Philip Ulanowsky



"Working together, the peddlers of privatization and of Outcome Based Education are deliberately destroying what most Americans of the World War II generation believed was the civil right of every citizen to a good education."

lost age when knights could slaughter insolent members of the lower classes with relative impunity, when ladies were said to be ladylike, and when the lower classes were mostly meek "Sancho Panzas." They yearn for a state of affairs in which your ancestors' features were suffused with an amiable quality of brutish, servile simplicity. They hate, and fear real Americans with as much passion as the ministers of King George III loathed that American insolent love for freedom which prompted our forefathers to beat back our British oligarchical oppressors, two centuries and more ago. They are "reactionaries," reacting against the heritage of our American Revolution.

In order that those Conservatives might bring upon us their parody of a medieval age, it were necessary to put today's descendants of medieval serfs into a stupefied state of contentment with an illiterate's menial labor. To bring such a neo-feudalist utopia into existence, the human race must be reduced to less than 20 percent of its present population, and most of the survivors of that genocide must be assuredly stupid.

Once Moscow's Nikita Khrushchev had signed onto the system of global nuclear condominium which London's Bertrand Russell negotiated during the year-end of 1962, the Anglo-American "Conservatives'" oligarchical faction unleashed its neo-malthusian radical-youth-counterculture, daring to take down the tradition of scientific progress on which western civilization had relied, until then, for its external security. Once the Berlin Wall began to crumble, in 1989, the backers of Britain's Margaret Thatcher and her stooge, President George Bush, believed that Anglo-American global supremacy was unchallenged, and that a "new world order" could be established. Their purpose was to realize the goals of the "Conservative Revolution" which Thatcher, Milton Friedman, Senator Phil Gramm, and Mont Pelerin cultists generally, serve with such conspicuously unrelenting, breathless passion.

It was in that context that arch-oligarch Boutros Boutros-Ghali was appointed Secretary-General of the United Nations Organization,¹¹ and UNO projects such as Outcome Based Education were unleashed to burk the minds of our children.

The Pre-1968 Rise of Modern Education

Those three interdependent institutions which define the successful features of modern european civilization, erupted from the initiative of the Council of Florence. These three are: (1) the idea of the modern nation-state, (2) that state's vital interest in fostering scientific and technological progress, and (3) the

role of education and related cultural development of the individual in making possible a form of society committed to scientific and technological betterment of the condition of the family and individual.

Throughout all history, until Europe's Fifteenth Century, the population of this planet never rose above the level of several hundred millions persons, in total. Most of these lived in a wretched state of serfdom or outright slavery. As a direct result of the influence of this threefold, revolutionary change within western european statecraft, made about the time of that Council, the life-expectancy and productive powers of labor in european civilization rose hyperbolically over the centuries since, until the downward trend introduced 30 years ago by the neo-malthusian youth-counterculture. [See Figure 1, p. 7.]

The roots of modern public education are traced back to the second half of fourteenth-century Europe, to the secondary-level program provided for some talented boys from ordinary families by a teaching order called The Brotherhood of the Common Life. This teaching order produced virtual battalions of geniuses, such as Nicolaus of Cusa, Erasmus of Rotterdam, Hieronymous Bosch, and so on. The influence of these Brotherhood-educated geniuses fostered others trained according to the same principles, such as Leonardo da Vinci and Raphael Sanzio. These were the fifteenth- and early sixteenth-century Renaissance geniuses who changed the history of Europe and the world, beginning less than a century after the teaching order was founded.

The method of instruction employed came to be known to historians as "Classical Christian Humanist" education (no similarity to the "modernists'" so-called "secular humanist" fad). The crux of the program is a rejection of today's textbook methods of classroom teaching. The principle is, that each adolescent youth should re-experience the original act of discovery of all of the most important fundamental discoveries of principle, from the earliest known, to modern times.

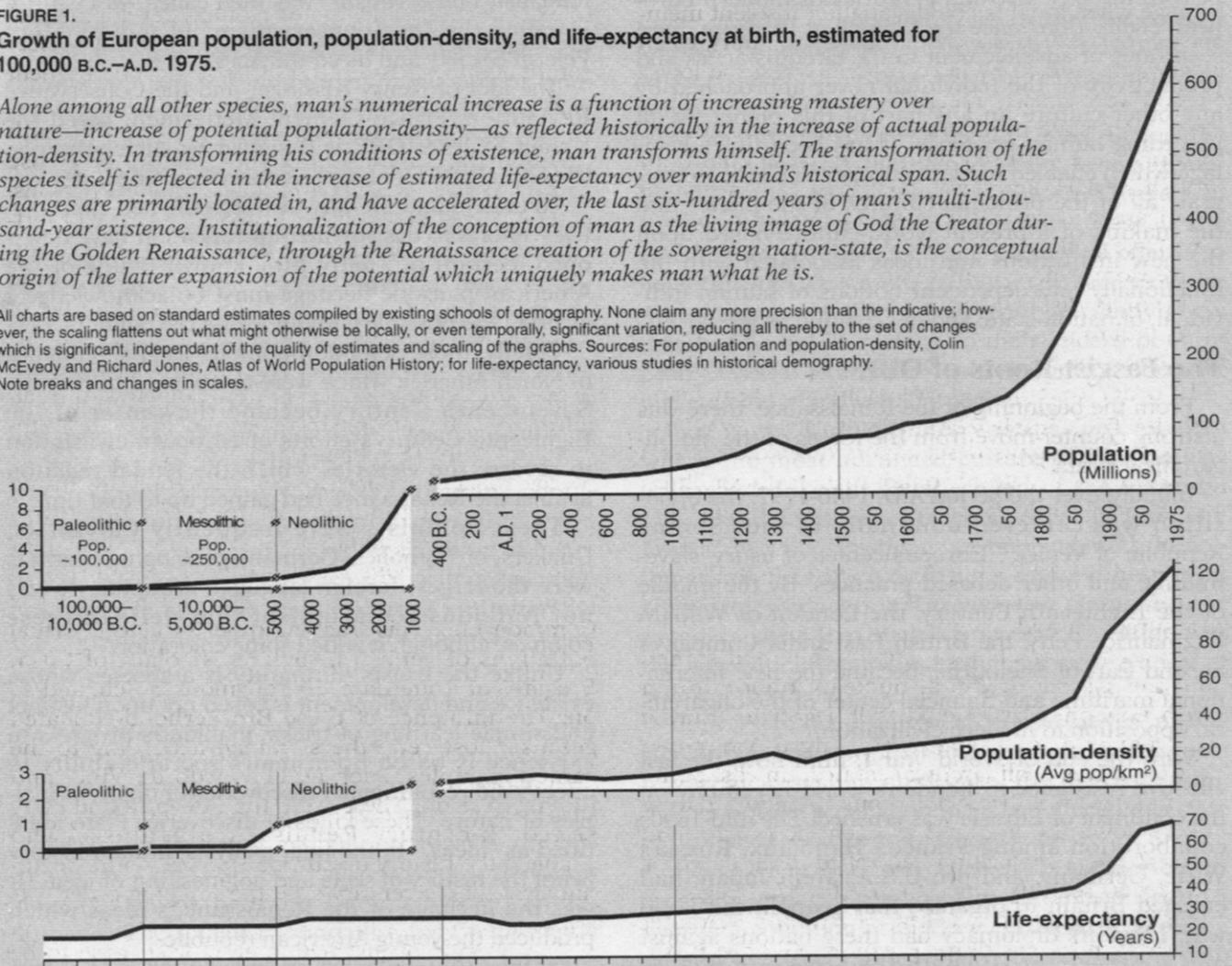
The best Classical Greek literature, such as the *Iliad*, the *Odyssey*, and some of the writings of Solon, Aeschylus, Sophocles, Xenophon, and, especially of Plato and his Academy, came to form the foundation of a Classical Humanist education as known to Europe during the Sixteenth through Nineteenth Centuries. These works were not taught as "dead languages." The very use of the pejorative term "dead language" is conclusive proof that the user of that term is but half-educated, a philosophical illiterate.

What is studied in a good Classical Christian

FIGURE 1.
Growth of European population, population-density, and life-expectancy at birth, estimated for 100,000 B.C.—A.D. 1975.

Alone among all other species, man's numerical increase is a function of increasing mastery over nature—increase of potential population-density—as reflected historically in the increase of actual population-density. In transforming his conditions of existence, man transforms himself. The transformation of the species itself is reflected in the increase of estimated life-expectancy over mankind's historical span. Such changes are primarily located in, and have accelerated over, the last six-hundred years of man's multi-thousand-year existence. Institutionalization of the conception of man as the living image of God the Creator during the Golden Renaissance, through the Renaissance creation of the sovereign nation-state, is the conceptual origin of the latter expansion of the potential which uniquely makes man what he is.

All charts are based on standard estimates compiled by existing schools of demography. None claim any more precision than the indicative; however, the scaling flattens out what might otherwise be locally, or even temporally, significant variation, reducing all thereby to the set of changes which is significant, independent of the quality of estimates and scaling of the graphs. Sources: For population and population-density, Colin McEvedy and Richard Jones, *Atlas of World Population History*; for life-expectancy, various studies in historical demography. Note breaks and changes in scales.



Humanist education, is the history of the creative development of those validated ideas which have an axiomatic-revolutionary quality of discovery. These ideas include not only the ideas of natural science, but also the Classical forms of such arts as poetry, tragedy, music, and painting. This education traces the documented evidence of such creative discoveries in art and science since the beginning of civilized European knowledge, since the Classical Greek and Hellenic time, especially since the time of Solon's reforms at Athens, through the deaths of the two great figures of ancient mathematics, Archimedes and Eratosthenes, at the close of the Third Century B.C.

This program of education and its influence created a revolution in human political institutions.

The institution of the modern nation-state did not exist anywhere on this planet prior to France's King

Louis XI's (1461-83) process of establishing France under his rule as the model of reference for the modern sovereign nation-state. The ideas which influenced Louis and others were radiated from the circles of the organizers of the A.D. 1439-1440 Council of Florence, Nicolaus of Cusa most notably. Louis XI's admittedly not fully stable success was nonetheless an inspiration among those forces in England and Spain who sought to end the feudal system of disunity and injustice in what became those newly unified nations at the end of the century.

It was the union of the new conception of the nation-state with the notion of organizing the nation around scientific progress, which marks the mid-fifteenth-century Council of Florence as a point at which modern history separates itself from the earlier feudal history of Europe.

If one discounts the effects of wars during that

period, the past five-odd centuries of modern european civilization, since the Council of Florence, have seen rates of advancement in the circumstances and productivity of the individual never approached by any other culture, in any part of this planet, in all preceding human existence. It has been this advantage which enabled modern european culture to integrate all of the principal cultures of the planet into the making of a present world-culture based upon the new institutions and ideas associated with the functionally interdependent notions of human individual, of nation-state, and of scientific progress.

The Fascist Roots of OBE

From the beginning of the Renaissance, there was a strong counter-move from the forces of the old oligarchical strata.

Initially, over the period A.D. 1440-1797, the opposition was centered nominally in the "Serene Republic of Venice," Europe's center of usury, slave-trading, and other debased practices. By the middle of the Eighteenth Century, the London of William Fitzmaurice Petty, the British East India Company's Second Earl of Shelburne, became the new international maritime and financial center of the oligarchical opposition to modern civilization.

With the end of World War I, until now, the last effective resistance to London's world hegemony on the continent of Eurasia was crushed. The mid-1890s collaboration among France's Hanotaux, Russia's Witte, Germany, and pro-U.S.A. Meiji Japan, had enraged Britain to organize that geopolitical world war; London's diplomacy had these nations against one another's throat. With the accession of U.S. Presidents Theodore Roosevelt and Woodrow Wilson, both lickspittles for London, the U.S.A.'s traditional, nineteenth-century, anti-Britain alliances with Germany, Russia, and Japan were broken. The threat of economic-development cooperation on that continent was ended virtually for almost a century to come, until the close of 1989.

In the setting of the post-war conditions of Europe's 1920s and 1930s, there was a rising wave of nostalgic reaction called the "Conservative Revolution": the revival of the Romantic "conservatism" of Metternich, Castlereagh, Hegel, and Savigny. This "conservatism" was essentially an anti-Renaissance movement of fervid, existentialist irrationalism, like that of George Soros' Jacques Derrida today. It located its tradition in the same pagan roman imperial traditions as Metternich's Holy Alliance. It was a revolt against everything which left-wing nihilist Bertolt Brecht called "Mahagonny": the industrialized power of the United States. This neo-

feudalist "conservatism" was then called "fascism"; it is called the "neo-conservatism" of today's Mont Pelerin Society and its co-thinkers.

The idol of Henry Kissinger and the Conservative Revolution, Prince Clement Metternich, hated the United States.¹² OBE is designed by such conservatives, finally to lure us into national suicide.

To understand the way in which the neo-conservatives' efforts to destroy literate education have developed, certain presently little-known truths of the American patriotic heritage must be acknowledged: as briefly as possible without losing the point.

Chiefly, those semi-autonomous English colonies of North America which were established during the Seventeenth Century became the center of the Eighteenth Century's efforts of european civilization to reverse the victories which the feudal reaction against the Renaissance had gained up to that time.

These colonists were frequently Calvinists, Quakers, or Catholics; German-speaking immigrants were the largest foreign-language grouping. It was not religious sectarianism that defined these colonies, although it added some coloration.

Unlike the beasts, humanity is a species whose existence and development is based not upon instinct and simple learning of tricks; mankind's progress in existence is based upon man's socratic ability to effect valid revolutionary discoveries of higher principles of nature. These kinds of discoveries Plato identified as "ideas." In the final analysis, human history is not the history of sects and dogmas, but of ideas. It was the heritage of the Renaissance's ideas which produced the young American republic.

Of the twelve colonies, apart from the special case of Georgia, only the law of the Carolinas was based upon the English empiricist dogma of John Locke. The other ten, typified by Massachusetts and Pennsylvania, were dominated by the influence of Leibniz, as the general welfare clause in the Preamble of our Federal Constitution reflects this distinction between Leibniz and Locke. The original mandate of the Mathers' seventeenth-century Harvard, and the educational work of the outstanding Winthrops of the Seventeenth and Eighteenth Centuries, attests to the emphasis upon a Classical Christian Humanist education.

The American Tories of the 1760s and 1770s, both those who emigrated and those who stayed behind, existed;¹³ but, they did not make the Declaration of Independence, the defense of the young republic against our foreign oppressor, or our Federal Constitution.¹⁴ The Tory tradition remained a legacy of parasitism and treasonous, anti-republican impulses among us: the American oligarchy, the self-

styled "patricians" such as President George Bush's family's patrons.¹⁵

The American Revolution was not the product of some occult principle embedded in our soil, or frontier. Teddy Roosevelt's favorite historian, Frederick Jackson Turner, was a fraud, as was the more sophisticated, Cambridge University-indoctrinated socialist ideologue, Charles Beard. There was nothing in the American soil or geography as such which made us politically exceptional. Our national forebears were products of European civilization. The ideas of our revolution, and the success of our repeated military struggles for independence from our British oppressor would not have been possible, but for the influence of those networks of continental Europe which had been led by the scientist and statesman Gottfried Leibniz over the interval 1676-1716.¹⁶

The source of popular miseducation and confusion on these relevant points of historical fact is a "politically correct" revision of the teaching of history. This falsification of our history was imposed upon U.S. schools and universities during and after the U.S. presidencies of the British Fabians' Theodore Roosevelt and Woodrow Wilson. This was done chiefly by the "revisionist" school of the Fabian Society's American socialist ideologues such as John Dewey, Charles Beard, and Walter Lippmann.¹⁷ Those super-wealthy Anglophile families which consolidated their dominance over our institutions under Teddy Roosevelt and Wilson, rewrote the history of the United States to make it appear that their views had always been the "legitimate American tradition."¹⁸ The socialist foundation for the presently accepted academic mythology was brought into currency as these pro-oligarchical revisionists took over post-World War I U.S. educational policy-shaping, and the writing of the schools' and universities' history textbooks.¹⁹

At the time of the founding of our Federal Republic, the typical American had more than twice the literacy, twice the productive output, and twice the household income of the typical Brit. As a people, we represented a level of culture far superior to that of decadent Britain. Man for man, the American skirmish line had more developed brain-power than the brutalized ranks of the redcoats.

Although a small, if relatively powerful oligarchy was developing in the colonies, the quasi-independent institutions of the emerging American nation were relatively free of oligarchical oppression, relative to the situation in predominantly "conservative" Europe. So, in the eighteenth-century British Isles, in Louis XVI's France, and among the networks of Leibniz throughout Europe, the sturdy and literate

American patriot enjoyed the sympathies and assistance of those European circles in the footsteps of Leibniz, the European circles which represented the highest level of culture existing throughout the world.

As in Europe, so in the young United States, the leaders understood, that to win and to keep a republic, the future citizen must be rendered literate in Classical Christian Humanist culture. Just as the ante-bellum slaveholders made it a capital offense to teach an African-American slave to read, so those Americans devoted to a free republic rightly knew that a universal literacy up to the standard of European Classical Humanism, was the precondition for preservation of individual freedom.

The young United States was the "test tube" in which the most advanced culture of Europe was unleashed. Like the Brotherhood of the Common Life, like the Oratorian teaching-order in Italy and France, like the Erasmians in England, and the followers of Friedrich Schiller's and Wilhelm von Humboldt's educational reforms in Germany, our founders knew that such a universal education was the foundation for the securing and preservation of political freedom.

Conversely, the oligarchical "conservatives" understood, then and now, that to restore and preserve an oligarchical system anywhere, the overwhelming majority of the population must be reduced to a state of brutish ignorance and superstitions.

Hence, OBE. Fascism, otherwise best described as a parody of pagan Roman Caesarism introduced to a decadent condition of modern European society, is a natural outgrowth of a social policy consistent with OBE. One or another variety of such fascist political forms is the kind of society consistent with the tradition of Metternich's Holy Alliance, with the positivist philosophy of law of the Romanticist Savigny, with the ideology of the Mont Pelerin Society, and with OBE.

A Campaign to Save Creativity

The accompanying chart²⁰ (see page 7) has illustrated the pivotal fact. The impulses which the Golden Renaissance supplied to modern European civilization produced a vastly greater *rate* of improvement of the circumstances of life of the individual and family than existed in any earlier culture in any part of the world, that of pre-fifteenth-century Europe included. In this aspect, modern European civilization has been superior, by orders of magnitudes, to all other cultures which ever existed.

However, thus far, modern society has failed to free itself from the grip of those "conservative," usu-

rious oligarchical traditions which also ruined all cultures of earlier world history.

That contradiction within European civilization, the failure to free modern European civilization of the powerful oligarchy recently rallied around the British monarchy, has defined the characteristic conflict which is recent centuries' history of this planet. So, the past five centuries of modern history came to be dominated by a long "dynastic cycle," like those earlier dynastic cycles which were the common characteristic of the rise and disintegration of the fallen empires of the past.

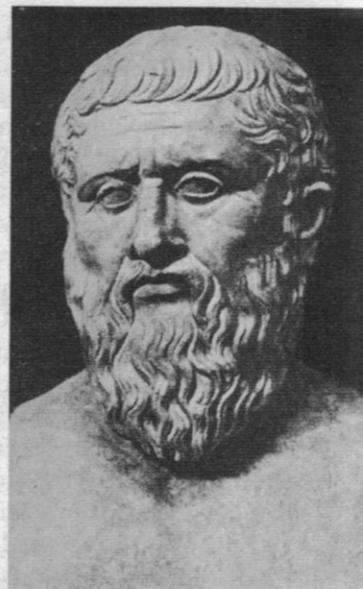
This modern dynastic cycle is now lurching toward an early, worldwide collapse. This collapse could become a prolonged "new dark age": an echo, but on a global scale, of those "dark ages" which beset Europe following the collapse of the Roman Empire in the West, and also following the mid-fourteenth-century bursting of the "Lombard" debt-bubble.²¹

The past 75 years of the continuing "Conservative Revolution" of Adolf Hitler, Friedrich von Hayek, Milton Friedman, and candidate Oliver North's so-called "neo-conservative" backers, is best understood as the tormented, terminal phase of that collapsing, long "dynastic cycle." It appears that its end will probably be coincident with the early collapse of the presently tottering House of Windsor: "OBE" educational policies and "free-market" privatization of the public educational systems, like currently popular Hollywood entertainments, or the cancerous spread of legalized gambling, are symptoms of a culture in its death-agony. These are symptoms of the kind of things which a culture does to itself when it has lost the moral fitness to survive.

In this circumstance, if the worst calamity is to be prevented, it is urgent that we identify and remove those agencies which are destroying the institutions most precious to our civilization. It is also urgent that we understand what it is we must defend, what we must save and revive. Those considerations may be summed up, briefly, as follows.

In all pro-oligarchical, or related "conservative" campaigns to destroy modern European civilization, the essential target selected for destruction is the Mosaic notion that each individual person is in the living image of God the Creator.²² In that Mosaic tradition, against which this feudal-like "conservatism" directs its bitterest hatreds, the individual person is proven to be in the image of *God the Creator* by the fact that each possesses a non-deductive, Socratic form of creative intellectual power. This power is a "divine spark of reason," which sets each person apart from and above all lower forms of life.

"The Greek city-states of Ionia launched a struggle to free mankind of the long oligarchical tradition of 'asiatic society's' system of serfdom and slavery."



Plato (427-347 B.C.)

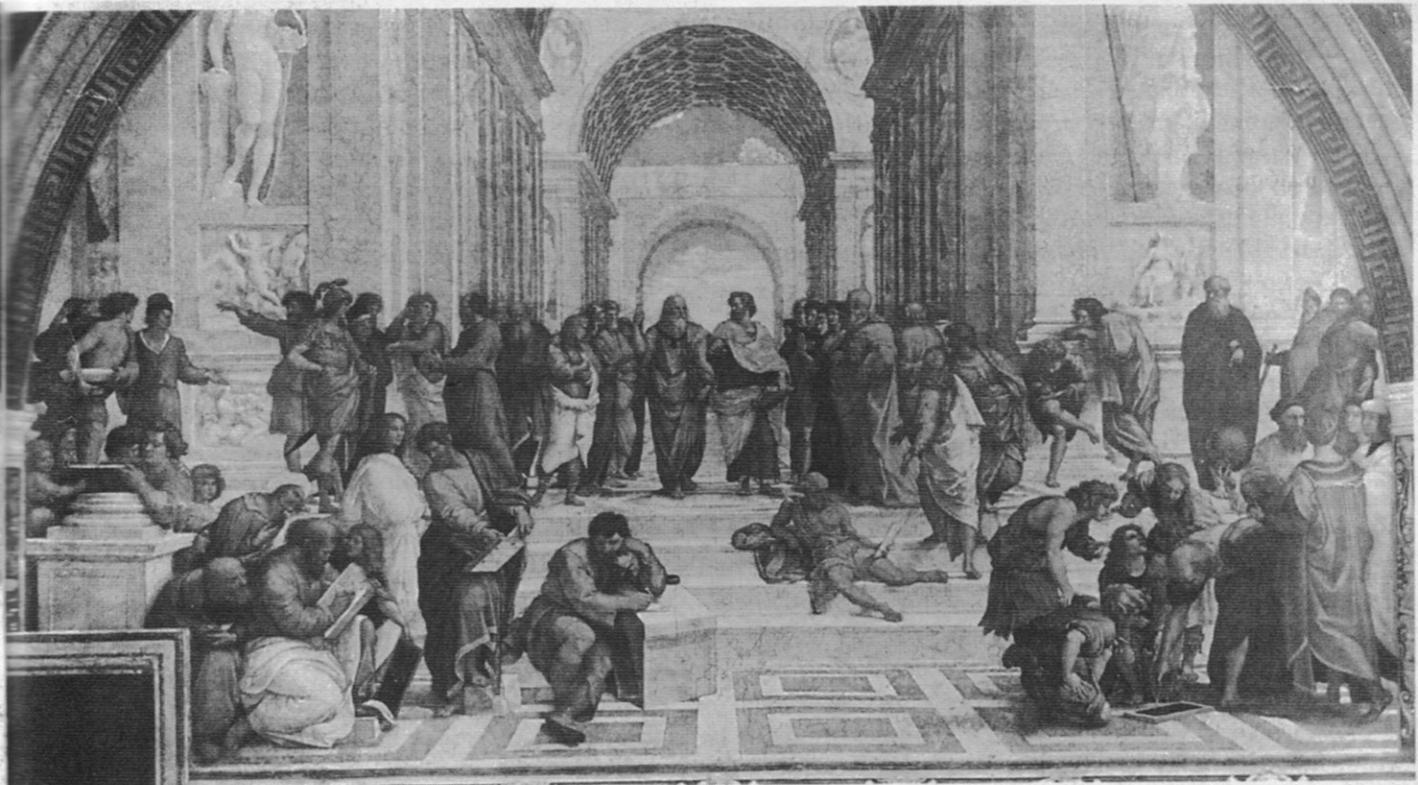
The Vatican



A sixteenth century engraving of Plato studying geometric figures.

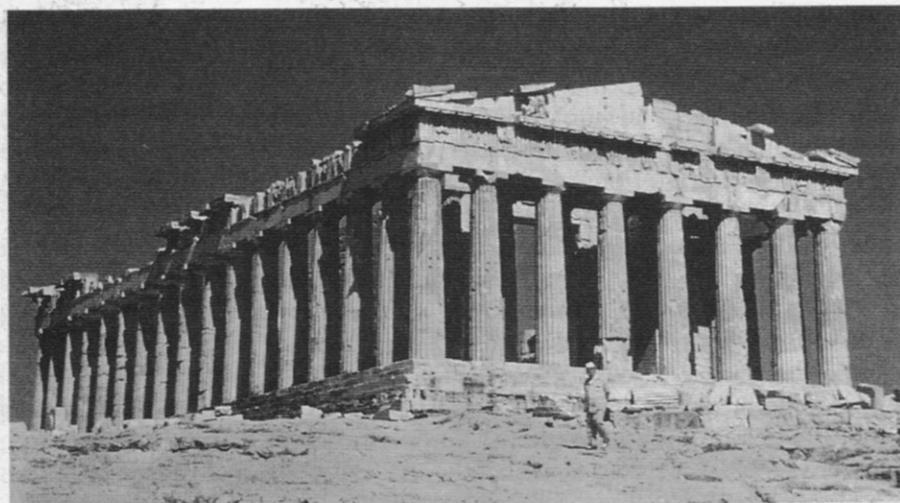
Nowhere is this issue shown more intelligibly, than in the domain of education.

Careless observers might raise an objection here. They might seek to document the point, that some religious conservatives accept the teaching, that every person has some special quality of importance in the eyes of God. On examination, that objection is exposed as a mere sophist's play upon words. When an oligarch uses the term from *Genesis: I*, "in the image



The Vatican

Raphael's *The School of Athens*, celebrating the achievements of Plato's Academy at Athens.



Dr. Frederick Guggenbuhl

The Parthenon

“The work of Plato’s Academy at Athens was the forerunner of a further struggle for freedom, a struggle for the civil rights of all mankind, which began with the ministry of Jesus Christ.”

of God,” he does not mean what the Mosaic tradition and Christianity signify by the term. His blind leap of faith is a sophist’s trick for rejecting the existence of a “divine spark of reason” in each person. In particular, as did Immanuel Kant,²³ the tradition of Metternich’s conservatism rejects the notion that some *intelligible* sort of intellectual quality of creative power over natural processes typifies the image of God the Creator in every individual person. That rejection is

the kernel of the hatred directed against the young United States of America by Prince Metternich and his Conservative followers.

There are two distinct, if interconnected reasons why the oligarchical conservatives reject this central principle of Mosaic and Christian teaching. First, this principle, if accepted, defines as inherently immoral any modern attempt to preserve or revive oligarchism. Second is the fact that the brutalization of

man by technological backwardness is an evil to be overcome, that society must be progressively changed to the purpose of surpassing the general need for brutish forms of toil.

This principle requires that the technology of practice of society must be progressively changed in this way, directly contrary to the practice of those backward forms of society which are sometimes named, euphemistically, "traditionalist." It requires that these specifically creative powers of the intellect of each newborn must be developed, by the family household and society generally, up to biological maturity. It requires that life within society be organized around activities consistent with that quality of creative intellectual potential which defines the person as in the image of God.

Those were the Augustinian Christian's platonic policies of statecraft, as set into motion by the mid-fifteenth-century Renaissance. It was the establishment of the new institution of the nation-state, with a commitment to fostering the development and employment of an intelligible form of the creative powers of the individual mind, which supplied modern european civilization with a greater power for the benefit of the society and the individual than any culture, in any part of the world, before it.

Over the course of the recent five centuries of the internal history of modern european civilization, in Europe and worldwide, the fight for, or against fostering this quality of individual creativity, has been the central issue of the attempts of the oligarchs to retard, to defeat, and, ultimately, to exterminate the general practice of scientific, technological, and related cultural progress.

The center of Plato's contributions to scientific method, and to human knowledge in general, is that he supplied us with the first formal proof of the intelligibility of those human mental-creative processes. The *formal* demonstration that man is in the image of God the Creator, is based upon this socratic proof supplied by Plato. It is the Christian's adoption of Plato's work on behalf of that Mosaic principle which is at the center of the Renaissance revolution in statecraft.

By applying the science of physical economy,²⁴ we are able to show that society's increase of physical productivity of labor, per capita, per household, and per square kilometer, and, consequently, of potential relative population-density, is the result of applying, as technological progress, the generation of valid axiomatic changes in our formal knowledge of principles of nature. The generation of such valid ideas, the transmission, as through Classical Humanist education, of the re-experiencing of the original gen-

eration of those ideas, and the general assimilation of those ideas into social practice, is the basis for continued human existence. It is on this basis, and this basis alone, that mankind has progressed from the several millions global population allowed by a "hunting and gathering" mode, to several hundred millions persons, prior to the Renaissance, to a *potential* (using existing science and technology) of about 25 billions today.²⁵

Without constant improvement in mankind's potential population-density, in that way, mankind must fall into recurring "new dark ages" of dynastic collapse. Without that constant action of change, that continuing improvement in the physical productive powers of labor per capita and per square kilometer, humanity would have been a relatively rare, most highly vulnerable, "hunting and gathering" specimen, like the higher apes today, subsisting miserably upon the blind caprices of primitive nature. Mankind, unlike any other species, is not a creature of "instinct" and bare sense-impressions; rather, mankind is uniquely a creature of ideas, as Plato defined "ideas."

To bring about that constant improvement in the human condition, each new generation of the population of every successful form of culture is developed afresh in the principles of generating and assimilating progressive changes in the form of mankind's practice of mastery over nature. Here, we locate the function of education of the young, and also of related cultural functions of family and national life. To achieve that, the principle of revolutionary discovery of valid new principles of nature must be rendered intelligible to the teacher, and to the student, in precisely the manner which would have infuriated Immanuel Kant, which also enrages the empiricists and positivists generally. What enrages them is the principle of a society based upon *self-rule by reason*.

For related reasons, no state could survive for longer than a few centuries, if it did not adopt the Mosaic principle, that the individual person is in the image of God the Creator, by virtue of that individual's capacity for generating valid revolutionary improvements in mankind's physical mastery over nature. So, the culture dominated by the venetian tradition of today's British monarchy, is doomed to expire presently.

Educational policy, and cultural policy of society more generally, must be examined from no different vantage-point than that we have identified summarily just now. The fight to eradicate OBE and related practices of usurious private looting of public school systems, must be viewed accordingly.

Creative Reason Defined

For reason of the explicitly central role which scientific and technological progress perform in permitting the continued present existence of mankind, we are obliged to represent classroom demonstrations of creativity by mathematical models of creative discovery, in the form of a physical event. The added pedagogical advantage of that demonstration is that this formal proof of intelligibility is accessible to any decently educated secondary pupil who has a grounding in the so-called euclidean form of solid geometry. The risk is that the sick, but popularized modern habit of dividing science from art, will cause the pupil to overlook the fact that great Classical poetry, tragedy, and music already contain, as the principle of *metaphor*, the identical type of creative thinking which conventional opinion today associates with the idea of revolutionary discoveries in physical science.

It is fair to say, that a person who is not steeped in the principle of metaphor in Classical forms of poetry and tragedy, who is not absorbed by the same principle of metaphor at the center of any good performance of great Classical musical compositions, can not become better than a terribly flawed scientific thinker. Education of the citizen requires a secondary education in not only the principle of creative discovery in physical science, but also the same principle found in all great Classical forms of poetry, tragedy, music, and painting. The secondary student must become grounded in each and all of these modes of expression of the creative principle.

In that way, the secondary student masters the intelligibility of that principle of creative intellectual life, by means of which the individual person is placed apart from and above all lower forms of life, and is proven empirically, so, to be in the living image of God the Creator. The secondary student is properly obliged to master these principles, or to be regarded relatively as an educational failure until that mastery is achieved.

In part, this mastery is accomplished in a formal way, as we shall consider an illustration of that training immediately below. At the same time, as indicated here earlier, the pupil learns creativity by re-experiencing crucial original, valid, revolutionary discoveries from Pythagoras to the present, with the emphasis always upon the standpoint of geometry, rather than formal arithmetic and algebra. In that way, the pupil learns *ideas*, rather than textbook and classroom dogmas.

The student's experience with re-experiencing of those historical acts of valid discovery become, with-

in the student's own mind, the experiences which the student relives, as a manifold *type* of mental activity. Those experiences are apprehended by the pupil's mind as an object of conscious reflection (an "object" in the same sense that a sense-phenomenon is conceived as an object of thought). The *type* of all such objects, each corresponding to the reliving of an original creative discovery, is the student's objectified understanding of something which the pathetic Immanuel Kant could not understand: the *intelligibility* of human creative reason, that creativity is an intelligible impulse which one may exert in the same sense one willfully exerts the musculature of one's arm to some purpose.

What we have just said is indispensable, crucially so, for identifying what is specifically evil within the dogmas of Outcome Based Education and the ADL's "A World of Difference" dogmas.

Using this geometry-based method of classroom work for natural science, and using the same general approach to the role of metaphor in Classical forms of poetry, drama, music, and painting, the pupil is afforded a broad mastery of those principles which commonly govern the development of all human knowledge. At the same time, by studying the accessible portion of the history of discovery of ideas, from ancient Greek times to the present, the pupil is gaining that grounding in the history of ideas which is indispensable for understanding the social and political history of civilization.

Those educational requirements are the qualification of the citizen of a true republic, the qualifications of judgment which the citizen requires to intervene in the self-government of his or her nation, and so on.

It is the follies of the illiterate and miseducated generality of the citizens of society, which causes those citizens to mistrust fearfully their own collective judgment, and so seek as an alternative to their own ignorant foolishness that of a Sancho Panza, for example in the proverbial "man on horseback," of whom the desperate citizenry hopes fearfully he will be benign.²⁶ There is no utopian political design so clever that giving Sancho Panzas the power of the ballot would not tend to foster disasters. The right of the citizen to become a qualified citizen, through a foundation in the needed form of Classical Humanist education, is the only durable remedy for the ills of the existing political system.

At whatever price, a Classical Humanist secondary education must be made mandatory for all secondary-age pupils, up through the relative maturity of sixteen to eighteen years of age. If we lack the will to pay that price, this republic, which we are near to

losing, will not survive for long.

This education, which should include a basis in literate forms of some foreign languages, must include the following most crucial elements which we have just identified above: 1) natural science from the standpoint of geometry, with emphasis upon re-experiencing original historic discoveries, rather than dogmatic textbook education; 2) the study of metaphor in the Classical art-forms of poetry, tragedy, music, and painting; 3) the study of history from the vantage-point of the role of the generation and transmission of scientific discoveries of principle and artistic metaphor, from one generation to the next, from one society to the next, over the thousands of years of *known literary history of discovery of such ideas* to date.

The 'Talking Points' of Creative Pedagogy

This brings us to the concluding obligation of this report. It is time to demonstrate the reason oligarchism requires the virtual burking of the creative potentials of the mind. It is time to show where and how this act of burking may be found at work inside the school curricula today. The principles governing the core-curriculum of a Humanist secondary education, are supplied in other locations. Here, three examples are sufficient to illustrate the connection: two from mathematics, one from physics; and, as third, identification of the role of metaphor in the Classical forms of poetry, tragedy, and music.

A parent, or a pupil, may hope that the secondary school has teachers of mathematics and physics who are not deluded into believing that a course in arithmetic and algebra could be a substitute for competence in geometry. A community whose school has such competence is among the most fortunate ones today. In that rare case, the adolescent child's mathematics and physics teachers will concentrate upon four successively higher steps of reasoning, in guiding the pupils through a formal understanding of the difference between the relative lower level of intellectual activity, formal logic, and the higher, non-aristotelean, socratic domain, of creative reasoning.

It is useful to consider these crucial topics of competence in mathematics education from the standpoint of both a parent, and a prospective employer of the local secondary school's graduates. The competent, if unfortunately rare secondary science program is founded upon recognition of the crucial distinction between a good education in merely formal mathematics, and a good mathematical physics. It is useful to examine the secondary curriculum as a whole from this starting-point. In this approach, the

qualified teaching professional can pin-point more readily, more precisely, the OBE program's damage to the mind and morals of its victim, the pupil.

Modern mathematics is derived from the kind of geometry which the relatively better-educated parents of today will recall from school days either as "euclidean geometry," or, for the rare, more fortunate persons, what is called "constructive," or "synthetic" geometry.²⁷ From the starting-point of a background in solid euclidean geometry, the four required levels of mathematical instruction in secondary schools appear in the following succession.

The first, and lowest level of reasoning is the level represented by euclidean geometry itself. At this level, the student discovers a new, added theorem of geometry by eliminating propositions which are deductively inconsistent with the already established theorems. All accepted theorems are consistent with each other; good traditional pedagogy organizes the lesson plans such that, from the beginning, the student locates the "hereditary" root of the common consistency of theorems in the consistency of each with the same common set of axioms and postulates.²⁸

The mastery of that method in geometry prepares the student's mind for more advanced work in mathematics, and in physics. That mastery of the deductive method equips the pupil with the prerequisites for recognizing the superior domain of the non-deductive. A rigorous form for representing the results of constructive methods of investigation in geometry, prepares the pupil to grasp those higher forms of proof which are not deductive. These higher forms are outgrowths of using the non-aristotelean socratic method, as that is presented by the writings of Plato. These higher forms provide the pupil access to the intelligibility of the creative processes of his or her own mind.

All of the formal mathematics is divided among a series of four types, each successor of a higher order of analytical power than its predecessor. On the lowest level is the simple arithmetic. The second, on the next higher level, are algebraic functions. The third level of mathematics is what is termed variously as "non-algebraic," or "transcendental" functions, discovered by a leading founder of the Golden Renaissance, the fifteenth-century Cardinal Nicolaus of Cusa.²⁹ The fourth, relatively highest, level is the higher transfinite orderings identified as such by Georg Cantor.

Consider two mathematical discoveries which had the most powerful influence on the development of modern science.³⁰ The first is Nicolaus of Cusanus's discovery of the non-algebraic (transcendental) char-

acter of the ratio of circumference to diameter of a circle.³¹ The second is the implications of the five platonic solids as reintroduced into modern european science, by Luca Pacioli, Leonardo da Vinci, and Johannes Kepler.³²

In the first case, Cusanus demonstrated that it is impossible to construct the perimeter of a circle by Eudoxus' "method of exhaustion" as famously employed by Archimedes. This method does provide an estimate of the value of π accurate to any definite decimal position, however remote; however, a close geometric study of the relationship between any two adjacent sides of the inscribed regular polygon and the circular perimeter at that power of 2^n sides, shows that the perimeters of the paired polygons and of the circle are of different species (or, mathematical *types*), and that the circular perimeter's species is of transfinitely higher *cardinality* than that of any algebraic function.

Careless, hand-waving opinion might delude itself that the pair of polygonal perimeters converges asymptotically upon the circular, that the perimeters will be equal "at infinity." Rigorous thinking shows that this notion of asymptotic convergence is absurd.

This was the core of Cusanus's original discovery of the division of the ancient Greek category of "incommensurables" into two classes of mathematical *functions*, a lower (*algebraic*), and the higher functions, which Gottfried Leibniz distinguished from the algebraic as "non-algebraic," or "transcendental" functions. The student's mastery of that distinction is the crucial step in education, which separates the mechanical mind of the digital-computer-like human "arithmetic machine" from the future scientist.

In this first case, Cusanus's discovery of the transcendental domain, the magnitude of the difference between the polygonal and circular perimeters can be made small without any definite value of lower limit. Yet, however small this value is made, the difference will always persist; since it can not be removed, it will always exist. No matter how small, the existence of that difference has definite existence, has *ontological actuality*. That ontological actuality is identified by the term *mathematical discontinuity*, as a type of *singularity*.

This discovery of the transcendental domain, by Cusanus, is an excellent choice of example of the form assumed by a creative discovery in mathematics or mathematical physics. Consider first, the fact that the persisting existence of the "infinitesimal gap," the discontinuity between the polygonal and circular perimeters, corresponds to the act of discovery.

The second general principle of creative reason illustrated, is that the result of the discovery is a new geometry, based upon a different set of axioms and postulates than the euclidean intellectual realm of the polygons. With this discovery, we abandon the euclidean axioms of self-evident existence of points, and "straight line as the shortest distance between two points." In the new geometry, brought into being by the discovery, an isoperimetric principle is substituted, as axiom, for the euclidean axiomatic form of assumed existence of points and straight lines.³³

In the new geometry defined by this change in axioms, points and lines exist, but they exist as theorems, derived from multiply-connected circular action, rather than as "self-evident axiomatic assumptions." They appear in the new geometry as theorems, rather than as axioms or postulates. Thus, the "transinfinitesimally small gap," the discontinuity, corresponds to the formal-logical discontinuity represented by a change in the set of axioms and postulates which absolutely separates the first geometry from the second. All the useful content of the theorems of the first geometry can be accessed by theorems of the new, but none of the theorems of the new can be defined as theorems of the old.

The intellectual act of bridging of that axiomatic gap, to arrive at the new geometry, is typical of an act of socratic creative reason, as opposed to aristotelean or other deduction. The intelligibility of this "axiomatic-revolutionary" intellectual act of creative discovery, typifies a platonic "idea."

Then, the second example from the realm of mathematics. Around his proof of the transcendental domain, Cusanus founded modern science³⁴ and reintroduced, during the mid-Fifteenth Century, the solar hypothesis employed by Johannes Kepler (1571-1630). Two of the most important students of Cusanus's writing founding modern science were Luca Pacioli (1450-1520) and Leonardo da Vinci (1452-1519). They revived the application of Plato's five regular solids, the so-called platonic solids. The work of Cusanus, Pacioli, and Leonardo were the central influences upon Kepler's point of departure in his work.³⁵

As Gauss proved approximately two centuries later, from studies of the orbits of the principal asteroids, Kepler's construction of an astrophysics premised upon the implications of the platonic solids is uniquely correct, in contrast to the famous pairwise attraction/repulsion model of Galileo and Newton.³⁶ Although Newton employs a model of gravitation which he derived directly, algebraically, from Kepler's Third Law of motion,³⁷ there is no way in which the mechanistic laws of motion of Galileo

and Newton could have predicted, as Kepler did, the discovery, two centuries later, of the necessary existence of a disintegrated former planet in the orbit of the asteroid belt. Kepler's achievement depended upon those implications of the platonic solids put forth by Plato, Pacioli, Leonardo, and Kepler, but rejected by Galileo and the Anglo-French empiricists and positivists. Kepler's use of the platonic solids is another instance of an axiomatic-revolutionary discovery.

Kepler's use of the platonic solids leads rather directly, if by somewhat delayed action, to Bernhard Riemann's 1854 founding of modern relativistic physics.³⁸ Riemann's discovery enables us to appreciate the significance of the platonic solids more adequately.

Human sensory experience of the physical universe depends chiefly upon the two principal senses, vision and hearing. The euclidean geometry echoes a naive axiomatic opinion of the world of vision; the harmonics presented by the platonic solids reflect

the world of human speech, singing, and hearing.³⁹ Since vision dominates the sensory imagination, the first approximation of a mathematics is developed on the basis of the kind of geometry which Plato's Academy at Athens, the founder of modern mathematics, based chiefly upon earlier contributions by the pythagoreans and certain egyptian institutions.

It were inevitable, that man should construct his imagination of the physical world around naive ideas of vision: up-down, forward-back, and sideways. Naive ideas of visual space are associated with the notion of continuous extension of the imaginary field of vision, and that continuous extension is also imputed to the notion of time-sequences. These combined notions of extension form the imaginary physical world of space-time.

It may appear perfectly natural to represent physical actions in terms of their locations as points or blobs in space-time locations. So, Galileo, and Newton after him, blundered in their mechanistic laws of motion. After Christian Huyghens' treatment

"During this presently passing century, that evil, against which our young republic's battles for freedom were fought, took the form of the so-called 'Conservative Revolution.' "



Terry O'Neil



The Hulton Picture Collection

Excrescences of the Conservative Revolution, from left: the British royal family; satanist Aleister Crowley, in the garb of his Ordo Templi Orientis cult; free trade guru Milton Friedman.

of Ole Roemer's 1677 measurement of the rate of retarded propagation of light at nearly 3×10^8 meters per second, it should have been clear that Galileo was wrong, and Newton, too.⁴⁰

This was pointed out by Gottfried Leibniz and his collaborator Jean Bernoulli, in a succession of papers outlining why the algebraic methods of Descartes and Newton must be superseded by the non-algebraic (transcendental) method. Crucial was Jean Bernoulli's application of Huyghens' treatment of refraction of light from the standpoint of a constant rate of retarded propagation of light. Bernoulli showed, that in a medium of constantly increasing density, the refraction of light would describe an isochronic curved pathway of the shortest time, congruent with the cycloid.⁴¹

Already, more than 2,000 years earlier, Plato had warned that the image of the world given to us by blind faith in the evidence of our senses offers us nothing better than the distorted shadows which fire-light might cast upon the irregular surface of a cave's

wall. Riemann's 1854 revolutionary habilitation dissertation attacked this problem successfully with great ingenuity and force.⁴² Physics must rise above the limitations of naive views of continuous extension of space and time. Physics must not measure the action of shadows upon shadows within naive space-time. Instead, the methods of defining a geodesic, as Gauss had addressed the problems of determination curvature in astronomy and geodesy, must be applied to the physical space-time of forms of physical action, such as chemical action. One must depart the zero-curvature space-time of Euclid, Descartes, and Newton, and recognize that the laws of physics must be adduced in terms of the effects of the bounding of processes within the relevant physical space-time by a definite, non-zero curvature.

The case of the well-tempered musical domain of J.S. Bach, Mozart, Beethoven, and Brahms, is in several ways a most relevant illustration of this principle of Riemann physics.

Reason in Song, Poetry and Tragedy

All singing, like the spoken language from which singing is derived, is based principally upon what Italian defines for English speakers as *vocalization*, the sounding of the vowels.⁴³ To sing with the greatest relative coherence of intended tone, and in the least tiring way relative to the music performed, the required method is that Florentine *bel canto* method of voice-training which is carved in stone from the time of the Council of Florence, in the choir loft of the famous cathedral of *Santa Maria del Fiore*.

Under those conditions, the human singing voice is divided among six choices of species of singing voice. These are called soprano, mezzo-soprano, contralto (rarer), tenor, baritone, and bass. These are defined as species by physiologically determined localities of the musical scale at which the trained singing voice passes audibly from one registration to another. For example, for the soprano voice, the register-passage from the lower to middle register, and middle to the lower of the two higher registers, occurs between the tones F and F#, when the well-tempered scale is set at C=256. Putting to one side difference in octave ranges, the passage from first to second register varies, among species, by one full step of the absolute well-tempered scale, as the voices are ranked from highest to lowest.

That is determined by nature, not by man.

Turn then to the Eighteenth Century compositions of J. S. Bach both for chorus and man-made instruments. The chorus is composed of voice-species which each have precise registrations and also limited upper and lower reaches of good singing tones.



PBS

"It is an oligarchical, anti-science, anti-progress movement, a movement of the kind of people, such as Prince Philip, who put man down to the same level as the wild beasts and cattle."

These are biologically determined; training brings out the potentials, but does not create them. These compositions, matched against the requirements of tuning for the chorus, show us that the well-tempered system of C=256 cycles is required to perform these works regularly without distortion of and damage to the singing voices.⁴⁴

The well-tempered musical scale is not determined by any magical qualities of numerology. There is no aspect of that scale, including the octave-steps themselves, which is not pre-determined by the naturally determined characteristics of vocal polyphony. The significance of Bach et al., relative to the discovery of this naturally well-tempered scale, is that the development of polyphonic composition was the indispensable means by which the principles of this scale were discovered.

Once that set of facts is known, it becomes apparent that, like transcendental quality of absolute π ⁴⁵, the well-tempered scale is set apart from any mechanistic measurements, such as Helmholtz's concoctions, by a singularity. That is but the ante-room to the crucial fact about the musical scale. The unit of musical composition is not the tone, but the "horizontal" interval, "between notes, not upon them."⁴⁶ This is key to understanding the motivic method of

thorough composition, introduced by Haydn in his six "Russian Quartets," Opus 33, a Haydn discovery perfected, successively, by Mozart, Beethoven, and Brahms (most notably).⁴⁷

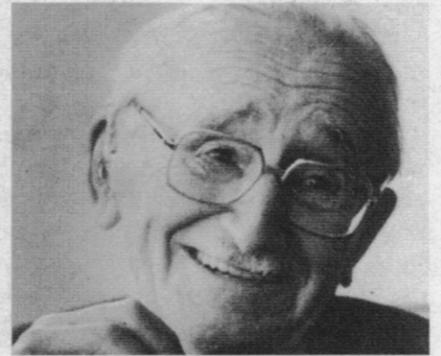
With a minimum of three tones, a Classical composer working in the tradition of Mozart, Beethoven, and Brahms may generate an entire musical work, such as a sonata or symphony. Those three, or four tones form two musical intervals in succession. The relationship between those two intervals takes us above the sensuous bounds of music, to musical ideas, in Plato's sense of "ideas." This *motivic*⁴⁸ musical germ-idea functions within music as the principle of "change" serves as the solution-principle for the ontological paradoxes of Plato's famous *Parmenides*.

The way in which the composer applies that motivic notion of change, defines the coherent composed musical work as a *type*. Thus, through a sustained concentration-span, from beginning to close, the qualified performer lends an indivisible quality to the performance as a whole, such that all aspects are inseparable from the entirety taken as a unit. The motivic element's employment is the key to all the most important of the mature Classical music compositions from Mozart's work of 1782-1786 onward, through Brahms of the 1890s.



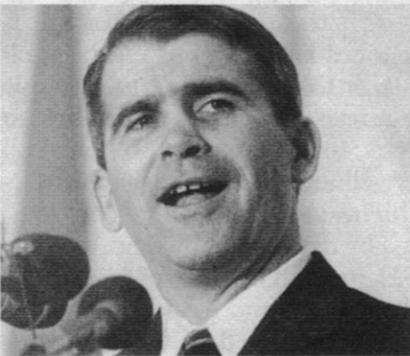
Prints and Photographs Division/Library of Congress

Environmentalist Adolf Hitler, at a rally of the SA in 1927.



Random House

The Mont Pelerin Society's fascist economist Frederick von Hayek.



EIRNS/Stuart Lewis

Grassroots fascist Oliver North.



EIRNS/Stuart Lewis

Michael Novak: insists Christianity and economic policy don't mix.



EIRNS/Stuart Lewis

Texas Sen. Phil Gramm: a balanced budget at any cost.

Regarded from a strictly formal e.g., deductive/inductive standpoint, whether in mathematics, physics, or the Classical art forms, a creative discovery correlates with a true singularity (discontinuity), analogous to the persisting gap in the case of Cusanus's referenced discovery. That gap correlates with a change from the set of axioms adequate to describe the system prior to the discovery, to a new set of axioms which describe the system after the discovery.

That form of discovery corresponds to what Plato defines as *hypothesis*. For example, the set of axioms and postulates of a euclidean geometry is such an hypothesis. Any valid discovery, whether in mathematics, physical science, or Classical art forms, has the form of such an hypothesis.

A method for generating a series of valid hypothesis is a constant method of successive changes. This typifies an *higher hypothesis*.

In Classical thorough composition in music, the application of the motivic germ, the interval of two intervals, is an hypothesis. The way in which a series of composers, from Mozart through Brahms, uses Mozart's reading of the six-part *Ricercare* from J.S. Bach's *Musical Offering*⁴⁹ to generate a series of compositions, is an example of higher hypothesis in thorough composition.⁵⁰

Moving now to Classical poetry, the creative element in poetry is located essentially in the role of metaphor.

In the simplest case, the poet juxtaposes the names for two distinct sensory phenomena, to the effect that the idea of the poem is no sensory phenomenon, but rather a thought treated as it were a sensory object. If the idea conveyed by the poem's use of the metaphor is a valid idea, the metaphor employed is of the form of a valid creative discovery of principle in natural science.

The principle of creative composition of Classical forms of tragedy is illustrated conveniently by the surviving first part of Aeschylus' "Prometheus." The nub of the piece is fairly summarized as follows.

Prometheus has been chained to the rock by order of the self-styled heathen gods of Olympus, with attendant supplementary torments supplied. The messenger of the gods arrives to discuss "plea bargains." Prometheus will make no bargain. Aha!—but that is no mere gesture of defiance on his part! It is the gods who are in trouble; they are doomed by their own misrule, unless they heed Prometheus' counsel. The case for this doom is presented by Prometheus. Obviously, in the lost concluding part of the tragedy, the doom of the gods occurs, showing to the audience the folly of oligarchical families which

set themselves up as self-appointed gods ruling capriciously over society.

The conduct of the heathen deities is representable by a set of axioms, such as the axiomatic features of the Lycurgus code of Sparta's slave-society. This set of axioms defines a sequence of consistent theorems,⁵¹ which define the dynastic cycle of rise, zenith, and doom of these would-be gods. Prometheus defines an alternative, a different set of axioms. Clinging to their traditional set of axioms, like today's devotees of the Mont Pelerin Society, the heathen deities are doomed.

Through the drama on stage, the audience experiences the creative mental act which is the dynamic of interplay between the two choices. The doom of the olympian immortals is artistically necessary, that the concept be made clear to the audience.

So, the kernel of the principles of real-life history are expressed in a concentrated way in Classical tragedy.

How Oligarchism Reacted Against Creativity

To realize its geopolitical goal of breaking England from its ties to France and Spain, Venice's agents in England deployed their trollop Anne Boleyn to lure and destroy Henry VIII. By driving a sex-crazed Henry thus to break his ties to Spain and the Vatican, Venice set into motion a state of permanent bloody conflict among England, Spain, and France which persisted until Britain's virtually total subjugation of French culture from 1815 onward. One of the key venetian agents directly involving in controlling Henry VIII to this purpose was a monk named Francesco Zorzi, who sometimes wrote under the alias of Francesco "Giorgi."⁵² Through his influential role as marriage counsellor to Henry VIII, venetian operative Zorzi came not only to reside in England, but to exert considerable influence upon the country's policies.

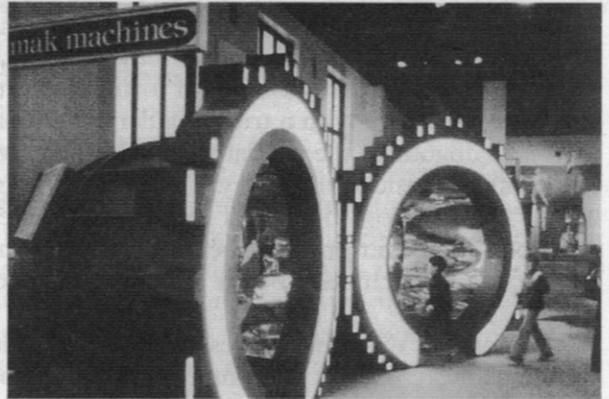
Zorzi's 1525 *Harmonia Mundi* presents explicitly the aristotelean, anti-reason principle which was to come to guide the British empiricists of the Seventeenth and Eighteenth Centuries, and later. As Bacon, Locke, et al., were to insist, Zorzi writes: "Those who retreat from the direct knowledge of the universe will retreat into the *docta ignorantia*." Zorzi is referencing directly Nicolaus of Cusa's *De docta ignorantia*. The only concepts allowed by the deductive formalists are the phenomena associated with sense-certainty. European oligarchism follows Aristotle literally in these matters. This applies not only to the frankly oligarchical, pro-slavery, and pro-usury *Ethics* and *Politics*, but also the *Organon* and



EIRNS/Philip Ulanowsky

The Core of A Classical Humanist Curriculum

1 Natural science from the standpoint of geometry, with emphasis upon re-experiencing original historic discoveries.



Smithsonian Institution



EIRNS/Philip Ulanowsky

2 The study of metaphor in the Classical art-forms of poetry, tragedy, music, and painting.

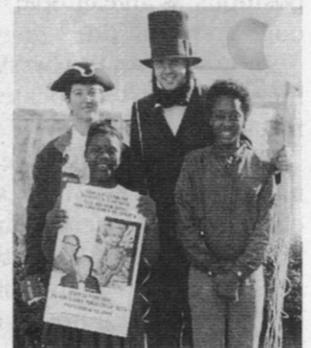


EIRNS



EIRNS/Stuart Lewis

3 The study of history from the vantage-point of the role of the generation and transmission of scientific discoveries of principle and artistic metaphor, from one generation to the next, from one society to the next.



EIRNS

the metaphysical papers. The oligarchs forbid society to treat an event in the creative processes of the mind as an object of thought; thus, the fostering of creativity is outlawed, as Zorzi and Paolo Sarpi's protégés Galileo and Francis Bacon typify this.⁵³

Romanticism in music, poetry, drama, and painting is an example of this oligarchical practice. The written attacks on Beethoven's principles of musical composition by two of British agent Guisepppe Mazzini's bomb-throwing terrorists, Richard Wagner and his confederate Bakunin, is an example. Consider just enough illustration to make this point clear.

Today's culturally illiterate music reviewer assures his faithful dupes that musical composition is defined by periods. He places Handel and Bach in the school of Baroque polyphony, defines Haydn,

Mozart, and pre-1815 Beethoven as "Classical," leaning to the homophonic, and assures all the credulous that musical composition from about 1815 onward had entered the Romantic Period, which continued until . . . (and so on, and on).

In reality, in music, the term "Classical" signifies the method which emerged around Haydn, especially that from about 1780 onwards, after the introduction of the more rigorous methods of motivic thorough composition to polyphony. No composers were more emphatically Classical and also polyphonic than the Beethoven of compositions dating from Opus Number 101 on, or Johannes Brahms through his "Four Serious Songs." There were no "romantic periods."

The most celebrated romantic composers during J. S. Bach's lifetime were a trivial tinkler by the name

of Rameau, and a more skillful Hamburg minstrel, Georg Philipp Telemann. The leading nineteenth-century romantic composers were Liszt, Berlioz, and Wagner, who were out of business while the world's leading composer of the late Nineteenth Century, Brahms was still producing major Classical works. The English and British empiricists of the Seventeenth and Eighteenth Centuries were already perfervid romantics in matters of plastic and non-plastic art-forms, music included most emphatically. There were never the sorts of "periods" of which one hears from the musicologists; from Claudio Monteverdi through Richard Strauss, there was a continuing conflict between clearly defined Classical and Romantic factions in music and other art.

What is obfuscated by the influential sophistries of such musicologists, or kindred specialists in other branches of art, is the fact that modern european civilization is a civilization characterized by an essential philosophical and political conflict which permeates every facet of modern european civilization.

That is a continuing conflict between the platonic traditions of the fifteenth-century Golden Renaissance, and the still-powerful residue of the so-called "asiatic" heritage of babylonian, caananite, and delphic oligarchism. It is conflict which appears in religion, and in statecraft generally, as opposition between the Christians' Mosaic conception of man in the image of God the Creator, and the oligarchical pagan's view of man as a talking species of lower beast. This is the conflict between reason and mechanistic notions of causality in science. It is a conflict in art, between the Classical principle of Reason and the oligarchical tradition of entertainment of capricious wondrous for pleasurable novelties.

In contrast to the mythical hegelian or analogous "periods" of the romantics and "modernists," all of european civilization's history is permeated by a persisting conflict between two opposing world-views in every facet of life, art included. The cyclical characteristics of the past six to five centuries of european civilization's history are the reflection of the resultants of that continuing conflict between two ultimately irreconcilable principles, two irreconcilably opposing conceptions of man, God, and nature. The essential, axiomatic substrate of that conflict is the opposition (by both ancient Aristotle and modern, neo-aristotelean radical empiricism) to the notion that man is distinguished from the beasts by a quality of potential for creative reason which casts the individual person in the living image of God the Creator. Essentially, the oligarch, for which Aristotle is the paradigmatic philosopher, will not permit his subject slaves, peasants or other lower social classes

to be quickened by education and Classical culture to political equality with the oligarch himself.

The world is gripped presently by the end-phase of a dynastic cycle which has been in progress for approximately 500 years, a cycle whose characteristics are rooted in that same conflict. Every crucial issue of policy, including those within the arts, is now permeated by the qualities appropriate to the terminal phase of that conflict under the reign of the doomed oligarchic dynasty now centered in the traditions of the dying British Empire.

When the Pensioners Turned Against North

The mass recruiting to the New Age counterculture which was launched in the aftermath of the John F. Kennedy assassination has struck the people of the United States in a way akin to the the impact of the Versailles Treaty upon the population of defeated and virtually occupied Germany. Fascism did not come to 1920s and 1930s Germany merely because of the desperately unpleasant social and economic conditions of 1920s and early 1930s Germany; rather, oligarchical forces continuing the Conservative Revolution tradition of the Holy Alliance's Metternich and Castlereagh,⁵⁴ exploited those social conditions to create literally hundreds of competing varieties of fascist groupings.

Hitler's Nazis was but one of those. So was the Pan Europa Union of oligarch Richard von Coudenhove-Kalergi. The founder of modern "Liberation Theology" within Catholic Church circles around the world, Martin Heidegger, was a full-blown Nazi philosopher who required no change of step in making the transition from Nazi leader to "respected" theologian and philosopher in most U.S.A. and other university philosophy departments today. Winston Churchill, a long-standing admirer and crony of Benito Mussolini, and full-blown representative of the fascist Conservative Revolution of that time, sponsored the Conservative Revolution's Friedrich von Hayek's post-war founding of that fascistic Mont Pelerin Society whose ideology overflows such present-day political cesspools as Professor Milton Friedman, Michael Novak, Senator Phil Gramm, and Oliver North.

The fascist "free trade" ideology of the Mont Pelerin Society is currently aimed at looting the senior citizens of their Social Security pensions and medical assistance, and the young of their rights to even the minimal standard of education enjoyed by the Depression-years generation which fought World War II. Today's professed "Christian" neo-conservatives, such as candidate Oliver North, have proposed

to solve the problem of their overfilling of the prisons, as Adolf Hitler did, by the kind of "privatization" which contractor I.G. Farben conducted at war-time Auschwitz: turning the burgeoning prisons into a pool of slave labor for the profit of private contractors. Meanwhile, with the aid of the insurance cartels, they have already stripped your physician of many of his rights to continue the practice of medicine in a moral way.

The forces of the Conservative Revolution have had their brief taste of victory, in the results of the mid-term U.S. congressional elections. It will probably be a short-lived victory. The political defeat of fascist senate candidate Oliver North, by aid of the anger of those senior citizens whom he threatened with mass-murderous looting of their Social Security, portends the likely turn of events in the 1996 elections.

Come 1996-1997, the majority of the U.S. population will be determined to have an economic recovery

from the collapse brought on by a large dose of the Mont Pelerin Society's Thatcherism. The majority will demand all of the political conditions upon which economic recovery, and future national economic security depend. There will be no continued toleration for the thieves' banquet of "privatization" of public education, social security, prisons, and what-not. The determination to defeat North from among the angered senior citizens of Virginia is a portent of moods among numerous constituencies come 1996.

Between now and then, on the subject of education, we citizens have two things we must do to prepare for the next U.S. national elections. We must work to halt the privateers' destruction of our public education system. We must come to understand the quality of education needed to build and perpetuate a free society, freed of oligarchical parasites who have brought us now to the edge of chaos. To understand education, we must be willing to educate ourselves.

NOTES

1. After William Burke, of Burke and Hare notoriety, executed in 1829.

2. See Lyndon H. LaRouche, Jr., "Are Your Children Being Spiritual Molested? Get the ADL/NEA Brainwashers Out of the Schools. On the Subject of Education"; *New Federalist* Vol. VII, No. 30, Aug. 9, 1993. See also news coverage in *New Federalist* Vol. VII, Nos. 25-29 (July/August 1993); and "Will You Allow Your Child To Be Spiritually Molested?" *New Federalist* pamphlet, August 1993.

3. *Ibid.*

4. Paul Gallagher, conference presentation on Jensen, Shockley, Herrnstein; Boston Science Conference, Boston, Mass., December 1972; see also Paul Gallagher in *New Solidarity* newspaper, summer 1973.

5. Charles Murray, *The Bell Curve* (New York: Free Press, 1994).

6. Schiller Institute Labor Day Conference 1994: civil rights panel, Sunday, Sept. 4, 1994.

7. See Scott Thompson, "Robert Muller, World Core Curriculum, and Brainwashing of Youth" Parts I, II, III; *New Federalist* Vol. VII, Nos. 35, 36, 37; Sept. 20, Sept. 27, Oct. 4, 1993, for the UNO origins of Muller's role in OBE.

8. See Henry A. Kissinger, *A World Restored: Metternich, World Restored: Metternich, Castlereagh and the Problems of Peace 1812-1822* (Boston: Houghton Mifflin, 1957).

9. See Armin Mohler, *Die Konservative Revolution in Deutschland 1918-1932* (Darmstadt: 1972).

10. Lyndon H. LaRouche, Jr., et al., "The Coming Fall of the House of Windsor," *Executive Intelligence Review*, Vol. 21, No. 43, Oct. 28, 1994.

11. Boutros Boutros-Ghali is a grandson of that Boutros Pasha Boutros-Ghali who assisted Britain's Lord Kitchener in butchery of people of Sudan. On preformance, as UNO Secretary-General, he has maintained that tradition.

12. So, according to Kissinger's May 10, 1982 public address at Chatham House, does the ever-treacherous "neo-conservative" Henry A. Kissinger. He had been invited to deliver that address in celebration of the 200th anniversary of the founding of the British foreign-intelligence service by Jeremy Bentham. In that address Kissinger made two principal claims: 1) that he had been a faithful servant of British foreign policies, contrary to U.S. policy, and often behind the back of the Presidents he nominally served; 2) that he supported the British colonial/imperial tradition of Winston Churchill, against the American tradition cited by President Franklin Roosevelt.

13. Those who stayed behind are typified by Bentham agent Aaron

Burr and Burr's cronies among the treasonous Hartford Convention of 1814.

14. See Anton Chaitkin, *Treason in America* (New York: New Benjamin Franklin Publishing House, 1985), and H. Graham Lowry, *How The Nation Was Won* (Washington, D.C.: Executive Intelligence Review, 1987).

15. Webster Tarpley and Anton Chaitkin, *George Bush: The Unauthorized Biography* (Washington, D.C.: Executive Intelligence Review, 1992).

16. E.g., the German, French, and Polish volunteers who came to our assistance, and also the great League of Armed Neutrality whose defeat of the British Navy forced Britain to submit to the testament of our victory at Yorktown. We fought four wars against Britain: 1776-1783, 1812-1815; the War with Mexico, using British agent Santa Ana in a conflict designed against us by the Duke of Wellington; and, the Confederate Secession and assassination of President Lincoln, both directed from London, using British agents such as Judah Benjamin and the treasonous uncle of Teddy Roosevelt. It was the threat of Russia's Czar Alexander II to launch war against Britain and France throughout Europe, which prevented Palmerston and his stooge Napoleon III from launching the combined British, French, and Spanish fleets against the Union forces, as those same combined forces were deployed actually, during that same period, for a genocidal looting of the people of Mexico.

17. John Dewey began his career as a leading figure of Chicago, Illinois' Fabian School. When Fabian-brainwashed John D. Rockefeller II returned from his London education, he induced his daddy to fund the transformation of the Fabian School into Chicago University; the Rockefellerers picked up Dewey as part of the "yard sale" at which they acquired the Fabian School. Lippmann, who was a confederate of Harriman's Colonel House, served as a key British controller of the loony President Woodrow Wilson during the Versailles Treaty proceedings.

18. For example, Charles Beard's fraudulent, *The Economic Interpretation of the of the Constitution of the United States* (1913). Beard, who institutionalized the myth of "Jeffersonian," summed up his "system" in his two-volume *The Rise of American Civilization* (1927). In fact, during the 1763-1815 period, and later, these confederates of British foreign-intelligence agent Aaron Burr had been recognized as the treasonous "Hartford Convention" crew. See Chaitkin, Lowry, *op. cit.*

19. Although radicals led by Lord Palmerston's agent Giuseppe Mazzini played a key role in the 1848-1849 disruption of London's for-

mer ally and chief competitor, Metternich's Holy Alliance, it must not be thought that socialism was an anti-oligarchical movement. The Fabians were anti-science and neo-feudalist, like the 'guild socialism' of John Ruskin and William Morris, from which the Fabian Society sprang. Teddy Roosevelt was a socialist in that same sense: the President who continued the work of the treasonous Specie Resumption Act of 1875-79; the President whose "trust-busting" broke the back of U.S. industry's resistance to takeover by the finance-capital of London and Wall Street. It is typical that, if no more than frequently, socialist movements have been deployed by finance-capital against agro-industrial capitalism. Beard's dogmatic revision of U.S. history is a sweeping falsification constructed to fit his anglophile socialist "political correctness."

20. Figure 1, above.

21. See Lyndon H. LaRouche, Jr., "The Coming Fall of the House of Windsor," *Executive Intelligence Review*, Vol. 21, No. 43, Oct. 28, 1994; pp. 64-71.

22. See Philo (Judaeus) of Alexandria, "On The Account of the World's Creation Given by Moses," in *Philo*: Vol. I, trans. by F. H. Colson, G. H. Whitaker, and R. Marcus, Loeb Classical Library No. 226 (Cambridge, Mass.: Harvard University Press, 1981).

23. Immanuel Kant: *Critique of Pure Reason* (1781), *Prolegomena to a Future Metaphysic* (1783), *Critique of Practical Reason* (1788), and *Critique of Judgment* (1790). Under the influence of venetian agents Christian Wolff and the Berlin circles of Frederick the Great's "favorite," Francesco Algarotti, a newtonian Kant emerged as an empiricist zealot against Gottfried Leibniz, which he remained until his death. However, during the 1770s Kant broke with David Hume over the latter's turn to the radical empiricism of Adam Smith and Jeremy Bentham. In his *Critiques*, Kant refused to declare human intellectual creativity non-existent, as the English empiricists did; he insisted it was *unknowable*.

24. See Lyndon H. LaRouche, Jr., "On LaRouche's Discovery," *Fidelio*, Vol. III, No. 1, Spring 1994; "The Truth About Temporal Eternity," *Fidelio*, Vol. III, No. 2, Summer, 1994.

25. At approximately 1968 U.S. physical standard of household life per capita.

26. The larger part of proto-fascist Oliver North's base within the population fits this description exactly. Poor, frightened, desperate folks, whose own populist instincts have become their own worst enemy, fearfully abandoning reason for a leap of faith in a scalawag whose sole political qualification is that he serves as the moral equivalent of "war": the moral equivalent of the fistful of street-dung these desperate folk would wish to throw directly into the face of those whom they believe have betrayed them earlier.

27. See A.M. Legendre, *Elements de geometrie* (Paris: 1794).

28. The rigorous modern appreciation of this is due to Legendre's text in geometry prepared for the educational program of Gaspard Monge's 1794-1814 Ecole Polytechnique (*op. cit.*), Legendre's and Monge's student, Jean-Victor Poncelet, and, finally, Bernhard Riemann's instructor in geometry from a constructive standpoint [of Jacob Steiner: *Gesammelte Werke*, Karl Weierstrass, ed., (Berlin: 1881-82): reprint (Bronx, New York: Chelsea Publishing Company, 1971)]. In the latter volume, see his "Systematische Entwicklung der Abhaengigkeit geometrischer Gestalten von einander," pp. 299-460, and also his "Die geometrische Constructionen angefuehrt mittels der graden Linie unter einem festen Kreis," pp. 461-522. In the papers of Enrico Betti, Betti reports upon topics from his conversational walks with Bernhard Riemann, during Riemann's last years spent in Italy; Betti records Riemann's emphatic advice, that competence in mathematical work should be grounded upon a rigorous study of the work of Riemann's own geometry instructor, Steiner.

29. On Nicholas of Cusa's proof that the circle belongs to a non-algebraic, or "transcendental" domain, see his *De docta ignorantia* (1440) and his *De circuli quadratura* (1450).

30. For the author's treatment of all four types of mathematical functions, see the following two titles, among others, of Lyndon H. LaRouche, Jr. "How Bertrand Russell Became an Evil Man," *Fidelio*, Vol. III, No. 3, Fall 1994; pp. 37-42; "The Fraud of Algebraic Causality," *Fidelio*, Vol. III, No. 4, Winter 1994, *passim*.

31. Not later than the A.D. 1440 date of his work founding modern science, *De docta ignorantia*. See also, his *De circuli quadratura* (1450).

32. LaRouche, "... Causality."

33. See Jacob Steiner, *op. cit.*, Vol. II, "Einfache Beweise der isoperimetrischen Hauptsatze," pp. 75-91, Table VI, Figs. 1-5.

34. *De docta ignorantia* (1440).

35. See Kepler's second edition of his *Mysterium Cosmographicum*, and his opening acknowledgements in his *Harmonices Mundi*. The year 1996 is the 500th anniversary of the publication of the first edition of Kepler's *Mysterium*, which should serve as the occasion for introducing relevant excerpts from this founding of a comprehensive mathematical physics to the secondary curriculum. 36. Carl Friedrich Gauss, *Werke* (Hildesheim: Georg Olms Verlag, 1981), Vols. VI, VII, *passim*. See also LaRouche, "... Causality," *loc. cit.*

37. LaRouche, *ibid.*

38. LaRouche, *ibid.*

39. As comedian Groucho Marx might have said, "Bad mathematics smells."

40. Christian Huyghens, *Treatise On Light* (1690), Sylvanus P. Thompson, trans. (1912) (New York, N.Y.: Dover Publications, Inc., 1962). This was written originally in 1678, in response to news of his former student's, Ole Roemer's relatively successful measurement of "the speed of light," in Paris, the preceding year. (See Poul Rasmussen, "Ole Roemer and the Discovery of the Speed of Light," *21st Century Science & Technology*, Vol. 6, No. 1, Spring 1993.)

41. In Gottfried Leibniz's *Acta Eruditorum* (Leipzig: May, 1697).

42. LaRouche, *ibid.*

43. For summary elaboration of the musical facts referenced here, see *A Manual on the Rudiments of Tuning and Registration*, John Sigerson and Kathy Wolfe, eds. (Washington, D.C.: Schiller Institute, 1992). 44. Contrast this to Hermann Helmholtz, *On The Sensations of Tone*, Alexander J. Ellis, trans., (New York, N.Y.: Dover Publications, 1954). Contrary to hoaxster Ellis, had Bach varied the pitch of his works upward and downward, as Ellis purports to prove, in virtually none of these instances could Bach's choral works have been performed to the accompaniment of that keyboard instrument.

45. That is, as distinct from π estimated to some decimal position.

46. This is the significance of the rather frequently cited remark of the famous conductor Wilhelm Furtwaengler, on the necessity of performing "between the notes." Think of "horizontal intervals" as like the difference in refraction among colors of the spectrum.

47. See Lyndon H. LaRouche, Jr., "Mozart's 1782-1786 Revolution in Music," *Fidelio*, Vol. I, No. 4, Winter 1992.

48. Thus, a method of composition which one leading contemporary musician describes as *Motivfuehrung*.

49. From 1782 onward, Mozart's qualitative further development of Haydn's new motivic method of thorough composition is based upon Mozart's insight into the significance of that Bach six-part *Ricercare*. The prime examples of this treatment of Bach include the *Adagio* K. 475 and the famous *Adagio and Fugue* K. *Adagio* 426/546. Mozart quotes his own K. 475 motivic restatement of this Bach work many times, directly and also implicitly, as do Beethoven (e.g., Op. 13, Op. 30 No. 2, Op. 111), Schubert (D. 958), and others, in this referenced and numerous additional instances. The extended motivic method which emerges in Beethoven's composition from Op. 101 and Op. 102 on, as realized in the two sets of late string quartets, is an extension of the same method first defined by Mozart's recasting of Bach's six-part *Ricercare*.

50. LaRouche, "Mozart's 1782-1786 . . .," *loc. cit.*

51. i.e., a "theorem-lattice."

52. Zorzi was an agent of the Venice foreign intelligence service then headed by Ambassador (and later Cardinal) Gasparo Contarini.

53. Typical of the effect is the failure of any known aristotelean scholar to produce a competent reading of Plato's *Parmenides*. The *Parmenides* sets up a series of paradoxes used to demonstrate the incompetence of the method of the Eleatic school of the Parmenides who was the famous predecessor of formalists such as the sophists, rhetoricians, and peripatetics. In this, in a manner consistent with the method of Classical Greek tragedy, Plato inserts a repeated hint of the solution to the ontological paradoxes posed, hints which demonstrate his method of *higher hypothesis*. Were an aristotelian to admit that, the system of aristoteleanism immediately "self-destructs." The method of motivic thorough composition is a perfect example of the solution-principle implicit in the *Parmenides*.

54. Like today's Henry A. Kissinger.