

EIR Strategic Studies

SDI: the technical side of 'grand strategy'

by Lyndon H. LaRouche, Jr.

The following document was released by the Committee to Reverse the Accelerating Global Economic and Strategic Crisis: A LaRouche Exploratory Committee.

The editorial page of the June 20, 1996 *Wall Street Journal* (*WSJ*) presented a symposium of selected defense-policy professionals, on the subject of missile defense.¹ Although some among the isolable points made there, might not be factually wrong in and of themselves, the argument made by each of the panelists, is, overall, worse than merely false. Their common error is, that the individual facts each cites, are merely part of the fabric of a wildly misleading fallacy of composition. None among them addresses the presently relevant, crucial strategic issues of the 1982-1983 debate on U.S. strategic ballistic missile defense.

For example, during the 1982-1983 period of the SDI's inception, the leading issue within administration and Department of Defense circles, was between the scientists, such as Dr. Teller, and those anti-science, Heritage Foundation-linked opponents, who preferred the obsolescence inhering within a proposal included as part of a cultish book, titled *High Frontier*. None of the *WSJ*'s current panelists, even Dr. Teller, recalled the disastrous effects which the SDI program suffered, from the political victory of the "kinetic energy weapons" mafia, during the middle 1980s, issues which are even more crucial in today's new strategic setting.

That panel discussion, taken in its entirety, illustrates the

point, that the making of the strategic policy of the United States, follows, still, today, the same pathway, predominantly, as did those who fumbled the issue of SDI a dozen years ago. Worse, the members of the panel seem to be ignorant of the fact, that, in everything they argue in that panel, they show themselves to be, more than ever, in the grip of those collective, habituated, utopian fantasies, which, whether as deluded belief, or career-management pragmatism, have taken over, and corrupted military policy-shaping, increasingly, since the close of World War II.

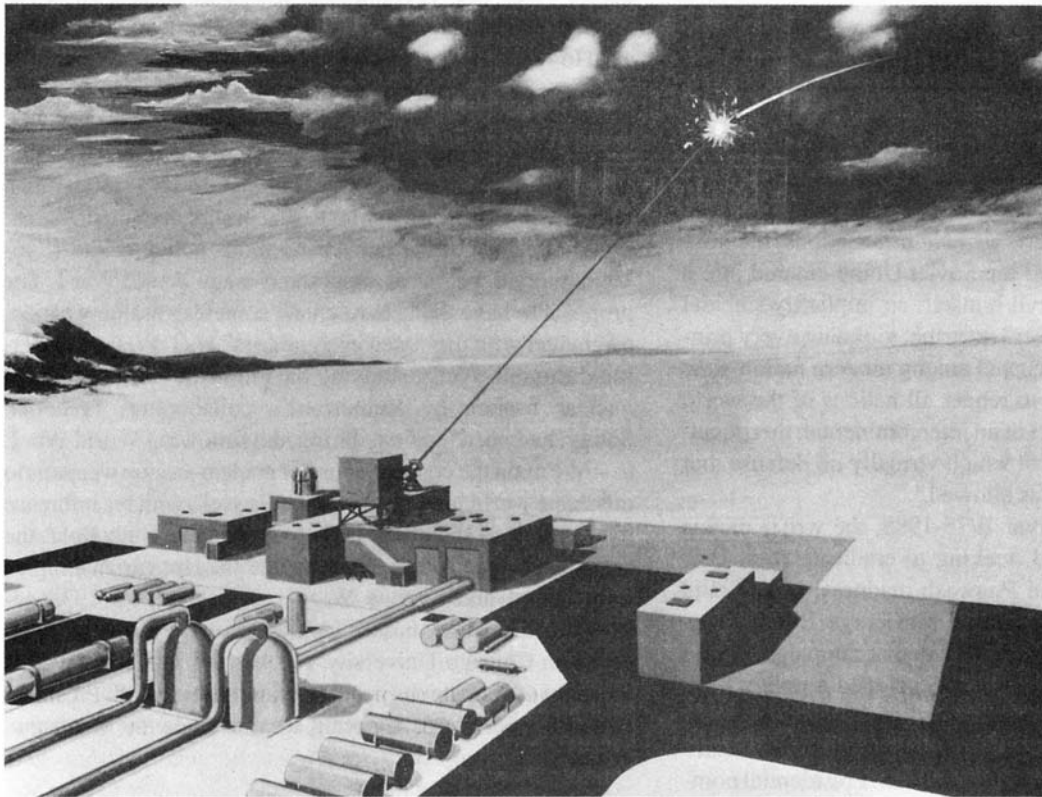
The present SDI debate poses three crucial issues of current U.S. military policy.

The first of these, is the continuation of an ultimately suicidal, post-1945, "balance of power" policy, premised axiomatically upon the abandonment of those principles of strategic policy-making which the modern European sovereign nation-state republic had referenced, in devising every successful military policy, from France's King Louis XI, through the death of President Franklin Roosevelt. That first issue has been addressed in a most recently issued policy memorandum.²

The second two crucial issues, are those upon which we shall come to focus attention during the following pages. Of these latter, the first, is implicitly acknowledged by some among the *WSJ* panel: *Who but a lunatic, or, worse, a craven bureaucrat, could have proposed to accept the policy under which the 1972 Anti-Ballistic Missile treaty was negotiated: as President Reagan stressed this point, how could we have tolerated a policy of intending to leave our nation*

1. "Do We Need a Missile Defense?" *Wall Street Journal*, June 20, 1996. Panelists include Secretary of Defense William J. Perry, General (ret.) Charles A. Horner, Frank J. Gaffney, Robert G. Bell, (Sir) Caspar W. Weinberger, Fred C. Iklé, Donald Rumsfeld, James Schlesinger, Edward Teller, Henry F. Cooper, and James Woolsey.

2. Lyndon H. LaRouche, Jr., *Now, Rid NATO of the 'Entente Cordiale'*, released by the LaRouche Exploratory Committee; also published, under the same title, by *Executive Intelligence Review*, May 28, 1996.



Artist's depiction of TRW's mid-infrared chemical laser, shooting down a cruise missile. The proposal to revive some form of SDI today, writes LaRouche, "contains no issue of principle not already embedded in this writer's own 1979-1983 definitions of a strategic defense based upon 'new physical principles.'"

with no "defense" against thermonuclear missiles, except "revenge"? The final issue, which relatively few among leading U.S. spokesmen, outside Dr. Teller's immediate circle, were able to comprehend, back during 1982-1983, is: *How could so many so-called putative "defense experts" have supported the delusion, which dominated the debate, for and against SDI, during the mid-1980s: the fallacious issue, that, the issue of SDI was, whether so-called "kinetic weapons systems" could provide an effective strategic ballistic missile defense?*³

Here, in the following pages, we review these underlying axiomatics of a revived SDI, in the setting of the writer's original design for an "SDI" policy. We begin the presentation of SDI, here, with attention to developments of the

3. The European professional circles were generally much more intelligent on the SDI than their leading U.S. fellows. For example, in a December 1982 meeting with leading military professionals of France, a spokesman for the French side correctly posed: "So, your design is based upon 'technological attrition.'" Typical of what was said among some leading German professionals of the same period, was: "This gives us the basis for meaningful strategy." Despite the violence with which both Yuri Andropov and Mikhail Gorbachov focussed hateful, personal venom against this writer, there were significant numbers of Soviet officials who agreed with the technical feasibility, and desirability, of what this writer had outlined in the 1982-1983 back-channel discussions with the Soviet government. It was the British and their Harriman-faction assets within both the Republican and Democratic parties, who orchestrated the opposition to anything more advanced than the "High Frontier" version of SDI.

period of this writer's initial role in the development of the original version of SDI policy, from late 1977, up to President Ronald Reagan's March 23, 1983 announcement.

Later, we narrow the discussion of SDI to the pivotal issues of the original policy-design. At that point, we define SDI, more narrowly, as it was outlined by this writer, and his associates, during the interval February 1982 through April 1983, to his Soviet interlocutors, and, also, to leading relevant circles in western Europe, India, and South America. That was the version of his 1979-1980 policy of strategic ballistic missile defense, which coincided with the strategic policy-conception originally enunciated by President Ronald Reagan, in the relevant segment of the President's nationwide television address of March 23, 1983: prior to his administration's later, somewhat radical departures from the original definitions.

We include, here, focus upon the implications of the central issue of the debate about SDI itself, during the February 1982 through March 1983 interval: whether SDI should be premised upon science, or "off the shelf" profits for defense contractors. We show that the issues of the proposal to revive some form of SDI today, under post-1989 circumstances, contains no issue of principle not already embedded in this writer's own 1979-1983 definitions of a strategic defense based upon "new physical principles." Thereafter, we address those issues of the nuclear-weapons policy which came to the surface within that 1982-1983 debate.

1. The history of nuclear-warfare doctrine

Over the course of the interval, from the 1958, “Dr. Strangelove” address of Leo Szilard, at the Second (Quebec) Pugwash Conference, through the 1972 phase of Pugwash activist Henry A. Kissinger’s *détente* negotiations, the governments of the U.S.A. and the Soviet Union entered into a veritable pact with the Devil himself: an implicitly suicidal version of “balance of power” doctrine, violating every principle of strategy earlier accepted among modern nation-state republics, a lunatic intent to render all nations of the world helpless before the prospect of an intercontinental, thermonuclear missile assault, against which virtually no defense, but the prospect of revenge, was allowed.⁴

Later, during the interval 1975-1988, the writer of this memorandum campaigned, seeking to eradicate from U.S. policy that mass-homicidal Pugwash madness, of Bertrand Russell, Russell’s Szilard, and of McGeorge Bundy, Kissinger, et al. Out of work done to further that campaign, during the 1975-1979 interval, the writer developed a policy for a new approach to global strategic ballistic missile defense. This policy, uttered in August 1979, as part of his own campaign for the Democratic Party’s 1980 U.S. Presidential nomination, was later to be renamed the “Strategic Defense Initiative (SDI).”

In a recently issued policy memorandum,⁵ we identified the geopolitical parameters, and underlying purpose, of the British Empire’s post-April 1945 U.S.A. strategic policy. That is the policy, under whose axiomatic assumptions Bertrand Russell’s Pugwash doctrine later became the ABM treaty negotiated by British foreign-service-controlled asset, and National Security Council advisor (Sir) Henry A. Kissinger.⁶ In that location, passing reference was made to this

4. Much of the material reported here on Russell, Wells, and their nuclear weapons project, was originally developed as a broad-based, intense research project which this writer launched in 1977-1978. The project, conducted by a transatlantic team of dozens of researchers, was summarized in a book-length report authored by Carol White: *The New Dark Ages Conspiracy: Britain’s Plot to Destroy Civilization* (New York City: New Benjamin Franklin House, 1980). Additional research, following that, was done into the specific pre-history and history of the 1972 ABM treaty. These overlapping research projects into the roles of Russell, Szilard, Kissinger, et al., were prompted by the issues posed by *Der Spiegel* newsweekly’s extensive publication of detailed features of pending NATO exercise “Hilex ’75.” I.e., *Der Spiegel*’s leaked account of “Hilex ’75” features, symptomized the growing danger of general thermonuclear war by miscalculation, growing out of the combination of trends in the combination of forward basing, “pin down” effects, and precision targetting, together with the types of lunacies expressed, during 1975, by circles associated with the wildly utopian “Kissinger clone,” James Rodney Schlesinger.

5. Now, *Rid NATO of the ‘Entente Cordiale!’*, loc. cit.

6. Kissinger’s role as a British agent, working against the most vital U.S.A. strategic interests, long antedates Kissinger’s 1995 misbekenighting by Queen Elizabeth II. In his May 10, 1982 public address at London’s Chatham House

author’s role, both in connection with what became known as the SDI, and his “anti-geopolitical” motivation for the proposals. However, it was decided to omit from that memorandum, two, crucial, presently most relevant, features of the SDI, lest their specialized technical character divert attention from the larger issues of the principal topic being considered there. The present memorandum is, and should be received as a relevant technical addendum to that earlier document.⁷

The history of the nuclear-weapons policy of the 1946-1996 interval, begins at about the close of World War I. The proposal to have the U.S.A. create a nuclear-fission weapon, originated with the “open conspirators” H.G. Wells and Bertrand Russell. Wells, studying the implications of reports on nuclear fission, by Rutherford’s collaborator, Frederick Soddy, had been the first, during and following World War I, to strike upon the concept of use of nuclear-fission weapons to misshape world history. However, Russell, with his influence over a circle of scientists, including the Dane Niels Bohr, the German refugee Albert Einstein, and the Hungarian emigrés Leo Szilard and Eugene Wigner, and Russell’s 1938 co-founding of the U.S.-based “Unification of the Sciences” project, with Chicago University’s Robert M. Hutchins, was in the more advantageous position to orchestrate U.S. President Franklin Roosevelt’s adopting what became the Manhattan Project.⁸

(“Reflections on a Partnership: British and American Attitudes to Postwar Foreign Policy”), Henry Kissinger bragged, that during his 1969-1977 “incarnation” in U.S. government posts, he had frequently followed British foreign service directives and related papers behind the back of “the President.” His treasonous inclinations developed much earlier than 1982, earlier than his appointment as chief warlock of the 1968 Hotel Pierre cabal. Sometimes, if rarely, as in the following excerpt from that address, even Kissinger is truthful: “British policy drew upon two centuries of experience with the European balance of power, America on two centuries of rejecting it. Britain . . . philosophically . . . remains Hobbesian . . . American foreign policy is the product of a very different tradition.” In that address, Kissinger defended the post-war policies of Prime Minister Winston Churchill, against those of President Roosevelt. Kissinger was inducted into service as a British foreign-service agent of influence, beginning his term as a part of the Harvard University-based branch of Chatham House’s Wilton Park organization. His original British intelligence mentor was the rabid Anglophile, and Confederacy buff, Professor William Yandell Elliot, a member and product of the racist “Fugitive/Agrarian” tradition based at Nashville, Tennessee’s Vanderbilt University.

7. In that way, we have incurred the cost of repeating here, in some small portion, several of the points presented in that earlier location.

8. Cf. H.G. Wells, *The Open Conspiracy: Blueprints for a World Revolution* (London: Victor Gollancz, 1928). Marilyn Ferguson’s *The Aquarian Conspiracy* (Los Angeles: Tarcher, 1980), reports on the project headed by Stanford Research Institute’s Willis Harman, claiming that the joint conspiracy declared, in 1928, by Wells and Russell, was in irreversible control of the United States’ policy-shaping today. Admittedly, Marilyn Ferguson, like her co-thinker Mary Bateson, is a product of a weird intellectual pedigree, but her report and claims for success of the “Age of Aquarius” project are never worse than slightly exaggerated. In fact, the 1938 Russell-Hutchins (Aldous) Huxley project, at Hollywood, Chicago University, the University of Pennsylvania, etc., has become the dominant ideological vector for change in U.S. academic life since that time: the Tavistock influences in sociology and psychology, Norbert Wiener’s radical-positivist cult of “information

During the interval between the two World Wars, it was already the avowed purpose of both Wells and Russell, to envisage nuclear fission as a weapon so horrible, that the World Federalist faction might succeed in making general war, such as the then recent World War I, so extremely unpalatable, that nations would abandon their sovereignty for international arbitration, rather than risk such a war. This is the argument, as Russell restated it in his contribution to the September 1946 edition of *The Bulletin of the Atomic Scientists*.⁹

In the latter piece, and in repeated, later public affirmations of the same intent, Russell posed two routes for making the United Nations Organization (UNO) “the world government,” which various among the “cognitively challenged” members of our diplomatic and intelligence establishment, already believe the UNO to have become in fact, today.

The first option which Russell proposed openly, beginning 1946—the “fast track”—was that the Anglo-Americans threaten to launch a “preventive nuclear war” against the Soviet Union, with the intent actually to launch that war, should Josef Stalin’s government refuse to submit to the rule of the UNO as a de facto world government under control of the Anglo-American leading families’ establishment.¹⁰

However, Russell noted, that if the Americans should lack the gumption to go to “preemptive nuclear war” against the Soviet Union, a second means to the same ultimate end would be required. Should the Soviet Union develop a nuclear arsenal prior to the time that the U.S.A. summoned the combined arsenal and will to launch a preventive nuclear war, world government must be sought by a more round-about route. For this case, Russell proposed to deal with Stalin’s prospective successors, to the same ultimate end as in the first option, but on terms ostensibly less unfavorable to the Soviet state, if only during the medium term. That second option is the history of the 1956-1996 interval, to date, which is continuing even after those events of 1989-1990, the which are deemed to have ended the so-called “Cold War.”

theory” (a key Russell project), the cult of “systems analysis” (a creation of such devotees of Russell and Norbert Wiener as John v. Neumann), and the Korsch-Carnap-Harris-Chomsky pseudo-science of linguistics, are by-products of the Russell-Hutchins “Unification of the Sciences” project of 1938.

9. Read current UNO policies of practice in light of Russell’s prescription, included in that piece, back in 1946: “It is entirely clear that there is only one way in which great wars can be permanently prevented . . . the establishment of an international government with a monopoly of serious armed force. . . . An international government . . . must have the only atomic bombs, the only plant for producing them, the only air force, the only battleships, and generally whatever is necessary to make it irresistible. . . . It must have a large army of inspectors who must have the right to enter any factory without notice; any attempt to interfere with them . . . must be treated as *casus belli*. . . .”

10. In 1946, the alliance of the Lowells (e.g., McGeorge Bundy) and the Kuhn Loeb/Harriman interests, in controlling the Truman Administration from within, typified the self-styled “patricians,” or “blue-bloods,” the U.S. side of the Anglo-American families’ establishment.

During Stalin’s remaining years, Moscow received Russell’s proposal with the invective it invited. Moscow’s soft-headedness toward Russell began, as N.S. Khrushchov consolidated his regime, with the dispatch of four avowed Khrushchov representatives to a 1955 conference of Russell’s World Association of Parliamentarians for World Government. The latter four gentlemen took the occasion to dispel the earlier “misunderstandings,” and to praise Russell most effusively, on behalf of General Secretary Khrushchov. This turn by Khrushchov, led to the British-sponsored founding of the Pugwash Conference, with sponsorship by Cleveland, Ohio millionaire Cyrus Eaton.

The second, 1958 Pugwash Conference, at Quebec, got down to business: Russell’s representative, Chicago University-based Dr. Leo Szilard, delivered the address which earned Szilard the stage name of “Dr. Strangelove.”¹¹ The policy was, to develop flotillas of thermonuclear-tipped intercontinental ballistic missiles, while also forbidding any deployment of a strategic ballistic missile defense capable of neutralizing a salvo of such missiles. To ensure that no nation were capable of resisting such a surprise attack, but only of nuclear retaliation, was deemed, by Russell et al., the necessary means of terror for establishing the UNO as the world government.

The two Pugwash conferences of 1958, led into the Khrushchov-Eisenhower meeting, referenced during that time by the code-phrase, “The Spirit of Camp David.” When Khrushchov staged a tantrum, to blow up the subsequent, Paris “summit,” which had been hosted by France’s President Charles de Gaulle, the next turn became the 1962 “Cuba Missiles Crisis,” in which Bertrand Russell, from London, played the role of intermediary between Moscow and Washington. From that 1962 episode, onward, especially after the assassination of President John F. Kennedy, about thirteen months later, the kind of *détente* which Russell had prescribed, was already in place. With the assassination of Kennedy, the launching of protracted, New Age-style “cabinet warfare,” in Indo-China, by McGeorge Bundy and Robert S. McNamara, was virtually assured. From that point, to the attempted consolidation of the UNO’s intended role, as “the world government,” was ostensibly but a matter of time. From that point on, weapons negotiations, especially the elimination of any likelihood of effective strategic ballistic missile defense, were the center-line of the highway leading toward world government.

With the adoption of the ABM treaty, the conditions were created, under which, beginning 1975, this writer gradually

11. When that film first appeared, reviewers proposed two additional contenders as role models for the title role of “Dr. Strangelove”: Herman Kahn and Henry A. Kissinger. Actor Peter Sellers’ affected German accent was connected with the reputation which Kissinger had already gained for a book, *Nuclear Weapons and Foreign Policy* (1957). That book parodied Wells’, Russell’s, and Szilard’s New Age ideas, a book sponsored by Kissinger’s patron, McGeorge Bundy, whose writing was largely the work of the Council on Foreign Relations (CFR’s) John Dean.

assumed a key role in the development of what became the SDI proposal of March 1983. The first public indications, that he might play a later role in shaping national strategic policy, appeared during 1967-1969. In 1975, he began the process of developing a military counter-policy to the 1972 ABM Treaty. By August 1979, he had published, as a policy-paper of his 1980 campaign for the Democratic Party's Presidential nomination, the precursor of what became the initial version of the SDI, a few years later. A discussion of that policy, of U.S.A.-Soviet cooperation in developing a system of mutual strategic ballistic missile defense, was the featured topic of a February 1982-February 1983, exploratory discussion with the Soviet government, conducted in U.S. interest. Those "back-channel" meetings were key to President Reagan's affirming the outline given in those exploratory discussions, as the SDI announcement of March 23, 1983.

2. The individual's role in history

To understand the place of that SDI policy within the Grand Strategy of the U.S.A., one must take into account the history of the way in which this transpired. The key to understanding that aspect of the policy, is the factors which operated to bring this writer out of the established public anonymity of his early forties, to play the global role with which he has been occupied during the greater part of the recent two decades. This is a topic of profound and leading interest to anyone who wishes to understand the decisive role which the humble individual citizen may rise to play, within the policy-shaping of a sovereign nation-state republic, such as our own. The corollary of that, is the fact that often, the strategic and related policies of a nation, like its leading works of art, or scientific and related inventions, may depend upon the selection of an individual lifted out of obscurity, as the circles of Alexander Dallas Bache adopted Thomas Alva Edison.¹² Indeed, it is to that kind of potential, that every future citizen of the republic ought to be educated. Whoever fails to grasp that point, does not understand the intent of our American Revolution, or its Federal Constitution of 1787-1789.

In that sense, the pre-history of the SDI began during the interval 1934-1940, in a youth's preoccupation with the writings of English, French, and German philosophers of the

12. During the interval 1793-1794, when "Author of Victory" Lazare Carnot led France from assured defeat, and dismemberment, into the creation of a virtually undefeatable French military force, within that short period, it was not unusual for him to fire major-generals for keeping troops in the barracks, or for postponing to the following day, the river-crossing which might have been done the preceding night. On occasions frequent enough to be more than merely anecdotal, Carnot promoted sergeants from the ranks, to replace the relevant, erring general, with successful results. Napoleon Buonaparte is reported to have commented, later, on the character which Carnot had built into the redesigned armies of France: Each soldier in that French army might be considered as carrying a Field Marshal's baton in his knapsack.

Seventeenth and Eighteenth Centuries. Crucial were, first, the rejection of the empiricists, in favor of Gottfried Leibniz, and, second, the youth's undertaking to defend Leibniz against the *Critiques* of Immanuel Kant. Although that youth was not to begin serious study of Plato until the 1950s, by the end of adolescence, at the onset of the 1940s, he was already, courtesy of Leibniz, committed to the method of Plato. His future outlook was implicitly settled by the experience of 1946-1948: sharing with his fellow-veterans the momentary optimism of the war-time rise out of the depression, under President Franklin Roosevelt, and experiencing, next, the moral capitulation of the overwhelming majority of his fellow-veterans, during the "Truman years."

"McCarthyism," as we called it then, did not come out of Appleton; it was not the secretion of that populist demagogue, the Senator from Wisconsin. It was a symptom of a popular sickness which was already in an advanced stage; it was an expression of the preceding, pervasive decay in the public, and personal moral standards, of the overwhelming majority of the present writer's generation of World War II veterans, and others. The onset and persistence of that moral sickness of the overwhelming majority among his generation, during the 1946-1955 interval, was the result of the transition from the optimism of the war-time Roosevelt years, into the cultural pessimism of the depressing Truman years.

A leading relevant point, for understanding the sickness in U.S. strategic thinking today: It was that moral sickness of the overwhelming majority of this writer's post-war generation, which imbued their children, the so-called "Baby Boomers," with their own kind of susceptibility to those induced "New Age" sicknesses, that moral and intellectual decay, the which erupted within the latter generation, during the course of the 1960s.

The self-righteous apologists for the youth-counterculture of the 1960s, spoke of the "materialism" of the parents. That charge, of "materialism," against the parents, was a smoke-screen for the accusers' own immorality. Their parents suffered a flaw, but it was not, generally speaking, "materialism" of the Ayn Rand-Gary Cooper variety of Nietzschean. The parents' flaw was the same moral cowardice which Germans, during the Nazi time, and, later, have attributed to the "neck-turners." Or, in American sociology, the same "neck-turner" immorality assumes the form of totally amoral "other-directedness," by the scared rabbit inside the "white collar" liberal. Among the apostate patriots of the writer's World War II generation, it was: "Look after your career-opportunities, your pension, and staying out of trouble; do anything, at any price, to 'stay out of trouble.'" As this writer was eyewitness, during 1966-1973, as a campus lecturer, to the onset of today's New Age sickness among the Baby Boomers: the transmission of that same immoral tradition of the fathers and mothers to their sons and daughters, was reproduced with genetic perfection, as the campus "political correctness" of both the New Age "leftist," and the "ditto-headed" fan of

George Bush's 1992 reelection-campaign, or of the 1994 campaign of Newt Gingrich's "Contract with America" slate.

In 1948, in the time of the Truman-Dewey race for the Presidency, moral, and also intellectual mediocrity reigned. During the mid-1950s, finding small-party politics as morally bankrupt as major-party politics, this then-still-youthful product of philosophy left all political activity, to concentrate on those science-related matters of economics which had already become his leading interest in life, during the course of the 1940s.¹³ It was that latter, scientific interest which, during the mid-1960s, turned him toward future political activity. Merely typical of that which provoked this interest in political activity, was a terrible 1964 tract, *The Triple Revolution*, of Robert Theobald, et al. The reaction to the 1960s onset of the New Age, was triggered by the writer's battles against the hoaxes of "information theory," and, later, "systems analysis," since the 1948-1952 interval. During 1963-1964, he recognized the onrushing New Age pathology, as the effort to develop a mass-basis for the poisonous kinds of false ideas embedded axiomatically within "information theory" and "systems analysis." The form of political activity he chose, out of a sense of obligation to combat the "New Left" infection, was to take opportunities to teach economics among university students of the 1960s. It was through that teaching activity of the 1966-1973 interval, that the writer's political role emerged.

In the Platonic method, of which Gottfried Leibniz is an exemplar, we rely upon Plato's *method of hypothesis*. By itself, the mere formal proof of a proposition has no direct relationship to truth; truth and consistency are often adversaries. The truth of an argument in defense of any proposition, lies essentially in the truthfulness of the axiomatic assumptions underlying the entire system of belief, and method, of the person presenting, or accepting that argument. So, in assessing the beliefs of the empiricists, or in assessing the moral decay which overtook most of his generation of war-veterans during the late 1940s, the writer's experience in philosophy guided him to seek out the often hidden, underlying assumptions on which the relevant propositions depended.

The hoax called "information theory," like the closely related cult of "systems analysis," is premised upon false assumptions which are not only adducible, but readily so, by anyone who has worked his way, step by step, through the Kant-Leibniz issue. The history of the United States, since the 1901 assassination of President William McKinley, for example, has been the history of an interacting succession of changes, both in underlying axiomatic assumptions, and in prevailing moods of institutions and the population more gen-

erally. It has been, thus, a history of what the London Tavistock Institute identifies as "cultural-paradigm shifts": changes within the set of hypotheses, or "cultural paradigm," which underlie those propositions likely to be accepted by members of the relevant social stratum.

For one of the writer's generation, born during the 1920s, the most conspicuous and generalized feature of the U.S. experience during the present century, is the successive changes in "cultural paradigm" which distinguish each of the five adult generations he has known during his lifetime: those born during the 1860s, the generation of the World War I veterans, the generation of World War II veterans, the "Baby Boomers," and "Generation X." In a related way, the changes in U.S. military doctrine, from traditional to utopian, which occurred during the late 1940s and 1950s, and the change from science to sociology, even in the military academies, during the 1960s, are exemplary correlatives of the same processes underlying the cultural-paradigm shifts from one post-war generation to the next.

Objectively, one can readily demonstrate, that the shift to utopianism, in all facets of national policy-making, during the life of the "Baby Boomers," is clinically insane respecting its effects upon our nation, our posterity. The question is, how does one convince a victim of that insanity, that his belief is insane in its consequences? Unless he brings the relevant, underlying, pathological assumptions, of his induced cultural paradigm, into the conscious light of day, the victim will not be able to free himself, or herself, from continuing to act out that insanity.

In history, such urgent changes in cultural paradigm ("popular opinion"), rarely occur, except under the pressures of a severe crisis, the kind of crisis which leaves undeniable, the fact that the present way of thinking is not working. ("What's wrong with me, Doc?") For that reason, there is no criminal who can cause as much damage to society, during such a crisis, as an influential pollster, or the like; he is, in effect, the criminal, who is trying to get the people back into the comforts of their *Titanic* staterooms, at the time the ship is already sinking. He is the imp of Mephistopheles' legion, who is insisting, "The people wish to hear that all is well, and getting better," even when the disaster is virtually unstoppable.

Only one who stands outside a pathological popular opinion, and observes the shifts, from one such popular opinion to another, from a Socratic standpoint, is likely to recognize what is really wrong with that society. No one who shares popular opinion, especially one who is strongly "other-directed," will be of much use to a society seeking to learn the causes of a persisting general distress. Thus, in time of crisis, the bureaucratic and other bodies of leading opinion, which represent that same, established way of thinking about policy-shaping, which has supervised the slide into the crisis, are the worst possible source of advice on choosing means for dealing with any severe crisis which is rooted efficiently in those

13. Respecting the author's discoveries and related work of the 1948-1969 interval, see Lyndon H. LaRouche, Jr.: "On LaRouche's Discovery" *Fidelio*, Spring 1994; "Why Most Nobel Prize Economists Are Quacks," *Executive Intelligence Review*, July 28, 1995; and, "Non-Newtonian Mathematics for Economists," *Executive Intelligence Review*, Aug. 11, 1995.

generally accepted, axiomatic assumptions which underlie existing policy-trends.¹⁴

The problems of policy-making, which confront us in today's national policy in general, are of that axiomatic nature for which the representatives of presently institutionalized conventional opinion are the least useful. Only a relative outsider could be useful, not because he or she is an outsider, but because the rare, competent authority probably will be found only among the outsiders. That is the advantage of a society which bases the design of its institutions on developing and nurturing that kind of outsider, the which may become more or less indispensable during the time those occupying positions of power must, habitually, tend to fail. All useful such outsiders, are of a philosophical disposition, specifically a Socratic one.

At the end of his military service, in 1946, this writer had already developed the kernel of what was, and remains, implicitly, a general strategic outlook for the post-1945 U.S.A. It was his conviction, reenforced by experience during post V-J Day military service in India, that the future security of the United States demanded that the U.S. act, not only to rid the world of the relics of the British, Dutch, French, and other empires, but to convert large portions of the industrial capacity built up for war, into an outpouring of machinery, machine-tools, and so forth, for the agro-industrial progress of those former colonial, or like nations, which desired such a strategic economic relationship with the U.S.A. It was also this writer's view then, that the post-war relationship of the U.S.A. to the Soviet Union, should be premised on the same prospect of global economic reconstruction.

That was the outlook which he carried into the first months and several years after his return to the U.S.A. The writer's perspective on that account, has not changed on these benchmark points since then, to the present time. Nor, has there been any evidence presented, thus far, which justifies proposing any different strategic outlook for the U.S.A. than this one. That was the underlying outlook which he brought to the

14. In the course of a meeting of flag officers and others, on the subject of SDI and related questions of strategy, the writer's late, and dear friend, General G. Revault d'Allonnes, described a certain other meeting, of French generals, in which he participated during the immediate post-war period, as one of the very few colonels present. In response to discussion, around the table, of the proposition, what is the first step to be taken, in response to outbreak of war, his answer was, "Fire the generals." Despite that utterance, he had risen later to the highest rank of trust assigned to him, as a flag officer, by President Charles de Gaulle, during the crisis of the early 1960s. His youthful answer had shown temerity, but not flippancy. Frequently, the most useful definition of a crisis, is that the crisis represents an habituated refusal of those long in power to admit the inherent failures built into the policies (such as "free trade," today) which they have adopted as unquestionable verities of practice. Thus, as General Revault d'Allonnes made the point on the indicated occasion, so Lazare Carnot proceeded to transform inevitable defeat and dismemberment of his nation, into victory. In the crucial moments of history, it is often, thus, only the "outsiders" who are qualified to lead in saving the nation. A nation which fosters such humble citizens, capable of that role, is the nation more likely to succeed.

one-semester courses in economics, which he taught during the 1966-1973 interval. That was the premise of his political outlook, then, and still today. That was, and remains the underlying standpoint upon which the writer's approach to defining the problems of strategic ballistic missile defense was premised, during 1977-1988.

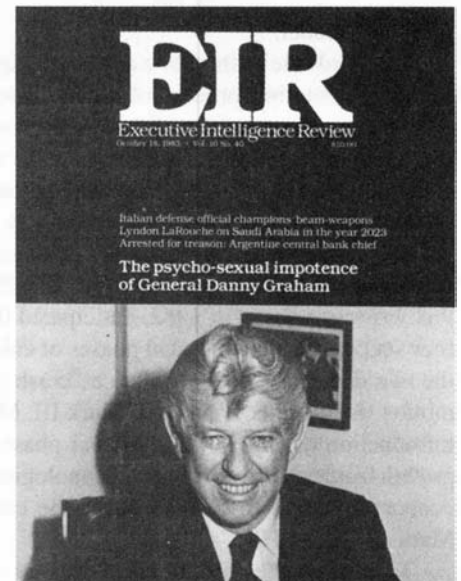
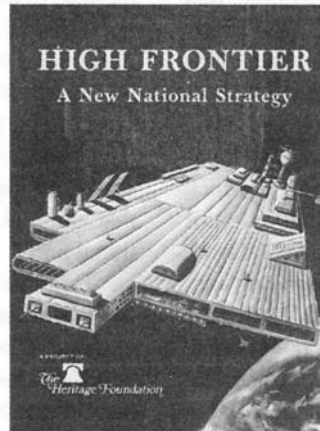
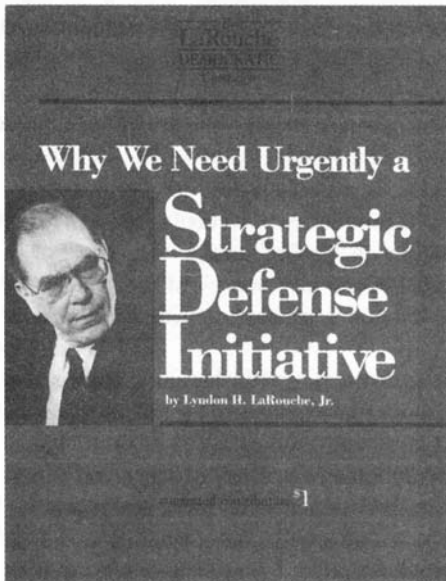
That, the writer's viewpoint at the close of the war, and later, might be fairly described by the historian, as what Sir Henry A. Kissinger, like Sir Winston Churchill, had recognized, and hated, as "typically American." It is a world-outlook which the writer, like many other Americans, shares with such Presidents as John Quincy Adams and Abraham Lincoln; it is typical of that outlook which American patriots have carried, repeatedly, into wars against our principal foe of these past centuries, the British monarchy. On record, it was the patriotic outlook, on the post-war world, adopted by our war-time President, Franklin Roosevelt.¹⁵ Although that attitude suffices to define the problem posed by the idea of strategic defense in the nuclear-weapons age, it does not, by itself, provide the concept of a real solution to that problem. To solve that problem, the solution must be approached by the kind of "maverick" which this writer has represented in his time.

A solution to this problem required a philosopher inflexible in his, or her devotion to the Socratic method, a philosophy hostile to those "cultural-paradigm shifts" which have come to dominate the fad-ridden popular opinion of the overwhelming majority of today's adult generations. The technical problem, which such a philosopher must address, lies primarily within the domain of Leibniz's science of physical economy.

Those noted features of this writer's relevant experience, bearing upon the development of SDI, illustrate the principled characteristics of the role of the individual: as a functional feature of the historical process. So, as this example illustrates a principle: *As history generates the crises of society, so, hopefully, history also shapes the development of at least some individuals, to ensure that someone implicitly embodying the means to solve the problems of crisis, will be available to the society which is wise enough to put aside established habits of opinion, to employ such contributions.*¹⁶ So, for bet-

15. Elliott Roosevelt, *As He Saw It* (New York: Duell, Sloan and Pearce, 1946).

16. It is noteworthy, in light of the extensive, corrupting influence of fascistic irrationalism dominating taught academic philosophy and theology today, to emphasize the contrast of the concept of the individual, "as a functional feature of the historical process," to the notion of "thrownness" introduced by Hitler's official philosopher of Nietzschean existentialism, existentialist Hannah Arendt's former lover, the Nazi Martin Heidegger. (Heidegger is the relevant influence behind theologians such as Karl Rahner and "liberation theology's" Hans Küng.) This Nazi-like filth, is spreading like an aggressive epidemic of genital herpes, throughout U.S. academic life today. In the sociology of native U.S. fascist movements, Heidegger's Nietzschean dogma of "thrownness," finds its most widespread reception among those deranged varieties of populist minds, whose every passion seems to be permeated by nostalgic tenderness toward the memory of the Confederacy's "Lost Cause."



EIR and Lyndon LaRouche, since the early 1980s, have insisted on an approach to strategic defense based on “new physical principles,” while the Heritage Foundation’s foolish Lt.-Gen. Danny Graham (ret.) promoted off-the-shelf “kinetic energy weapons.” Left to right: a pamphlet released by LaRouche’s Presidential campaign, Nov. 18, 1986; the Heritage Foundation’s incompetent “High Frontier” proposal; EIR’s cover story from Oct. 18, 1983, in which LaRouche denounced “The Psycho-Sexual Impotence of General Danny Graham.”

ter or worse, history unfolds, and civilizations rise or collapse. So, the writer came to present the relevant concept of strategic ballistic missile defense, in U.S.A.-Soviet back-channel chats of 1982-1983.

3. The role of technological cardinality

Before turning to the broader strategic implications of a strategic ballistic-missile defense policy, focus upon the issue of the choice of required technology.

To present a competent overview of an SDI policy, or its successor, for the post-1991 world, one should begin with reference to the unresolved policy-differences between the Reagan era’s two leading factions of strategic defense, respecting which choice of technological principle SDI should follow. The discussion of today’s policy should begin with

Typically, those “rebels without cause,” whose fondest feelings may be evoked by Nashville versions of fascism’s Richard Wagner: not whoops of Valkyries, but ballads which Bedford Forrest’s nightriding company of unbathed “critters” might sing. Society is not the adversary of the individual; although individuals such as Nietzsche, Hitler, Heidegger, and Jacques Derrida, make themselves the Devil’s own adversaries of all mankind. Society is the possibility of realization of one’s individual soul. The relationship between the individual and society and its organic institutions, is a functional one, a notion of function premised upon that which sets mankind above the beasts, the cognitive power of reason, mankind’s mastery of itself and the universe, through ideas such as those of science and Classical artist composition. It is through those cognitive relations, and in no other way, that the individual is linked to the past and future, even more than present, of all human existence.

focus upon the key issue of those mid-1980s SDI policy-fights. What the advocates of “kinetic energy systems,” such as the Heritage Foundation’s late Lt.-Gen. (ret.) Daniel P. Graham, never comprehended about SDI, then, is the nature of the scientific principle governing the shifting technological margin of advantage, between the strategic offense and strategic defense, during the recent five and a half centuries. That principle of technology is crucial. Without addressing it, all attempts to formulate an SDI, or SDI-like policy, are amateurish folly.

Back then, during the Reagan administration days, three technological considerations were at the heart of the strategic defense program.

For the first of these three principles, the rule of thumb was, that we must not only employ “new physical principles,” beyond anything employed in deployment of thermonuclear ballistic missiles. We must select those new physical principles which will enable us, asymptotically, to destroy a dollar’s investment in strategic offense, with ten cents’ investment in strategic defense.

The second rule of thumb, was that we must develop that new family of technologies in such a way, that the economy which produces such strategic defense, is richer, per capita, as a result of investing in such a defense, than it would have been, had it not invested. The second technological consideration, was termed the “economic spillover” benefit; the model of comparative reference, was provided by a 1976 Chase Econometrics study. Chase had reported that the U.S. national economy received an estimated \$14 of increased income for each dollar spent on the Kennedy “crash” aerospace program. The development of SDI must be based upon such a “crash

program” model.

The third rule of thumb, was the principle of discounting for an accelerating process of *technological attrition*: that accelerating the rate of technological progress in a “crash program” mode, would also accelerate the rate at which new technologies of this year became relatively obsolete five years or so ahead. *No one choice of technology would provide a durable strategic defense; a series of successively more advanced technologies, was required.* The SDI policy which this writer proposed in 1982, anticipated the completion of four successive technological phases of enhancement during the two decades to follow (were a “crash program” set into motion then): Mark I, Mark II, Mark III, Mark IV. After the introduction of an operating Mark I phase, the tax-revenue growth from “spillover” of new technologies into the national economy, should more than cover the costs of generating Marks II, III, and IV.

To portray the mathematical-physics image of such a three-fold economic-technological requirement, requires emphasis on the combined contributions of two leading Nineteenth-Century scientists, Bernhard Riemann and Georg Cantor. The crucial conception is that of Riemann’s famous, 1854 habilitation dissertation.¹⁷ To satisfy the need to generalize the implications of Riemann’s relativistic notion of those changes in Gaussian curvature of physical space-time, produced by technological attrition, we should adopt the notion of mathematical (transfinite) *cardinality* supplied by Cantor.¹⁸ Although this writer has explicated this use of the related notions of Gaussian curvature and cardinality in numerous published locations, it is of such crucial importance to our subject-matter, that a restatement of the relevant definitions must be supplied here.

Riemann’s habilitation dissertation is crucial for supplying the science of physical-economy its uniquely rational definition of the origins of both *increases in productivity* and the production of *profit*. That is to emphasize, that the “ecological” distinction of principle, between mankind and the beasts, is reflected in the increase of, combined: the potential relative population-density of our species, a correlated trend of improvements in demographic characteristics of households and persons, and, an improved quality of individual and family

17. op. cit.

18. In speaking of “technological attrition” within the domain of such changes in Gaussian curvature of physical space-time, we are referencing both physical-economic space-time, and physical space-time as otherwise defined. Most relevant references in Cantor’s writings are found in *Georg Cantor: Gesammelte Abhandlungen mathematischen und philosophischen Inhalts*, Ernst Zermelo, ed., (Berlin: Julius Springer, 1932, 1980); the most relevant titles are his *Grundlagen einer allgemeinen Mannigfaltigkeitslehre* (1882-1883); *Mitteilungen zur Lehre vom Transfiniten* (1887-1888); and *Beiträge zur Begründung der transfiniten Mengenlehre* (1895-1897). A 1975 *Campaigner* translation, by Uwe Henke, of the *Grundlagen*, was produced in a now out-of-print edition. The standard English translation of the *Beiträge*, by Cambridge’s Philip Jourdain (*Contributions to the Founding of the Theory of Transfinite Numbers*) exists, although caution is suggested in referencing Jourdain’s Introduction.

life. This improved performance, reflects the efficiency of the creative powers of cognition, unique to the individual member of our species, through which valid original discoveries of natural principle are generated by one person, and those discoveries replicated in the minds of others. The willful promotion of this process, is the sole source of continual increase in the per-capita productive powers of labor, and in the generation of a margin of “profit,” as the “free energy” in excess of the physical-economic “energy of the system” of that entire physical-economic process considered as a functional unity.

This characteristic distinction of the human species is also key for the generalized comprehension of the historical development of mathematics and mathematical physics. Every valid, axiomatic-revolutionary discovery of a physical principle, generates a characteristic paradox, and a corresponding formal discontinuity, within any formal mathematics.¹⁹ That paradox is key for understanding the related matters, of both the special importance of Riemann’s initial representation of general relativity, and Cantor’s related notion of the implicit enumerability of densities of mathematical discontinuities.²⁰ These considerations are key for mastering the problems of representing the three cited rules of thumb relevant to an SDI policy.

The mathematics associated with a formal-deductive version of Euclidean geometry, or the algebraic mathematics derived from that geometric model, is the prototype for what we term here a “theorem-lattice.” It is the fallacy represented by any such formal mathematics, or mathematical physics, which is the pivotal subject of Riemann’s 1854 habilitation dissertation. Riemann’s focus upon the physical fallacies of Aristotelean and empiricist theorem-lattices, there, is indispensable for conceptualizing, among other things, those measurable functions underlying technological progress and physical-economic profit.

As the case of formal Euclidean geometry illustrates the indicated paradox, any set of mutually consistent theorems, depends implicitly upon the adoption of an underlying set of interdependent axioms, postulates, and definitions. In its first approximation, the Classical Greek term *hypothesis* signifies nothing other than such an underlying set of assumptions. Thus, the set of axioms, postulates, and definitions of any logical system, such as a formalist Euclidean geometry, or generally accepted classroom algebra, constitute the principal *hypothesis* from which all newtonian physics was derived. The kernel of that hypothesis, is the arbitrary, and false assumption, that space is extended, without bounds, and in perfect continuity, in three mutually independent

19. This paradox is genetically equivalent to the “ontological paradox” of Plato’s *Parmenides*, the dialogue which serves, implicitly, as a kind of foreword for all of the late Plato dialogues. For an early modern treatment of this characteristic paradox of any formal mathematics, or formalistic mathematical physics, see G. Leibniz’s *Monadology*.

20. op. cit.

senses of direction, and time in one, additional such sense of direction.²¹

The problem which Riemann addressed in 1854, had been posed by the intersection of two developments of the Seventeenth Century: Christiaan Huygens' study of isochronicity in the gravitational field, and the implications, as developed by Huygens, Jean Bernoulli, and G. Leibniz, of Ole Roemer's astronomically measured estimate for the rate associated with the notion of a retarded potential in the propagation of light. Bernoulli's experimental demonstration, that the generalized refraction of light and isochronicity coincided, is the reference-point for the emergence of a notion of generalized physical relativity.

The starting-point for Riemann's 1854 dissertation, is that Descartes' notion of space-time is false to reality: that, physics is not the movement and interaction of bodies within Euclidean space-time. Isochronicity and the relative speed of light, for example, involve discoveries of measurably validated physical principles, which are associated with that notion of extension which we attribute to independent senses of direction in space and time. These discovered principles function, thus, as "dimensions," in respect to the measurement of a functional principle of extension, and, the fact that such extension is of the form of an "independent dimension," in relation to similarly defined notions of space-time or other "dimensions."

If we, then, attempt to apply the so-called "Pythagorean" metric to the physical space-time composed of all of these participating "dimensions," as it were applied to a hypothetically Euclidean, or Cartesian space-time, interesting results appear. The physical space-time of "n dimensions" behaves as one might expect a space-time to do; however, the physical space-time measurements obtained experimentally, do accord with the "n dimension" model, but not with a Cartesian or Newtonian type. Thus, for reasons sufficiently indicated by Riemann, it is said, that the measurable characteristic difference (e.g., neo-Pythagorean metric) between a physical space-time of "n dimensions," and one of "n+1 dimensions," fits the notion of a generalized Gaussian curvature of physical space-time.

The burden of our definitions here, is that this conception supplies the basis for speaking, more or less fluently, of one physics as being more "powerful" than another, or of one mathematical-physics as representing a higher "cardinality,"

21. For example, when Newton devotee Leonhard Euler deluded himself, in writing, from Berlin, his 1761 *Letters to a German Princess*, that he had discovered a proof with which to refute Leibniz's *Monadology*, he overlooked the simple fact, that his proof depended absolutely upon employing a geometry which pre-assumed axiomatically, precisely what Euler purported to prove by means of that geometry!—that assumption of perfectly continuous extension, the which is axiomatically intrinsic to the hypothesis of a formal Euclidean geometry. Euler's additional blunder, was to assume that what might be said for a formal mathematics, is therefore true for physics. Riemann's habilitation dissertation, is implicitly a devastating refutation of Euler's twofold blunder.

in Cantor's sense, than another.²² These are the notions required for intelligent consideration of the three SDI rules of thumb identified above.

In summary, a durable qualitative advantage of the defense over the offense, requires a higher physical geometry for the defense, than the offense: a margin of technological advantage of one, or more, discovered, valid physical principles. For example, among the requirements is, obviously, that the principle employed by the strategic defense relies upon a principle enabling approximately an order of magnitude more "energy-flux density" applied, functionally, to the destruction of the missile or warhead, than that "energy-flux density" embodied in deploying a lumbering thermonuclear missile.

The very nature of the physics involved, signifies that the cost of producing and deploying sufficient high-speed interceptor rockets to destroy an average thermonuclear missile or warhead, must put the costs of strategic defense, by such modes, way above the costs of the relevant strategic offense. Only when a cost attributed to the effect of one such warhead's reaching its target, is factored, as a potential cost-saving, into the deployment of the interceptor, does an economic rationale for such an interceptor system come into view.

However, even then, the strategic defense loses. In an arms race, with defense on one side, and offense on the other, the relatively cheaper offense can supersaturate the defense much more rapidly, and extensively, than the more costly defense might attempt to match the threatened assault. If *effective* defenses are developed on the basis of laser and particle-beam technologies, for example, the factors of speed, energy-flux density, and, ultimately, cost, are on the side of the strategic defense.

Then, shift the picture, to the second rule of thumb: away from the notion of societies with relatively fixed military-allocable incomes. Consider the effect of military expenditures upon the total and per-capita, physical-economic income of the society. Consider the case, that the more we spend upon military expenditures, the greater the available per-capita income of the society becomes. The latter is the model represented by the Kennedy "crash" aerospace program of the 1960s. The latter case, the "technology spillover" model, succeeds only if the military research and development is producing laboratory proof-of-principle models, which can

22. i.e., greater density of discontinuities per interval of characteristic action. Each change in any among the axioms, postulates, and definitions of a physical space-time, defines a formally absolute discontinuity, separating the physical space-time of the old hypothesis, from that of the new. In comparing the theorem-lattices associated with the respective hypotheses, one can never reach the second theorem-lattice from the first, and can view the first, from the vantage-point of the second, only as a degenerate case of the second. The fact that there is a difference of physical principle involved, is measurable in terms of the difference in metrical characteristics ("curvature") between the two physical geometries. Thus, the accumulation of valid discoveries of principle, embedded in human knowledge to date, represents a potential expressed in terms of density of discontinuities.

serve as the basis for introducing more advanced and powerful technologies into the design of machine-tools and products. Contrary to the Heritage Foundation approach: No sustainable rate of expandable economic benefit can be obtained from use of military designs based upon classified-secret, "off the shelf" technologies.

This brings us to the third rule of thumb: technological attrition. In any anticipation of possibility for serious conflict, the impulse is to match every advance in the defense with enhancement of the offense, and vice versa. The higher the rate of development, the higher the rate of generalized technological attrition. This can not be sustained without a "science-driver crash program," of the type of the Manhattan Project or the most intense phases of aerospace development, as during the 1960s. Such a military program could be sustained economically, only if the technology-driven rate of increase of productive powers of labor is being pushed by directed "spillovers" of new technologies, at high rates, out of the machine-tool and related channels of the military programs.

Unless one is prepared to employ a highly dirigistic model of interlinked monetary, credit, and physical-economic policies, for both the public and private sectors of the national economy, such a program were virtually impossible to sustain. A sophistry of exaggeration was used, then, by some devotees of Adam Smith, to the effect, that the only conditions under which such a model could be sustained, would be a "war-economy." Freeing the subject matter of any concession to such sophist's criticism: In fact, such a model were likely to be adopted, either when a nation is faced with a perceived threat of warfare, or, under conditions of mobilization for recovery from an economic depression, or, a combination of both conditions (as the U.S.A. during 1939-1943). We are confronted, globally, with the second condition today, hopefully not the third.

During 1985 and early 1986, this writer introduced the proposal, that the SDI ought to be subsumed, at least in significant degree, under a long-range space program. A commitment to the establishment of a science-city colony on Mars, after forty years of preparatory stages, was the specific proposal made. The net effect of such a space-oriented program, would be the immediate benefits to the Earth's economy, of every technology developed as a prerequisite for each step of preparation for the Mars colonization program.

Today, the need for such a space program has been increased by the disastrous trends in economy over the recent ten years. The mustering of the shrinking capabilities for such a program, around the world as a whole today, is desperately wanted, to create that fountain of technological progress, without whose spillover, we shall not be capable of meeting the mounting accumulation of economic crises around the world.

With the foregoing considerations in view, President Clinton's observations on the relative technological advantage of future SDI commitments, over the Republicans' proposals, were plainly defensible ones, much more to the point

than Clinton's critics have been able to recognize, thus far. Under present global circumstances, the optimal approach to strategic ballistic missile defense, is *not* a compartmentalized program of military SDI research, development, and deployment. We must not, certainly, waste money on the kinds of SDI projects formerly favored by the Heritage Foundation and its factional allies. What we require, is the kind of "crash program" which will satisfy all among those three classes of requirements we have identified above.

Not only would every required feature of a future SDI program best be produced as a by-product of a forty-year crash-program commitment to preparing the establishment of a science-city colony on Mars, no effective SDI package could be developed as well, or as quickly, except as a by-product of such a space program.

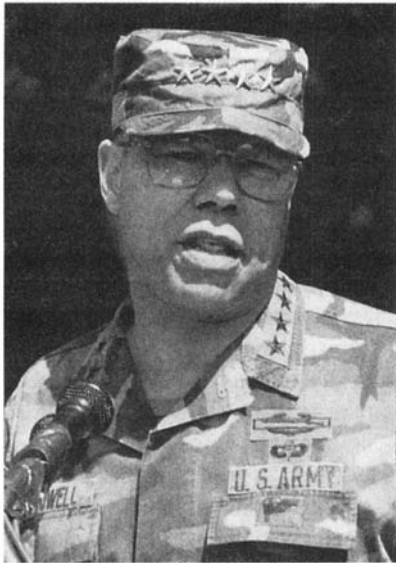
At this real-time historical juncture, we must distinguish between a *policy* of affording advantage to the strategic defense, over the strategic offense, and a *purchase* of a specific array of hardware for meeting such a strategic defense requirement. We must be committed to strategic defense, as we were not under Henry A. Kissinger's Pugwash-designed SALT and ABM treaties; we must be committed to developing the kind of research and development program which solves the problems of military designs implicit in high rates of technological attrition. Presently, the latter is best satisfied as an envisaged by-product of international cooperation in a Mars-colonization-steered program of exploration and colonization beyond Earth orbit. That space program builds the civilian-economy "shopping center" from which the military requisitions the future specific technologies of required strategic defense technologies, whenever that may be required.

In the meantime, the "science driver" space program meets the requirements of rules of thumb two and three.

4. Strategic defense within grand strategy

A deadly nightmare has gripped U.S. strategic thinking, since about the same time, during the 1960s, when the invasion of sociology displaced the rationality of science at West Point Military Academy.²³ The lunatic feature of that obses-

23. To the writer's personal knowledge, the first appearance of this lunacy occurred at the Research Laboratory of Electronics (RLE), at Massachusetts Institute of Technology (MIT), during the post-war 1940s, under the joint sponsorship of the RAND Corporation and the, related, spin-off of the U.S. Air Force, out of the old U.S. Army Air Corps. The relevant activity of that period was centered in the MIT center earlier established by the fascistic psychologist Dr. Kurt Lewin, otherwise known for his kindred institution at Ann Arbor, Michigan, and his role in establishing the National Training Laboratories and its sundry project-offshoots in education and in the synthesis of "new religions." The present writer came on the track of this Air Force and related MIT activity during the late 1940s, as part of his investigation of the spread of the cult-doctrines known as "information theory" and "systems analysis." The first ventures into the domain of "information-theoretical group-think," were conducted in conjunction with the "Cybernetics" pro-



Among the “sirs” in the U.S. defense establishment, who have received knighthoods from Britain’s Queen Elizabeth II (left to right): Sir Colin Powell, Knight Commander of the Order of the Bath; Sir Caspar Weinberger, Knight Grand Cross of the British Empire; and Sir Henry Kissinger, Honorary Knight Commander of the Order of St. Michael and St. George.

sion, is the misshaping of the mind of most putative defense specialists by misanthrope Thomas Hobbes’ definition of “human nature.” The outcome of that perversion, is a recurring nightmare. The characteristic of this recurring nightmare in policy-shaping, is a derangement in what passes for official and other U.S. strategic thinking, a dysfunctional state of mind²⁴ which is fairly described as a sports fan’s fantasy-

gram of one of the leading weirdo foundations of that epoch, Frank Fremont-Smith’s Josiah Macy, Jr. Foundation of New York City. One of the relevant programs done at MIT was human experimentation into behavior of “task-oriented problem-solving groups,” led by MIT’s Professor Alex Bavelas. This program was designed through the circles of the Josiah Macy, Jr. Foundation, and funded in the interest of the Air Force and RAND. Key figures participating in the broader design of this effort included RLE’s own Warren S. McCulloch and Walter Pitts, and notable New Age kooks including Gregory Bateson and his sometime wife Margaret Mead of the eugenics center at New York’s singularly unnatural American Museum of Natural History. Significant influence was supplied from the work of a close follower of Norbert Wiener, Bertrand Russell devotee John v. Neumann. Neumann’s work along the lines of his 1948 submission to the Hixon Symposium, *Cerebral Mechanisms in Behavior*, is relevant to developments at MIT during the late 1940s and early 1950s. Neumann’s thinking along these lines is also documented in his posthumously published Yale lectures on *The Computer and the Brain*. Later MIT-RLE work in the same direction came out of collaboration between Karl Korsch follower Noam Chomsky and MIT’s resident “Dr. Frankenstein,” Marvin Minsky (of “artificial intelligence” notoriety). The Allen Dulles-co-sponsored MK-Ultra Project (and its gift of the drug epidemic to the U.S.A., spun off from the LSD projects of the London Tavistock center) of Aldous Huxley, Gregory Bateson, Timothy Leary, et al., was a by-product of the same “Dr. Jekylls” involved in designing Air Force and other command-decision-by-committee “sensitivity groups,” of U.S. military history’s 1960s, 1970s, 1980s, and 1990s to date.

24. *Dysfunctional state of mind*: a denial of functional reality. The type of *fallacy of composition* ordained by William of Ockham and his admirers,

dream-world, functioning as substitute for reality.

The outcome of the blend of sociology and “systems analysis,” is a view of strategy which is recognizable as a New Age version of “cowboys and Indians,” played chiefly with video-games technology, and, the odd bit of spoon-bending added in for spice. In that New Age nightmare arcade, mis-named “strategy,” the professional’s hands, acting on the real world, are controlled by a mind which is trapped in the virtual reality of Hobbesian, utopian fantasies. The results of that schizophrenic practice, were likely to bring about, within the domain of reality, a living nightmare as deadly to the player as to the “sand box” upon which he perpetrates his tricks. Indeed, precisely that nightmarish result, so accomplished, is the “New Dark Age” into which the presently governing mass-news-media and other circles of this entire planet appear about to plunge this planet, by no later than the end of the present decade—that is to say, all among us who survive that long: given the present economic, epidemic disease, and budgetary trends.

Above, we reviewed the technological implications of a strategic ballistic missile defense. Now, let us compress all

such as Paolo Sarpi, Francis Bacon, Robert Fludd, Thomas Hobbes, and John Locke, is an example of such a dysfunctional state of mind. In mathematics, such a fallacy of composition is typified by omitting consideration of essential, relevant principles of physics (e.g., what Riemann defines as “dimensions” of an n-dimensional physical-space-time manifold). In the latter case, the lack of correspondence to an otherwise, functionally well-defined reality, is identified as the result of a degenerate state of mind (i.e., the employment of a degenerate form of physical space-time manifold as model for reality). In this case, “dysfunctional state of mind” is employed to that well-defined effect.

functional notions of military means, as such, into a single, relatively small object; let us call that object “weapon,” signifying “preparation for, and conduct of warfare.” Let us shift our focus to the living organism whose hand holds that weapon, the organism called “society,” signifying “the making of history.” Let us, thus, locate “strategy” as a characteristic of that living organism, and the weapon as but a tool which serves that organism’s interest. “Strategy” for today is then defined as a conception not-inconsistent with what Elliott Roosevelt, in fresh recollection, described, in 1946, as his father’s, President Franklin Roosevelt’s, strategy for the post-war world. Adopt that Roosevelt strategy as the “grand strategy” of reference to be implemented. For that case, “the weapon” is a means which must be used, and developed, only to further the purpose of that strategy, and must never be used in a manner which nullifies, or corrodes the realization of that purpose.

Thus, the idea of a purely military strategy, is exposed as a utopian fantasy, a fool’s mission.

Since the excuse presented for President Truman’s firing of General MacArthur, the popular myth is, that “the civilian command must overrule the military.” That is a sophistry; those words were a crude, press-agent’s fallacy of composition, designed for the ears of the gaping-mouthed credulous. The truth is, that it is the “non-military” context, such as that which Elliott Roosevelt describes as his father’s strategy for the *post-war* world, which must define the development and employment of the military institution and its mission. That “weapon” is an institution and a mission implicit within the *Preamble* of our original Federal *Constitution*. The untruthfulness of the MacArthur-firing myth, is that President Truman’s self-serving sophistry evades the reality, that should the civilian command issue orders to the military, which violate the relevant “grand strategic” imperative, the civilian command is constitutionally impeachable for “high crimes and misdemeanors,” on that account.

President Truman, under the mind-bending influence of London’s asset, the Harriman cabal controlling Truman’s administration from the inside, changed the rules of engagement of the U.S. military arm, and did this in the interest of a consideration directly contrary to our Constitution, by action in the interest of development of the ability of the United Nations Organization, step-wise, to assume the powers of world government. What Truman introduced, however unwitting of this implication he might have been, was another crucial step toward destroying the sovereignty of our republic. For that Truman was accountable, to the relevant constitutional agency; the trouble was, that constitutional agency was asleep at the switch. In the toll of the 1960s Indo-China bloodbath, and otherwise, we have paid dearly for failing to impeach Truman’s firing of MacArthur.

Now, examine this, the overriding authority of “grand strategy,” such as that implicitly outlined in Elliott Roosevelt’s book, in the terms of reference employed to define a proper SDI policy. Examine this in reference to the histori-

cally determined mission permeating the origins of the U.S.A.

Mankind, as *Genesis* 1:26-30, and Plato’s and the *New Testament*’s notion of *agapē* define mankind, is the purpose and measure of our strategy. Summarily: Man is made in the image of God, a claim, by *Genesis*, for which we possess scientifically verifiable, conclusive proof, even had those verses from *Genesis* never been uttered. We know, scientifically, that we are in the image of God, by virtue of unique endowment of the members of our species with that cognitive potential for valid, axiomatic-revolutionary discoveries in natural science and Classical art-forms, by means of which the potential relative population-density of the species is increased, again, and again. Thus, man is given implicit “dominion” over the universe.

The relevant faculty, by means of which that dominion is achieved, is the capacity of the developed individual mind, within its own sovereign precincts, for generating, replicated or original, successive such axiomatic-revolutionary discoveries of scientific and Classical-artistic principle, the which are the sole source of the increase of man’s dominion in the universe. The empirical proof of this potency, is the increase of the potential relative population-density of civilized humanity, through the fostering and employment of combined scientific and Classical-artistic modes of progress in efficient ideas. It is that sovereign cognitive potential of every individual human being, which is referenced, when we speak of man as in the image of God, with dominion over all else in the universe.

That understanding of man, is not optional. It is not the just liberty of one culture to believe this, and another not. Cultures which do not accept this scientific truth, on which all decent human existence depends, are morally and otherwise inferior to those cultures which accept this individual’s authority and responsibility for contributing to enhancing the condition of our species as a whole. As the relevant facts, respecting this individual potential, demonstrate, there is but one human race, so, the best of all cultures expresses an approximation of a single, global culture, on which all human progress converges.

The very notion of a distinction between truth and falsehood, or, justice and injustice, depends upon acceptance of those notions of but a single human race, and a corresponding variability of relative truthfulness or untruthfulness, relative to fostering of rates of increase of potential relative population-density, among the characteristic beliefs and practices of different national and regional sub-cultures. The notions of truth and justice depend upon a single, universal standard, by which the differentiable qualities of truthfulness and appropriateness of the contributions of one sub-culture to world-culture may be assessed. Under such a standard, one may assess the truthfulness of each and all cultures’ adopted opinion *on any universal matter*, and can also recognize the legitimacy of certain *differentia specifica* of some cultures, as appropriate to the historically determined reality in which the members of that culture must approach the realization of truth

and justice. The two qualities, truth respecting universals, and appropriateness (or, inappropriateness) of cultural differences, are not at odds with one another intrinsically, any more than reaching a common destination, the one by land, the other by sea, are at odds in respect to the means available to each. Truth is conceived, thus, as an ecumenical principle of knowledge.

However, it is not sufficient to realize so-called “objective,” e.g., formal, notions of truth and justice. From Plato, civilized mankind has had a cognizable insight into a special quality of emotional correlative for the process of achieving truth and justice. This emotional correlate of the act of generating, or replicating valid, axiomatic-revolutionary discoveries of principle in science and Classical art-forms, is termed *agapē* by Plato. Plato identifies this, in an exemplary way, as a passion intrinsic to realizing justice, and truth.

In all civilized statecraft, Plato’s adopted notion of *agapē*, is crucial in defining the appropriate condition of the individual and the individual’s relations to all mankind. The adoption of Plato’s notion of *agapē*, by the Christian *New Testament*, as in Paul’s celebrated *I Corinthians* 13, is at the center of the efficient contributions of later European civilization to the development of the social and political institutions of mankind. It is from these twin sources, of Greece and the Israel of the Christian Apostles, that every good, the which has been a unique contribution to mankind by western European civilization, has been accomplished. From Classical Greece, especially the faction of Solon and Plato, Europe acquired science and civilization; from such exemplary writings as *Genesis* 1 and *I Corinthians* 13, we derived a realization of Plato’s desire for a world governed by *agapē*.

In this sense, with these principled qualifications, mankind is the purpose and the measure of man’s knowledgeable practice in the universe. It is from this consideration, that all competent notions of the “grand strategy” of these United States are derived.

That strategy is history, properly defined. The object of history, is to produce, sustain, and develop forms of society which cohere functionally with that strategy. The principal functional conditions which must be satisfied, are three: universal education, universal opportunity to participate in the production and benefits of scientific, technological, and cultural progress, and the right to participate cognitively in the re-creation and development of those ideas upon which the nation’s efficient self-government of the progress of the human condition, continues to rely.

History to date, has been the struggle to bring the universalized state of knowledge, of practice, and individual participation, within each society, out of the barbaric and other political conditions in which the great majority of mankind was subjected to a condition of life describable as the fate of “human cattle.” Universality of participation in cognitive education, in a technology of practice consistent with universal progress in knowledge, and of efficient participation, by every individual, in society, as a true citizen, has been the minimally

required condition toward which history, until now, has moved.

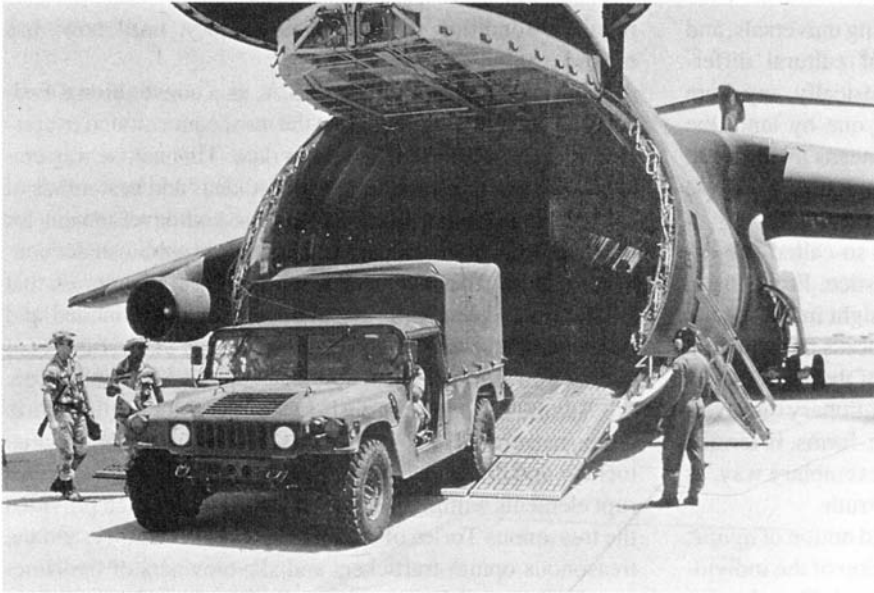
The establishment of the U.S.A. as a constitutional Federal Republic of 1789, has been the most concentrated expression of that historical mission, to date. This nation was created, with the sponsorship of the best ideas and best minds of Europe, to establish a place of refuge and development for the institution of the modern nation-state republic, under conditions, during the Seventeenth and Eighteenth Centuries, that the forces aligned with the evil institutions of landed and financier aristocracy, had placed in jeopardy the possibility of securing such sovereign nation-state republics within Europe.

Admittedly, the English-speaking colonies in North America were polluted with imported elements of landed aristocratic and financier-oligarchical practices. It was those corrupt elements within the colonial population, which provided the treasonous Tories of the late Eighteenth Century, and the treasonous opium-traffickers and slave-owners of the Nineteenth Century.²⁵ Despite that pollution, from the beginning of the colonization, the pre-1689 history of the Massachusetts Bay Colony, and the similar early history of the Commonwealth of Pennsylvania, exemplify the struggle for universal education, for a non-oligarchical form of monetary-credit and economic system, and for scientific and technological progress in infrastructure, agriculture, and manufactures.

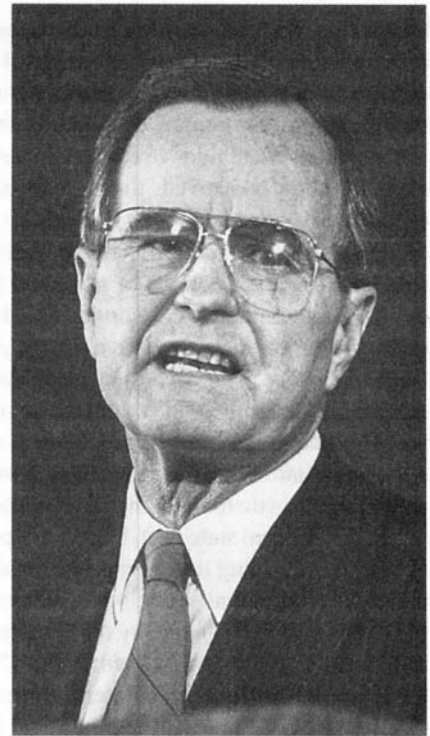
These principles of universal public education, universalized scientific and technological progress, public development of basic economic infrastructure, are the correlates of a society in which all adult persons are full citizens, in which no class distinctions are permitted, in which only a single race, the human race, is recognized, and in which the nation and its state are the property of all citizens: the departed, the living, and posterity alike.²⁶ These are characteristic distinctions of the modern nation-state republic, which set us into absolute opposition to those oligarchical forms of society, the which are derived from the Babylonian root, which had dominated, and polluted European civilization, until the be-

25. On the role of the oligarchical political currents within Eighteenth- and Nineteenth-Century North America, see H. Graham Lowry, *How the Nation Was Won*, Vol. I (Washington, D.C.: EIR, 1987); and Anton Chaitkin, *Treason in America*, 2nd ed. (New York: New Benjamin Franklin House, 1985); and, The Editors of EIR, *Dope, Inc.* (Washington, D.C.: EIR, 1992).

26. All three, the departed, living, and posterity, have equal weight of rights in claims to control the present policy of the republic. This authority can not be based on mere opinion, since policy must address particular matters unknown to departed and posterity alike. Only matters of principle can be known with equal force to all three; thus, Justice Antonin Scalia’s notion of radical democracy, is a fraud. In real history, as Tom Paine warned, in defense of the principle of our Constitution, such radical democracy is as great an evil as any tyrannical monarch. Such “democracy,” is typified by those Paris mobs purchased and deployed at the whim of the King’s treasonous cousin, the Duke of Orleans. Thus, contrary to Scalia’s wild-eyed defense of (among other things) judicial murder, our forefathers consulted the known history of man, since Classical Greece, to adduce those constitutional principles which would assuredly serve posterity as history had bequeathed knowledge of their efficacy to ourselves.



U.S. Army and Air Force personnel unload military vehicles from a C-5 plane in Saudi Arabia, during George Bush's Operation Desert Shield in 1990. The war against Iraq was a grotesque example of that misnamed "strategy," in which, as LaRouche writes, "the professional's hands, acting on the real world, are controlled by a mind which is trapped in the virtual reality of Hobbesian, utopian fantasies." Insert: President Bush.



ginning of the modern nation-state under France's King Louis XI.

If we discount the role of our nation's treasonous social strata, the additional, special importance of the United States has been: During times when all of Europe continued to be polluted by relics of the Babylonian oligarchical tradition, as the Anglo-Dutch oligarchy typifies such continuing pollution today, the United States has been able to maintain contemptuousness toward all pretenses of titled nobility, toward landed or financier oligarchy, and to similar notions of race and class.²⁷ This admittedly tainted, but distinctive degree of achievement, made us, by process of elimination, the torch-bearer of freedom for all mankind, during most of the decades since the beginning of our struggle for freedom, against the "Brutish" monarchy and Holy Alliance alike.

So considered, history warns us, that the great danger to our republic, and its citizens, comes from those relics of oligarchism which still today, pollute the continent of Europe, and elsewhere. This pollution exists as a threat to us, chiefly to the degree the Anglo-Dutch financier-oligarchy exerts a strong political, financial, and cultural influence upon nations, including our own.²⁸ This planet will never be safe for our

republic, for our citizens, until that evil relic of Babylon is removed, in every continent, from the position in which it might continue to exert overreaching power, or resume such power.

We do not adopt the prerogative of making war against these adversaries at whim. We prefer that the necessary end be accomplished by other means; but, we do not desire that end less, merely because we lack the inclination to realize that result by the imposed force of aggressive warfare.

Thus, the elementary basis for the strategy of the United States is to ensure the safety, within this planet's life as a whole, for the continued existence of the U.S.A. as a perfectly sovereign nation-state republic committed to those (indicated) historical missions for which it was founded. This strategy will be efficient, only if it is premised on a commitment, not only to defend that U.S.A. and its institutions, but premised upon a comprehension of the principles which underlie our Eighteenth-Century forefathers' wise choice of the institutions of national sovereignty, and universal citizenship of our adult population.

The means by which we seek to accomplish our strategic ends, are those implicit in Elliott Roosevelt's referenced book. Our preferred means are, first, to employ the adversaries' induced fear of our resolve and potential power, to dissuade them from making war against us, and, also, to build a concert of political power among nations which share our strategic objective. Our course of action is, negatively, to rid this planet of those institutions upon which the continued power of the enemy depends. Positively, we act to promote the insurgency of *agapē*, through fostering those activities

27. Since Queen Elizabeth's misbekenighting of such churls as Sir George Bush, Sir Colin Powell, Sir Henry Kissinger, Sir Brent Scowcroft, and so on, a man's nose were in mortal danger should he, within a public place, address a patriotic citizen by the title "Sir." Over the prostrate form of the ill-advised, one might hear the voice of the assailant: "I ain't no damned traitor!"

28. See Jeffrey Steinberg, et al., "The Sun Never Sets on the New British Empire," *EIR*, May 24, 1996.

which awaken this insurgency from those places where it might be slumbering. Those notions, with Franklin Roosevelt's post-war outlook in the corner of his eye, were the governing considerations in this writer's 1977-1982 devising of the referenced strategic ballistic missile defense policy. These same notions, under the altered circumstances of a later decade, are the proper axioms underlying a strategic defense policy for today.

Thus, the higher strategy, for which military means and institutions must exist only as servants, is that type of "grand strategy" illustrated by President Roosevelt's post-war vision. The weapon of this grand strategy, is not the power to kill today's chosen potential national adversary, but the evocation of the power to ennoble him, and, also, ourselves, that he might be a prospective adversary no longer. In terms of the monotheistic tradition of European civilization, grand strategy relies chiefly not upon such oligarchical conceits as crusades and inquisitions, but upon the weapons of evangelization, atonement, and redemption; in the word of Plato and the Apostle Paul, it relies chiefly upon the power of *agapē*, the power of the impulse associated with creative reason.

In short: Today, even the imps of Hell may shriek, chiefly in the British Commonwealth's special interest, of "human rights," from the pulpits of world government's non-governmental organizations (NGOs).²⁹ There will be no justice without a passion for truth, and no passion for either, without *agapē* as Plato defines it. Without the existence, and persistence of an efficient passion for justice and truth, all talk of "human rights" is the ineffable babbling of a foolish puppet in a British oligarchical intelligence service's scripting of some *Grand Guignol*.

The central subject-matter of "grand strategy," must be, therefore: *How might the power of the state be employed, to foster the force of agapē?* Some examples, taken somewhat out of chronological order, illustrate this point.

During April 1975, the present writer travelled to Baghdad and elsewhere, to pose consideration of the fact that Israel and its Arab neighbors shared a vital common interest in the prospect for the physical-economic development of the Middle East region as a whole. Without such a vital quality of common interest, the writer proposed, all talk of purely "political solutions" was impotent prattle. A broad river of rage, much wider than Jordan, had been unleashed throughout the region, by the smirking British Raj. This had stirred up violent, deep-rooted, base passions for revenge, a river of rage which could not be bridged by anything so trivial, so impotent, as a typical diplomat's mewling proposal of "political solutions." Only a powerful interest, strong enough to touch commonly the deepest passions respecting posterity, among both Arab and Israeli, could provide the motive for durable peace throughout the region. Then, during April 1975, and since, the best Arab and Israeli consciences concurred in that esti-

mate; the struggle for such a just peace continues, with continued deadly opposition, notably from London, London's Sir Henry A. Kissinger, London's asset Ariel Sharon, London's Arab assets, and the World Bank.

This approach to the Middle East crisis, had been refined in the U.S. experience of 1964-1972, in Indo-China. While President Franklin Roosevelt had lived, Vietnam patriot Ho Chi Minh had been a collaborator of the U.S.A., and of the U.S.'s OSS organization, in the Southeast Asia region. With Roosevelt's death, President Truman's administration betrayed our Vietnam allies to London's French imperialist stooges. That betrayal of our ally, compounded by many new U.S. diplomatic atrocities, had turned the ally into an adversary: Betrayed Ho Chi Minh had led his forces into the camp of the so-called "Soviet bloc."

That history of the Anglophile U.S. government's betrayal of a war-time ally, had been key to U.S. policy toward Indo-China, during the Eisenhower 1950s. After the establishment of the Russell-Szilard doctrine, as "détente," in the wake of the 1962 "Cuba Missiles Crisis," the avowed higher apes (and horse-appendages) of the British monarchy, and their lackeys in Wall Street circles, had a new reason for launching a prolonged, no-win cabinet warfare in Southeast Asia. With "détente" fully emplaced, the doctrine of "strategic conflict managed below the threshold of nuclear conflict," was applied to Asia with full force. It was a purely British policy, with all the disgusting qualities inhering in that; it was "cabinet warfare," like the later, drug-funded, surrogate war in Afghanistan, or the Anglo-American orchestration of the prolonged, 1980s Iraq-Iran war, conducted for no leading purpose but to orchestrate the environment of Anglo-American diplomacy with Moscow and Beijing.

The writer knew, or otherwise correctly understood much of this at the relevant times. It was the legacy of imperial colonialism, in Asia and elsewhere, which must be addressed, and also the legacy of the Truman administration's betrayal of our war-time Vietnam ally. This writer had proposed, in various papers published during the interval 1967-1969, a Franklin Roosevelt-like, reconstruction-based, alternative approach to the issues of conflict in Southeast Asia. This, in turn, was an extension of his general proposal for ending the legacy of colonialism, through economic development cooperation. This policy of the 1960s and 1970s, was, in turn, an outgrowth of the strategic perspective which this writer had carried out of India, shortly after the close of World War II.

The function of the principles underlying the establishment of the European, perfectly sovereign nation-state republic, beginning the France of Louis XI, is to establish the existence of true, universal, adult citizenship, of all persons, without regard to supposed distinctions of race or class. This requires, the undermining, and progress toward dissolution of, the institutions of, and notions of special property right associated with the institutions of landed aristocracy and financial oligarchy. However, necessary as those measures are, they will not succeed by themselves. The successful develop-

29. Or, duped clergy from misguided religious institutions.

ment and continued existence of the sovereign nation-state republic, as an institution, depend, unconditionally, upon the fostering of *agapē* as the characteristic feature of the relationship between the individual person and the society as a whole. It also requires, the extension of this same principle to defining the relations within a globally extended community of sovereign nation-state republics. Thus, *agapē* is the principal element of hypothesis underlying all enterprises of that republican cause.

The writer's design of his 1982-1983 proposal for U.S.A.-Soviet collaboration, in shifting from the lunacy of the "MAD" (Mutual and Assured Destruction) dogma of Russell, Szilard, McNamara, Bundy, Kissinger, et al., to strategic ballistic missile defense, based upon what Kissinger's ABM diplomacy had labelled "new physical principles," was premised on the same considerations.

The relevant considerations posed in those exploratory chats with the Soviet representative were these: The United States (and also western continental Europe, and the developing sector generally, too) was being ruined by the mid-1960s shift into "post-industrial" utopianism; the Soviet economy, and the Comecon economies, too, were being ruined similarly. The writer imparted his belief that the Comecon sector then (early 1983) was approximately five years away from a potential economic disaster. Both superpowers, and others, needed desperately, a stimulant to technology-driven growth analogous to the economic impact of the Kennedy "crash program" for the manned Moon landing. Cooperation in development of the technologies needed for strategic ballistic missile defense, would provide that needed technological stimulant to all participating economies, if the policy of fostering "spillovers" into the civilian economy were adopted, too.

To shift from an adversarial, to a cooperative relationship, in those instances a prolonged, deeply embedded hostility has been previously inculcated, a powerful incentive of deepgoing self-interest must be provided. Outwardly, effective incentives for such purposes place the emphasis on physical-economic benefits (as distinct from relatively superficial, financial ones). The physical-economic benefits are important, but the materialists and empiricists greatly overrate such "incentives" as such. The essential thing is not the material reward, as such; the essential thing is the activation of *agapē*; the public identification of a needed material gain with the activation of the cognitive processes on which scientific and technological progress depends absolutely, is the key to achieving the desired *strategic effect*.

What today's typical think-tank circuit "strategist" seems incapable of grasping, with all of his prattling excursions through positivist varieties of statistics, sociology, and psychology, is the fact that the human individual's distinguishing characteristic is man as the sole being in creation whose existence depends upon *ideas*—ideas in the sense Plato defines ideas. It is through the efficient impact of more advanced ideas (e.g., valid, axiomatic-revolutionary discoveries of physical principle), that man increases his power over nature, per cap-

ita, that the productive powers of labor are increased, and so on. It is in the state of affairs in which society is motivated by the development of such efficient ideas, that the sense of *agapē* is relatively the strongest, and that the character of the individual, and the nation are at their relative best.

It is the mobilization of such approaches to national and global affairs, and the strategic defense of such approaches, which is the foundation of a well-defined strategy for U.S. national security. It is the employment of those forms of human activity which emphasize the stimulation of agapic passions, which foster the development and strengthening of the institutions of the sovereign nation-state republic. These strategic policies are therefore the proper yardstick by which the suitability of a proposed U.S. strategic doctrine is measured. Those were the principles underlying this writer's design for what was presented as "SDI."

Today, the circumstances differ. The Soviet Union is no more. The military power of Russia is a fraction of what Soviet potential had been. Nonetheless, the world today is gripped by a crisis which, in its own way, is more deadly than any manifest military threat-potential of the 1970s or 1980s. The threat is of an abrupt collapse into a prolonged "New Dark Age," echoing somewhat the "New Dark Age" of Europe's mid-Fourteenth Century, but more profound, probably more prolonged, and more devastating in its material effects for humanity as a whole.

Unless the present onrush of a global monetary-financial disintegration-process is defeated, that "New Dark Age" is the likely result, beginning before the close of this decade, and continuing over perhaps two generations or more. In that case, given the impact which the so-called "ecology" movement has achieved, since 1961,³⁰ to date, the likely outcome

30. The "mother" organization of the present, international "ecology movement," is the World Wildlife Fund/World Wide Fund for Nature, co-founded, in 1961, by Britain's Prince Philip and the Netherlands Nazi-SS veteran, Prince Bernhard. The so-called "Bilderberger" society, and the "1001 Club," typify related organizations. That organization is still the center of the movement to the present date. The Club of Rome, founded by Dr. Alexander King, Lord Solly Zuckermann, et al., typifies the secondary level of influential, usually pro-oligarchical social strata, deployed under the umbrella of the princes' 1961 initiative. Although the argument upon which the movement premises itself, is usually identified as "Malthusian," or "neo-Malthusian," the leading influence is the work of the Venetian monk Giammaria Ortes, the English translation of whose work (*Riflessioni sulla popolazione delle nazioni*, 1790) was parodied by Malthus, and, implicitly, also the work of an Ortes forerunner, Giovanni Botero (*Della ragion distato*, 1588). Contrary to scientifically competent arguments for maintaining and improving environments, already in currency prior to 1961, most of the famous cases of the "ecology movement" have been demonstrated to have been outright frauds and hoaxes: e.g., the banning of DDT, the "ozone hole" scare, "global warming," and so on. Excepting the specific frauds employed by these post-1960 "ecology" cults, there is nothing modern or original in the doctrine itself. Princes Philip and Bernhard have done little more than implement, in modern language, the relevant "zero growth" axioms of the Emperor Diocletian's *Codex*. Unfortunately, in the absence of a burst of investment in scientific and technological progress, the damage done to the world's economy by the recent quarter-century of "ecological" hoaxes and fanaticism, would be sufficient to accelerate greatly the rate of plunge into a "New Dark Age," under the indicated, threatened preconditions.

would be a collapse of world population-levels, from more than five billions, to even significantly less than one billion, over the course of two generations. In that case, infant mortalities would be catastrophic, and adult life-expectancies in the order of the worst regions of Sub-Sahara Africa today. Civilization, as we have employed the term during recent centuries, would be virtually extinct. Ultimately, the destruction, wrought by a brew which combines interacting, hyperbolic proliferation of famine, human and animal populations' epidemics and pandemics, pestilences, and sylvatic, would be as great as, or greater than, a general thermonuclear war.

During the onset of conditions of desperation so unleashed, all varieties of military threats, and others, are likely. Thus, the need for a present-day version of what was originally proposed as SDI, is greater than ever. However, given the reality of the situation, such a strategic defense policy must be seen and applied in an all-sided way, as a strategic defense of civilized culture, first, and, also, as a subsidiary function, a military strategic defense.

5. Briefly: the mathematical physics of 'agapē'

In the practice of physical economy, it is necessary to express policy in the implicitly measurable terms of an "allocation function." In the economics of strategic ballistic missile defense, that allocation function assumes a form fairly described as a series of "Leontief input-output" matrices, which, as a series, corresponds to that ordering of transformations, from each table to its successor, which reflects the im-

One who was as close as I was to the 1964-1972 "cultural paradigm-shift," which occurred, first, among the university population of "Baby Boomers," may recall how the state of mind associated with today's "ecology" fanatics, was established as a mass-phenomenon, during the Fall 1969-Spring 1970, post-Chicago Convention change within the "anti-war movement." This was the development which spawned both the "ecology movement" and matching "Rainbow Coalition." Already, during the Spring and Summer of 1968, the radical wing of the anti-war movement was a dionysiac, fascistic phenomenon, echoing the existentialist, Sorelian *mythos* of Mussolini's *squadristi*, and the youth-counterculture of the most extreme elements within the Nazi *Jugendbewegung*. The militant core of the so-called "ecology movement" was recruited from among an anti-war movement stratum typified by those devotees of the "Great Proletarian Cultural Revolution," like Columbia University's PLP activist Dennis King (who tumbled to public notoriety out of Roy M. Cohn's closet) and Weatherman ideologue John Jacobs, who were, during 1966-1968, either members or close associates of the violence-prone currents within the Progressive Labor Party. The role of McGeorge Bundy's Ford Foundation, in the funding of the self-styled "Crazies," around Mark Rudd, at Columbia, and the association with these operations of those funding conduits, by that notorious epigone of Georg Lukacs, former CIA agent Herbert Marcuse, shows the Liberal Establishment families' hand behind these developments. In the U.S.A., Europe, and elsewhere, it is the embedding of such fanatics, as a powerfully backed force of wild fanaticism, within the today's influential political processes and leading institutions, which is even far more threatening to the future existence of civilization, than the wrecking of the world's infrastructure, agriculture, and industry, by the influence of ecological hoaxes.

pact of the series of technological and related changes, on the structure of one table, relative to its predecessor. In the case of changes occurring in a series whose characteristic feature is the technological impact of valid discoveries of physical principle, we are obliged to step outside mathematics as it is usually employed, to take into account the process by which validated axiomatic-revolutionary changes are introduced to the schema.

Since, as we have indicated above, strategic defense is both a matter of military technologies, and also a function of the impact of technological progress upon the economic process of the society as a whole, it is important to identify the relevant functions from the standpoint of comparison with the kinds of mathematical functions which could be applied to an hypothetical, non-human economy. In other words, to show, implicitly, what is fatally wrong with both "systems analysis" and "information theory."

In the technology-driven increase of the per-capita power of society over nature, we are presented implicitly with the following proposition: Since the apparent, proximate cause for this material gain (the effect) is nothing other than an idea, what is the mass and velocity of an idea—a valid, axiomatic-revolutionary discovery of physical principle, for example, that it might produce that measurable, physical-economic effect? Translated into shop-talk, the question becomes, "How do we handle this type of challenge, both to today's prevailing classroom, and popular, notion of 'causality,' and, also, to generally accepted classroom mathematics?"

Among the incidental advantages which the U.S. soldier contributed to the military performance of the forces, during World War II, was the relatively high ration of the recruits—city boys and farm boys—who could not only operate a motor vehicle, but could, operating largely from insight, improvise significant repairs on those vehicles. For a comparison, try operating a modern production facility in a region of the world, where the nearest relevant quality of machine-tool repairman, works in a place hundreds of miles, or more, away. In such matters, as in scientific work, "insight" is a term usefully reserved to those aspects of a solution to a conceptual problem, the which can not be accounted for as deductive, or "textbook" reasoning. That same term is also used to signify creating an otherwise unachievable solution, by going outside the considerations posed explicitly by the problem as defined.³¹ For our purposes, here, we must show such "insight" into the nature of "insight" itself.

The generalized function implicit in Riemann's referenced habilitation dissertation, implicitly defines "insight" as that species of mental action, which enables the thinker to leap from the theorem-lattice based upon the hypothesis adopted prior to some valid, axiomatic-revolutionary discovery of physical principle, to the new theorem-lattice associated with the new hypothesis, incorporating that discovery. That pre-

31. Cf. Wolfgang Koehler, *Gestalt Psychology*.

sents the posterior view of the leap, as a leap to an appropriate theorem-lattice, away from an earlier theorem-lattice which is of an inconsistent, relatively degenerate form and hypothesis. In the effort to reach the second lattice, deductively, from the first, one encounters an absolute, formal discontinuity, the which can not be bridged in that way (nor actually “slid through”).

In fact, the quality of mental act associated with that successful leap (of discovery) is also present, if in a less intense form, in many cases of problem-solving of the type which do not involve a change in physical principle. Thus, it were appropriate, that we define “insight” in terms of the most rigorous case, as we do here, and, then, to note the reflection of the same type of mental power in applications which solve problems of lesser epistemological profundity.

Through familiarity with the successful use of insight, the individual may become conscious of that kind of “insight” as a definite kind of object. That is to say, we know two general categories of objects. The first, signifies objects which we either identify by means of sense-perception, or to which we attribute qualities analogous to those of sense-perceived objects. The second, signifies thoughts as objects; this second case includes ideas such as love of justice, love of truth, and the act of valid discovery of an axiomatic-revolutionary principle. *Agapē* is associated with mental objects of the second class; *agapē* itself is also such an object.³²

In the case that the student undergoes a Classical-humanist form of education, the student acquires the ability to “locate” the power to make valid leaps of discovery, themselves

32. Since no later than Plato, the functional distinction between *eros* and *agapē*, has been that the former pertains to the class of sensual objects, the latter to the domain of *Platonic ideas*. This is key to identifying that streak of immorality permeating all of Immanuel Kant’s *Critiques*, as the implicitly fascist quality of Kant’s philosophy was emphatically, and correctly prophesied by Heinrich Heine’s *Religion and Philosophy in Germany*. This is also the root of Kant’s crucial role as the leading philosopher of reference for the Nineteenth-Century Romantic movement. The war between the Classical and Romantic factions in music, from the Congress of Vienna to beyond the death of Brahms, down to the present day, illustrates the functional role of the distinction between *eros* and *agapē*. Retrospective studies respecting the roots of the form of motivic thorough-composition developed by Mozart, Beethoven, Brahms, et al., show that the composition and competent performance of all Classical compositions, of J.S. Bach, Haydn, Mozart, Beethoven, Schubert, Schumann, Brahms, et al., are premised upon the use of resolution to evoke *agapē*. Carl Czerny’s pupil, Franz Liszt, turned against God, and also Beethoven, to substitute sensual effects, such as irrationalist chromaticism, for motivic thoroughness; Liszt’s pupil, the Mazzinian bomb-thrower and composer Richard Wagner, was a perfervid Beethoven-hater of the Nazi-like radical conservative (oligarchical lackey) type; the *Liebsted* duet from his *Tristan und Isolde*, typifies the Romantic principle, of substituting sensual effects (*eros*), for creativity (*agapē*). Thus, Classical composition is inherently religious, in the Christian sense: It expresses the *agapē* demanded by *I Corinthians* 13; whereas, Modernism, post-Modernism, “Nashville,” and rock, are pathologically, either erotic, or sterilely “academic” formalism. The idea of a Christian “rock hymn,” is as absurd as that of a Christian “black mass.”

a definite kind of mental object of consciousness.³³ By “Classical-humanist” education, we signify an education in which so-called textbook education is outlawed, and replaced by a curriculum in which the student reexperiences, in his or her own mind, a reenactment of the relevant original act of discovery of a valid, axiomatic-revolutionary principle. In other words, a cognitive education, rather than one based on mere learning, is an education which produces graduates who actually know these ideas, rather than merely learning to identify them in a textbook manner.

Plato provides us the means to render comprehensible the most essential of the functional relationships involved. A succession of reenacted original discoveries, is, as Riemann’s dissertation shows, a series of hypotheses. Plato identifies the mental act which carries us from one, to the next of a series of successively superior hypotheses, as an *higher hypothesis*. The distinctive advantage of a cognitive education, over mere textbook education, is that the student enjoying the qualitatively superior, cognitive education, is concentrating on developing the power of making controlled, successful, valid leaps of discovery (higher hypothesis), rather than skating through a sequence of cookbook-like, “how to” recipes.³⁴

Over time, the quality of leaping may be improved. In other words, we may be presented, thus, with such an ordered series of higher hypotheses, rather than a series of ordinary hypotheses. The former series, of higher hypotheses, compels the mind to render the series comprehensible by, as Plato indicates, “hypothesizing the higher hypothesis.”

The mind which is developed to think in such directions, is one which is able to respond to a problem by mustering a mental habit of insight. Thus, the same mental principle which we encounter in its most rigorous and essential form as higher hypothesis, is also encountered, as a principle of mental activity, on levels which are far below the sophistication of a discovery of physical principle. The essential principle of the Leibniz-founded science of physical economy, is the functional role of insight in general, in governing the increase of the productive powers of labor, and in making possible a net, “macro-economic,” physical “profit” for the society taken as a whole.³⁵

33. In posthumously published writings, we find Bernhard Riemann wrestling with this same conception, at the time he was in the process of producing that fundamental discovery for which he is most famous, and most important, in the history of science. Where this writer employs the term “metaphor,” from Classical poetry and drama, to identify the *Platonic idea* of a valid, axiomatic-revolutionary discovery of principle, Riemann approaches the same problem of representation from a slightly different tack, employing the term *Geistesmassen*. See Lyndon H. LaRouche, Jr., “Riemann Refutes Euler,” *21st Century Science and Technology*, Winter 1995-1996, pp. 36-47. See also, in the same issue, the translation of Riemann’s *Zur Psychologie und Metaphysik* (“On Psychology and Metaphysics”), pp. 50-55.

34. The result of that latter sort of “textbook” education, Friedrich Schiller ridicules by means of the term *Brotgelehrten*, thus comparing such graduates to the poor quality of musician, perhaps a “popular” night-club crooner, who has barely learned “to sing for his supper.”

35. It is significant to note that Leibniz identified these topics in his first writing on the subject of a science of physical economy, his 1671 *Societ*

One additional bit of background definition is required, before turning to those notions of allocation function essential to defining the economic feasibility of strategic defense based upon accelerated technological attrition. We must precede remarks on that allocation function by supplying a working definition of a “not-entropic” economic function.

As Leibniz stresses in his 1671 *Society and Economy*, the maintenance of a supply of labor of a certain skill and physical productivity, requires a corresponding level of existence of the household producing this labor, a level of existence which could not be cheapened, without lowering the level of skill and physical productivity of the labor-force. This consideration applies not only to the effective household income; the level of development of basic economic infrastructure of the society (per capita of labor-force, per household, and per square kilometer), is also a per-capita cost of productive labor, as are capital-intensity (measured in physical, rather than financial terms), and power-intensity. Thus, a certain level of productivity of society is supplied at a physical cost, which cost has the connotations which Lord Kelvin, Rudolf Clausius, et al., attributed to “energy of the system.”

The complication is, that as we increase the level of productivity, these physical costs increase, in absolute terms. Thus, the per-capita “energy of the system” increases. This is a correlative of the notion of an economy whose general allocation function is attuned to “technological attrition.”

In these cases, the physical margin of a society’s output which might be usefully defined as profit, is simply the margin of total output in excess of the required “energy of the system,” a margin designatable as the relative “free energy.” The obvious goal is, that the ratio of free energy to energy of the system, must not decline, although the costs expressible as “energy of the system” are constantly increasing in absolute physical terms, per capita of labor force, per household, and per square kilometer of relevant land-area. This requirement is identified as a “not-entropic” function, in the same sense that living processes are also to be classed as “not-entropic systems.” All measurements in physical-economy are made, in those primary terms of reference, and evaluated functionally in terms of that “not-entropic” yardstick of required performance.

Derived from those background considerations, there are principally three physical-economic conceptions, whose interrelationship underlies the notions of, both the general allocation function in physical economy, and, of effective strategic defense. These three conceptions, are: the writer’s version of what Leibniz identified as “universal characteristics,” the notion of a Riemannian per-capita physical potential (i.e., *cardinality*), and the notion of a per-capita physical-economic potential. The latter is related to, but distinct from the notion of a simple physical potential.

and Economy, written before his assignment to represent relevant German interests in Jean-Baptiste Colbert’s Paris center of scientific discovery.

a) Universal characteristics

For pedagogical purposes, we introduce the notion of “universal characteristics” in the following way.

In the non-existent case, that the history of mankind could be accounted for, as Thomas Hobbes, John Locke, and Isaac Newton profess, by a single set of mutually consistent propositions (e.g., theorems), from remote past, into the indefinite future, one could represent all past, present, and future history in terms of a single, unchanging theorem-lattice. The fact that human existence is altered by the impact of new discoveries of principle, which alter society’s response to phenomena, introduces the notion, that a concept of “universal characteristics” is indispensable for analysis of the nature and effects of human behavior, especially on the historical scale, or in study of the effects of changes in technology in an economy. This, then, is recognizable as one of the implications of Riemann’s habilitation dissertation; it was an idea whose importance was emphasized, earlier, by Leibniz.

The peculiar distinction which appears, when we introduce the notion of hypothesis to physical, and analogous functions, is that, with respect to any corresponding theorem-lattice, an hypothesis exists *outside of time*. As we proceed from one theorem to another, of the same formalist theorem-lattice, the hypothesis never changes: It is the *alpha and omega* of that theorem-lattice. It has, thus, the form of a *good* within Plato’s work, not the highest Good, but a much lesser rank of “lesser good.”³⁶ This, in the microcosm of the proverbial simplest case, identifies the outward distinction of the idea of a “universal characteristic.”

Since the continued existence of mankind depends absolutely upon the kind of progress represented by the supersession of inferior, by superior hypotheses, we can not be satisfied merely with that most simple form of universal characteristic. We require emphasis upon the kind of universal characteristic associated with Plato’s notion of higher hypothesis, or, better, hypothesizing the higher hypothesis. In each case, these notions of hypothesis have the form of the good, of universal characteristics.

In this case, we are presented an additional distinction. Once we supersede the notion of a society as being ruled by a single, unchanging hypothesis, by the notion of higher hypothesis, we have presented ourselves with the *idea of history*. If we move from a conjectural model of such ordering of history by higher hypothesis, to a model premised upon a chronology of actual, validated, and failed, axiomatic-revolutionary discoveries of presumed principle, we have seized the

36. It is important, for the sake of clarity on this point, to stress, as illustration, that “evil” is the counterposing of the “lesser good” to the higher, as in the case of the soldier who flees the field of battle, thus jeopardizing his nation, for the “lesser good” of meeting his responsibility to provide “quality time” with his family. Contrary to the doctrine of gnostical hypocrisy popular among certain of today’s “Baby Boomer” generation, for example, the higher Good is not the synthesis of “moral personal behavior” by individuals. Rather, personal Good is that which the good of mankind, nation, and so forth, as a whole, requires of the individual’s personal self-development and behavior.

actual history of mankind at its core. The history of both bad and good ideas, and their effects, so considered, is the real-life basis for investigating the notion of hypothesizing the higher hypothesis.

In the latter case, we study history factually, to adduce, not only good versus bad currents of idea-development, but the germinal feature of those currents from the standpoint of the notion of “higher hypothesis.” Thus, for example, we find, that during the recent 6,000 years or more, the pre-history and history of European civilization, is encapsulated by the issues of what European history recalls as “the Persian wars.” Precisely the kind of stuff a fellow must master before setting himself up in shop as a strategist. Indeed, this close scrutiny of this bit of history, has been bedrock of all effective strategic thinking in modern European history. Therefore, we are by no means off the beaten track in addressing this area; we are simply providing a fresh, and more useful overview of the implications of that history for addressing the problems of strategic defense, today.

Notably, the characteristic conflict—the conflict between universal characteristics—which has shaped the history of European civilization during the recent 2,600 years, has been the conflict between the Homer-Thales-Solon-Plato tradition continued from the history of Classical Greece, against two foes, the Cult of Apollo and the so-called “Persian Model” of empire, the latter better identified as the “Babylonian Model.” The relevant features of that are summarized as follows.

The nature of this conflict is adduced most efficiently, by recognizing the subject-matter of the Homeric epics, and of the Golden Age tragedies of Aeschylus (for example), as a conflict, on one side, among irreconcilable hypotheses of different cultures among men, and the concurrent struggle of mankind against the caprices of the tyrannical pagan gods. Given, thus, two factions among mortal men, the resulting interaction creates a three-way dialogue, in which, in response to commonly experienced actual events, each of the three parties responds with its propositions which are irreconcilable with the propositions which those events prompt in the other two. They are each governed by mutually exclusive hypotheses, mutually exclusive universal characteristics.

Out of this development in the heroic literary heritage of Classical Greece, we derived the Socratic dialogue, as typified by the work of Plato. This literary heritage, from Homer, Thales, Solon, the Golden Age tragedies, Socrates, Xenophon, Plato, et al., addresses two characteristic strategic issues of that age. First, the fight which man must wage to free mankind from slavery to the evil, pagan gods of Olympus, and similar types, which is, second, an expression of the earthly battle to free mankind from rule by those collations of ruling oligarchical families, which the imaginary, pagan gods serve as a fantastic apotheosis. It is the oligarchical model, as typified by the Persian Empire of the Classical Greece experience, and also by the Delphi cult of Gaia-Python/Dionysos-Apollo, which is the adversary of both mankind and the Creator Himself. That is the Classical kernel of the strategical



Statue of Johannes Kepler in Weil der Stadt, Germany.

model, down to the present day.

Our war is a war among conflicting universal characteristics, as the Greek Classics typify that conflict. Our war, today, as then, is against the real-life force deployed by the Babylon heritage’s oligarchical model, a model which is, not so incidentally, that of the British Empire’s financier-oligarchical monarchy, in the time of Benjamin Franklin, of John Quincy Adams, of Abraham Lincoln, of President Franklin Roosevelt, and, still, today.

From the standpoint of the kind of physics represented, with special excellence, by Kepler, Leibniz, Gauss, and Riemann, the notion of universal characteristics appears as the concept of physical relativity, the notion of the significance of a local event, as being determined by the imputable physical space-time geometry in which it is situated. This obliges us to consider the dimensionality of the relevant, Riemannian physical space-time manifold, and also the Gaussian form of measurably verifiable, physical space-time curvature associated with that manifold. This was already the vantage-point of Johannes Kepler, who identifies this same idea, for his time, by his use of the term *Reason*, in implicit opposition to the introduction of the percussive notion of mechanistic *causality* by the founder of empiricism, Paolo Sarpi, and by Sarpi’s personal lackey Galileo Galilei. *Reason*, in this usage, signifies the principle, that events must conform to the universal characteristic of the physical space-time in which they appear (as opposed to the “causality” of percussive interaction within an idealized, “Euclidean” space-time).

Any economic process, taken in entirety, at any point in evolution, or devolution, can be viewed functionally as a

Riemannian manifold. At least, a useful approximation may be devised. That manifold has an associated, imputable, universal characteristic. This characteristic determines the practical implication of any type of event within the process taken as a whole.

b) Physical potential

There are six gross distinctions of functionally topical areas within the domain of the empirical matters addressed by physical science in its entirety. Three of the six are of type; the three remaining, are of scale. Of type, there are putatively non-living, putatively non-cognitive living processes, and cognitive processes. Of scale, there are astrophysical, microphysical, and macrophysical. Science is composed of the process of comprehending the nature of the interaction of each of these with all of the others. This defines the manifold. The dominant issue is that of adducing the universal characteristics of the universe represented by such a manifold, and of devising measurements which enable us to validate or correct that estimation.

The most characteristic endeavors of relevance to economy, in physical science, are 1) the effort to extend the scale of man's efficient intervention, into the remoteness of astrophysics and microphysics; 2) to increase the power of man's intervention, per capita, into all domains; and 3) to master the demonstrated reality, that the universe is so composed, that living cognitive processes—the cognitively developed human individual—are the highest order of efficient known existence within that universe.

c) Physical-economic potential

The highest authority, on which all claims of science depend absolutely, is the demonstration, that through cognitive processes of validatable, axiomatic-revolutionary qualities of discovery of principle, mankind has been enabled to rise above a "natural," late-cenozoic, ecological potential population of not more than several millions higher apes of wretched demographic characteristics, to modern levels of hundreds of millions and billions of persons. On the basis of this evidence, the universal characteristic of the human species, is expressed by the activity we have identified here as hypothesizing the higher hypothesis.

It is the correlation between physical science (in particular) and the role of products of scientific progress in shifting the imputable Gaussian physical-economic space-time curvature of society to higher levels of man's power over the universe, which is the ultimate scientific experiment, upon which the validity of all other experiments in physical science depends.

The crucial fact of science, is the manifest proneness of the universe to submit to the cognitive will of mankind in this manner. It is from that vantage-point, within that physical space-time manifold, that the underlying axioms of scientific thinking must be forged.

The crucial problem, posed in a fresh, and rather acute

form, by the problem of devising and implementing a sustainable advantage for the strategic defense under conditions of forced rates of acceleration of technological attrition, confronts us with these conceptions of physical science and physical economy in this ostensibly "sophisticated" form. The challenge can not be efficiently addressed on a lesser level of conceptualization.

This brings us to the concluding point to be made, respecting the relationship of these technological matters to what many will regard, as if instinctively, as the human side of the strategic equation. How does this defense address directly, the continuing, global struggle between mankind and the pestilence of oligarchism?

The premise for the existence of the modern form of perfectly sovereign, constitutional, nation-state republic, is the conception of man as a creature of cognition, not fixed sets of biological social traits. It is to the degree that we require all among the members of society to function with emphasis upon the development and use of those cognitive potentials which distinguish the human individual above the beasts, that we summon into action that potential superiority of power of the republic, over any other form of society, over any oligarchical society. That was understood by Niccolò Machiavelli; all history since has demonstrated that principle, in one way or another.

We summon into action that form of individual and social action which defines the relatively highest achievable level of power of any society, and thus, in that way, evoke from the individual, and for relations among persons, the highest cognitive standard which man's intrinsic nature can supply, the agapic quality of work wrought with the weapon of cognition itself. We arouse within the republic and its allies, the highest power possible in our time, by arousing that which imparts to the greatest number of our people, the greatest per-capita power of society possible.

This has been long understood by the oligarchical enemies of the republic. The evil Emperor Diocletian understood it very efficiently, as his wicked *Codex* attests, and as his wicked imitators, such as Princes Philip and Bernhard, attest by their relevant actions. Take away from mankind the right to foster and enjoy the benefits of endless scientific, technological, and cultural progress, and by halting progress, so, you turn good men and women into beasts, as we watched this transformation—the so-called "cultural-paradigm shift"—among those "Baby Boomers" who became mentally and morally *hors de combat* in those waves of dionysiac cultural pessimism, which surged through the campuses of Western Europe and the Americas, about thirty years ago.

To recover our national sovereignty, and to create the security we require, our nation must reclaim its soul. Otherwise, we are doomed, and most of the presently living families of this planet with us. Effective strategic defense must be understood as, foremost, an economic, a cultural, and a moral challenge. What follies are we willing to abandon, to secure our nation, perhaps, to save our souls?