

SDI UNDER RECONSIDERATION:

War as Peace By Other Means

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A German press report of a March 1, 2001 statement by Chancellor Gerhard Schröder, on cooperation with Russia in development of ballistic missile defense, takes us back, once again, to the core of what now appears to be that still unquenchable, original SDI proposal, that which I made during February 1982-February 1983, then both publicly, and in my back-channel discussions of that period with the Soviet government.¹ The Chancellor's remarks echo that 1982-83 proffer of scientific cooperation between the U.S.A. and Moscow, which President Ronald Reagan announced in his famous televised address of March 23, 1983.

Recently, the Chancellor has made several references to the recently revived, separate proposals, from Russia and from the U.S. Bush administration, for a limited revival of SDI. The especially significant feature of his own remarks on this occasion, was his reference to the way in which the development of "beam weapons" would foster much-needed technological advances within the civilian sector of economies. Two implications of his remarks have potentially crucial significance. First, that the Chancellor was using language which points to what the 1972 ABM treaty identified as defense systems based on "new physical principles."² Second, the importance of using those "new physical principles" technologies as a needed stimulant of the economies of the cooperating nations.

Given the general temperament and internal complexities of the new U.S. Bush

1. Lyndon H. LaRouche, Jr., "SDI Revisited: In Defense of Strategy," *21st Century Science & Technology*, Summer 2000, Vol. 13, No. 2.

2. The miserable performance of "kinetic weapons" methods for intercepting even lumbering, almost antique Scuds, during "Desert Storm," should have sunk forever the late Lt.-Gen. (ret.) Daniel Graham's fanatical hostility to "new physical principles." Still today, as then, strategic ballistic missile defense begins at the platform-level of "electro-magnetic pulse" effects.



German Defense Minister Rudolf Scharping meets with U.S. Defense Secretary Donald Rumsfeld at the Pentagon, March 11.

administration, current discussions of both U.S. relations with Russia, and U.S. reactions to Germany's relations with Russia, are sticky matters. The important differences between U.S. Defense Secretary Donald Rumsfeld's remarks on the subject, at the recent Wehrkunde meeting, and the counter-proposal from Russia's President Vladimir Putin, are only typical of this. The most interesting feature of the discussion so far, is that the initiative for a qualified revival of President Reagan's March 1983 SDI proffer, has come from President Putin. *Putin's initiative represents a qualitative change, of profound strategic implications, in the case for strategic defense.* Chancellor Schröder's March 1 remarks on that matter, echoing the fact of the Putin offer, show that the Chancellor has been well briefed by circles in Germany long familiar with my own work on the original design for the SDI proposal.

Outstanding among the several, outstanding technical difficulties of all current proposals for ballistic missile defense, is the fact that the economies of the U.S.A., Germany, and Russia have come a disastrous long way down, from the levels of relative technological capabilities which still existed in 1982-83. However, notably, some progress has been made in perfecting some systems of the kinds which I specified during the late 1980s. Programs such as directed-energy-beam types of weapons systems, which I emphasized, back during the late 1970s and early 1980s, and, also, their role in deployment of "over the horizon" systems, on which I had focussed during the middle to late 1980s, are becoming standard. Such scattered bright spots aside, today's economies are a sorry techno-

Germany Revisits the SDI

"First, we must discuss such a project [nuclear missile defense] with the allies, but also with Russia and China," stated German Chancellor Gerhard Schröder on March 1, in an interview with the *Stuttgarter Zeitung*. In another interview the previous day, on German television's news channel N24, Schröder had stressed the "pre-eminent economic interest" which Germany has in the development of the new technologies for missile defense, what are called more precisely "new physical principles" in the text of the 1972 Anti-Ballistic Missile (ABM) Treaty.

"This implies that we potentially co-design technologies that are developed, this also, in material terms, outside NATO—so that we are not closed off from that technology and the know-how of that technology. . . . What we want is a share in the technology."

Schröder added that the "debate about national missile defense in Germany has, in my opinion, not been conducted as it should have been"—that Germany's interest lies neither in "saber-rattling" nor in "calling national missile defense a devil's tool."

logical wreck, compared to those of one to two decades ago.

Unfortunately, crucial aerospace capabilities, that of the 1980s, Germany's MBB, for example, no longer exist. The spread of the epidemic of so-called "benchmarking," has destroyed much of the competence, in all categories of engineering, which still existed two decades earlier. Irreplaceable veteran scientists, and senior military figures, from various countries, such as Chicago's Professor Robert Moon, who contributed key elements to my own efforts, for example, have died, or gone "on the shelf," during the course of the recent two decades. Much of what we could have put together as a team twenty years ago, could not be replicated now in less than a generation.

The fact that NMD, as recently described by some Bush-related U.S. circles, is largely a hoax, does not mean that concepts underlying my earlier approach to SDI are technologically, or otherwise, a "dead letter." During the recent eighteen years, some of our troublesome engineering objectives then, such as efficiently focussing directed-energy beams for penetrating the atmosphere, are reported to be off-the-shelf capabilities today. The issue of electro-magnetic-pulse effects and the methods of their delivery, to which I shall refer, in due course, here, remains a principal, if ironically submerged priority in today's strategic options. For any scientist who has grasped the relevant implications of biogeochemist Vladimir Vernadsky's revolutionary conception of the Earth's noösphere, there are also ways, still beyond the imagination of most, by aid of which an effective deterrent capability can be developed and deployed.³ Even under greatly reduced circumstances, cultured people who really use their heads, are capable of producing possibilities which often astonish other people.

The catastrophic misconduct of the recent NATO war against Yugoslavia, should remind us of the danger in providing today's governments with what pass for new weapons-systems. Similarly, as the experience of the Indo-China war should have demonstrated, and also the long-standing, homicidal lunacy of the Middle East conflict: most existing governments, especially on the NATO side, seem to have no consistently competent insight into the objectives for which weapons ought to be used. Often, the minds of those passing themselves off as strategic advisors to governments today, appear to be suffering from effects of critical overload, and

3. *21st Century Science & Technology*, Winter 2000-2001, Vol. 13, No. 1. All the original proposal for what came to be known as "SDI" was my own personal undertaking; my chief collaboration in developing the technical side of the proposal was done through the channels of a scientific association which I had led in founding during the mid-1970s, the Fusion Energy Foundation (FEF). The original impetus for the founding of that association came in the form of a letter which I wrote to my associates during Spring 1973, in which I defined the leading task of science to be subsuming Vernadsky's conception of the noösphere under my own discoveries, incorporating certain crucial features of the work of Bernhard Riemann, in the science of physical economy.

even possibly "burn out," in their exposure to the kind of fantasy-life illustrated by today's TV violence.

However, any discussion of the implications of this currently revived discussion of a strategic ballistic missile defense crisis, must tend to be self-degraded into the nonsense which prevails in leading Anglo-American and related circles today, until the deeper, axiomatic reasons for that state of confusion are identified. The crisis in strategic policy-shaping today can not be understood, until we first identify the existence of two, absolutely irreconcilable, opposing definitions of what the term "strategy" ought to mean.

1. Two Notions of Strategy

In particular, we must recognize, that the tragic incompetence of recent trends in most U.S. strategic thinking, is reflected in the hopelessness of those global economic and related policies which the Blair government, and the current Bush administration, for example, have adopted as the basis for their choices of strategic objectives. The relevant delusion I am attacking here, is the implied assumption, that there is but one definition of the meaning and objectives of strategy; whereas, in fact, in today's world at large, there are two, axiomatically distinct and mutually opposite definitions of even the mere term itself. There exist, predominantly, two absolutely irreconcilable notions of the objectives and methods of even military strategy as such. Until that confusion over even essential definitions is recognized, the presently prevailing tendency to wild-eyed blither and blather will dominate the issues of making and avoiding war.

The essential causes of that persisting confusion are of two general types.

Firstly, only three national cultures of today possess the sense of having world power within their reach. These are the British monarchy, the United States, and Russia. Russia has, indeed, come upon hard times, but its culture retains the impulse of a power with the authority to demand that its views be brought to the table at which the fate of the world as a whole might be decided. Thus, the distinction between those three nations, and others, is that they are capable of thinking of strategy from above, while the others tend to seek to negotiate their fate, either as if from the sidelines, or below.⁴

The second type of issue, is that of the choice between two social models. The one, is the model of the modern sovereign nation-state republic, on which the U.S. was founded. The second, is the British imperial model, a model premised ultimately, and by conscious choice of intention, on the ancient oligarchical model of Babylon and pagan Rome, and more proximately, the Venetian financier oligarchy's imperial maritime power of the period from the Second Crusade into the

4. See my address prepared for delivery in Berlin, on March 5, 2001 (in *EIR*, March 16, 2001, Vol. 28, No. 11).



A collaborative SDI, based on "new physical principles." Lyndon LaRouche addressed this major Milan seminar on electromagnetic-effect weapons, Dec. 1, 1987. LaRouche is flanked by Prof. Bruno Brandimarte, Gen. Carlo Li Gobbi (ret.), Marco Fanini of EIR, and Jonathan Tennenbaum, of Germany's Fusion Energy Forum.

late Seventeenth Century.

The systemic strategic objective of the American intellectual tradition, is the establishment of a community of principle among respectively sovereign nation-state republics. The strategic objective of the British monarchy's and its Commonwealth's oligarchical model, is an echo of the traditions of the oligarchical models of old Babylon, of the Delphi cult of the Pythian Apollo, and of ancient Rome and Byzantium. The British monarchy, taking the imperial maritime power of Venice at its height, as the model of reference, relies upon the use of blended instrumentalities of guile and force, to manage both the internal and external affairs of its empire, to the purpose of establishing and maintaining its global hegemony within the world at large.

Meanwhile, the world's greatest professional fools, believe that the British monarchy is, at its worst, the lesser evil, relative to U.S. power.

On this account, since the crushing of Germany in two world wars, the global context for the choices of definitions of strategy, has been the question, whether the U.S.A. will seek to work with the pivotal role potentially played in continental Eurasia, by Russia, to check that opposition to the American intellectual tradition which the British monarchy continues to represent, or whether the U.S. will degrade itself to being a virtual member of the British Commonwealth, and thus merely the chief bully-boy of an Anglo-American, neo-Roman imperium.

Notably, from the beginning of our nation's struggle for independence, our patriotic tradition, while seeking to bring into being a community of principle among sovereign nation-states of the Americas, has focussed upon continental Eurasia

as the prospective location of leading, powerful partners for the emergence of a more or less global, anti-British community of principle, that among nations which were in the process of emulating the American System of political economy, in opposition to what President Franklin Roosevelt denounced and abhorred as "British Eighteenth-Century methods."

With the exception of friends such as Lafayette and the legacy of Lazare Carnot, France was the enemy of the U.S.A. for most of the interval from July 14, 1789 through the fall of Napoleon III. A happier state of relations emerged under the France of Thiers, President Sadi Carnot, and Gabriel Hanotaux, but the emergence of the *Entente Cordiale* brought the combined anti-republican sweepings from among the legitimists, Bonapartists, and neo-Jacobins into power as a British asset. Throughout most of the Nineteenth Century, the German Classical tradition and the legacy of Czar Alexander II, Mendeleyev, and Count Sergei Witte, was a more consistent prospective ally and partner of the U.S. aim to establish a community-of-principle relationship to continental Eurasia. Franklin Roosevelt's intention to use U.S. post-war collaboration with Russia and China, as the counterfoil to the British monarchy's imperial policies, typifies a long-standing strategic tradition among the leading republican patriots of the United States.

There are, otherwise, two principal complications in the conduct of strategic policy-shaping. The most essential complication, is the fact that the republican and oligarchical models of society are ultimately, incurably, mortal foes. The second complication, demonstrated early in modern times by the political fates of Leonardo da Vinci and Niccolò Macchia-

velli, is that the defense of the institution of the modern sovereign form of nation-state, was compelled, then as now, to reckon with the mixed and corrupt character of both principal powers of that time, and the brutish susceptibilities of the common folk, such as our own contemporary American Yahoos, which were used, chiefly, as mere instruments of oligarchical policy.

Thus, as Macchiavelli argues, republican leaders, whether in war or otherwise, were, then as now, usually compelled to resort to what shallow-minded observers derived as “unprincipled” strategies and tactics. The strategist-statesman was obliged, as the experiences of Leonardo and Macchiavelli typify this, to adopt opportunities for expression of principles, often incurring the liabilities inhering in such temporary alliances and circumstances. They used the political, social, and military flanking opportunities at their disposal, in their efforts to realize what are otherwise clearly principled means and objectives. The march upon an adversary’s flank may take one through an awful swamp.

Once the foregoing categorical considerations have been assimilated, many of what otherwise appear to be mystifying complexities of strategic practice, fall into place. It is from this vantage-point, that the strategic implications of a ballistic missile defense, premised upon “new physical principles,” depend. Review of a number of related topics will help to clarify the implications of the discussions between such figures as President Putin and Chancellor Schröder.

Begin with the ironical case of Clausewitz.

On Clausewitz

It was the hard-won lesson of the 1648 Treaty of Westphalia, that, if modern society were to continue to exist, the purpose of modern warfare must be the securing of an inherently durable form of peace.⁵ That objective compels prudent statesmen and warriors to think of the conduct of necessary warfare in terms of defining what might be described as “systems of peace.” Only idiots, bi-polar brutes, or worse, think that the objective of war is either to kill everyone one dislikes, or to subjugate them to such brutalities that they will become sheepish victims of the Tavistock Institute’s perverted doctrine of application of “aversive behavioral modification” to threat and prosecution of warfare. If we desire durable peace on our planet, such brutish minds as those should not be allowed to touch the shaping of the issues of strategy.

Macchiavelli addressed this matter; the revolution in statecraft,⁶ which occurred beginning the Fifteenth-Century Renaissance, has changed the meaning of strategy fundamentally, away from that of ancient and medieval times. Although

5. LaRouche, op. cit., passim.

6. Niccolò Machiavelli, “The Prince” (written 1513, first published 1532); and “The Discourses on the First Ten Books of Titus Livius” (written 1513-1517, first published 1531); in Peter Bondanella and Mark Musa, ed. and trans., *The Portable Machiavelli* (New York: Viking Penguin Books, 1979).

much is to be learned from mankind’s earlier experience in ancient and medieval warfare, especially Alexander the Great’s victory over the Babylonian model, any competent modern strategy must be defined within the historically specific context of the new modern age, the age of the sovereign nation-state.

Great modern commanders, such as Vauban, Lazare Carnot, and Count Wilhelm Schaumburg-Lippe’s protégé, Gerhard Scharnhorst, have understood, taught, and exemplified this principle of *strategic defense*.⁷ General Douglas MacArthur’s conduct of the war in the Pacific, unlike the contrary policies and practices of some of his rivals and critics, illustrates the critical role of sound strategy for peace. The strategy for the defense of Russia against Napoleon’s imperial army, as adopted by Czar Alexander I on the advice of his Prussian advisors, and the Soviet resort to a similar defensive strategy against the similar Nazi invasion, are examples of this principle of strategic defense to modern warfare. The Franklin Roosevelt-led role of the U.S.A. in a similar strategic defense of European civilization against Hitler and his allies, during World War II, illustrates the same principle.

For example, one of the leading lights of the American intellectual tradition, John Quincy Adams, crafted a design for the long-term defense of the Americas against forces such as the British monarchy and Metternich’s Holy Alliance. Adams referred to that as “a community of principle.” Adams’ policy is a model of thinking about strategic defense, still today. The kernel of a policy of strategic defense, is to be found in the object of, first, defining, and then achieving a durable peace. From that historical vantage-point, and contrary to post-Carlsbad Decrees Clausewitz’s pro-Romantic inversion of Scharnhorst’s doctrine, *warfare becomes peace achieved by other means*.

To recognize the distinction I have just made, look at the crucial difference between the character of the Germany led by great Classical reformers such as Scharnhorst, and the predominantly Romantic, post-Vienna-Congress Germany, of Hegel’s state philosophy and the repressive, oligarchical style in political order defined by the Carlsbad Decrees.

The great Prussian reformers, typified by such friends and followers of poet, historian, philosopher, and dramatist Friedrich Schiller, as Wilhelm von Humboldt, were representatives of the late-Eighteenth-Century German Classic, which had been set into motion by such avowed followers of Gottfried Leibniz and Johann Sebastian Bach as Abraham Kästner, Gotthold Lessing, and Moses Mendelssohn. It was, notably, the friend and collaborator of Schaumburg-Lippe, Mendelssohn, who crafted the program used for the military education of Scharnhorst. These leading Prussian reformers

7. Vauban’s design of the fortified position at Neuf Breisach typifies the way in which Vauban defeated the threatened attack from the Habsburg forces, without needing to fire a shot, as does Lazare Carnot’s design which scared the allies into giving up the intent to dismember post-Napoleon France.

were in the same spirit as the American Revolution which had inspired many among them. Even those Prussian reformers who defended the Prussian monarchy as an institution, aimed to establish the Classical form of the same republican philosophy underlying the Preamble of our own Declaration of Independence and Constitution.

In the aftermath of that Vienna Congress which was an avowed adversary of the United States, the anti-Classical, Romantic school of state philosopher Hegel, Prince Metternich, and the tyrannical Carlsbad Decrees, dominated the circles of the Prussian court into which Clausewitz was assimilated during that time. Consequently, Clausewitz's work during the post-Vienna Congress period, echoed, as a taint, the characteristically Romantic features imposed, top-down, by the character of the monarchy of that period.

To appreciate the comparison, think of the difference between those West Point graduates of the European Classical tradition, who defended the Union, as defined by President Lincoln's Gettysburg Address, and those others, those Romantics who were either Confederates, who defended slaveholder society as a matter of principle, or, like the dubious General McClellan, were intent upon the British monarchy's policy of that time, a peace treaty which would fragment the United States into a set of perpetually quarreling, blood-soaked baronies.

Just so, under the growing influence of what became known as Richard Nixon's "Southern Strategy" of 1966-1968, there has been a corresponding process of moral erosion in the prevailing military and related policies of our United States. For some professional officers who have strayed into the camp of the "Southern Strategy," the mere, poorly comprehended text of Clausewitz's posthumously published *On War*, has been adopted as the watch-word for immoral practices which the Clausewitz of Scharnhorst's lifetime would probably have abhorred.

The traditional military policy of the U.S., was rooted, like the policies of strategic defense of Vauban and his great follower Lazare Carnot, in scientific and engineering training. The West Point graduates under Thayer, such as Benjamin Franklin's great-grandson Alexander Dallas Bache, were nation-builders rooted in engineering. The contrasted trend, by official post-MacArthur U.S. strategic doctrines, into the increasing decadence of a post-modernist variety of Romanticism, from the Indo-China war and related other developments of the recent thirty-five years, has been a degeneration coherent with the Nixon "Southern Strategy's" political-financial carpetbagger's transformation of the formerly great agro-industrial power of the nation into the rotting national "rust belt" of today.

The principle is: *Strategic policy will tend to express the character of the society it serves. It must tend, therefore, to express either the correspondingly real, or delusory character of the type of peace it aims to bring into being.*

The United States was brought into being by a European

Classical tradition, typified by the influence of Leibniz upon the shaping of the Eighteenth-Century American intellectual tradition. Today, that United States is being plunged into the pits of neo-Confederacy forms of decadence, a condition reflecting that decadence in the way its strategic policies and military doctrines have devolved in the wake of the 1989-1991 collapse of the Soviet system's role as that strategic adversary of reference. While the Soviet Union existed as a relevant potential adversary, its existence kept U.S. strategic thinking within the bounds of as much a sense of reality as the conditions of the post-MacArthur era absolutely demanded. With the 1989-1990 collapse of Soviet power, undiluted strategic lunacy took over the madly triumphant Anglo-American alliance.

Warfare as peace achieved by other means, was the basis for my 1977-1983 work in crafting what became the basis for the March 1983 SDI proffer to the Soviet government. *One must use the actual, or potential catastrophes arising in the form of actual or threatened deadly conflict, as a source of creative political energy for developing a just and durable approach to peace.*

However, "peace" does not mean simply the absence of conflict. There is no possibility for peace inhering in the nature of known forms of society existing prior to the Fifteenth-Century European Renaissance's introduction of the principle of a modern sovereign form of nation-state based upon the principle of the general welfare. Every other presently existing form of society is inherently, either engaged in war, or on a course leading toward future wars.

When we, today, speak of peace as a strategic objective, rather than merely an absence of currently ongoing warfare, we either mean the kind of peace defined by a community of principle among sovereign nation-states, or we are babbling nonsense, intentionally, or otherwise. The cases of today's support for, and opposition to Franklin Roosevelt's war-time policy, illustrates the point.

At the Close of World War II

There are certain complexities in President Franklin Roosevelt's expressed policies and prejudices. I do not claim that I support all among Roosevelt's impulses. However, there are certain leading features of his strategic policy which do enjoy either my support or my sympathy. Other considerations put to one side, those features are a valid contribution to the conception of peace-seeking then, and now, contributions whose merit outlives any contrary features of his policies during that time.

As President Franklin Roosevelt forewarned Prime Minister Winston Churchill, it was the President's intention to use the occasion of the close of the war, to bring to an end both the world's colonial systems, and also the rule of economic affairs among nations by those "British Eighteenth-Century methods" associated with the doctrine of Adam Smith. With Roosevelt's untimely death, the new Administration adopted



This banner, raised outside the 1993 Seattle summit at which a Russian proposal for collaboration on SDI technologies was given to President Clinton, was immediately broadcast in Russian national TV coverage of the summit.

Churchill's post-war perspectives, not those of President Roosevelt. We had won the war, but, to a large degree, under Truman, we had lost a greater, more durable part of what should have been the peace.

Had the power of the United States been used in the manner implicit in Roosevelt's stated intention, the United States would not have committed the militarily unnecessary nuclear attacks on the civilian populations of Japan's Hiroshima and Nagasaki; and efforts like those merely typified by the Marshall Plan, would have resulted in a full-scale expansion of the agro-industrial potential of the U.S.A., that, to the purpose of building up the economies of the states newly liberated, by U.S. post-war might, from the tyrannies of Portuguese, Dutch, British, and French colonialism.

To locate the historically crucial strategic importance of the Truman administration's adoption of an anti-Roosevelt, British strategic policy, look back to the internal U.S. political ironies associated with the transition into the wars of 1939-1945.

Throughout most of the 1930s, the neo-Confederate tradition of the Theodore Roosevelt, Woodrow Wilson, and Calvin Coolidge Presidencies, remained stoutly embedded in the majority of the U.S. Supreme Court, echoing the Taney Court of the 1850s, and prefiguring the Rehnquist-Scalia-Thomas, neo-Confederate majority of today. The American Tory alliance of Aaron Burr's and Martin van Buren's Wall Street "shareholders" with the legacy of the Confederacy's slaveholders, has been the persisting curse of the U.S.'s internal life, since virtually the founding of our Federal republic. The issue, then, as now, was Roosevelt's defense of the Constitution's most fundamental principle, "the general welfare clause," against the forces, including a Federal Court major-

ity, which sought to nullify that central principle of our constitutional law.

It was only as the U.S.A. was being mobilized, for a second time, to support the Anglo-French *Entente Cordiale* in a new world war against London's early 1930s creation, the Nazi regime in Germany,⁸ that Roosevelt was able to impose his 1936-1939 economic recovery and related policies with almost full effectiveness even in many matters of domestic policy. In this circumstance, a large ration of the Wall Street and related Establishment Anglophiles, the so-called Wall Street British-American-Canadian (BAC) establishment which had been built up around Teddy Roosevelt and Woodrow Wilson, gave Roosevelt the degree of support for the 1940-1945 war-time mobilization, which they had chiefly opposed, and even attempted to ruin in the President's peacetime efforts to the same social and economic goals.

As the U.S. moved toward the post-war period, the ques-

8. It was Britain's one-time head of the Bank of England who, in concert with his partners, including the grandfather, Prescott Bush, of the current U.S. President, put Adolf Hitler into absolute power in Germany during the 1933-1934 interval. Originally, the British, who organized the "America First!" movement in the U.S., intended to keep the U.S. out of the coming war with Hitler. Their intention had been, that Hitler would deplete Germany by a deep invasion of the Soviet Union, and that British and French forces would then, while the German forces were so engaged, fall upon Germany's western flank. In this way, London intended to avoid the contingency of U.S. emergence as the dominant post-war power in Europe. It was when London realized that Hitler would strike a détente with the Soviet Union, in order to secure his rear for an attack upon France, that the British howled for help from the U.S., dumping the putatively pro-Nazi Edward VIII as a way of securing the U.S. alliance. The Bush family circles are richly encumbered with the legacy of those U.S. Anglophile interests which were involved in 1930s support of Hitler.

tion, "What would the post-war U.S. destiny be," depended upon Franklin Roosevelt's ability to carry through his post-war "American Century" policy, despite the Anglophile interests represented within the BAC establishment and behind Vice-President Harry S Truman. The continuation of Roosevelt's policy, depended upon his ability to extend the principle of the general welfare to the post-war world at large. Only if the war-time economic mobilization could be rapidly reoriented, without significant interruption, into building a world order based upon the same general-welfare principle, could the legacy of the American System of political-economy be efficiently upheld even inside the post-war U.S.A. itself. The take-down of the colonial system, in favor of independent nation-states participating in their own, U.S.-assisted, "New Deal"-like economic and social development, especially in basic economic infrastructure and productive technology, was the perspective upon which the U.S.'s actual achievement of a durable post-war peace depended.

In short, the strategic perspective of the U.S., since the 1776 Declaration of Independence, to the present day, has depended upon the projection of the principle of the general welfare, as a doctrine of international law, a doctrine of law enforced by a community of sovereign nation-states committed to that principle of their internal affairs and mutual relations. This was crucial for John Quincy Adams' and Abraham Lincoln's perspective for the sovereign states of the Americas, in their time. Since the change in the world's affairs brought about by the U.S. military and economic successes of 1861-1876, this notion of a community of principle, has been an essential, indispensable strategic outlook for U.S. global policy of practice. Every serious error in our foreign policy and strategy, has been the fruit of either simply the neglect, or even outright violation of that principle.

The great issue of all human historical existence to date, has been the conflict inhering into two mutually exclusive notions of mankind. These are reflected as the contrast between the *oligarchical model* which modern European civilization has inherited from pagan Rome and medieval Venice, and the *republican model* of statecraft, of each man and woman as made equally in the image of the Creator, first brought into existence during the course of Europe's Fifteenth-Century Renaissance. The principle known variously as the *general welfare*, or *the common good*, underlying the sovereign form of nation-state, such as the constitutional form brought into relative perfection by the efforts of President Abraham Lincoln, is the line of division separating the two opposing conceptions of man and society.

Relative to oligarchical society, the republican "model" is inherently not only revolutionary, but insolently so. The task of the republican is to see that the individual person is uplifted from that state of personal moral degradation of the population which inheres in the legal and cultural tradition of ancient Rome, and that morally degrading modern empiricist and positivist liberalism which is typified by the doctrines of

Thomas Hobbes, Bernard Mandeville, the Physiocrats, Adam Smith, and Jeremy Bentham. The conception of man as naturally endowed with the redeemable potential for goodness, and of society as obliged to serve the general welfare on that account, means the destruction of all oligarchical models of statecraft.

The evocation of that Classical-humanist self-image of the individual member of society,⁹ is the essence of the revolution, and the cornerstone of republican strategy. It is as that power implicitly defines the nature of the individual personality for that individual, that the individual so inspired will work to promote and to defend the society and government which represents that image of man. This relationship of state and society to all of the members of society is expressed as the principle of the general welfare.

Thus, if the principle of the general welfare is expressed in the liberation of a people from oligarchical subjugation, such as the people of the British Empire and Commonwealth, and if that act of liberation is expressed efficiently in the practice of the consequently emerging state, the people will tend to adopt the self-image which is consistent with that practiced notion of the general welfare. Such was the great attraction of the United States for emigrants from Nineteenth-Century Europe, for example.

When President Truman's government betrayed the principle on which the U.S. and its law rested, by fostering the post-war subjugation of the victims of Portuguese, Dutch, British, and French colonialism, and when a comparable, pro-oligarchical, reactionary attitude was fostered in the U.S.A. itself during those immediate post-war years, the U.S. lost much of the moral authority it had built up under Franklin Roosevelt's Presidency, despite the efforts to offset this, later, by the Kennedy Presidency and President Johnson's courageous actions on behalf of civil rights.

The revolutionary character of the republican form of constitutional law, can not be separated from those notions of truth and justice set forth systematically in Plato's dialogues. The notion of the human individual as naturally endowed with redeemable goodness, can not be separated from the notion of justice, and the notion of justice can not be separated from a standard of truth, based upon reason, in contrast to falseness of mere opinions.

No example of this distinction is more efficient than the fact, that the most degraded moral tradition of tyranny in European history is that traceable to the culture of pagan Rome, centered upon the bestialization of the general popula-

9. Essentially, "Classical humanist" signifies the Mosaic view of the Classical Greek image of man, that associated with Plato, and with the Gospel of John and Epistles of Paul. As Philo Judaeus' work shows, and, most emphatically, the work and influence of Moses Mendelssohn, "Classical humanist" is the generic, ecumenical name for the Mosaic heritage common to Judaism, Christianity, and Islam. This generic term, situated within the framework of law-making of Plato, also signifies a principle of a body of universal *natural law* derived from this conception of the special nature of man.

tion by the cult of rampant irrationalism known as the *vox populi*, expressed as mass-spectator sports (thumbs up, thumbs down) by the shrieking mobs of the Roman arena: or “popular opinion.”¹⁰ Perhaps nothing better expresses that irony of “popular opinion,” than the French Jacobin terror of 1789-1794, and of the first modern fascist state, that which Napoleon Bonaparte based upon the model of Caesar and Roman law, which was spawned as the aftermath of the Jacobin Terror.

The kernel of the practical issue here, is located in the fact, that all known society existing outside the bounds of the adoption of the principle of the general welfare as supreme law, is, by its nature, a predatory form of society. Like the condition of the lower eighty percentile of U.S. family households under the reign of the legacy of Nixon’s Southern Strategy today, a society premised upon a principle of “shareholder value,” is an oligarchical society, in which a ruling oligarchy, aided by its associated armed and other lackeys, preys upon the majority of even its own population as virtual human cattle.

Consequently, in an oligarchical society, such as that which the legacy of Nixon’s Southern Strategy has installed in the U.S. Supreme Court majority today, there neither is, nor could be any lasting form of peace outside the cemetery. In any oligarchical society, mortal conflict of the sort most suitably expressed as endlessly recurring warfare is the inevitably endemic, or even epidemic state of affairs. Under the bloody brutishness of the state of perpetual homicide known as *Pax Romana*, or the Babylonian and Achaemenid tyrannies earlier, like the British Empire of Queen Elizabeth II today, there is no durable peace. For oligarchical society, a perpetual state of either active warfare or preparations for warfare, is the state of affairs inhering in the oligarchical principle itself.

Although many good things were done by the U.S. during the 1945-1965 interval, and a diminishing few even later, we as a nation have never yet recovered morally or otherwise from the self-inflicted wounds struck in the immediate months and years following the most untimely death of President Franklin Roosevelt.

In summary, the natural strategic perspective of the U.S.A. as the constitutional republic it was founded to become, is an orientation toward bringing into being a hegemonic combination of perfectly sovereign nation-states, each and all committed to fostering the benefits of the principle of the general welfare for each and all.

Insofar as a war must be fought, or anticipated, any strategic objective of the U.S. must be in the same spirit as General

MacArthur’s patriotic U.S. policy for the Pacific War. *The objective, is to bring about the conditions under which the relevant, formerly warring nations, will prefer a community of principle based upon the general welfare, rather than the feudal, or quasi-feudal traditions of cabinet warfare, or the worse traditions of all ancient and modern colonial systems and empires.*

By “peace,” I do not mean the submission of the slave to his imposed condition as virtual human cattle. *By “peace,” I mean the termination of politically motivated killing of persons as a method of establishing, or enforcing the power to rule. By “peace,” I mean the willing consent of the governed to the assurance of their vital self-interest in enjoying the protection of the principle of the general welfare, the common good.*

The Roots of British Rule

Over the course of more than a century, the underlying global characteristic of conflict on this planet has been the effort of the British monarchy to eradicate the institution of the sovereign nation-state, in favor of an imperial form of world government under a rule of law coherent with the nature of the British monarchy itself. All globally significant or related warfare has been either directly authored on behalf of the monarchy, or has been a consequence of the methods used in its efforts to impose and sustain its hegemony.

Until the 1901 assassination of U.S. President William McKinley, the U.S.’s American System of political-economy was actively the world’s leading adversary to the British system. The predominant strategic feature of the Nineteenth Century, had been conflict between even the merely continued existence of the U.S. Federal republic and the British monarchy.

With the assassination of McKinley, and the Presidencies of Theodore Roosevelt, Woodrow Wilson, and Calvin Coolidge, the U.S. adopted the status of virtually an associate member of what was to emerge as the new form of the British Empire, variously known as an “English-speaking union,” or British Commonwealth. Only under Presidents Franklin Roosevelt, John F. Kennedy, and Bill Clinton, was there a significant tendency to reassert the U.S.A. traditional position as philosophical adversary of the so-called “British liberal system.”

Within the U.S. itself, this implied U.S. membership in an Anglo-American world empire, has been rooted in a so-called “Establishment,” a concert of Wall Street-centered financier interests and associated law firms, sometimes referred to as the “BAC,” that, as the Nixon, Carter, and Bush administrations typify this arrangement, in perennial political alliance with the tradition of the Ku Klux Klan and former Confederacy.

Since the agreements among British Prime Minister Margaret Thatcher, France’s President François Mitterrand, and U.S. President George Bush, during 1989-1990, the collapse

10. Thus, the inherent depravity of that hostility to a notion of truthfulness expressed by existentialists such as Theodor Adorno and Hannah Arendt. That existentialist denunciation of the Socratic principle of truthfulness, as to be abhorred as an “authoritarian personality” type, is one of the principal influences contributing to widespread moral degeneracy in the U.S. educational systems and public practice today.

of Soviet power has been taken as the opportunity to establish a virtual imperial world rule under five nations, four of which are subjects of the British monarch as their head of state (the U.K., Canada, Australia, and New Zealand), and a “BAC”-dominated U.S.A.

Since that collapse of the Anglo-American powers’ principal, Soviet rival, the trend in world affairs has been toward the consolidation of what is in fact the form of “world government” sought by such influential utopians as H.G. Wells and his confederate Bertrand Russell,¹¹ using the threat of nuclear warfare as the political force employed to compel nations to surrender their sovereignty to a supranational power.

2. EMP Effects

As former Secretary of State Henry A. Kissinger stated at the recent Wehrkunde meeting, his audience should not be taken in by the new Bush administration’s dubious chatter about threats from so-called “rogue states.” What the Bush administration actually intends, according to Kissinger, is a strategic conflict with Russia and China.¹² For once, Kissinger spoke truthfully; the Bush chatter about “rogue states,” is nothing but the usual lying to be expected from Orwell’s “Big Brother,” intended for the foolish ears of credulous dupes. Thus, in that case, the issue of ballistic missile defense is centered on the U.S. and Russia.

In that case, the essential reality of Bush administration double-talk about ballistic missile defense, boils down to the

11. H.G. Wells, *The Open Conspiracy: Blueprints for a World Revolution* (London: Victor Gollancz, 1928). Wells was the original promoter of the development of nuclear-fission weapons (1913) for the stated purpose of bringing world government into being. Russell publicly associated himself with the program of Wells’ *The Open Conspiracy* at the time it was first published; the two of them devoted their lives thereafter, to bringing about world government through the terror of nuclear weapons. Wells’ six-point program is notable for its specifying what have become the widespread open practices of “globalization” today. “1. The complete assertion, practical as well as theoretical, of the provisional nature of existing governments and of our acquiescence to them. 2. The resolve to minimize by all available means the conflicts of these governments, their militant use of individuals and property and their interferences within the establishment of a world economic system. 3. The determination to replace private local or national ownership of at least credit, transport, and staple production by a responsible world directorate serving the common ends of the race. 4. The practical recognition of the necessity for world biological controls, for example, of population and disease. 5. The support of a minimum standard of individual freedom and welfare in the world. 6. The supreme duty of subordinating the personal life to the creation of a world directorate capable of these tasks and to the general advancement of human knowledge, capacity, and power.” The life’s work of utopian figures such as George Orwell, Aldous Huxley, and Julian Huxley, seen in the light of their association with the “Open Conspiracy” policies of Wells, Russell, and Aleister Crowley, from that time on, is to be seen in the light of the Wells manifesto.

12. See *EIR*, Feb. 16, 2001, p. 48, for a report on Kissinger’s Wehrkunde Conference claims about Bush administration intentions for national missile defense programs.



Already in the 1980s the U.S. rocket-interceptor tests were achieving similar results to those they exhibit now—here, a recent U.S. Army test of an experimental interceptor. These technologies, long off-the-shelf, do not offer what is needed, as the Patriot missiles’ poor performance in Desert Storm demonstrated.

role of submarine deployment in support of delivery of electro-magnetic-pulse (EMP) effects. In that light, the case of the sinking of Russia’s *Kursk* submarine is a matter of notable consequence.

“EMP effects,” are not the only topic to be considered, but all of the issues of global strategic ballistic defense are typified by the “EMP” model.

By its nature, a global sort of EMP effect involves stealth. Long-range ballistic missile delivery, or “space-based” delivery, are not indicated ruses. For both the U.S.A. and Russia as targets, short-range deployment of EMP warheads over the targetted territory, is indicated. In effect, this boils down to the use of submarines, in conjunction with the deployment of covertly situated “launch pods” in relevant submerged locations at the borders of the targetted nation.

In actual strategic operations of such a type, the pods represent an “over the horizon” deployment controlled by, typically, nuclear missile submarines of strategic types.

Such a strategic EMP attack, has the following type of application.

EMP attacks of the strategic type implied are, relatively speaking, non-lethal, at least when their effects are contrasted with those of mass-lethal nuclear explosions, for example. Also to be considered, is the fact, that principal powers’ mili-

Russian Anti-Missile Defense Proposals

On Feb. 20, Russian Defense Minister Igor Sergeyev handed to NATO Secretary General George Robertson, in a Moscow meeting, the text of a Russian proposal to Europe, for an Eastern and Western European anti-missile defense. European press reports purporting to identify the specifics of the Russian proposal, have so far turned out to be unsubstantiated. However, on the following day, Feb. 21, Minister Sergeyev gave interviews in which he emphasized that Russia has all the necessary technical capacities for creating a European ballistic missile defense system. "Russia has testing areas, research centers, and testing facilities. And if we team up with our European partners, I believe we will manage to do everything that we have proposed and planned." Sergeyev did confirm that Russia has suggested to the European countries, using Russian S-300 mobile missile complexes in the structure of a Euro-

pean ABM system.

Eight years ago, on April 2, 1993, the Russian daily *Izvestia* had published an article suggesting Russian thinking about collaborative anti-ballistic missile (ABM) development among the major nations. The Russian proposal, *Izvestia* reported, was known by the project name "Trust," and involved plasma and electromagnetic-pulse anti-missile weapons (see **Figure 1**, the illustration printed by *Izvestia* at that time). The then-Deputy Chairman of the Russian Federation for Defense Industry, Yuri Glybin, called the "Trust" proposal "an alternative to the SDI." Glybin stressed that the ABM Treaty of 1972 does not at all prohibit "joint work on global defense against missile attack. Twenty years ago, it could not have entered anyone's mind, that such a thing were possible." In other words, the Russian idea for collaborative development of anti-missile defenses (in that case, with the United States under President Bill Clinton), was clearly focussed on the "new physical principles" involved in directed-energy beams, the development of which is explicitly excluded from the 1972 Treaty prohibitions.

tary systems tend to be "hardened" against EMP effects, although most of the targetted nation will be shut down, with lasting effects. The military-retaliatory capability of the targetted power is not eliminated, or reduced to doomsday response-capabilities. Rather, a threshold condition is induced, at which negotiations of peaceful conditions begin, or doomsday may ensue.

Thus, a strategic EMP effect does not necessarily invoke a doomsday counterstrike by the nuclear arsenal. Rather, it challenges the targetted nation to face a doomsday sort of nuclear exchange, or to back away from the conflict and accept mutual damage done, rather than escalate to doomsday.

This is precisely the "scenario" most suited to the present capabilities and state of mind of the military institutions of the U.S. and Russia. It is a scenario which neither power would employ, except in extreme circumstances, but it typifies the most likely response should there arise what it perceives to be, for it, an extreme condition.

On this account, the most likely threat comes from the present Bush administration. It is that threat which must be taken into account, to estimate the actuality of an "EMP effect" event on the strategic horizon.

Apart from the proudly unconcealed intellectual limitations of the new "education" President, as long as the new administration remains in its present form, it is doomed to early self-destruction, and much of the rest of the world with it. Here, in the new administration's acute intellectual incapacities, lies the very real threat of some combination of de-

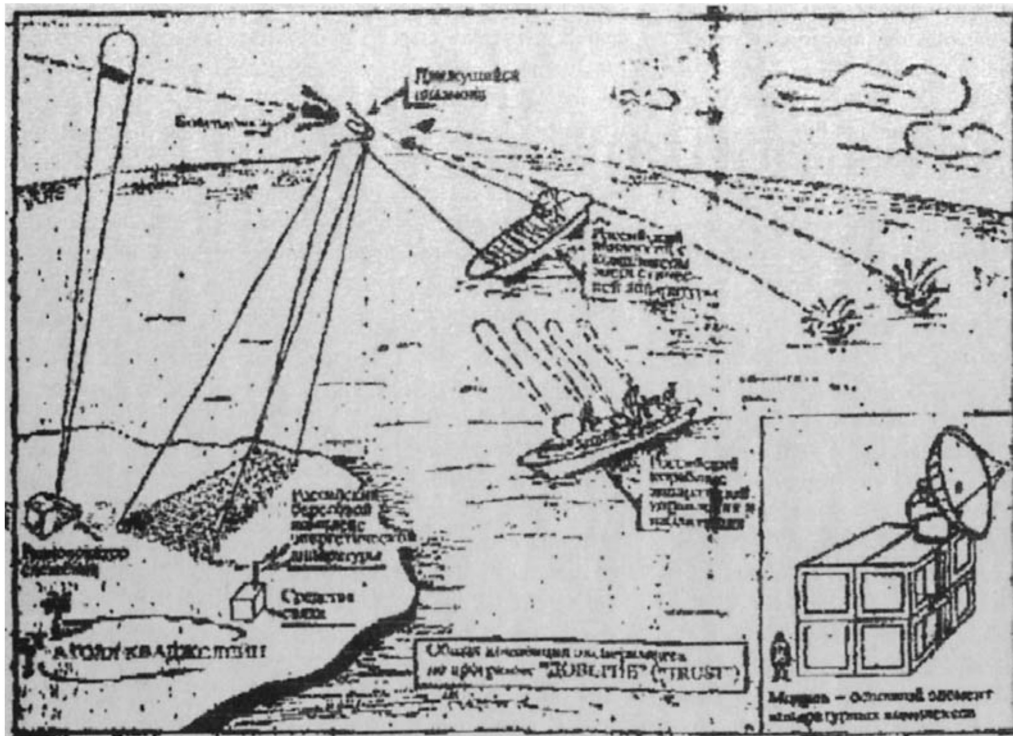
velopments such as deployment of "EMP effect" and outrightly doomsday capabilities.

The principal relevant intellectual and moral defects of the new administration, are three.

First, there is the case of the already referenced intellectual shortfalls of the new head of state, the worst possible choice of figure to put into such a position for a crisis of the severity now onrushing. He is personally incapable of a competent crisis-decision, unless that decision were forced upon him, more or less against his will. Second, there is the principal popular political base of the new administration, typified by pathetic pieces of intellectual and emotional wreckage such as Senator Phil Gramm, and the irrational fanatics dominating the ranks of the "religious" admirers of the new Attorney-General, John Ashcroft. Third, there is the factor typified by the pack of predatory parasites known as the Carlyle Group.¹³ All three, combined, are fairly described

13. *New York Times*, Monday, March 5, 2001, "Elder Bush in Big GOP Cast Toiling for Top Equity Firm." This front-page profile of the Carlyle Group highlights the role of George Bush, Sr., James Baker III, and Frank Carlucci, in building up the Washington, D.C. corporate takeover outfit into the country's largest private equity fund, surpassing Kohlberg Kravis Roberts (KKR). In addition to the ex-President, Secretary of State, and Secretary of Defense, Carlyle also includes Richard Darman, former Indiana Senator and putative Bush nominee for Ambassador to Germany Dan Coats, and such foreign luminaries as John Major, Karl Otto Pöhl, Fidel Ramos, and former South Korean President Park Tae Joon as directors, advisors, or directors of subsidiaries. The \$12 billion firm has ownership stakes in 164 companies worldwide, is the 11th largest defense contractor in America, and owns *Le*

FIGURE 1



This drawing from Izvestia depicted the 1993 Russian proposal, to develop the capability of launch of plasma and electromagnetic-pulse weapons from sea or land. Tracking and guidance technologies are also depicted.

as about as rational as the early Eighteenth-Century dupes known to history as the wild-eyed followers of John Law. These, taken together, should remind us of the driver who, against all forewarnings, insists upon driving across the bridge which is no longer there. For each and all, combined, their loyalty to their own cupidity and lunatic blind faith, is greater than any clearly perceivable contrary reality.

But for the power they wield, they represent a pack of fools fairly described as the Confederacy reborn as farce.

One should not be deluded by the appearance of figures such as Secretary of Defense Donald Rumsfeld and Vice-President Dick Cheney in the array. Admittedly, they were formerly associated with an industrial interest which has now chiefly vanished into America's ruined "rust belt." The question to ask, is: "For whom do they work today?" The controlling financier interest which they represent, today, is the new financier power which has grown up around the neo-Confederacy's Southern Strategy. The mentality of this group, from the Carlyle Group's James Baker III on down, is that of Bush league pro-Confederacy carpetbaggers who have looted both Yankee-land and the former Soviet Union, and see the incumbency of young President Bush as license to loot what remains

of the rest of the assets of both the U.S. and the rest of the world besides.

For all three leading factors in the new administration, anything which is not terribly bad for the U.S. and the world besides, is something to which they are absolutely opposed on principle.

In sum, this administration, as long as it remains in its present form, is on a short fuse toward the explosion of the worst financial and economic debacle in modern history. How would any "good old," devoutly bi-polar Ku Klux Klan type react "When Ah don' git mah way!"? How would he react from his position as the government of the world's leading, if fading military power?

Although, as I have indicated at the outset, there are some significant developments spottily scattered amid the spectrum of a strategic defense based upon "new physical principles," the breakdown in scientific and technological capacities of the NATO nations and their industrial establishments, had reduced the globally strategic options to the area centered around EMP effects.

Therefore, it is sufficient, for the purposes of the policy discussion assigned to this location, to use the foregoing model as typifying the broader range of options available.

The essential point remains, that, as long as the present administration has the characteristics which I have summa-

Figaro newspaper in France. In 1990, Carlyle hired the then-unemployed George W. Bush, as a director of its subsidiary, Caterair.

rized at this point, the world as a whole could therefore be on a short fuse to the brink of Hell.

Unless the combination of wiser heads, inside Europe as well as in the U.S.A., act in some degree of concert, to pull the proverbial rug out from under the present composition of the Bush administration, the worst is the most likely.

3. The Noösphere in Strategy

There is an obvious remedy for the recent three decades' drift into the present world financial and economic crisis, a remedy obvious to any of the types which Rumsfeld, Cheney, et al. represented in their pre-Nixon incarnations. The Franklin Roosevelt reflex is obvious to any of those types who wished to restore the U.S. to its former good health as an agro-industrial leader of the world.

What, therefore, is the Bush administration's agenda? Does it have a plan? Or, is it merely, like some "Manchurian candidate," a puppet, selected for the perceived utility of its moral and intellectual defects, a mere missile sent to self-destruct in the ruin of its assigned target, playing out some role assigned to it? For the answer, look back to those centuries when Venice dominated the Mediterranean and Europe as a whole, as an imperial, financier-oligarchical form of maritime power. We are speaking of "geopolitics."

There was never anything scientific about so-called "geopolitics." If there were, poor looney and aging Zbigniew Brzezinski, for one, could have never understood any of it. It was, at inception, the British perception that the Venetian model used for building both the Dutch and British maritime power on a more or less global scale, must be defended against any danger that global maritime supremacy might be outflanked from the interior of the Eurasian and/or American continent.

The crucial development which led the circles of Britain's Prince of Wales and later King Edward VII to adopt Halford Mackinder's curious view of geography, was the victory of the Abraham Lincoln-led United States over Lord Palmerston's puppet, the Confederacy. The 1861-76 economic miracle of agro-industrial development, which was set into motion by the combined efforts of Lincoln and Henry C. Carey, included the use of transcontinental railway systems to unite the American continent in an economically functional way, and to prompt Japan, Germany, and Russia, among others, into imitations of the U.S. approach to development of agro-industrial economy and the use of transcontinental railway development for the Eurasian continent as a whole.

The principle involved, in what is called "geopolitics," is expressed in the simplest way, by noting that if we define transcontinental transportation routes in terms of development corridors, rather than simply transportation ways, for every fifty miles or so along such a corridor, the process of

transportation itself will foster the production of far greater wealth than the cost of building and operating that route. This is to be contrasted with the benefits of each fifty miles of ocean transport. In addition to this, high-speed rail lines, or the superior magnetic levitation systems, are vastly faster, and, in net effect, cost less per kilometer traversed, than ocean traffic.

Thus, the combined developments in that direction, within North America and continental Europe, represented a deadly threat to the ability of imperial Britain to use its maritime power to control the world. So, the British organized the first Sino-Japanese war, and the formation of the *Entente Cordiale*, and the linking of Russia to France and Britain, for a war against Germany. The object was to put the continental powers at one another's throat, and thus to abort trans-Eurasia developmental routes of a type which would have threatened the doom of the British Empire.

There was a second principle involved in this. This brings us to the matter of the convergence between Vladimir Vernadsky's elaboration of the concept of the *noösphere* and my own original contributions to the development of the science of physical economy. It is from my view of the deeper implications of the *noösphere*, that the deeper implications of Britain's geopolitical hoax are to be adduced.

Contrary to the popularized mythologies of modern British Biblical archeology and the conventional history texts, the relatively most advanced ancient cultures were transoceanic maritime cultures, rather than inland-based, or "riparian" cultures. Within the scope of modern archeology's actual knowledge, it was transoceanic maritime cultures, such as the Dravidian language-group culture which created Sumer, which spread maritime cultures inland along the obvious riparian routes. Only as technology advanced, was inland development in a position to "compete," so to speak, with the per-capita and per-square-kilometer rates of physical output achieved along coastal and major riparian inroads.

Even to the present, this remains the case. Thus, we have the vastly underdeveloped land-areas of the interior of the U.S.A. and South America, and of continental Eurasia.

The principal gains of recent centuries along the lines of such inroads, have been associated with development of mechanized transportation networks, large-scale water management systems, and increasingly dense energy production and distribution.

Hence, the vital interest of the Venice-modelled Anglo-Dutch maritime power, has been to abort the rate of scientific and technological development of the planet as a whole! The natural continuation of the scientific and technological development of the planet for human habitation, and the pressures for such development caused by improvement of the demographic characteristics of populations, must render inevitable the absolute supremacy of inland-based development over attempted control of the planet through maritime supremacy!

Immediately this aspect of geopolitics is brought into the

foreground, the role of the U.S. neo-Confederacy types as merely instruments, rather than sources of policy, emerges.

The Economics of the Noösphere

The great biogeochemist Vernadsky, the one-time student and follower of Russia's railway builder Mendeleev, who actually organized the initial development of Soviet nuclear science, and also guided the formation of the team which produced the Soviet nuclear arsenal, made a crucial contribution to understanding the macroeconomic function of the development and maintenance of basic economic infrastructure. It is from my discoveries in the field of physical economy as such, that the deeper significance of Vernadsky's concept of the noösphere is made clear.

Vernadsky divided all physical principles among three categories: non-living, living, and cognitive (noëtic). Following in the pathway of the work of such as both Pasteur and Mendeleev, Vernadsky pointed to the unique experimental proof that living processes represent a universal physical principle not present in non-living processes, and that human creative intervention accelerates the self-development of the biosphere upon which the sustenance of human populations depends.¹⁴ Just as life controls the process of fermenting wine in ways which non-living processes can not, so man's intervention into the biosphere increases the rate of self-development of the biosphere in ways which are not possible without society's intervention.

This interface between the noösphere and biosphere, located in terms of relevant human actions, is most conspicuously shown in respect to what is called "basic infrastructure." The ability of society to deploy technologies which increase the per-capita productive powers of labor, depends upon the intervening development of the basic economic infrastructure. Thus the technological ability to develop the biosphere through basic economic infrastructure, depends upon a corresponding level of scientific and related development in production in general, and a correlated increase of the physically defined productive powers of labor per capita and per square kilometer.

By "basic economic infrastructure," one means to include not only transportation, power, and water-management systems, but improved fields and forests, improved practices of sanitation, and urban development. This implies health-care systems, educational systems, and so on. It implies the quality of government through which such sundry improvements are installed or otherwise fostered.

In short, therefore, the ability of mankind to make effective use of land areas, especially inland areas, and land-area as a whole, depends upon a preceding level of general technological development, upon which the feasibility of the relevant development of basic economic infrastructure depends.

14. See Lyndon H. LaRouche, Jr., "A Philosophy for Victory: Can We Change the Universe?," *EIR*, March 2, 2001.

By looking backwards to earlier cultures, through the eyes and mind of Johannes Kepler and his successors, our appreciation of the minds of the ancient transoceanic navigators, is not diminished but greatly increased. What we know of the construction of calendars from as recently as five to eight thousand years ago, gives us an insight into those ancient maritime cultures which necessarily traversed the Atlantic, Indian, and Pacific oceans thousands of years earlier. With that benchmark as a point of reference, we appreciate better the nature of the obstacles which had made the mastery of the inland areas so difficult until relatively modern times.

From this vantage-point a certain view of geopolitics emerges.

Maritime powers, such as Venice, had depended upon factors of advantage inhering in sea-power. These advantages were, in the long run, temporary in nature. The inevitable consequence of improvements in scientific progress and in statecraft, would produce, naturally, the circumstances in which the clear economic and related supremacy of inland development would surpass maritime power.

There would be no way to prevent that transition from emerging, unless two conditions were first met. First, that technological progress must be brought virtually toward a halt, and that its application to development of basic economic infrastructure must be aborted, as a matter of priorities. Second, that population-levels, and also life-expectancies, must be severely curtailed and even reduced.

How does a ruling thalassarchical financier oligarchy bring such conditionalities into being? It lacks the numbers, as a class, to accomplish this by its own raw force. Ah! But, if the fools available are sufficiently numerous, that difficulty can be overcome. Synthetic religions, and like instruments have been the standard convenience employed by oligarchies over known history and pre-history's crucial evidence. Get a mob to do the dirty work, even if it destroys itself in the doing.

Mobs such as those typified by the Bush administration and its popular base, are merely puppets, trained and deployed as hunting dogs and cattle are used by the oligarchs, who supervise the breeding and deployment of such mere humanoid livestock. These mobs have no intrinsic self-interest in the policies they serve as instruments. They are simply cultivated and deployed to act, as if instinctively, in the way they are selected and conditioned to react.

Who, then, is the actually controlling interest behind the deployment of the cattle of which the Bush administration and its popular base are composed? Who controls the "critter company," the white-sheeted animals, deployed as the Ku Klux Klan types?

Only a confrontation with the shocking discovery of what we are permitting be done to us, by the kind of "critter company" deployed as the popular base of the Bush administration, were likely to persuade the relevant U.S. institutions into calling a halt to the monstrous farce in progress at the present moment.