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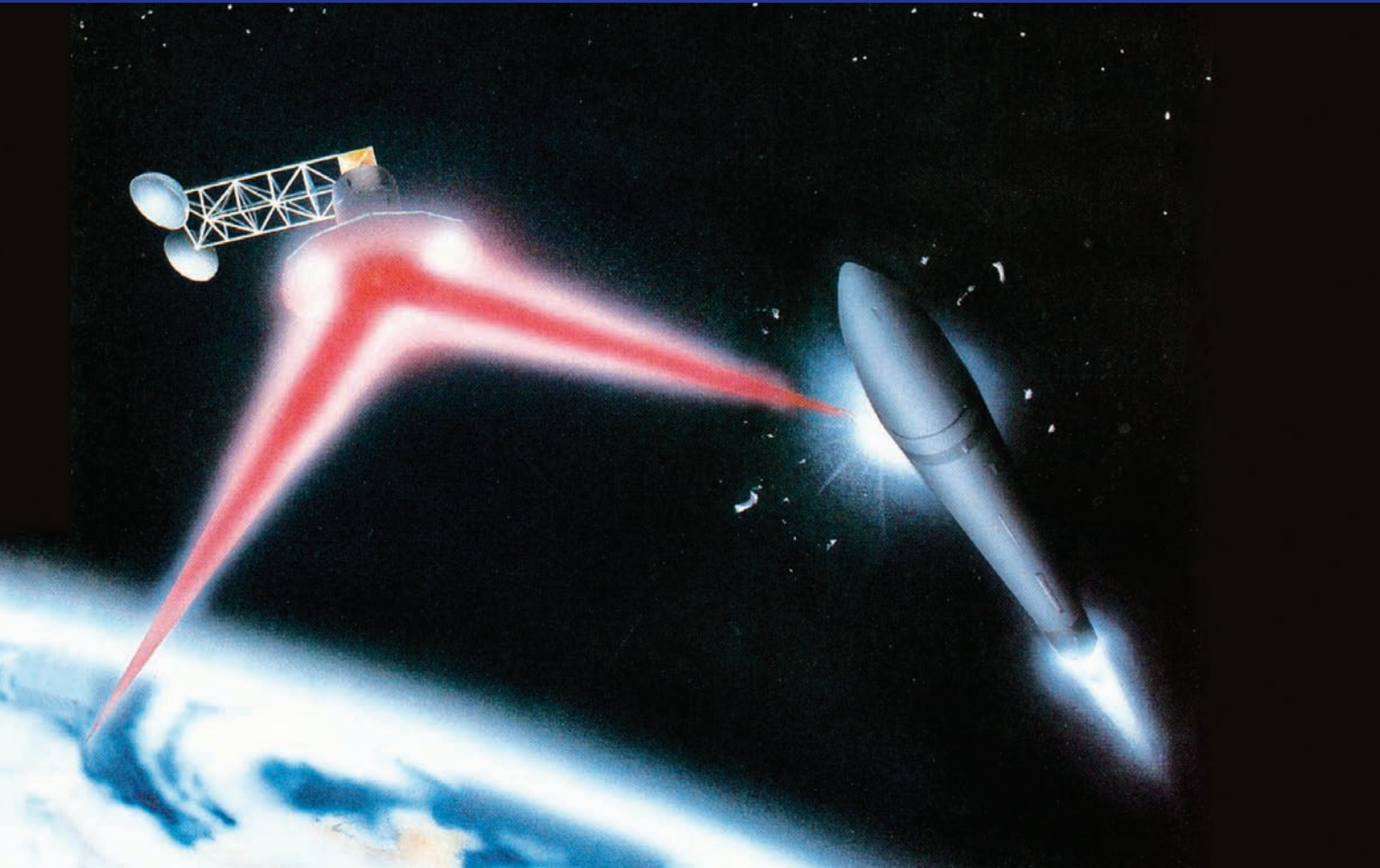
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Will the Financial Crisis Trigger World War III?
Towards a New Periodic Table of Cosmic Radiation
Will Singh Preside Over New Indian Famine?

**The Case of the SDI: The
World That Should Have Been**



What Is LaRouche Saying About How To Solve The Global Economic/Financial Crisis?

Lyndon LaRouche

THE SCIENCE OF PHYSICAL ECONOMY

With this present opening of this third section of this trilogy on the underlying, practical foundations of the science of physical economy, we have presented ourselves with the task of untangling the most crucial of the issues posed by recorded human history, with emphasis on the history of European civilization from its ancient to modern times, up to the present day.

—LaRouche, from the final segment of
“The Science of Physical Economy”

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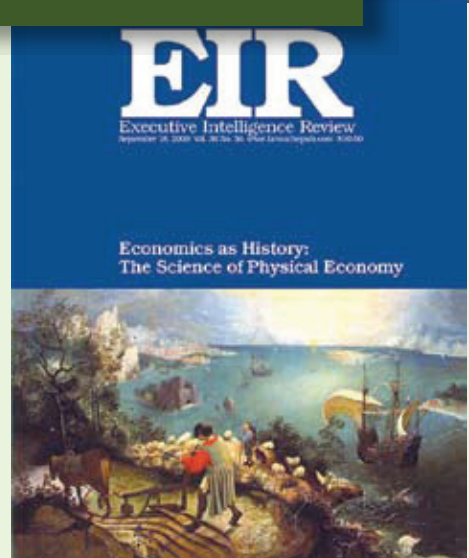
Economy for Scientists: Economics as Science, in Short

EIR, June 19, 2009



A Sequel on Economics as Science: The Rule of Natural Law

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Economics as History: The Science of Physical Economy

EIR, Sept. 18, 2009

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EIR

From the Managing Editor

In his webcast on March 26, Lyndon LaRouche promised to reveal something that would shock the audience and the world: “largely ignored or overlooked facts, but facts which have shaped the history in which you live. Facts without which you don’t know, why you’re in the situation you’re in today.” He proceeded to relate how and why he crafted the Strategic Defense Initiative (SDI), which was adopted by President Reagan in 1983, but then sabotaged by pro-British operatives in notably the Soviet Union, but also the United States.

Our *Feature* gives the full story, with background and “foreground” material to help you grasp its importance.

Why bother looking at that history now? Just think what the world would be like, had LaRouche’s conception of the SDI been implemented. You must understand that it had nothing to do with “Star Wars,” or a U.S. policy to wreck the Soviet Union. It was intended, as Dr. Edward Teller understood, to serve “the common aims of mankind.” It would have initiated cooperation for *mutual survival*, ended the Cold War, and fostered a joint “science-driver” policy to capitalize on the high-technology sectors of both economies, notably controlled thermonuclear fusion and manned space travel.

As you will see, the most important thing about LaRouche’s SDI was its *cultural* aspect, *not* its military one: changing the way people think. It is for that reason that we include as part of the package an exciting article by Peter Martinson of the LaRouche movement’s “Basement Team,” on cosmic radiation—a subject that LaRouche himself has addressed at length in recent issues of *EIR*, in the context of the requirements for future space exploration.

But the SDI was blocked, and East and West continued their plunge into post-industrial junkheaps. The Soviet economy plunged faster—and faster still after the breakup of the U.S.S.R., when London’s agents practically took over the place for a time. In the U.S.A., the von Hayekians and Alan Greenspan predominated, and the bubble economy took off, culminating in our current disaster.

And so, we find ourselves facing the possibility of world war again—not a U.S.-Russian showdown, but a Hundred Years War of religious strife. See *International* and *National* for details.

On May 8, LaRouche’s next webcast will take up the issue of “What Has To Be Done If Civilization Is To Be Saved.” Listen to the man: He knew what was needed in 1983, and he still knows.



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The Strategic Defense Initiative was a policy for mutually assured survival, crafted by LaRouche.



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The current crisis in world affairs did not have to be. An alternative future was on the verge of coming into being in the early and mid-1980s; one that would have brought about economic development, global cooperation in ending the sources of war, and a crushing defeat of the British Empire. The crucial issue was the Strategic Defense Initiative, the Reagan initiative which had been devised by Lyndon LaRouche. It was the rejection of that SDI which brought us into the current period of extreme danger.

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Instead of addressing what should be considered as the key to India's survival, by transforming the nation's vast and largely impoverished agricultural sector, leaders in New Delhi sing hosannas about Information Technology and its direct offshoots, which serves not even 1% of the population. Will the famines of the British Raj return as a result?

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LaRouche's SDI: The World That Should Have Been

by Jeffrey Steinberg

April 19—The world, at present, is plunging headlong, recklessly, into a New Dark Age.

The final phase collapse of the present floating-exchange-rate global financial system is well underway, and no initiatives taken by any government, since the 2007-08 explosion of the financial bubble, has done anything to reverse the accelerating, hyperinflationary disintegration. That hyperinflationary collapse, unless reversed immediately by a bankruptcy reorganization, as spelled out by Lyndon LaRouche in his call for a Global Glass Steagall reform, will reach a break point well before the end of this year.

The physical economic collapse of, particularly, the trans-Atlantic leading economies, is accelerating at an even greater rate, already passing the point where the productive capacity of the planet falls far short of what is required to continue to provide the most basic needs of the Earth's 6.7 billion human inhabitants. Without a U.S.A.-led revival of the physical economies of the leading trans-Atlantic nations, including notably the United States, Germany, France, and Italy, no amount of marginal real economic expansion in the Asia-Pacific region can avert the total physical economic breakdown of the planet as a whole.

This deadly present state of affairs did not have to be. An alternative future was on the verge of coming into being in the early and mid-1980s; one that would have brought about a long period of explosive economic development, global cooperation in ending the sources of war, and a crushing defeat of the power of the British Empire. The crucial issue was the Strategic Defense Initiative (SDI), the Reagan initiative which had been crafted by Lyndon LaRouche, and which held the potential for shifting the strategic equation in favor of peace and prosperity. It was the rejection of that SDI which brought us into the current period of extreme danger.



EIRNS/Stuart Lewis

If LaRouche's SDI had not been rejected, the world wouldn't be in the disastrous mess it is. Today, the essence of that proposal is still on the table, as LaRouche's Four Powers plan. Here, LaRouche discusses his solutions at his Dec. 3, 2009 webcast.

If there is to be any hope of avoiding the current on-rushing London-driven New Dark Age, the lessons of that earlier missed opportunity must be understood—and acted upon. Ironically, LaRouche's basic SDI conception, expressed today in the form of his Four Powers proposal, remains the unique policy solution for the current crisis.

The Only Enemy: The British Empire

Were this crisis simply a matter of a failure of leadership, it would be bad enough. But the root of the problem is that, increasingly since the death of President Franklin D. Roosevelt, in April 1945, the dominant force shaping global economic and financial policy has been the British Empire, an empire with global reach, and based on the maritime financier oligarchical model of the Venice that willfully brought on the 14th-Century New Dark Age, which nearly wiped out continental Europe.

Today's British oligarchy, typified by Royal Consort Prince Philip, the Duke of Edinburgh, is aggressively promoting another Dark Age, centered upon a policy of radical Malthusian population genocide, that could wipe out 80% of the world population in a matter of several generations. It is the power of this

British Empire, and that factor alone, that poses the greatest, existential threat to the survival of mankind. Its tentacles stretch from Wall Street and Washington, D.C., to Moscow, New Delhi, Brasilia, and most other world capitals. Its own concentration of monetary power lies offshore, in such drug-money-laundering havens as the Dutch Antilles, the Cayman Islands, and Dubai.

The present British Empire is an even more virulent form of the British East India Company, against which the American Revolution was successfully waged.

U.S. President Barack Obama owes his career to those City of London and Wall Street circles who engineered his election, precisely because of their

fear of a revival of the American System policies of FDR, in the face of worse than Great Depression conditions of life for a growing majority of Americans.

Permanent War, Permanent Chaos

The rapidly approaching Doomsday moment for the present global financial system is widely recognized among City of London circles. Occasionally, as in the recent writings of British imperial apologist Niall Ferguson, they share the recognition with some segments of the general public.

In response to this existential crisis, this London-centered oligarchy, and its agents and dupes around the globe, is moving to literally blow up the world, through a new Hundred Years religious war, stretching across much of Eurasia. The presently preferred detonator for such a perpetual asymmetric war, as designed in London and promoted by such figures as former British Prime Minister Tony Blair and former U.S. Vice President Dick Cheney, is an Israeli preemptive military strike on Iran, a strike premised on a U.S. follow-on military intervention in support of Israel, regardless of whether Washington gave its advanced blessing to such an Israeli act of strategic madness.



UN Photo/Marco Castro

Israeli Prime Minister Benjamin Netanyahu, a longtime British asset, is making a credible threat of launching military attack on Iran—as part of the British permanent chaos scenario. Here, Netanyahu fulminates at the United Nations in September 2009.

The fact that such an attack would serve no genuine Israeli or American strategic interests merely underscores the degree to which policymaking is steered by assets controlled from outside, whose behavior is, by its nature, tantamount to treason against their respective nations and peoples.

With President Obama in the White House, such a suicidal American response is virtually assured—despite vigorous opposition from leading circles within the U.S. national security establishment, including advisors to President Obama himself. As one leading retired U.S. military officer put it, “It is President Obama’s call. He is the Commander-in-Chief. At the moment of truth, everyone else is merely an advisor.”

Israel, one of the principal pawns in the still-ongoing Sykes-Picot neo-colonial Middle East arrangement, would justify such a strike, on the greatly exaggerated grounds that Iran is near to obtaining a nuclear weapons capability. By every indication, a planned Israeli strike upon targets inside Iran is scheduled to take place sometime before the November mid-term Federal elections in the United States, and, perhaps, in the immediate days and weeks ahead.

U.S. intelligence assessments, presented during Senate Armed Services Committee hearings last week, make clear that, under even the most favorable circumstances, Iran is two to five years away from a deployable nuclear weapon. And the reality is that Iran is probably much further from mastering the technologies for a deployable nuclear weapon. Nevertheless, the drumbeat for war is sounding now.

Why? Because a new Hundred Years religious war is being promoted on a British timetable, driven by the global financial disintegration, a disintegration that jeopardizes the power of the City of London. Israel is the mere suicidal pawn. And such a confrontation is virtually certain to destroy the United States, which has been the number one object of British hatred since before the American Revolution and the establishment of the Federal Constitution, going back to the time of the Massachusetts Bay Colony.

Under conditions of such an Israeli attack on Iran—an attack that would only strengthen the current dominant Revolutionary Guard power structures in Tehran, until American military intervention—London might also choose to unleash an assassination of its own chosen American asset, President Obama. Assassination of Obama would throw the United States into the kind of social turmoil that would create a groundswell of support for dictatorship, thus ripping up the U.S. Constitution forever. The long history of British assassinations of American Presidents should underscore the actual danger to President Obama—ironically, at the hands of his own London sponsors.

Further adding to the perpetual war/perpetual chaos scheme, an imminent Israeli attack on Iran would almost certainly take place during a planned U.S. and NATO major military offensive in the Kandahar province of southern Afghanistan, an offensive that violates all of the most fundamental maxims of strategic warfare.

Compare the folly of Gen. Stanley McChrystal, the U.S. and NATO commander in Afghanistan, to the warnings delivered in 1961 to President John F. Kennedy by Gen. Douglas MacArthur (ret.) and Gen. Dwight Eisenhower (ret.), and the issue becomes obvious. MacArthur and Eisenhower warned President



Cpl. Sarah Furrer

The escalating Afghanistan War fits perfectly into the British imperial plan to destroy the United States, and Gen. Stanley McChrystal's "surge" policy is an integral part of it. Here, McChrystal consults with British Prime Minister Gordon Brown, second from right, in August 2009.

Kennedy not to get involved in any land war in Asia. President Kennedy wisely accepted their advice, against the wishes of his own Secretary of Defense, Joint Chiefs of Staff, and National Security Advisor, and cancelled plans for direct American military engagement in Indochina. Had Kennedy not been assassinated by a team of sharpshooters on orders from London, the United States would have avoided the nightmare of Vietnam.

Now, the United States enters a fourth decade of long wars in Afghanistan, wars that have destroyed the foundations of the pre-1979 Afghan economy and society, and replaced it with a narco-economy, which supplies well over 90% of the world's opium and heroin, spreading addiction, death, and menticide around the globe, precisely as the British East India Company's 18th- and 19th-Century Opium Wars did. One of America's potential leading Four Powers allies against this British imperial drive for global chaos, Russia, is among the leading victims of the British Afghan-centered new opium war. Continental Europe and the United States are the other two principal targets of a flood of cheap illegal narcotics.

It Did Not Have To Be

Now, let's look at the crucial turning point of the early 1980s.

On Dec. 31, 1982, Lyndon LaRouche delivered a speech in New York City to a conference of the International Caucus of Labor Committees. He presented an assessment that his proposal for U.S.-Soviet collaboration on a scientific and technological revolution, to develop and deploy a system of strategic ballistic-missile defense, a proposal that he had first presented in 1977, could change the course of history. He insisted that such a radical change in direction of world affairs had to be achieved within the next 100 days.

"If we succeed, if President Reagan does this thing, in the coming weeks," La-

Rouche told the audience of 1,000 supporters, "then we shall have administered to that ancient foe of our people and of the human race—the Harrimans, et al., the Malthusians—not a killer blow, but a very deadly defeat; a sharp reduction of the Malthusian power internationally. We shall have cleared the decks, weakened the enemies of humanity, to the point that those who are not the enemies of humanity are given a greater latitude for making decisions without having to submit to the Harrimans and that crowd in the period ahead.

"It is in that sense, in that act, which, I believe—in this great tragedy through which we are now living—that choice, is the *punctum saliens* of our age. Either we can grab it, or I know not what we can do."

At the moment he delivered those words, LaRouche knew that there was a very real possibility that President Ronald Reagan might take up his proposal to bring an end to the Bertrand Russell-engineered era of thermonuclear mutually assured destruction (MAD).

LaRouche first devised his proposal for Soviet-American collaboration on strategic ballistic-missile defense in 1977, in the context of his fight against the Jimmy Carter Presidency, which was being run by the



EU

Both Yuri Andropov (right), General Secretary of the Communist Party of the Soviet Union from 1982-84, and Mikhail Gorbachov, his successor until the U.S.S.R. dissolved in 1991, acted as outright traitors to their nation, by rejecting President Reagan's offer to collaborate on the SDI.

about Soviet advanced work in particle beam lasers, LaRouche crafted his proposal for joint American-Soviet collaboration on the development and deployment of a space-based ballistic-missile defense system, based on new physical principles. LaRouche's concept was to defeat the threat of MAD, through a more scientifically and technologically advanced system of mutually assured survival.

LaRouche knew, from his much earlier groundbreaking work in the science of physical economy, that the advances required for such a ballistic-missile defense system, in many frontier areas of scientific discovery, would have dramatic spillover effects on overall economic productivity.

After all, one of the greatest menaces represented by the Tri-

lateral Commission of David Rockefeller and Zbigniew Brzezinski, and which came into office, by means of massive vote fraud, with an avowed policy of provoking a nuclear confrontation with Moscow. LaRouche had been privy to confidential policy documents from the Trilateral Commission circles, revealing those plans for confrontation, prior to his own 1976 U. S. Labor Party Presidential campaign, and he devoted a half-hour nationwide prime-time television broadcast on Election Eve, to a warning about the dangers of a Carter victory.

As the result of those warnings, the worst threat of a direct provocation against Moscow was defeated, and LaRouche became a hero collaborator among a group of American patriots, including a network of World War II Office of Strategic Services (OSS) veterans, who were still quite active. One of those individuals, with whom LaRouche associates had frequent interaction during the late 1970s, William Casey, had been designated by President-elect Reagan in late 1980 to be his Director of Central Intelligence.

From the time of the 1977 publication of a report by then-Air Force Intelligence chief Gen. George Keegan,

lateral Commission-owned Carter Administration, was that it had adopted a policy, crafted by Chatham House in London and the Council on Foreign Relations in New York City, for a decade of "controlled disintegration of the world economy," based on the shutdown of advanced science research, including thermonuclear fusion, and the development of a globalized system of slave labor production. The deindustrialization of the United States was a top priority of the Carter Administration, and LaRouche's plan for Soviet-American collaboration aimed at defeating the Trilateralist plans, and their underlying ideology of Malthusianism and systems analysis.

The LaRouche-Reagan Collaboration

LaRouche played a significant role in the defeat of two Trilateral Commission candidates for the 1980 Presidential nominations of both the Democratic and Republican parties. LaRouche's Presidential campaign for the Democratic Party nomination in the New Hampshire primaries, delivered a deadly blow to the candidacy of Republican George H.W. Bush, a blow for which Bush the elder never forgave LaRouche. And

LaRouche's campaign, and collaboration with a then-more-serious Kennedy machine, weakened Carter, and helped contribute to Ronald Reagan's landslide victory in the 1980 general election.

During the New Hampshire primaries, LaRouche had the opportunity to sit for several hours with candidate Reagan, during a debate in Manchester, and a personal bond developed between the two men, which would have historic consequences.

During the November-December 1980 transition period, following Reagan's defeat of Carter, LaRouche was frequently called upon to consult with leading figures within the transition team, many of whom would assume top posts in the Reagan Administration. LaRouche played a significant role in facilitating an important border summit meeting between President-elect Reagan and Mexican President José López Portillo, for example.

First and foremost, LaRouche conveyed his grand strategy for an end to MAD and a reversal of the long-standing disintegration of the U.S. physical economy, through his beam defense plan. Despite opposition from utopian factions within the Pentagon and Congress, LaRouche's ballistic-missile defense proposals gained growing institutional traction, between 1981-83.

A Soviet Approach

The Soviet leadership, still under Leonid Brezhnev, was deeply puzzled by the incoming Reagan Administration, and in the early days following the inauguration, a senior Soviet diplomat at the United Nations in New York requested LaRouche's appraisal of the new President and his team.

As you will read below in this author's 1993 account of the SDI back-channel negotiations, LaRouche used the opportunity of the Soviet approach to enter into officially sanctioned talks with Soviet officials on the prospects for a United States-Soviet collaboration on his own beam defense proposal.

While many aspects of the Soviet deliberations on the LaRouche proposal remain secret, what is certain, from the direct interactions, is that, through to the death of Brezhnev and his replacement by Yuri Andropov in November 1982, good faith discussions, at a very senior level, were taking place between Washington and Moscow, through LaRouche.

Within the Reagan White House, and key segments of the Pentagon and the CIA, a growing faction had

come to support the LaRouche proposal for what represented a complete overhaul of the global strategic alignment. The prospects of a science-driven revival of a dying American agro-industrial economy, was understood by many to be part of LaRouche's unique capacities as a grand strategist.

Among the Henry Kissinger faction Republicans and a corrupt Democratic Party faction, now grouped around another Trilateral Commission asset, former Vice President Walter Mondale, LaRouche was hated, precisely because he was threatening to single-handedly overturn their policies and powers. As early as August 1982, Kissinger was writing personal letters to then-FBI director William Webster, demanding that LaRouche be silenced.

This was the backdrop to LaRouche's Dec. 31, 1982 *punctum saliens* speech.

Reagan Delivers

On March 23, 1983, Ronald Reagan delivered a nationwide television address from the Oval Office, in which he formally announced what he called the Strategic Defense Initiative. For leading political circles in Washington, Moscow, and in the capitals of all leading Western European and Asian nations, it was clear that President Reagan had adopted LaRouche's mutually assured survival policy. Through follow-on statements and private communiqués, the message was delivered directly to top circles in Moscow: The United States was prepared to enter into strategic collaboration with the Soviet Union to end the decades of threatened thermonuclear Armageddon.

But, in Moscow, a significant change had occurred, with the accession to power of Yuri Andropov. Andropov was, in effect, a hardcore British agent, who had been among the earliest of the Soviet officials to strike a deal with Britain's Lord Bertrand Russell, around the establishment of a Malthusian world government arrangement between Eastern and Western imperial powers. Andropov had been profoundly impacted by his experience as Soviet ambassador to Hungary during the 1956 revolt. As KGB head beginning in 1967, Andropov played a central role in the establishment of the International Institute for Applied Systems Analysis (IIASA) in Vienna, Austria, which institutionalized the earlier Bertrand Russell agreements with the late Soviet leader Nikita Khrushchov.

Despite the fact that he was fully informed of the

two years of back-channel negotiations in Washington, conducted by LaRouche under the sponsorship of the Reagan National Security Council, Andropov rejected Reagan's SDI offer of collaboration.

With that treasonous decision, Andropov assured the near-term disintegration of the Soviet Union. An exhausted and drained Warsaw Pact and Comecon could not sustain a competitive defensive arms race, particularly given that the Soviet Union, with its compartmentalized military-industrial sector, was incapable of rapidly absorbing new scientific and technological discoveries into the overall economy.

Throughout the two years of back-channel talks that preceded Reagan's March 23, 1983 announcement of the SDI, LaRouche had repeatedly emphasized the tremendous economic benefits—to the Soviet Union and to the West—of his science-driver policy. He had offered a candid assessment of the inherent weaknesses in the Soviet economic system, during his frequent face-to-face talks with his Soviet interlocutor, and had commissioned and written dozens of policy papers, elaborating how the Soviet-American collaboration on breakthroughs in science based on new physical principles would transform the world economy—as well as ending the horrors of thermonuclear blackmail.

Both preceding and following the Reagan speech, LaRouche and associates had also organized an international movement in support of his mutually assured survival policy. Leading military and political circles in France, the Federal Republic of Germany, Italy, Japan, Argentina, and India had embraced the LaRouche vision for a world freed from the threat of nuclear war, and the prospects of a global economic renaissance, driven by unprecedented advances in new technology.

While no one claimed that a global system of space-based particle beam laser defense against thermonuclear warheads would be immediately achieved, the shift from mutually assured destruction to mutually assured survival would have redefined global affairs, in effect establishing a new, reinvigorated Westphalian system of collaboration among sovereign nation-states that had been pitted against one another, during the British-engineered Cold War.

The Collapse

LaRouche did not give up on the SDI, even after Andropov's rejection of it and the launching of a vicious campaign by British agent Henry Kissinger and

others, to eliminate "the LaRouche factor" by assassination or railroad frame-up prosecutions.

In the ensuing months and years, LaRouche warned, through a series of "Global Showdown" reports, that Andropov's rejection of the Reagan SDI offer had doomed the Soviet Union to an early disintegration—before the end of the decade. When Andropov's hand-picked successor, Mikhail Gorbachov, took power in March 1985, he reinforced the Andropov policy. In October 1986, as 400 U.S. Federal, state, and local law enforcement personnel, backed up by U.S. military units, staged a raid on LaRouche's publishing offices in Leesburg, Virginia, Gorbachov met with President Reagan in Reykjavik, Iceland, and attempted to get the American President to abandon the SDI. Despite the best efforts of Reagan's own Secretary of State, George Shultz, and others, to break Reagan's commitment to strategic defense, and buy into Gorbachov's offer to trade off SDI for nuclear arms reductions—thus keeping the world under the tyranny of MAD—Reagan stuck to his principles.

By this time, however, the actual SDI program had been substantially defeated, and the Reagan Presidency was already, in effect, destroyed.

A moment of great opportunity was, for the time being, lost. The Soviet Union did collapse, on precisely the timetable, and for precisely the reasons that LaRouche had forecast. What's more, the rejection of LaRouche's concept of a science-driven U.S. and global economic reversal of the "controlled disintegration" policies of London and Wall Street, meant that the trans-Atlantic nations were also doomed to the process of economic and monetary disintegration that has now entered the endgame phase.

LaRouche Reflects on Reagan

On June 6, 2004, former President Ronald Reagan died. In a brief personal reflection, LaRouche offered a summary of his own collaboration with Reagan, which is of great relevance to the present moment of profound global crisis and challenge:

"This morning's press brought me stunning news: the death of U.S. President Ronald Reagan. Although we actually met on but one occasion, at Concord, New Hampshire for a candidates' night, in January 1980, that meeting between us changed world history in ironical ways which are reverberating still today.

"The continuing significance of that encounter is that it led to meetings with the incoming Reagan



EIRNS/Stuart Lewis

In his fight for the SDI, LaRouche enlisted the cooperation of leading military and political circles in Western Europe. Here, he greets French heroine, Marie Madelaine Fourcade, a leader of the French Resistance, who supported his efforts.

Presidential team, in Washington, D.C., later that year, and with new meetings with key representatives of the new Presidency over the interval into 1984. The most important product of those meetings was my 1982-83 role in conducting back-channel talks with the Soviet government, on behalf of that Presidency. The leading topic of those talks, coordinated through the National Security Council, was my proposal for what President Reagan was to name his 'Strategic Defense Initiative' (SDI). That proposal changed the world.

"In reflection on that and related experience, over the following years, I was often bemused in reflecting on the paradoxical features of that relationship to the President during that period. In part, the affirmative aspects of the relationship were rooted in our sharing the experience of our generation, despite the decade's difference in our age: the common experience of President Franklin Roosevelt's leadership of the U.S. economic recovery and the defeat of fascism. In all my dealings with the Reagan Administration during that time, this area of agreement was clearly, repeatedly demonstrated, whereas, on economic policy otherwise—such as the subject of Professor Milton Friedman—we were almost at opposite poles.

Stunning Intervention in History

"One point about those matters needs to be cleared up; and it is my special, personal obligation to do so. It is true that Soviet General Secretaries', Andropov's and Gorbachov's, repeatedly hysterical rejection of President Reagan's offer of March 23, 1983—not military threats from the U.S.A. and its allies—led to the fall of the Soviet system six years later. It was the folly of the Soviet government, not threats by the administration of President Reagan, which led to the end of the Soviet system in the way that occurred. On March 23, 1983, the President had made a public offer, which he renewed later, to find a way to escape the system of 'revenge weapons.' It was the Soviet rejection of the President's offer which brought down the Soviet economy and caused

the break-up of the Soviet Union. Had the President's offer been accepted then, during the years which followed, the history of the world would have made a better turn than it did then, better for both the U.S.A. and Russia, a better way toward a better world today.

"Had we reacted to the break-up of the Comecon/Warsaw Pact bloc as I proposed publicly in October 1988, the worst of the miseries experienced during the 1989-2004 interval to date, on all sides, would have been avoided. Those 1989-2004 failures of U.S. and European policies on this latter account, do not detract from the indelible achievement of President Reagan's most stunning intervention in history, as first announced on March 23, 1983. Such is his enduring personal landmark in all truthful future accounts of U.S.A. and world history.

"Ironically, the U.S. Democratic Party's leadership never understood any of this, to the present day; that makes it all the more important that President Reagan's achievement on this account, be commonly acknowledged by his survivors, Republican, Democratic, and others, today.

"Such is the nature of the institution of the U.S. Presidency. That is not past history. It is a lesson in statecraft which the new generations of this world must still learn today."

LaRouche's SDI Changed the World

Jeffrey Steinberg gave this speech to a conference of the International Caucus of Labor Committees in Northern Virginia on March 20, 1993. Lyndon LaRouche was in prison at the time, a political prisoner incarcerated by the George H.W. Bush Administration in 1989. He was released on parole in 1994.

Ten years ago this week, President Ronald Reagan changed the world by delivering the following brief message at the close of his nationwide televised address: "In recent months," the President said, "... my advisors ... have underscored the necessity to break out of a future that relies solely on offensive retaliation for our security. Over the course of these discussions I have become more and more deeply convinced that the human spirit must be capable of rising above dealing with other nations and human beings by threatening their existence.... Wouldn't it be better to save lives than to avenge them? Are we not capable of demonstrating our peaceful intentions by applying all our abilities and our ingenuity to achieving a truly lasting stability? I think we are—indeed we must!

"After careful consultation with my advisors, including the Joint Chiefs of Staff, I believe there is a way. Let me share with you a vision of the future which offers hope. It is that we embark on a program to counter the awesome Soviet missile threat with measures that are defensive. Let us turn to the very strengths in technology that spawned our great industrial base.... What if free people could live secure in the knowledge that their security did not rest upon the threat of instant U.S. retaliation to deter a Soviet attack, that we could intercept and destroy strategic ballistic missiles before they reach our own soil or that of our allies? ... Isn't it worth every investment necessary to free the world from the threat of nuclear war? We know it is!...

"I clearly recognize that defensive systems have limitations and raise certain problems and ambiguities. If paired with offensive systems, they can be viewed as

fostering an aggressive policy and no one wants that. But with these considerations firmly in mind, I call upon the scientific community in our country, those who gave us nuclear weapons, to turn their great talents now to the cause of mankind and world peace; to give us the means of rendering these nuclear weapons impotent and obsolete.... We seek neither military superiority nor political advantage. Our only purpose—one all people share—is to search for ways to reduce the danger of nuclear war.

"My fellow Americans, tonight we are launching an effort that holds the promise of changing the course of human history. There will be risks, and results take time, but I believe we can do it. As we cross this threshold, I ask for your prayers and your support."

The following day, March 24, 1983, in a public statement issued from Wiesbaden, West Germany, Lyndon LaRouche offered his personal congratulations and support to the President with the following words: "No longer must Democrats go to bed each night fearing that they must live out their lives under the threat of thermonuclear ballistic terror. The coming several years will be probably the most difficult of the entire post-war period, but, for the first time since the end of the 1962 Cuban Missile Crisis, there is at last hope that the thermonuclear nightmare will be ended during the remainder of this decade.... Only high level officials of government, or a private citizen as intimately knowledgeable of details of the international political and strategic situation as I am privileged to be, can even begin to foresee the earth-shaking impact the President's television address last night will have throughout the world. No one can foresee what the exact consequences of the President's actions will be; we cannot foresee how ferocious and stubborn resistance to the President's policy will be, both from Moscow and from the nuclear freeze advocates in Europe and the United States itself. Whatever those reactions and their influence, the words the President spoke last night can never be put back into the bottle. Most of the world will soon know, and will never forget that policy announcement. With those words, the President has changed the course of modern history.

"Today I am prouder to be an American than I have been since the first manned landing on the Moon. For the first time in 20 years, a President of the United States has contributed a public action of great leadership, to give a new basis for hope to humanity's future to an agonized and demoralized world. True greatness



Ronald Reagan Library

President Reagan's March 23, 1983 televised address, where he proposed cooperation with the Soviet Union for mutually assured survival, was a once-in-a-lifetime opportunity for world peace, based on the conception and input of Lyndon LaRouche.

in an American President touched President Ronald Reagan last night; it is a moment of greatness never to be forgotten.”

LaRouche's prophetic comments on President Reagan's March 23 address were based on his own intimate involvement in the process leading up to the President's adoption of what he labeled the Strategic Defense Initiative. From Moscow to London to Washington, among the small circle of the world's most powerful political figures, friends and enemies alike, there was absolutely no doubt that President Reagan had adopted LaRouche's strategic doctrine. Against all odds, the power of an idea, devised and promulgated by Lyndon LaRouche, had “touched” the President of the United States and a small handful of his most loyal advisors, and history was made.

For some leading figures in Moscow, one of the critical questions left unanswered by the TV address of March 23 was whether President Reagan's adoption of the ballistic missile defense/Mutually Assured Survival doctrine also meant that he had consciously adopted Lyndon LaRouche's *Operation Juárez* proposal for a new world economic order. But on the question of ballistic missile defense, there was no doubt.

Earlier in the afternoon of March 23, at a National Security Council background briefing for the White House press corps, details of the President's 8 PM TV address had been filled out. At that briefing, it was made

clear that President Reagan would propose that the United States and the Soviet Union work together to make the doctrine of Mutually Assured Survival a reality. Shortly after the President's speech, Defense Secretary Casper Weinberger more formally conveyed the offer to Moscow for the two superpowers to work together to develop and deploy a strategic ballistic missile defense system.

Not only was LaRouche the intellectual author of the policy concept behind Reagan's SDI. Between December 1981 and the date of the President's speech, LaRouche, acting on behalf of and at the behest of the Reagan White House and other U.S. government agencies, personally conducted back-channel negotiations with high-level representatives of the Soviet government. As the result of those negotiations, Moscow was fully informed, well over a year in advance of the President's March 23 speech, of the details of

the policy offer. And because of LaRouche's personal role in those discussions, Moscow had no justifiable reason to doubt the sincerity of President Reagan's offer.

Had Moscow decided to take up President Reagan's generous offer, rather than adopt the suicidal alternative, Lyndon LaRouche would have undoubtedly been called upon to continue in his role as broker and guarantor of a new era of world peace and prosperity based on a thorough transformation of East-West and North-South relations. Tragically, LaRouche was right when he warned on March 24 about the reactions that would come spilling out of the crevices in Moscow, London, New York, and Washington. But he was also right when he said that the actions taken by President Reagan could “never be put back in the bottle.”

The Pre-History

President Reagan's March 23 address came as the result of years of effort.

Lyndon LaRouche and his associates had been talking about ballistic missile defense, employing new physical principles, since 1977.

During the perilous years of the Carter presidency, Mr. LaRouche had served as an unofficial channel of communication between elements inside the official U.S. intelligence establishment and Soviet intelligence counterparts. This was part of a “failsafe system” built

up by sane individuals on both sides of the East-West divide, to minimize the danger of a misunderstanding triggering a strategic confrontation. LaRouche was solicited for this effort in part in response to his election eve 1976 nationwide TV address in which he warned of the dangers of thermonuclear war should Jimmy Carter and the Trilateral Commission come into office.

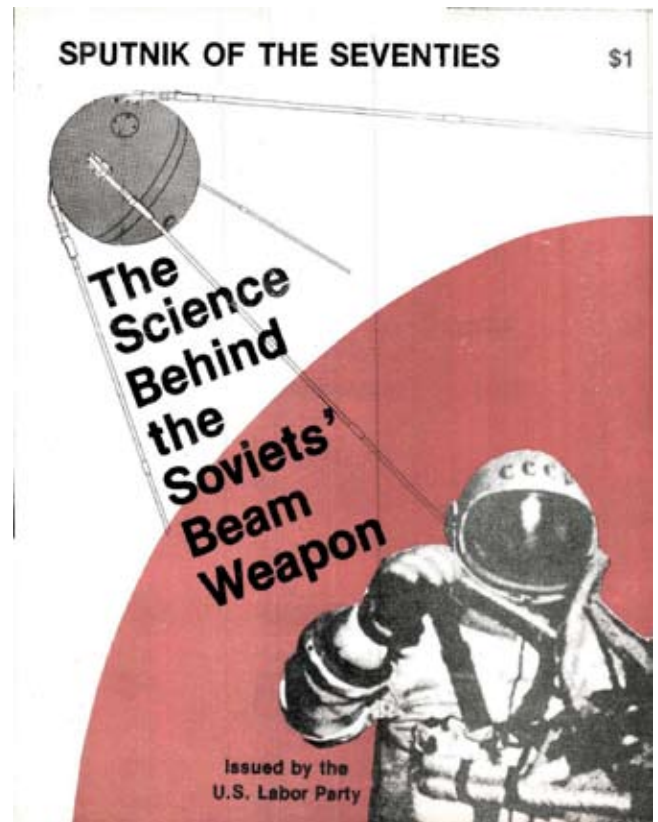
In early March 1981, a senior Soviet diplomat posted at the Permanent Mission to the United Nations, Mr. Kudashev, approached *EIR*'s Asian Affairs Editor, Dan Sneider, soliciting LaRouche's views on the new Reagan Administration. On instructions from the same U.S. intelligence channels through which the earlier Soviet discussions had been conducted, word of that approach and a detailed summary of the discussion, were forwarded to White House Councillor Edwin Meese.

By the early Autumn of that year, LaRouche had spelled out his proposals for a joint or parallel U.S.-Soviet strategic ballistic missile defense program. During this same period, representatives of *EIR* held preliminary discussions with a senior diplomat at the Soviet Embassy in Washington, D.C. named Mr. Shershnev.

As the result of these developments, in December 1981, Lyndon LaRouche was again approached by senior U.S. intelligence officials and formally asked to initiate "back-channel" discussions with appropriate Soviet representatives, on the possible adoption of a modification of existing strategic doctrine—i.e., LaRouche's own Mutually Assured Survival concept. LaRouche was informed that the back-channel discussions were classified as a compartmentalized secret operation known to a select number of senior officials under a code-name.

By this time, Lyndon and Helga LaRouche had met personally with CIA Deputy Director Bobby Ray Inman at the Agency's facility adjacent to the Old Executive Office Building and the White House.

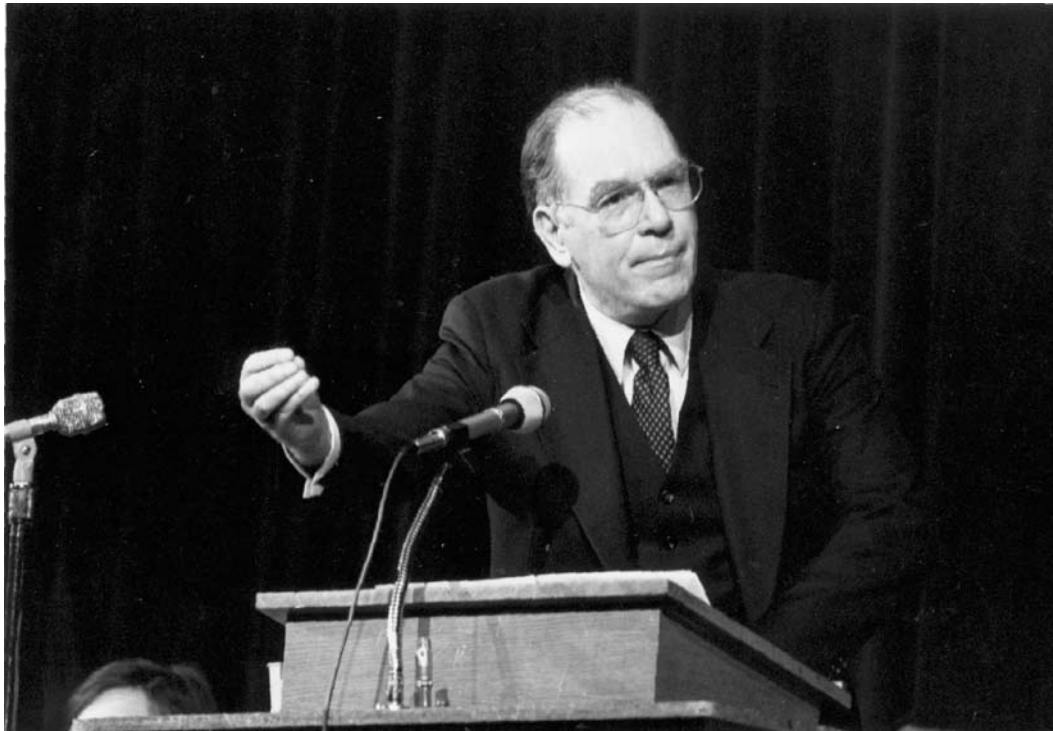
In support of his back-channel efforts on behalf of the ballistic missile defense policy, on Feb. 18-19, 1982, LaRouche participated in a two-day *EIR* seminar on the subject and related topics in Washington, D.C. Of the 600 or so attendees, a number were Soviet and Warsaw Pact diplomats. At an *EIR* reception for participants in the conference, LaRouche was introduced to Mr. Shershnev and they had the first of a number of discussions about strategic policy issues affecting the U.S. and the U.S.S.R.



Having been made aware of the Trilateral Commission's policy of provoking war against the Soviet Union, LaRouche began campaigning for beam defense as early as 1977. Here, the cover of a pamphlet issued by LaRouche's U.S. Labor Party.

At their first private discussion, which took place in a suite at the Hay Adams Hotel in Washington shortly after the February 1982 event, LaRouche informed Shershnev that he had been designated by the Reagan Administration to conduct exploratory discussions, and that he would distinguish clearly when he was conveying official messages from U.S. government agencies and when he was providing his own personal evaluations.

In the early Spring of 1982, Admiral Inman announced his resignation as deputy director of the CIA effective several months later. The channels under whose auspices LaRouche had been carrying out the negotiations with Moscow representatives informed him at that point that the operation was for the time being aborted. Sensitive to the highly restricted "need to know" security surrounding the back-channel negotiations, LaRouche prepared a memo to Edwin Meese, seeking some guidance on how to proceed. That memo was hand delivered by a representative of the National



EIRNS/Philip Ulanowsky

At the 1982 year-end conference of the LaRouche movement, LaRouche told his listeners that they were living in a “great tragedy,” but were on the verge of President Reagan making a decision on the SDI: “That choice, is the punctum saliens of our age. Either we can grab it, or I know not what we can do,” he said.

Security Council. With the appointment of Judge William Clark as Special Advisor to the President for National Security Affairs in January 1982, LaRouche representatives had established ongoing discussions with a number of NSC officers.

After Ed Meese failed to provide any clear response to the LaRouche memo, Richard Morris, the Executive Assistant to NSC advisor Clark, informed LaRouche that the Council would take charge of the operation and that the sanctioned back-channel negotiations should continue uninterrupted.

By the Autumn of 1982, momentum had built up inside sections of the U.S. military and intelligence establishment in support of Lyndon LaRouche’s ballistic missile defense proposals. Gen. Volney Warner, a retired head of the U.S. Army’s FORCECOM, told LaRouche associates in October 1982 that the policy was winning strong support among some of the President’s key advisors. Also in October, Edward Teller, a close personal friend and science advisor to President Reagan, threw his support behind BMD, citing recent breakthroughs at Lawrence Livermore Labs on some of the very “new physical principle” approaches advocated by LaRouche. Significantly, Teller also advocated sharing these scientific and technological breakthroughs

with Moscow.

LaRouche publicly alluded to his role in the back-channel process in a Dec. 12, 1982 *EIR* Memorandum titled “The Cultural Determinants of an Anti-Missile Beam-Weapons Policy:” “During the months since I first announced the proposed beam-weapons policy, since February of this past year, I have had a number of occasions to discuss this policy with Soviet and other East Bloc representatives, both in person and through relayed communications. In such discussions one must acknowledge that the Soviet representative in question is speaking as a representative of his government to me as a person whom that representative views as connected to policy-influencing agencies of the United States. Therefore, the kinds of discussions which occur have two functional aspects. In one aspect, each of us is speaking for the record. I am careful to indicate what I believe to be my government’s policy, as well as I know that policy, as for the record. My Soviet discussion partner in each case will do the same. Then, apart from such statements of policy for the record, we are able to enter into a more or less frank discussion of possible other, additional policy options.”

LaRouche again addressed all of these issues in his Dec. 31, 1982 speech to the International Caucus of

Labor Committees conference in New York City. Referencing his Beam Defense program, LaRouche observed: “If we succeed, if President Reagan does this thing, in the coming weeks, then we shall have administered to that ancient foe of our people and of the human race—the Harrimans, et al., the Malthusians—not a killer blow, but a very deadly defeat: a sharp reduction of the Malthusian power internationally. We shall have cleared the decks, weakened the enemies of humanity, to the point that those who are not the enemies of humanity are given a greater latitude for making decisions without having to submit to the Harrimans and that crowd in the period ahead.

“It is in that sense, in that act, which, I believe—in this great tragedy through which we are now living—that choice, is the *punctum saliens* of our age. Either we can grab it, or I know not what we can do.”

In the early weeks of February 1983, back in Washington, LaRouche again conferred with Mr. Shershnev—this time in a suite at the Sheraton Carlton Hotel. In that discussion, Shershnev delivered a three part message to LaRouche and, through LaRouche, to the Reagan White House, straight from Moscow.

1. The Soviet government would reject SDI.

2. Soviet studies of LaRouche’s BMD proposals had proven that they were sound and viable. However, under conditions of “crash development,” the Soviet economy would be incapable of keeping pace with a revived U.S. economy. Therefore, it was principally on economic grounds that Moscow would reject the package.

3. Through other channels of discussion with the highest levels of the Democratic Party, Moscow had been informed that LaRouche’s BMD proposal would never reach the desk of President Reagan, and that, therefore, there was no danger of the Reagan Administration ever actually adopting the plan. Under those circumstances, since Moscow found the back-channel talks with LaRouche useful, they would be continued.

March 23, 1983 hit Moscow like a ton of bricks. Closer to home, the combat had already begun in earnest.

In his autobiography, President Reagan gave a hint of the battle:

“**March 22**—Another day that shouldn’t happen. On my desk was a draft of the speech on defense to be delivered tomorrow night on TV. This was one hassled over by NSC, State and Defense. Finally I had a crack at it. . . .

“**March 23**—The big thing today was the 8 p.m. TV speech on all networks about national security. We’ve been working on the speech for about 72 hours and right down to the deadline. . . . I did the bulk of the speech on why our arms buildup was necessary and then finished with a call to the science community to join me in research starting now to develop defensive weapons that would render nuclear missiles obsolete. I made no optimistic forecasts—said it might take 20 years or more but we had to do it. I felt good.”

Years after that historic date, I received a firsthand account from one of the key figures at the National Security Council of what actually happened on March 23.

James Baker III, as the White House Chief of Staff, was officially the last person assigned to review the President’s speeches before the final version was passed on to Reagan for approval. The SDI portion of the speech had been written under the auspices of Judge Clark by a White House speech writer, Aram Bakshian, who had been in contact with *EIR* for some time, initially courtesy of Richard Morris. When Baker saw the ballistic missile defense section of the speech, he personally went ballistic. He removed the entire final section, eliminating any mention of the SDI.

Fortunately, Judge Clark was alerted to Baker’s perfidy, and in a total violation of protocol, bypassed Baker, slipped into President Reagan’s office and alerted him to the deleted portion of the speech. Reagan reinserted the SDI announcement. James Baker didn’t find out about it until about 8:20 that night when the President read those fateful words to the American people.

Ironically, from Wiesbaden, West Germany, LaRouche had such a pulse-beat sense of the fight surrounding his strategic defense policy, that even after being informed of the late afternoon White House background briefing in which the SDI announcement was prominently featured, he warned us back in New York to watch the 8 o’clock telecast to be sure that nothing had been done at the last moment to sabotage the President’s public announcement.

I can assure you that there are leading figures from the Reagan Administration, who stood with us in the SDI fight, who will probably never forgive James Baker for what he tried to do that day.

In one of those fortunate quirks of scheduling, *EIR* and the Fusion Energy Foundation had arranged a conference on the strategic defense plan for mid-April in Washington, D.C. at the Vista Hotel. The event had



EIRNS/Stuart Lewis

Immediately following Reagan's announcement of the SDI, LaRouche's Fusion Energy Foundation carried out a massive international campaign for its acceptance. Here, FEF Executive Director Paul Gallagher explaining the concept on CBS national TV, March 24, 1983.

been scheduled prior to the President's March 23 speech. It was a standing room only crowd of 500 or 600 people. Mr. Shershnev sat in the front row. Afterwards, in a meeting with *EIR*'s Washington bureau chief, Shershnev conceded that his and Moscow's hardline attitude towards LaRouche's strategic defense proposals had been a mistake. He added that with the President's March 23 announcement, the situation was now too big for him to handle. He reported that he had recommended a face-to-face meeting between LaRouche and Georgi Arbatov, the head of the U.S.-Canada Institute. This recommendation was at that very moment being reviewed at the highest levels back in Moscow.

Two weeks later, the back channel was abruptly shut down on orders from Moscow. Shershnev was shortly thereafter summoned back home. . . .

Even after the Soviet government's rejection of the SDI policy, Lyndon LaRouche never abandoned the idea that this was the last, best hope for mankind. On Sept. 2, 1983—the day after the KAL 007 [Korean Air Line] downing—LaRouche wrote to Georgi Arbatov:

"There is no possible route to war-avoidance," LaRouche said, "except the general strategic doctrine I have proposed. . . . Since we must either end up agreeing to what the President has offered on March 23,

1983, or destroy one another, the only worthwhile discussion is a discussion of means to reach such war-avoidance agreement. . . .

"I am not in the least insensitive to the deep implications of the leading point I propose to discuss. I know there are aspects of this matter which are most painful by their nature to the Russian world-outlook, the issue of the 1439 Council of Florence, the issue of Plato versus Aristotle. Yet, experience shows that unless Soviet thinkers in responsible positions can fight through precisely these issues with me, avoidance of war may be impossible, since the philosophical basis for conducting such negotiations may be impossible. How much psychological discomfort of this sort would your associates be willing to endure for so unimportant a matter as perhaps saving the Soviet Union from thermonuclear holocaust?"

These blunt but hopeful words, so typical of the vision that LaRouche brought into all of his dealings with Moscow, spoke of axiomatics that are as valid today as they were a decade ago.

Now more than ever, the world needs Lyndon LaRouche—in the flesh and blood, free to shake things up and pull together the kind of international combination of people of goodwill that passed the world—albeit imperfectly—through the *punctum saliens* of 1983.

Space: The Ultimate Money Frontier

by Lyndon H. LaRouche, Jr.

The following article first appeared in the Feb. 23, 1996 edition of EIR in the context of a discussion of space exploration. Its economic and scientific scope, however, provide the essentials of how to think about the transformation which would have occurred, had President Reagan's Strategic Defense Initiative proposal been accepted.

It was the fair mid-1970s estimate, that the U.S. economy had received about 14 cents in benefits from each penny which the U.S. Federal government had spent on the U.S. Manned Moon-Landing program. So much for those hyperventilating, glassy-eyed, Mont Pelerin Society fanatics, who chant endlessly, that we must get the Federal government out of the U.S. economy.

The following identifies summarily each of the five sets of facts which any competent economist would have considered as background, before rendering judgment on issues of space policy....¹ First, the general dependency of all sustainable profitability of a national economy upon energy-intensive, capital-intensive modes of investment in scientific and technological improvements of the per-capita productive powers of labor. Second, the division of responsibility between government and the private sector in providing this investment. Third, why the government's investment in military and aerospace technology has proven itself to be such a big winner in the fight to increase the real national income of the U.S.A. Fourth, how the proposed Mars-colonization proposals of 1985-1986 came about, and how they will benefit the U.S. economy. Fifth, how space science works to this effect.

1. The American System of Political-Economy

The "American System of political-economy," as that term was defined by President George Washington's Treasury Secretary, Alexander Hamilton, was im-

1. LaRouche's conception of the space science subsumes his particular proposal for the Strategic Defense Initiative.



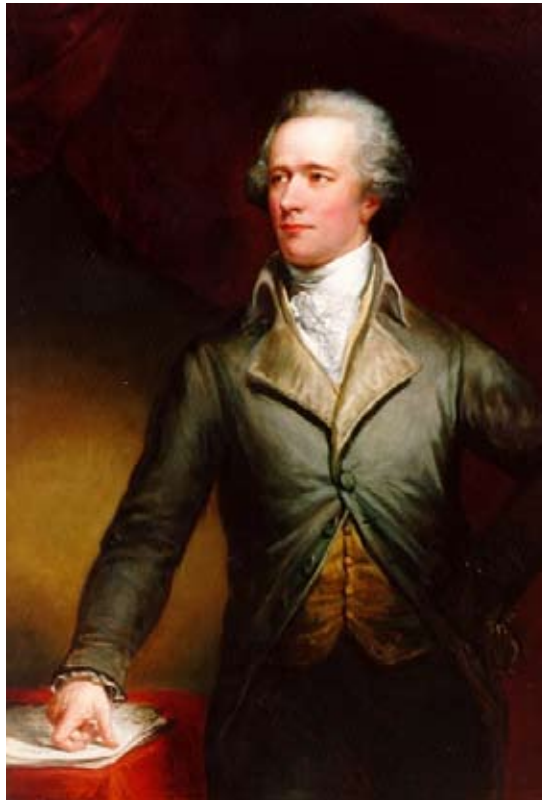
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Sustainable profitability of a national economy depends upon constantly increasing the energy and capital intensity of production, including the corresponding development of the productive powers of its labor force. Scientific work, like that shown here by workers putting a coil on the International Thermonuclear Experimental Reactor, will become more and more characteristic of the future, once a true Space Age is launched.

posed, implicitly, as an integral feature of the U.S. Constitution's ***Preamble and Article I***. At that time, 1787-1789, it was conceived, and received, as a remedy for the nearly fatal economic sickness of "free trade," with which the nation had been infected through the compromises embedded within the Articles of Confederation and in the 1782-1783 treaties with the United States' mortal adversary, then and now, the British monarchy.

It was the understandable zeal for peace with both Britain, and also with Britain's U.S. admirers, which

had brought about the nearly fatal corruption pervading the 1783-1789 U.S.A. The compromise with Britain had been effected, first, during 1782, with Prime Minister William Fitzmaurice Petty and his creature, British Foreign Service head Jeremy Bentham.² The 1763-1783 stay-behinds are found among both the strata of wealthy slave-owners, which later formed the oligarchy of Britain's American puppet-state, the 1861-1865 Confederacy, and New England and Quaker Tories. The Tories of North Atlantic states were typified by the treasonous, leading U.S. agent of Jeremy Bentham's British foreign-intelligence service, Aaron Burr: those families which profited from the slave-trade, from the British opium trade, and as London-loving textile manufacturers working in partnership with the purveyors of slave-produced cotton.³



The American System of political economy was de facto established by the first U.S. Treasury Secretary, Alexander Hamilton, who established the principle of government responsibility for providing for basic economic infrastructure, and promoting scientific and technological progress. Here, Hamilton in an oil portrait by Daniel Huntington (1865).

Protective Federal regulation of foreign and interstate commerce, a Federal government monopoly respecting the issuance and regulation of legal tender, a centralized common defense under Federal authority, the promotion of public works

2. The first of these agreements was negotiated with Prime Minister Shelburne (William Fitzmaurice Petty), during 1783. Initially, that agreement was repudiated by Shelburne's successors, but realities obliged them to affirm it in fact in the proceedings of the 1783 Treaty of Paris. The adoption of the "free trade" policies of the British East India Company, the interest which Shelburne represented, was the condition of peace imposed upon both France and the United States in the negotiation of these treaties.

3. On the subject of the common purpose of the two American tory oligarchies, the New England abolitionists and the Confederacy's slave-masters, see Anton Chaitkin, *Treason in America*, 2nd edition (New York: New Benjamin Franklin House, 1985); H. Graham Lowry, *How The Nation Was Won*, Vol. I (Washington, D.C.: Executive Intelligence Review, 1987); and, the work which influenced President Abraham Lincoln, Henry C. Carey, *The Slave Trade, Domestic & Foreign*, Reprint of 1858 edition (New York: Augustus M. Kelley, 1967).

of infrastructure, and the fostering of scientific and technological progress in infrastructure, agriculture, and manufacturing, were leading considerations motivating, and reflected in the 1787-1789 Constitution.

This "American System," rooted in the economic and monetary successes of the pre-1689 Massachusetts Bay Colony, is the economic design famously associated with such names as Benjamin Franklin, Alexander Hamilton, the Careys, John Quincy Adams, Henry Clay, Friedrich List, E. Peshine Smith, and Abraham Lincoln's pre-Teddy Roosevelt Republican Party; and has proven itself the most successful model of economy which has been seen in any part of the world during the recent three centuries.

The United States, in particular, never had an economic depression, or kindred experience, during any part of the

1793-1995 interval, since Washington's first administration, which depression was not the result of deviating from the U.S. Federal Constitution, into the follies of both "free trade" and kindred British corruptions of our national monetary, banking, and economic policies.

The Mont Pelerin Society quack-remedies peddled lately by fellows such as Sen. Phil Gramm and Speaker Newt Gingrich, are not the cure; they are the disease, like the corrupting influence of famous American Tories such as Albert Gallatin, or Andrew Jackson, Wall Street banker Martin van Buren, Franklin Pierce, treasonous President Buchanan, British spies Judah Benjamin and August Belmont, and, after Lincoln's murder, Andrew Johnson, Teddy Roosevelt, Woodrow Wilson, and Calvin Coolidge. Since 1763—and even earlier—there have been only two parties of principle in the United States, crossing all other nominal political-party lines: the patriotic party of Cotton Mather, Benjamin Franklin, Washington, Lincoln, and Franklin Delano Roos-

evelt, *versus* that tory tradition of Aaron Burr, the Massachusetts Lowells, and Benedict Arnold, which Americans in the Winston Churchill-loving tradition, such as Henry Kissinger, George Bush, Phil Gramm, Newt Gingrich, and the rabid “free trade” Democrats, typify today.

As documented in other locations, the characteristic differences in way of thinking, which divides the patriots from the American Tories, still today, is that the governing principles of the Tories, are typified by the empiricist world-outlook specific to the kind of philosophical liberalism (and, also, fascism) associated with Thomas Hobbes and John Locke.⁴ That point is underscored by the contrast between preambles of the respective constitutions of the U.S.A. and the pro-slavery Confederacy. The Tories are followers of Locke; whereas, the ideas of the U.S.A.’s patriotic founders were shaped by the explicitly anti-Locke influence of Gottfried Leibniz in physical science, in philosophy, in political morality, and in principles of political economy. Treasury Secretary Hamilton’s famous, December 1791 Report to the U.S. Congress, *On The Subject of Manufactures*, illustrates the governing influence of Leibniz’s economic science upon the American System of political-economy.

Putting to one side the expenditure for administrative and regulatory functions of the Federal government: Under the American System of political-economy, the dividing line between government’s role in the economy, and that of the private entrepreneur, is essentially threefold: the government is responsible for the economy of national defense, the maintenance and development of basic economic infrastructure, and the promotion of progress and investment in advances in science and technology. In each case, the responsibility undertaken by, and assigned to government addresses a primary need of the economy which the sum-total of private entrepreneurs could not fulfill competently without government’s own special and natural role in the economy of any civilized modern nation.

The responsibilities of government for infrastructure, include, presently, national and regional water management and related programs of general sanitation, public transportation, the organization of large-

4. Cf. Anton Chaitkin, et al., “The Anti-Newtonian Roots of the American Revolution,” *EIR*, Dec. 1, 1995 and “Leibniz, Gauss Shaped America’s Science Successes,” *EIR*, Feb. 9, 1996. On the subject of “characteristic differences,” see Lyndon H. LaRouche, Jr., “How Hobbes’ Mathematics Misshaped Modern History,” *Fidelio*, Spring 1996.

scale power grids, general urban infrastructure. This also includes governmental responsibility, at the variously appropriate levels of national, state, and local government, for a quality of universal education essential to the development of a qualified citizenry, and for the fostering of generalized increase of the productive powers of labor through investment in scientific and technological progress. It requires governmental responsibility, similarly, for ensuring the existence of adequate health-care delivery systems to all of the citizenry. It includes programs of scientific and technological progress which must be undertaken on a scale beyond the reasonable scope of the private entrepreneurs, as the Manhattan Project, the post-Sputnik program of National Science Foundation educational grants, and the Manned Moon-Landing program of the 1960s, typify this distinction.

2. The Lesson of the Soviet Union as an Infrastructure Desert

Go back to the second half of the 1960s. Compare three sets of national economies: A) The leading industrialized nations, typified by Japan, West Germany, and the United States; B) The Soviet bloc of nations (Eastern Europe and the Soviet Union); C) China and India as typical of greatly underdeveloped nations. Use maps of infrastructural features (rails, highways, inland waterways, and power grids) as aids in comparing the conditions in Japan and in Europe to the west of Berlin, with the development of infrastructure in continental Eurasia to the east and southwest of Berlin. Recognize, that during the second half of the 1960s, the general level of technology of production employed, and productivity, in Japan, the Federal Republic of Germany, and the U.S.A. were nearly equal, but that those three economies differed greatly in their respective population-densities per square kilometer of usable land-area. The characteristic of the three latter, developed economies, is the approximate functional correlation between population-density and density of infrastructure development.

By contrast with those three developed economies, the Soviet Union fell far short of being competitive, by virtue of lack of adequate development of basic economic infrastructure. On the same premise, China and India were economic disasters.

The principle involved, is, summarily, as follows.

The most characteristic distinction, which sets the human race absolutely apart from, and above all other



While the Soviet Union created a highly developed military industry, its failure to invest in basic economic infrastructure crippled the development of its economy, compared to the West. Here, a Soviet tank factory during World War II.

forms of life, is the quality of *cognition*: the ability of the individual human mind to create valid, revolutionary changes in axiomatic principles of human control over nature, by means of which the *potential relative population-density* of society is increased. This gain is reflected not only in an increase of the size and density of the human population, but also rises in individual life-expectancy, lowering of rates of sicknesses by age-interval group, and increases in both the “market basket” of household consumption and in the per-capita production of the contents of those household market-baskets.

Until the late Eighteenth Century, the overwhelming majority of the populations of sundry cultures was rural. At the time of the first census of the U.S. population, for example, more than 90% were still rural. The technological development of farming, forestry, and mining, was the foundation of mankind’s production of the physical preconditions of existence. In the history

of the early colonies in North America, and the young United States, the transformation of a relatively unfruitful wilderness into fertile, developed farmlands, was the foundation of progress in the human condition. Hamilton’s 1791 *On The Subject of Manufactures* provides a prophetic, rather detailed description of the process by means of which the United States was to be developed into the world’s leading agro-industrial power.⁵ It was the fostering of manufactures, made feasible through such means as development of roads and canals, which made feasible the interdependent increase in the productivity of agriculture and urban industry, as Hamilton describes this process. This development of infrastructure, is to be regarded as a development of the economic fertility of the entire inhabited land-area of the nation, comparable to the measures by which a fertile farm is hacked out of an infertile wilderness.

Hence, the relatively desert-like quality of infrastructural underdevelopment, and corresponding economic infertility, of most of the habitable territory of the former Soviet Union.

During the Nineteenth Century, the repertoire of basic economic infrastructure required, was expanded, to include railways, steam power, and so on. In the history of our Federal republic, infrastructure was supplied, chiefly, as either an economic activity of government, or through the instrumentality of privately owned, but government-regulated public utilities. This included not only tangible forms of infrastructure, but also the leading role of government in providing the means for universal education, health-care systems, and the fostering of science and technology.

Relatively speaking, an ironical failure of the Soviet economy, is that it lacked that “socialist” institution most successfully developed in capitalist western continental Europe, Japan, and the U.S.A.: publicly provided basic economic infrastructure, the indispensable development of the potential economic fertility of the land-area of the nation. Similarly, the most conspicuous economic challenge facing nations such as China and India is, similarly, the development of a basic economic

5. It should be stressed, that at the beginning of the Nineteenth Century, the average citizen of the United States had more than twice the literacy rate of the average subject in the British Isles, was approximately twice as productive, and had approximately double the standard of living. This advantage was not the “bounty of nature,” but the fruit of combined educational policies and dedication to scientific and technological progress, beginning with the Seventeenth-Century Massachusetts Bay Colony.

infrastructure adequate to foster urgently wanted increases in the potential productive powers of the nation's labor-force.

3. Military Spending and Space Exploration as Infrastructure

In modern warfare, the per-capita effectiveness of the individual soldier depends upon the technology and related logistical support with which he and his unit are equipped.⁶

In the history of the United States, the premises of military achievement were the fostering of technological progress within the Federal arsenal system, combined with the civil engineering programs, copying those features of Gaspard Monge's 1794-1814 *Ecole Polytechnique* in France, at West Point and Annapolis. Under Presidents James Monroe and John Quincy Adams, the model for scientific development of the U.S. military capabilities was the military science-driver programs developed in France, by Monge and Lazare Carnot, during 1793-1814. Later, as post-1814 France's quality degenerated under the influence of Laplace, Cauchy, and the positivists, the U.S. national security apparatus, centered around Benjamin Franklin's great-grandson, Alexander Dallas Bache, turned to the Germany of Alexander von Humboldt and Carl F. Gauss for the shaping of U.S. scientific progress and related military programs.⁷

It should be noted, that Lazare Carnot assumed command of the military defense of France at a time when the British agents in Paris, Robespierre's Jacobins, were satisfied that the invading armies would soon effect the dismemberment of France.⁸ Carnot, already established



U.S. Air Force/Staff Sgt. William P. Coleman

Despite the wastefulness of most U.S. military production, the scientific and technological advances "spilled over" into the civilian economy, and also played a part in qualifying a scientific workforce. Here, two Air Force men installing a bomb.

as a genius in military science, and also a ranking scientist, assembled his friends of the Monge circle to effect a technological revolution in warfare, as part of his rebuilding the French military forces under his command. The deployment of newly designed mobile field artillery, and its use for massed artillery fire, was among the measures which revolutionized warfare. Under the Lazare Carnot who came to be celebrated as the "Author of Victory," French forces went, during months, from effective defense to appearing as the virtually irresistible military force of the continent of Europe, creating the great instrument so famously misused by the picaresque Napoleon Bonaparte. The intertwined efforts of the two collaborators, Carnot and the *Ecole Polytechnique*'s Monge, established the model for what later efforts, such as the Manhattan Project and the German-American space-program, identify as science-driver forms of "crash programs."

Although we might trace the origins of the modern science-driver "crash program" to the Platonists Archimedes and Leonardo da Vinci, the conception of such

signed function of the Jacobins was not to lead France, but to arrange its destruction. Carnot was given leadership of the military, not to secure its success, but to assume the blame for a defeat which was presumed to be inevitable at that time.

6. The study of this development in modern warfare may be begun with reference to the relevant inventions of Leonardo da Vinci and the writings on warfare by Leonardo's ally Niccolò Machiavelli.

7. See Anton Chaitkin, "Leibniz, Gauss Shaped America's Science Successes," *loc. cit.*

8. The direction of the French Jacobins was supplied from London by the Jeremy Bentham who had assumed direction of the British foreign intelligence service under Lord Shelburne. For example, the French Danton and the Swiss lunatic Marat, were both trained personally by Bentham, in London, and sent to France to take over leadership of the Jacobin Terror. The relevant point, in this text location, is that the as-

programs is traced directly to Gottfried Leibniz's specifications for a science of physical economy, as developed through the work of such explicitly anti-Newton followers of Leibniz as the French 1793-1814 science community associated with Carnot and Monge.

During the Twentieth Century, most of the technological progress which has occurred, would not have occurred but for the impetus supplied by perceived military-strategic imperatives. Although space exploration lies as much outside the domain of military expenditure as within, the mid-1950s "moth-balling" of a Huntsville capability for putting a satellite into orbit, typifies the ugly reality of our Hobbesian age. Had the Eisenhower Administration been able to reach an "off" button, to stop the nagging beep of the Soviet Sputnik, put into orbit on Oct. 4, 1957, the U.S. space program would have been virtually choked to death by Arthur Burns' monetarist mothballs before the 1960s arrived.

For related reasons, the machine-tool activity centered in the arsenals has been the principal motor-force of modern investment in scientific and technological advances, in both improved qualities of products and increased productive powers of labor. Thus, although military products are essentially economic waste, throughout modern history, the greatest progress in the national income of nations has been won through that proliferation of new technologies which has occurred as a by-product of military investments in science and technology. As the Chase Econometrics study implies, government investment in space exploration has been the outstanding profit-producer for the taxpayer.⁹

4. The 1985-1986 Mars-Colonization Program

My widely debated, 1985-1986 proposal for a 40-year mission orientation for planting a science colony on Mars, was prompted by Helga Zepp-LaRouche's reaction to the December 1984 death of a dear friend and outstanding space scientist, Dr. Krafft Ehrlicke. She assigned me to prepare a paper for delivery to an international scientific conference, convened in memory of Krafft, at Reston, Virginia, June 15-16, 1985.¹⁰ Out of discussions of my presentation during that conference,

9. A study by Chase Econometrics in 1976, found that for each \$1 spent by the government on space exploration, more than \$14 was returned to the economy. —ed.

10. "Ehrlicke's Contribution to Global and Interplanetary Civilization," Proceedings of the Schiller Institute's Krafft Ehrlicke Memorial Conference, June 15-16, 1985, *Colonize Space!* (New York: New Benjamin Franklin House, 1985), pp. 27-51.

I was prompted to produce the proposal which I presented for publication about six months later, at the beginning of 1986. That proposal attracted much wider recognition, and a still-raging controversy, when it was presented in the form of a half-hour Presidential-campaign television broadcast, "The Woman on Mars," during 1988.

The manner in which this came about typifies the general rule in modern science. It is an account which need be told, if one is to understand the policy-framework within which U.S. space policy is situated today.

True to the Twentieth-Century intertwining of military procurement and space science, my association with space science, and my approach to space exploration had developed as a result of my contribution to what President Ronald Reagan named the "Strategic Defense Initiative" (SDI). I had first published that SDI design during August 1979, as a document of my 1980 campaign for the Democratic Party's Presidential nomination. That was brought into the Reagan Administration through my 1982-1983 work, on behalf of certain Reagan Administration agencies, in exploratory, back-channel discussions with the Soviet government.

One must glance back, to events few years earlier, to understand how this came about.

My own work in this direction had begun during 1975-1976. It started when I encountered a leaked report in the Hamburg newsweekly, *Der Spiegel*, on a pending NATO desk-operation of the Hilex series. This strange *Spiegel* report drew my attention to a piece of insanity which, I soon came to discover, was officially denoted as proposed NATO doctrine MC-14/4. These facts prompted my conviction that the developments in solid-fuel boosters and precision of targetting, combined with the urge toward forward-basing, were bringing us toward the threshold of potential first-strike nuclear warfare. When heads of superpowers are faced with the detection of a clutch of missiles a few minutes from one's territory, and the prospect that those few missiles might be capable of "pinning down" one's ability to kick back, the world were at the brink of a "first nuclear strike" potential. *Without an effective strategic ballistic-missile defense*, "first strike" would cease to be an unlikely strategic option.

The next step toward the idea which was to become known as SDI, was some 1977 discussions, held on my behalf, with the then recently retired, former head of Air Force intelligence, Maj.-Gen. George Keegan. Keegan suggested that scientists associated with me



On the initiative of his wife, Helga (center), who was a dear friend of outstanding space scientist Krafft Ehricke, Lyndon LaRouche developed a detailed proposal for a 40-year mission for planting a space colony on Mars. The proposal grew out of LaRouche's work on the SDI.

EIRNS/Stuart Lewis

assess the evidence that the Soviet Union had the capability of developing a deployable, ground-based, ballistic-missile defense, based upon what the 1972 ABM-treaty suffixes identify as “new physical principles.” Keegan’s concerns paralleled my own, in opposition to the regrettably stubborn, anti-scientist prejudices of former DIA head and (1980s) Heritage Foundation associate Daniel P. Graham.¹¹

My standpoint was different than many among the U.S. strategists who came to agree with the SDI simply as a sane choice of military technology. Winston Churchill’s Britain had been all too successful in exploiting—early and often—the premature death of Churchill’s deadly political opponent, Franklin Delano Roosevelt. Churchill’s London had lured Washington and Moscow into that geopolitical balance-of-superpowers game, by means of which the tattered and smelly remains of the old British Empire could play off Moscow and Washington to London’s profit, using the super-power conflict as a means of subordinating the sovereignty of every nation on this planet, to London’s

11. During late 1982, until after March 23, 1983, Lieutenant-General (ret.) Graham was a vigorous opponent of the policy which became the SDI. Even after he came around to professing support for the SDI by name, he insisted upon stressing “off-the-shelf” and related “kinetic energy” systems, deprecating “new physical principles,” as he had during his earlier attacks upon me and Dr. Edward Teller.

manipulating the relations between the two superpowers.

Unfortunately, by the late 1970s, very few among the relevant professionals, barring a relative handful of exceptions in Europe, recognized the significance of the fundamental strategic conflict between Roosevelt and Churchill. They did not comprehend the fundamental strategic significance of such follies of Averell Harriman’s and Winston Churchill’s Harry Truman, as Truman’s firing and fraudulent defamation of Gen. Douglas MacArthur, an action which brought to an end the United States’ true sovereignty as a nation-state, and ushered in those immoral forms of “cabinet” warfare pioneered in post-MacArthur Korea, and applied with a vengeance in 1960s Southeast Asia. So, by the late 1970s and early 1980s, only a dwindling handful among our military understood what was evil in Robert S. McNamara’s and Henry Kissinger’s pushing the Russell-Szilard, Pugwash dogmas of “détente.”

My starting-point, was to view the mutuality of the danger posed by trends of both powers toward forward basing, as a premise for bringing about a strategically indispensable, axiomatic change in global economic policy. Since *effective* forms of strategic ballistic-missile defense could not be accomplished by any means less advanced than “new physical principles,” U.S.-Soviet agreement to cooperation in developing such a

strategic missile defense, could, in my estimate, not merely bring the immediate military problem increasingly under control, but would represent an international science-driver effort, which would accelerate the productive powers of labor throughout the planet, through the “spillovers” of military technology into the civilian economies of the world as a whole.

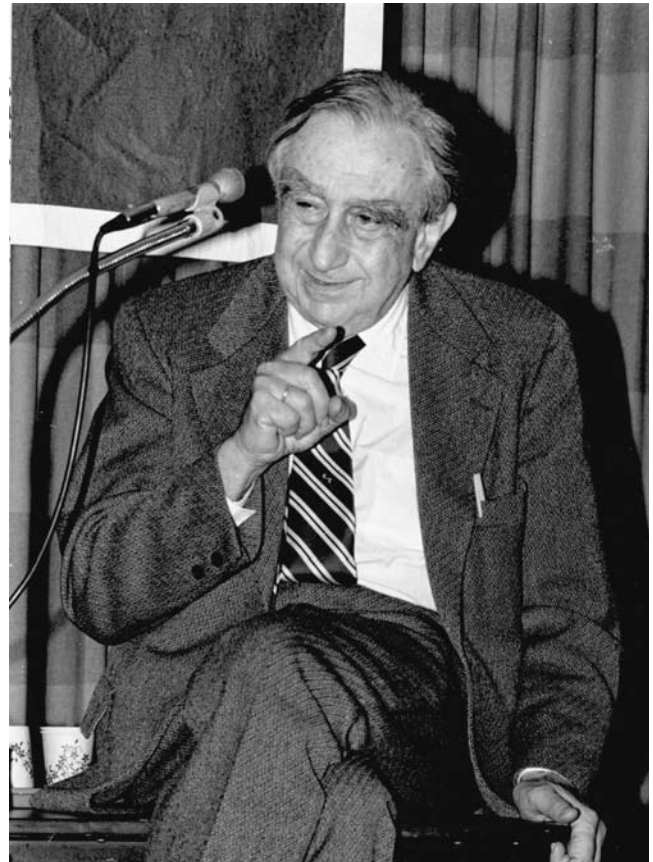
It was on that point that Dr. Edward Teller’s 1982 references to use of these technologies to advance “common aims of mankind,” and the offer of technological cooperation featured in President Reagan’s March 23, 1983 announcement, coincided precisely with my views on the proper design of the proposed agreement between the superpowers.

These global economic implications of effective strategic defense, were the point of departure for my 1985-1986 development of the Mars-colonization proposal. My views on the military and political-economic impact of “new physical principles” approaches to strategic defense, were, and are central axioms of my Mars-colonization program.

The crucial strategic incompetence which General Graham and his factional allies would never overcome, was their inability to recognize that it is economically impossible to achieve assured preponderance of the strategic defense by use of “kinetic energy” means, within the domain of dense flotillas of rocket-launched nuclear warheads. One must change the geometry of that domain, the aerial battlefield, a change in the physical geometry of the problem, which only “new physical principles” could accomplish. In the political-strategic domain, the same principle prevailed: Peace could be achieved only through either the defeat, or collapse of one of the superpowers, or through a radical change in the political-economic geometry of the planet. The same “new physical principles,” properly applied in a coordinated way, would accomplish the optimal result in both respects.

That is the quality of scientific and strategic thinking which is indispensable for competent formulation of space policy.

During 1982, my exploratory back-channel discussions with Moscow representatives, were paralleled by my briefings to relevant scientific and military institutions of other nations, including France, Germany, Italy, India, and Japan, on the type of policy which I was proposing (of course, without referencing my back-channel discussions with Moscow). Numerous among these professionals had significant backgrounds in space sci-



EIRNS/Stuart Lewis

LaRouche’s stunning success in winning converts to the SDI was reflected in the fact that none other than traditional anti-Communist Dr. Edward Teller endorsed President Reagan’s call for joint U.S.-Soviet development of the program. Here, Teller speaking at New York University in April 1983.

ence and related fields. A wide assortment of valuable collaborators was brought together in this fashion. This activity overlapped the significant scientific competencies of the Fusion Energy Foundation, of which I had been a co-founder, and with which I was actively involved throughout the period. Out of this aspect of the work on what became known as SDI, came the foundations for the 1985-1986 design of the Mars-colonization program.

My 1985-1986 Mars-colonization policy was developed and promulgated to prompt the U.S.A., as then still the leading nation of this planet, to use its leadership position to launch a global economic-recovery program whose design was based upon the lessons of the marvelous economic success of the 1960s Manned Moon-Landing “crash program.”

The need for such a program was great, even within the United States itself. By the close of the 1970s, the

United States had lost critical, large chunks of that technology, which we had had during the 1960s, which had been indispensable for the 1969 success of the Apollo program. Today, during the past thirty years, the per-capita *physical* value of the United States' economy has been shrinking at an average rate of more than 2% per year.¹² Around the world, moving from nation to nation, one of the most consistent pictures of the past thirty years' economic history, is the vanishing of entire, vital sectors of technology and of those types of labor skills which would be indispensable in any effort at an actual economic recovery. In short, contrary to the prophecies of such loonies as Britain's Lord William Rees-Mogg, and his American protégés Alvin Toffler and Newt Gingrich, the human body can not live on a diet of software.

The need for such a Mars colonization policy is much greater today, than during the mid-1980s. Without a very large-scale, government-based, global "crash program" form of science-driver spur to global investment in advanced technologies, it will be virtually impossible to effect an early general recovery of this planet's ruined economies. The revival of lost machine-tool and labor-skills resources, the stimulus to reviving educational systems from their presently technologically and culturally moribund condition, require, on an expanded scale, the kind of stimulus which was provided by the crash aerospace program of the mid-1960s.

12. The portion of this which is most readily measured, is shown by determining the increase in employment required to bring the output of each agricultural sector or industry up to the level of output needed to supply the same market-basket of goods, per household, which was average during the second half of the 1960s. In addition, we must consider the large amount of net disinvestment which has occurred in basic economic infrastructure and in productive and other physical capital goods of farms, industries, municipalities, and households, amounts which are not reflected in the deductions made by the Federal Reserve and government agencies, to arrive at estimated national Value Added. For these and additional reasons, the official estimates of National Product and National Income are essentially fraudulent, wildly overestimated.



Creative Commons/Metaveld BV

Among the advances in productivity impelled by the space program was the development and use of industrial lasers, like the one shown here. Such improvements in energy flux-density would characterize an economy like that envisioned by LaRouche in his SDI and space program proposals.

5. The Economic Principles of Space Science

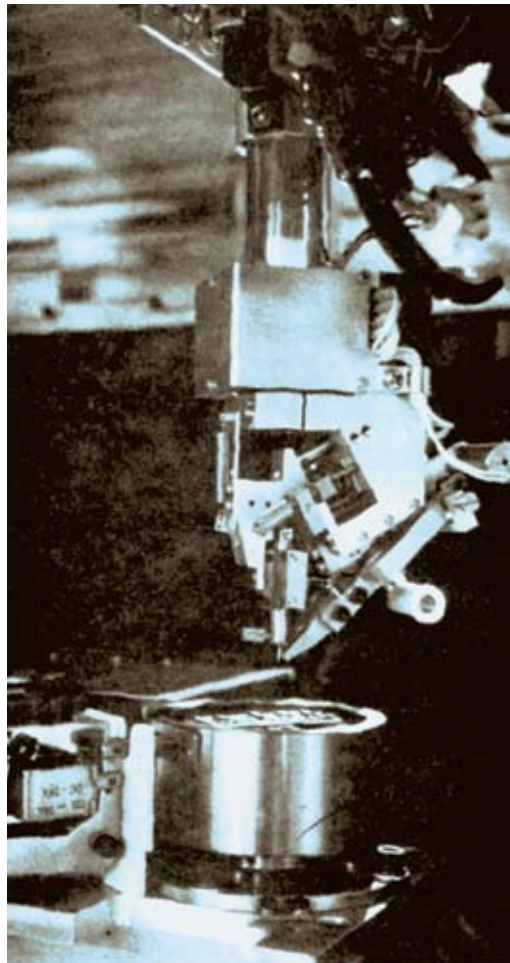
It is not sufficient to rely only upon the practical politics of the attention-getting fact, that there was a fairly estimated 14 cents return to the U.S. economy for each penny spent on the U.S. government's Kennedy space program. Just as a physician must prescribe no medication whose efficient principle is not known scientifically, costly governmental investments should not be risked on the opinions of political pragmatists. Since the relevant principles are presented in a significant number of published writings on my original discoveries in the science of physical economy, a summary suffices here.

The formal solution to the relevant, central problem of measurement in economic science, is set forth implicitly in Prof. Bernhard Riemann's widely circulated, but rarely understood habilitation dissertation of 1854.¹³ To reduce any validated experimental discovery of physical principle to the appropriate form, that principle must modify the relevant set of axiomatic assump-

13. Bernhard Riemann, "Über die Hypothesen, welche der Geometrie zu Grunde liegen" ("On the Hypotheses Which Underlie Geometry"), *Bernhard Riemann's Gesammelte Mathematische Werke*, Reprint of 1902 Teubner edition (New York: Dover Publications, 1953). See, Lyndon H. LaRouche, Jr., "Non-Newtonian Mathematics for Economists," *EIR*, Aug. 11, 1995.

tions underlying the mathematical physics existing prior to that discovery. The result of such a modification of such a set of axioms, is what Plato, and scientists after him, Riemann included, identify by the term *hypothesis*. The formal product of applying any such hypothesis to a system of formal logic, such as a deductive mathematics, is an open-ended set of mutually consistent propositions, called *theorems*, constituting what is known as a *theorem-lattice*.

The relevant problem of hypothesis, which is central to economic science: Any change in the set of axioms underlying a theorem-lattice, produces a new theorem-lattice, none of whose theorems is consistent with any theorem of the previous lattice. Nonetheless, in every case of a valid discovery of principle, the result of the change in mathematical physics is measurable *in some way*, but not formally deducible from the standpoint of the old mathematics. What may be measured to such effect, is either a magnitude of extension, or, in the alternative, the clearly defined existence of the kind of mathematical discontinuity which marks the presence of what we term a *singularity*. In consequence of the preceding work of Carl F. Gauss, Riemann classified the general idea of those changes in yardsticks, brought about through valid experimental discoveries of physical principle, as *curvature* of physical space-time. The term “curvature” is employed there in the same sense, that consistent errors in measurement of the shadows of sundials led to Eratosthenes’ fair estimate of the curvature of the Earth’s surface, about twenty-three centuries past.¹⁴



Nippon Development Company

Japan's Nippon Electric Co. developed this Advanced Robot Manufacturing System-Development robot, with arms, hands, and optic sensors for the precision assembly, adjustment and inspection of small solid-state devices. Broad application of technologies like this would be required for the beam-weapon development effort called for by LaRouche's SDI.

The relevance of Riemann’s treatment of the metrical problem of hypothesis to economic science, is located in the essential distinction which sets man as absolutely superior to, and apart from all other forms of life. Man is the only species which can willfully increase its potential relative population-density, to such an effect that no principle of animal ecology can be applied competently to the study of human populations. We increase our species’ potential relative population-density through that developable agency of the individual human intellect, which we recognize in such forms of expression as validated discovery of a new, higher principle of nature (i.e., the generation of a new hypothesis). The increase of potential relative population-density, is the yardstick used to measure those changes in the “curvature” of physical-economic space-time resulting from such efficient kinds of discoveries within the domains of art and science.

We assimilate the individual such discoveries of other persons, by reenacting the original discoverer’s mental experience of making that discovery, within our own minds. These mental

processes, by which individuals make, or reenact original, valid discoveries in art and science, are recognizable by the term *cognition*. The term cognition, so defined in practice, is equivalent to the alternative term *creative reason*, creative reason as distinct from the qualitatively inferior mental activity of mere logic. The understanding which we acquire through those pro-

direction. The measurement of the change in noon-time angle of the sunlight’s shadow, leads to estimates of the curvature of the Earth’s surface, and hence the size of the Earth. By including the case of singularities, we are able to state that some kind of measurement is always available for recognizing a valid discovery of physical principle.

14. Determine the meridian by obvious stellar observations. Place a series of sundials at intervals along that meridian, in a south to north

cesses of cognition, constitutes that which deserves, uniquely, the term *knowledge*, as distinct from either sense-perception, mere deduction, or mere opinion. In other words, knowledge is limited to our accumulation of that body of valid original discoveries which we have made our own through either original discovery, or by reenacting the mental experience of original discovery.

This accumulation of knowledge is of the Riemann form of a series in which each given level of discoveries of principle, up to some point, designated by n , is superseded by an additional such discovery, designatable as the $(n+1)$ 'th discovery (dimension). The series of many hypotheses which is generalized by the symbology $(n+1)/n$, is a series whose transfinite quality is what Plato designates by the term *higher hypothesis*, or *Becoming*.

The validity of that series, as demonstrable by measurement according to the principle of curvature, is the demonstration that the universe is so designed, that nature is obliged to obey those individual powers of cognition which produce, or act upon the directing premise of valid discoveries of higher principle. This is usefully restated: The human species' manifest ability to increase its potential relative population-density practically, through successive breakthroughs in scientific and related knowledge, demonstrates, *experimentally*, that the universe is so designed, that its laws are expressed in the form of generalized human cognition, human creative reason, of cognition in the form of higher hypothesis.

From those considerations, we derive the following framework governing the principles of space science.

In the universe, we encounter three distinct qualities of processes. Proceeding from lower to higher, these three are: those processes we deem non-living, those we recognize as living, and the processes of cognition. None of the characteristics of the higher processes can be derived in a formal way from the characteristics of the lower processes. Among these three, what Leibniz identified as the notion of universal characteristics, are adumbrated for all three domains by the principles of cognitive processes.

The limitations of our senses also apportion the universe in which these three qualities of processes interact, among three domains: microphysics, astrophysics, and macrophysics, the latter corresponding to processes which can be examined directly on the

scale of the senses. Also, there is an order in the succession of relatively valid new hypotheses, an order fairly identified by the notion of an ordering of "necessary predecessors" and "necessary successors," in the sequence of valid discoveries of principle in art and science.

From applying these considerations of economic science to exemplary experience with fruitful "crash programs" from the past, the general notion of a successful design for a structurable "science driver" form of new "crash program" may be derived. The work of the Monge Ecole Polytechnique, the Manhattan Project, and the Kennedy space program, are prominent among the convenient examples.

Firstly, the subsuming objective of any science-driver "crash program," must be to increase mankind's power, per-capita, over the universe. This objective inheres in the principles of such a program, as summarily identified, immediately above. Thus, axiomatically, any such space program will produce immediate benefits for mankind on Earth.

Secondly, the immediate objective of such a "crash program" is not one or several valid discoveries of principle, but an entire family of such discoveries. This means, that one has chosen as a central target for such discovery an issue which A) is within the reach of constructable experimental measurements, B) involves each and all of the six phases of nature identified above,¹⁵ C) brings together a wide array of discoveries which must be resolved as the necessary predecessors for the centrally targetted discovery of the project as a whole, and D) identifies a direction for later, further central objects of discovery, which are made reachable through realizing the initial centrally targetted discovery.

The primary objective of the 1985-1986 Mars-colonization project, was, and still is a broad-based family of fundamental and successive scientific breakthroughs which will revolutionize the practice of science and technology on Earth.

The highlights of the program are as follows:

The immediate target, to be reached within an estimated forty years lapsed time, is the establishment of a permanent "science city" colony on Mars, serving space research as the science city of Los Alamos served the Manhattan project: a base of operations as far distant

15. i.e., non-living, living, cognitive processes, each and all examined on the scales of microphysics, astrophysics, and macrophysics.



Lawrence Livermore National Laboratory

The development of nuclear fusion power is a key component of the breakthroughs that can be anticipated from revolution in science and technology that will come from the space and SDI program. Here, technicians at the National Ignition Facility, installing a replaceable unit.

from the noisy Sun as is reasonable within such a time-span. This “science city” on Mars is to provide a forward base of operations for very-large-aperture arrays and related research tools, for the intensive study of every designated crucial variety of physical anomaly in space which might be accessed by apparatus set into space near Mars orbit.

The preliminary steps to be completed as prerequisites for establishing a permanent base on Mars, are: 1) Establishing a family of Earth-orbiting space-stations; 2) Achieving radical economies in bringing weight to space-station orbit, through replacement of direct ground-to-orbit rocket, by an approach modelled upon the Sänger project;¹⁶ 3) Establishing “automated industrial” activities on the Moon, as envisaged for the U.S.A. by such veterans of Hermann Oberth’s original

16. The developed proposals for carrying out Eugen Sänger’s design envisaged the pickabacking of a rocket plane upon the back of an approximately B-747-sized scramjet of between Mach 6 and Mach 8 capability. Since the scramjet would scavenge the heavier portion of its fuel—oxygen—from the air through which it travelled, the ratio of fuel consumption to net payload of the paired scram and rocketplane could be on the order of ten times as efficient as rocket ascent alone. This factor of cost is one of the prime barriers to reasonable economy and security in operations into nearby space.

Moon-landing program as Krafft Ehrlicke; 4) The fabrication of the heavy components of interplanetary vehicles and of Helium-3 fuel components in industrial facilities on the Moon; 5) The establishment of occasional and then regular flights of flotillas of interplanetary space-craft between Earth-orbit and Mars-orbit, combined with the reorientation of space-exploration to operations based upon this Earth-Mars link. And, so on.

In conclusion, three additional points are to be summarized. First, there is virtually no instance of any observatories or probes sent into solar space, which did not provoke the discovery of

at least one crucial-experimental quality of anomaly. The universe is heavily populated with astrophysical anomalies which we know to exist, but want the means to examine in a more efficient way. On this basis, alone, the number of new fundamental discoveries awaiting mankind from even the preliminary next steps toward Mars colonization is awesomely large; these anomalies alone would assure us of numerous major scientific breakthroughs in the practice of science upon Earth. Second, no principle of nature is proven, until it is demonstrated experimentally in respect to all three domains of astrophysics, microphysics, and macrophysics, and in respect to the characteristics of both non-living and living processes. From the remotest beginnings of scientific knowledge, in the ancient construction of solar astronomical calendars, long before riparian silt deposits produced lower Mesopotamia, astrophysics has been the origin of man’s mastery of the principles of scientific knowledge. Without astrophysics, microphysics could not have been developed, nor a rational macrophysics rendered possible. It remains the same today.

Man yearns upward, toward the exploration of space, for one overriding purpose: the fuller development of mankind on Earth.

Toward a New Periodic Table Of Cosmic Radiation

by Peter Martinson

Max Planck began his series of lectures on thermodynamics in 1909 by asserting that science is the systematic investigation of sense perceptions. Our concepts of basic principles, like force, come from those senses. The task of science “consists only in the relating of sense perceptions, in accordance with experience, to fixed laws.” Those laws were, themselves, always brought closer and closer into line with experience.

But, this description was only a trap for the unsuspecting, for Planck then made an about-face, and asserted that, “ladies and gentlemen, this view has never contributed to any advance in physics.” Relating the sense perceptions to one another with mathematics, and pulling logical derivations out of those relations, can be quite interesting, but this could never, in itself, derive a new discovery of principle. The generation of new knowledge about the universe comes from a world different from that of sense perception, but one which the human mind has access to.

Planck’s target in these speeches was the so-called Positivist movement. Since the time he hypothesized the existence of the quantum of action, these anti-reason “brownshirts” asserted that all knowledge must come only from that which is measurable. Further, if some process weren’t proven to be measurable, then that process couldn’t even exist. Therefore, that world Planck referenced, as the domain of human creativity, could not exist.

The debate about the existence of such principles

which guide physical phenomena, and their knowability, has raged until the present day, with the positivists seemingly gaining the upper hand.¹ However, there is now brewing a revolution in science, led by Lyndon H. LaRouche, Jr., which will sweep this mental infection away.

This revolution is classed under the broad name of

Cosmic Radiation, which is the investigation of the relationship between what Russian Academician Vladimir I. Vernadsky called “living matter,” and that energetic cosmic phenomenon today known under the broad name of cosmic radiation. If our national travesty, the British agent called President Obama, is removed from office before he and his controllers can dismantle America’s last foothold on true, immortal science, the American manned space program, we will soon be presented with the challenges of a manned mission to Mars, embarking from the surface of a soon-to-be-industrialized Moon.

As LaRouche has emphasized, along with others who know what they’re talking about, this requires the

consideration of accelerated paths between these two bodies, within Solar space. The senses of the positivists say that this intervening space is empty. The travelers on that fusion-powered, accelerating flotilla will say that



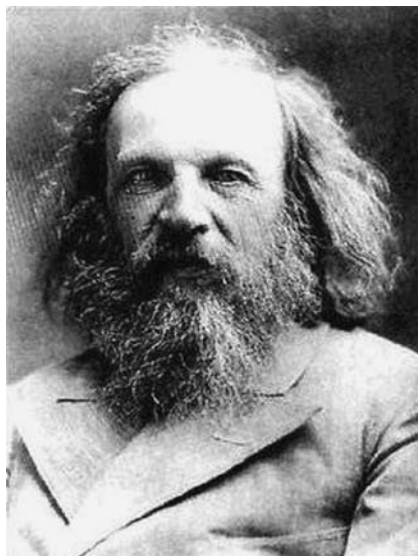
Max Planck (1858-1947)

1. For example, although the experiments that can now be performed with CERN’s Large Hadron Collider will produce extremely valuable data, the scientists analyzing it will be crippled if they assume a positivist viewpoint.

that space is, indeed, anything but empty. It is as empty as the open ocean, upon which human navigators have mapped out shipping routes outside of which it is either dangerous, or even impossible, to travel. What makes up this open ocean of interplanetary space, and how will it manifest itself to our accelerating descendants?

Positivists, and kindred opponents of reason, beware! The study of cosmic radiation will soon render you an historic kidney stone, passed, on humanity's mission to the stars!

In this brief report, I will define cosmic radiation in terms of the problems posed by Planck, Einstein, and their collaborators, and then describe



Dmitri Mendeleev
(1834-1907)

some of the areas of clear research opportunities, and some potential experiments to be carried out.

A milestone reached in this new field of research, will be the enhancement and elaboration of a new periodic system of the universe. At the end of the 19th Century, Dmitri Mendeleev applied his genius to the construction of a Periodic Table, which allowed him to forecast the existence of then undiscovered, but potential elements. Since his death, that table has been expanded, but has always remained valid. In the same way, Johann Sebastian Bach's well-tempered system of counterpoint has remained the standard, up through the compositions of Jo-

FIGURE 1
The Modern Periodic Table of the Elements

hydrogen 1 H 1.0079																	helium 2 He 4.0026	
lithium 3 Li 6.941	beryllium 4 Be 9.0122											boron 5 B 10.811	carbon 6 C 12.011	nitrogen 7 N 14.007	oxygen 8 O 15.999	fluorine 9 F 18.998	neon 10 Ne 20.180	
sodium 11 Na 22.990	magnesium 12 Mg 24.305											aluminum 13 Al 26.982	silicon 14 Si 28.086	phosphorus 15 P 30.974	sulfur 16 S 32.065	chlorine 17 Cl 35.453	argon 18 Ar 39.948	
potassium 19 K 39.098	calcium 20 Ca 40.078	scandium 21 Sc 44.956	titanium 22 Ti 47.867	vanadium 23 V 50.942	chromium 24 Cr 51.996	manganese 25 Mn 54.938	iron 26 Fe 55.845	cobalt 27 Co 58.933	nickel 28 Ni 58.693	copper 29 Cu 63.546	zinc 30 Zn 65.39	gallium 31 Ga 69.723	germanium 32 Ge 72.61	arsenic 33 As 74.922	seletem 34 Se 78.96	bromine 35 Br 79.904	krypton 36 Kr 83.80	
rubidium 37 Rb 85.468	strontium 38 Sr 87.62	yttrium 39 Y 88.906	zirconium 40 Zr 91.224	niobium 41 Nb 92.906	molybdenum 42 Mo 95.94	technetium 43 Tc [98]	ruthenium 44 Ru 101.07	rhodium 45 Rh 102.91	paladium 46 Pd 106.42	silver 47 Ag 107.87	cadmium 48 Cd 112.41	indium 49 In 114.82	tin 50 Sn 118.71	antimony 51 Sb 121.76	tellurium 52 Te 127.60	iodine 53 I 126.90	xenon 54 Xe 131.29	
cesium 55 Cs 132.91	barium 56 Ba 137.33	* 57-70	lanthanum 71 Lu 174.97	hafnium 72 Hf 178.49	tantalum 73 Ta 180.95	tungsten 74 W 183.84	reuterium 75 Re 186.21	osmium 76 Os 190.23	iridium 77 Ir 192.22	platinum 78 Pt 195.08	gold 79 Au 196.97	mercury 80 Hg 200.59	thallium 81 Tl 204.38	lead 82 Pb 207.2	bismuth 83 Bi 208.98	polonium 84 Po [209]	astatine 85 At [210]	radon 86 Rn [222]
francium 87 Fr [223]	radium 88 Ra [226]	** 89-102	actinium 89 Ac [227]	thorium 90 Th 232.04	protactinium 91 Pa 231.04	uranium 92 U 238.03	neptunium 93 Np [237]	plutonium 94 Pu [244]	americium 95 Am [243]	curium 96 Cm [247]	berkelium 97 Bk [247]	californium 98 Cf [251]	esboium 99 Es [252]	fermium 100 Fm [257]	mendelevium 101 Md [258]	nobelium 102 No [259]		
		* Lanthanide series	lanthanum 57 La 138.91	cerium 58 Ce 140.12	praseodymium 59 Pr 140.91	neodymium 60 Nd 144.24	promethium 61 Pm [145]	samarium 62 Sm 150.36	europium 63 Eu 151.96	gadolinium 64 Gd 157.25	terbium 65 Tb 158.93	dysprosium 66 Dy 162.50	holmium 67 Ho 164.93	erbium 68 Er 167.26	thulium 69 Tm 168.93	ytterbium 70 Yb 173.04		
		** Actinide series	actinium 89 Ac [227]	thorium 90 Th 232.04	protactinium 91 Pa 231.04	uranium 92 U 238.03	neptunium 93 Np [237]	plutonium 94 Pu [244]	americium 95 Am [243]	curium 96 Cm [247]	berkelium 97 Bk [247]	californium 98 Cf [251]	esboium 99 Es [252]	fermium 100 Fm [257]	mendelevium 101 Md [258]	nobelium 102 No [259]		

Each column contains elements whose chemical properties are very similar. This amazingly insightful construction will be subsumed, soon, by a more comprehensive table, which includes the living and cognitive domains.

hannes Brahms and Robert Schumann, in a way that opened up a whole world of possible modes of communication in music. Instead of throwing Mendeleev's Periodic Table away, it is now time to see it as being subsumed by a larger system, called Cosmic Radiation, with which the present state of human understanding is pregnant.

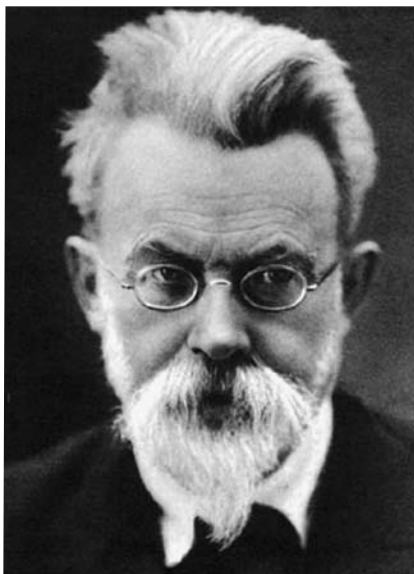
What Is Cosmic Radiation?

But, first, let's just get a summary of what we mean by "cosmic radiation."

As a starting point, Vernadsky divides the universe into material phenomena and energetic phenomena. Energetic phenomena, themselves, are generally invisible to the senses, though their effects are very sensible. They include the various fields—the electric, magnetic, and gravitational fields found in the Solar System and elsewhere—and also the electromagnetic radiations, covering the entire spectrum of frequencies. Material phenomena include what happens when you run into a tree. Also, the elaboration of crystal structure, and the chemical properties of the general phases of matter, constitute material phenomena. Thus, the cosmic rays discovered by Victor Hess, being the high-velocity nuclei of all the atoms on the Periodic Table, would be classed as material phenomena.

Our own biological sense apparatus is designed to be sensitive to the interaction between the material and energetic. For example, as you read this page, which is a material body, light is reflecting off of the page into your eyes. Your eyes do not, themselves, perceive light, but perceive a page with words written on it. The light transmits a signal from the page, to receptors in your eyes, which then convert the signal into a different form which can then be transported to your brain. There, your mind has the opportunity to interpret the signal—which itself probably bears little optical resemblance to what you think this page looks like! But, the energetic light signal, which cannot itself be seen, registers the existence of the material object before you, to the material object of your biological senses.

The concepts "material" and "energetic" are thus



*Vladimir Vernadsky
(1863-1945)*

well defined. Material is the stuff you can sense, and energetic is why you can sense it. Energetic phenomena are generally continuous, while material phenomena are generally discrete. Who would mistake the light emitted from a light bulb, for the light bulb itself?

But, are these two concepts really so well defined?

The fundamental, and most studied, of the so-called energetic phenomena, is light. Such scientists as Christiaan Huyghens, Thomas Young, and Augustin-Jean Fresnel established that light is not composed of particles shooting in straight lines, but represents a wave motion. This was profoundly demonstrated in experiments on the interference of the

light waves (see box, p. 33). This concept required (and still does, in this author's opinion) a material substrate in which the waves can become manifest, in much the way that water waves necessitate the existence of water. Without the water, what would be waving? Hence, light spreads as a space-filling wave structure, and is thus continuous in space, never having a specific location. Any "points" of light represent an event of constructive interference among waves.

But, when Max Planck decided to work out the laws governing the types of radiation that are emitted by a heated body, the frequency of which depends upon its temperature, he had to give this supposedly continuous phenomenon of light a discrete form. He showed that, in the transformation of the action of material oscillation into that of electromagnetic radiation, there was a smallest amount of action that could be thus transformed, which he called the quantum. It is as if, when you press the accelerator of your car, you have to press down until you're giving enough gas to go 1 mile per hour, and your car instantaneously achieves that speed, never having gone a half mile per hour! The smallest amount of energy that could be transferred by the radiation was proportional to its frequency. Hence, at very small scales, light, and all other energetic phenomena, had the properties of a discrete part—the continuity of this supposed wave phenomenon had broken down.

Though there was an attempt to ignore Planck's hypothesis, experiments around the world began to result in paradoxes of exactly the form he forecast. Finally, Einstein broke the stand-off in 1905, when he demonstrated that the photoelectric effect could be efficiently explained, if it were assumed that light transferred energy to the ejected electrons in the form of quantum packets. As the intensity of the light was increased, no increase in the kinetic energy of the ejected electrons was observed. Hence, each electron was given a specific amount of kick, which coincided with

an individual quantum transfer. That amount of kick would only change if the frequency of the light were changed.

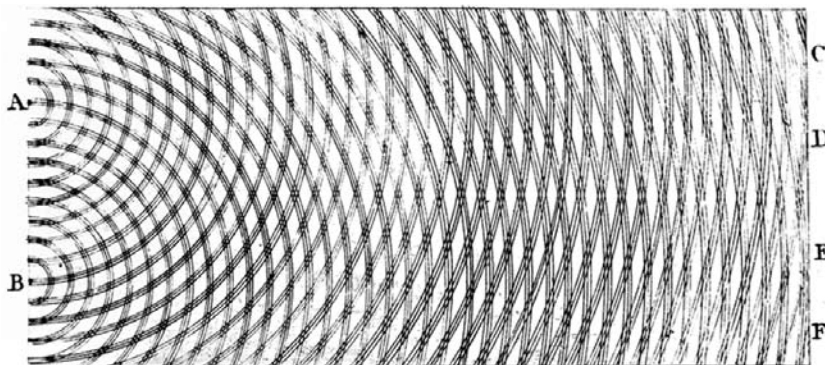
So, here was one example of an energetic phenomenon, acting as a discrete object.

What about matter? A similar category of paradox was popping up all over the study of atomic phenomena, specifically in the spectra of the elements and their isotopes and ions. Louis de Broglie took from Planck the hypothesis that the universe is harmonically organized, and determined a wave structure for

Two-Slit Interference

Wave phenomena are characterized by what is called "interference." Transverse waves, such as those produced on the surface of water, are composed of both peaks and troughs. If two waves cross each other, the heights of the waves "add" to each other, in such a way that two peaks crossing will produce a wave whose height is enhanced, while a peak crossing a trough will produce one whose height is diminished. If one wave encounters a barrier with two holes, each hole will become the source of a new set of waves, and thus two wave sets will propagate on the other side of the barrier. If a screen is set up further on that side, the waves will produce an interference pattern.

In the image shown here, drawn by Thomas

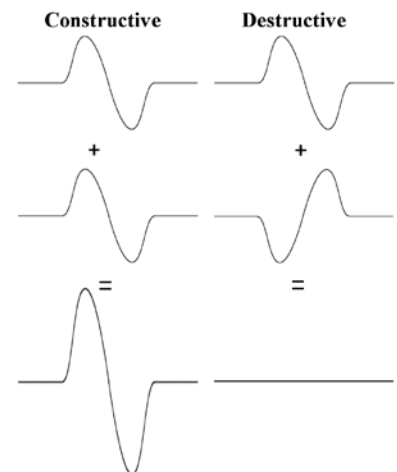


Thomas Young's sketch of wave interference. Each series of curves represents a wave peak, and where wave peaks cross is a high point of constructive interference.

Young, two sets of water waves emanate from the slits at A and B. Each of the circles drawn represent a peak of a circular wave. At the far end is a screen. Between points D and E is the tallest wave, between C-D and E-F are shorter tall waves, and so forth. But, at C, D, E, and F the waves completely cancel each other.

A beam of light passed through two thin slits will also produce such a pattern on a screen. Thus, it was hypothesized that the light must have the same wave characteristics as water. This opened up the question, though, as to what, exactly, was waving?

—Peter Martinson



Constructive interference: The two waves add to produce a larger wave.
Destructive interference: The two waves are each other's negative, and thus add up to zero wave.



Louis de Broglie
(1892-1987)

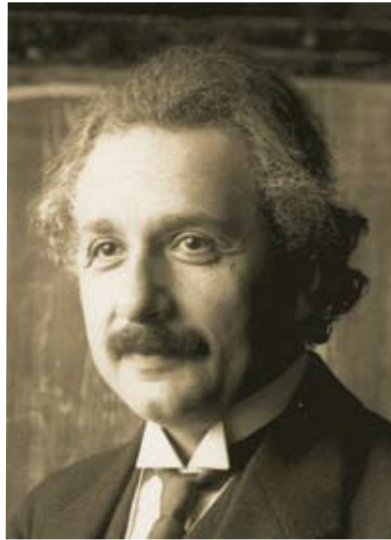


Photo by Ferdinand Schmutzer
Albert Einstein
(1879-1955)

elementary particles, such as the electron. He forecast that a beam of electrons focused on a thin crystal—the distance between whose atom-points was comparable to the “wavelength” of the electron beam—would produce an interference pattern on the other side, analogous to light interference, and then calculated the characteristics of that pattern. The experiment was performed with such a beam of electrons, and exactly the result forecast by de Broglie was obtained. Thus, all matter, including the lowly electron, has wave characteristics, just like light and all other energetic phenomena.

If electrons, supposedly tiny particles, can be induced to act like non-localized wave phenomena, then what exactly are they? Indeed, what is matter itself, and how is it different than energetic phenomena? If both material and energetic phenomena have the characteristics of both corpuscles and space-filling wave functions, then how can it be said that the space between planets, which is filled with an enormous variety of radiation, is empty? It is as empty as your typical university physics professor’s head!

The New Periodic Table

This consideration must take the form of a central theme in the investigation of cosmic radiation, and its interaction with life. Organisms on our Earth are not opportunistic, hyperactive combinations of dead

chemicals. They represent the organized expression of a universal phase of physical space-time, within which matter functions differently than in the abiotic phase. Does such living matter also have an opportunity to manifest both field and corpuscular characteristics? Or must living matter take a back seat to the quantum paradoxes that have tortured the positivists for the past hundred years? I think that would be very insulting to an entire phase of the Creator’s universe!

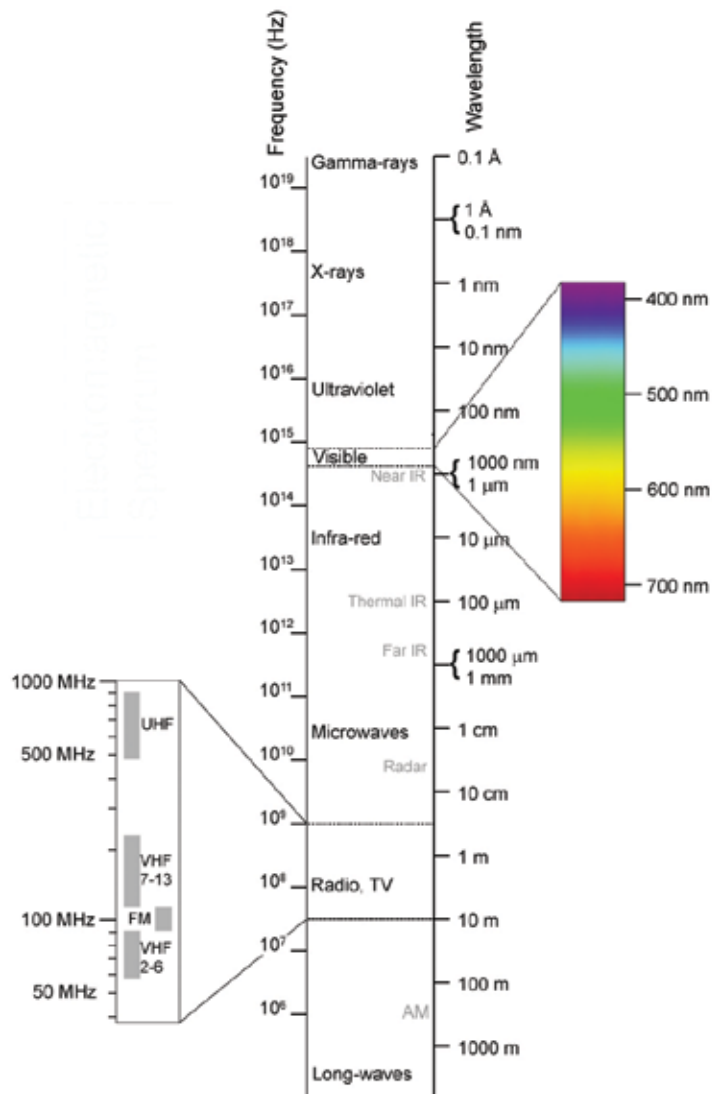
At the same time, the process of photosynthesis is only one, albeit a very important one, of many aspects of the interaction between living matter and cosmic radiation. Areas of investigation will be described below, which demonstrate that this interaction is perhaps the dominant expression of life in the universe. Indeed,

it may turn out to be incorrect to discuss “the interaction of life and cosmic radiation,” instead of, simply, “cosmic life processes.” Instead of viewing the Biosphere as some separate entity which interacts with cosmic phenomena, it very well might be more accurate to view cosmic radiation, generally and universally, as an aspect of life in the universe, and thus that life on Earth is itself inseparable from these radiations. As a collaborator recently expressed it, investigating life by shielding it from various radiations, could be like investigating a whirlpool by shielding it from water.

Cosmic radiation can be divided into categories, such as the various fields (electric, magnetic, gravitational, morphogenetic, etc.), the domains of the electromagnetic spectrum (radio, microwave, infrared, visible, ultraviolet, X-ray, gamma ray, etc.), and so-called energetic particles (cosmic rays, radioactive decay products, etc.). It is also necessary to subsume each of these categories by the domain of action, in terms of Vernadsky’s three phase spaces: the abiotic, the Biosphere, and the Noösphere. For example, ultraviolet light is active on a purely chemical basis, in the breaking of chemical bonds; but it is also active in living processes, such as in the vision of many insects; and it is also used by man in his study of various organic systems, like chlorophyll, through UV fluorescence experiments. These three types of events must

FIGURE 2

The Electromagnetic Spectrum



Life responds to all wavelengths of the electromagnetic spectrum.

be classed as different phases, although of the same wavelength ranges.

Starting from here, we can begin to build up harmonies among sets of elements. In the tradition of Mendeleev’s notecard method, we can begin amassing properties of the catalog of radiations, including their relations to both living and cognitive phases of space-time. Mendeleev created a table of elements, arranging their ascending masses according to the characteristic properties they exhibit in chemistry.

His table was incomplete, as Mendeleev himself

would readily point out were he alive today. For example, there is no convenient way to represent the expanding armada of isotopes in this table; much less is there a way of showing how each element or isotope came into being. William Draper Harkins took issue with this in 1917, by noting that the cosmic abundances of the elements vary in such a way that the even-numbered elements are far more abundant than the odd. He concluded, rightly, that the abundances are not determined by mass, but by “factors involved in the formation and disintegration of the atoms.” Thus, there is no representation in Mendeleev’s table yet, of the evolution of isotopes, through the stages of sundry radioactive decay series.

Mendeleev’s student, Vernadsky, hypothesized that a new system of organizing the elements could be developed, if the distribution of minerals in the Earth’s crust by living processes were taken as a crucial property. Vernadsky criticized Frank Wigglesworth Clarke’s wonderful tables of geochemistry for exactly this omission, and for assuming that the distributions were merely geochemical, instead of biogeochemical.² This strategy was enhanced by the recognition that organisms in the Biosphere actively select specific isotopes of the elements, which implies the ability of life to select on the basis of some criteria other than simply chemical. A new table must thus reflect the dominant role that living processes play in the motions and transformations of all matter.

We go a step further. All living processes depend, fundamentally, on the catalog of cosmic radiation, as demonstrated profoundly by photosynthesis. Therefore, the Periodic Table itself can and will be reorganized into a new system, which takes as crucial elements those effects of the transformation of cosmic radiation within the three phase spaces of the universe—the abiotic, living, and willful cognition. Mendeleev’s work was extremely impor-

2. Vernadsky also hypothesized that the granite bedrock of continents, which floats atop the denser basalt layers forming ocean bedrock, was generated by living processes. A manned mission to Mars, beginning with industrialization of the Moon, will be necessary to determine whether or not granite even exists on other planetary bodies. As yet, none has been found. See, for example, Rosing, et al. (2006).

tant, but was necessarily bounded by the contemporary state of experimental work. Over one century later, we are now poised to include what seems like the rest of the universe. In this way, as LaRouche has described it, we can now begin to get this universe organized.

The Shape of Life

To conclude, let us look at one example of “Cosmic Life Processes,” with the promise that there will be a lot more to come in the advancing weeks and months.

Russian molecular biologist Alexander Gurwitsch demonstrated that mitosis in cells, during the developmental stage of the organism, can be induced through interaction with other cells in active mitosis phases. He discovered that this effect is caused by the emission of radiation from one cell to another, the wavelength of which he found to be that of ultraviolet light. He named this phenomenon mitogenetic radiation (“M-rays”). Later, he went on to demonstrate that the mitosis of cells was affected, spatially, by the other mitosing cells in the environment. He carried out these experiments under the hypothesis that there existed a morphogenetic field, which was analogous to the fields found in physics, but was not any one of them. He proposed that the study of this field, which was uniquely biological, would enlarge our understanding of fields in general.

Gurwitsch’s M-rays are bound to very specific wavelengths. Outside that range, there is clear evidence of a more-or-less behavioral influence on living organisms from other categories of cosmic radiation, under the topic of Circadian Rhythms. Frank Brown’s experiments did not necessarily reveal morphological changes, but these rhythms apparently registered all energetic phenomena, including electric and magnetic fields, cosmic rays, and extremes in the electromagnetic spectrum (such as gamma rays). Besides simple behavioral effects, reproductive cycles are also driven by lunar, annual, and other cosmic cycles.

One clear hint at a mode of direct action comes



*Alexander Gurwitsch
(1874-1954)*

from a description by Russian biologist Vladimir Voeikov of A.A. Kozlov’s work, which demonstrated that ionizing radiation could be necessary for the division of cells. Gurwitsch’s M-rays are in the ultraviolet range, between about 3 and 100 eV. Kozlov pointed out that, if a beta particle exceeds 263,000 eV in water, it will produce Cerenkov radiation, which is about 4-5 eV—right at the low end, and thus the sweet spot, of mitosis-driving M-rays. Hence, if a gamma ray could enter the cell and trigger a beta decay from one of the atoms there, this would generate potential M-rays, and thus drive a mitosis.

The experiment has not yet been carried out, to my knowledge, but it presents a clear avenue down which the development of the Biosphere could be driven, were the Creator of the universe so inclined.

These M-rays could be induced in another way—by cosmic rays. The Pierre Auger Observatory in Argentina detects the air showers caused by cosmic rays in two ways. First, barrels of water provide an environment in which the secondary particles of the air shower can move faster than light, which produces Cerenkov radiation. There is every reason to assume that, inside a cell, these secondaries produce a Cerenkov event, and thus M-rays. Second, the primaries cause nitrogen in the atmosphere to produce sub-ozon layer ultraviolet radiation, which can reach up to 4 watts on the ground. This could also be a potential source of M-rays.³

While this is not proof that morphogenesis is driven from outer space, it provides a very important mode of connection between the processes in distant systems, such as the Crab Nebula, with life here on Earth. Here we have a rich territory of experiment to fill out part of our new Periodic Table, under the category of Ultraviolet Radiation in the Biosphere.

3. This process, specifically, draws again into consideration the importance of the creation and maintenance of the Earth’s atmosphere, which has the ability to convert high-energy cosmic rays into forms that are usable by organisms in morphogenesis.

Conclusion

Human civilization is on the brink of a new understanding of its universe. The effects of cosmic radiation will soon be recognized to impact virtually all aspects of scientific work. But, the recognition of this truth requires the overthrow of the now-dominant position that the positivist outlook has held over science. We must return to Planck's polemic against the positivists, that human reason does not lie in the world of sense perceptions, but in a higher, unsensed world.

This concept today sees its most developed state in the ideas of Lyndon LaRouche, who has asserted the primacy of a science of physical economy, over all other physical sciences. It is in the domain of that science, that the properties of human cognition are studied as a willful, causal representation of what can be called cosmic creation. A core of the budding physical economist's curriculum, is the study of the creative processes of a human mind, as represented in specific cases of scientific discovery. It is those processes, which the physical economist must seek to provoke, promote, and defend in the design of public policy.

As such, the earliest lesson in a course of physical economics, is that absolutely no knowledge is derived from sense perceptions, but those perceptions must rather be assumed to be fraudulent—in a very lawful way. True knowledge comes from the human mind, which uses those senses as what LaRouche terms "instrumentation," the paradoxical juxtaposition of which must be deciphered by the creative mind. In the same way, a skillful lawyer will pit two obviously lying witnesses into argument against each other, in order to make obvious where the truth doesn't reside. But, those lying sense perceptions, taken by themselves, can never be used to mathematically predict an as-yet-unknown, causal phenomenon. Only an hypothesis, generated by the creative individual worker, informed through the errors inherent in several sense perceptions, has that predictive quality.

This is the way all future scientists must think, in order to make sense of our growing universe.

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References

LaRouche, Lyndon, "The Escape from Hilbert's 'Zeta' 'X': Mapping the Cosmos," *EIR*, March 19, 2010
Planck, Max, *Eight Lectures on Theoretical Physics*, translated by A.P. Wills (New York:1915).

Vernadsky, Vladimir, "On Some Fundamental Problems of Biogeochemistry," *21st Century Science & Technology*, Winter 2005-2006, p. 39. http://www.21stcenturysciencetech.com/2006_articles/Biogeochemistry.pdf

Vernadsky, Vladimir, "Problems of Biogeochemistry II: On the Fundamental Material-Energetic Distinction Between Living and Nonliving Natural Bodies of the Biosphere," *21st Century Science & Technology*, Winter 2000-01, p. 20. <http://www.21stcenturysciencetech.com/translations/ProblemsBiogeochemistry.pdf>

Vernadsky, Vladimir, "On the States of Physical Space," *21st Century Science & Technology*, Winter 2007-08, p. 10. http://www.21stcenturysciencetech.com/Articles%202008/States_of_Space.pdf

Interview with Prof. Vladimir Voelikov, *21st Century Science & Technology*, Spring 2000, p. 58.

Gurwitsch, Alexander and Gurwitsch, Lydia, "Twenty Years of Mitogenetic Radiation: Emergence, Development, and Perspectives," translated by Vladimir Voelikov and Lev Belousov, *21st Century Science & Technology*, Fall 1999, p. 41.

Harkins, William Draper, "The Structure of Atoms," *Science*, Vol. 46, No. 1192, p. 419 (1917).

Harkins, William Draper, "The Structure of Atoms II," *Science*, Vol. 46, No. 1193, p. 443 (1917).

Brown, F., "Living Clocks," *Science*, Vol. 130 (1959)

Rosing, M., Bird, D., Sleep, N., Glassley, W., Albareda, F. "The Rise of Continents—an Essay on the Geological Consequences of Photosynthesis," *Palaeogeography, Palaeoclimatology, Palaeoecology*; Vol. 232, p. 99, 2006.

On the fight around the quantum:

de Broglie, Louis, "Wave Nature of the Electron," Nobel Prize Lecture, 1929 http://nobelprize.org/nobel_prizes/physics/laureates/1929/index.html

Planck, Max, "On the Law of Distribution of Energy in the Normal Spectrum," *Annalen der Physik*, Vol. 4, p. 553 (1901).

Einstein, Albert, "On a Heuristic Point of View about the Creation and Conversion of Light," *Annalen der Physik*, Vol. 17, p. 132 (1905).

Bacciagaluppi, Guido and Valentini, Antony, *Quantum Theory at the Crossroads: Reconsidering the 1927 Solvay Conference* (Cambridge: Cambridge University Press, 2009).

Will the Financial Crisis Trigger World War III?

by Helga Zepp-LaRouche

April 16—History has a wealth of examples of great economic and financial crises leading into wars, or, as in the 20th Century, into world wars. While it is becoming increasingly clear that a series of imminent national bankruptcies is ringing the death-knell of today's financial system, a combination of the escalation of the Afghanistan War, and a looming military strike against Iran, threatens to unleash a chain reaction which could plunge the world into a New Dark Age.

According to reliable sources, both a planned war against Iran, as well as the great Spring-Summer offensive in Afghanistan which is already under way, were the subject of numerous discussions during the just-concluded Nuclear Security Summit in Washington, aimed at firming up a coalition for these military operations. On top of that, an atmosphere is being built up to use the threat that Iran will soon have an atomic bomb, as the context for an early military strike—just as British propaganda did earlier over Iraq's "weapons of mass destruction." As is now common knowledge, those Iraqi weapons were nowhere to be found; and still today, the U.S. National Intelligence Estimate—the National Security Council's compilation of estimates from various U.S. intelligence services—sticks by its evaluation that Iran is still a good three to five years away from having the capacity to build a nuclear weapon.

Both the *New York Times* and the Israeli daily *Ha'aretz* report that Ronald Lauder, chairman of the World Jewish Congress, secured the approval of Isra-

el's Prime Minister Benjamin Netanyahu before he released his open letter to President Obama, which was printed in the *Washington Post* and the *Wall Street Journal*. In his letter, he warns against the Iranian regime's "nuclear ambitions," leaving no doubt about Iran's genocidal intentions toward Israel. The letter goes on to admonish the United States that it has committed itself to never allowing Iran to possess nuclear weapons.

Sanctions Lead to War

Yet another contributing factor to the climate for a military strike against Iran, was the attempt by Susan Rice, the U.S. ambassador to the United Nations, during a three-hour session on April 14, to induce the Chinese, Russian, French, United Kingdom, and German delegations to agree to a UN Security Council escalation of sanctions against Iran. Her proposed measures included an arms embargo, the right to seize Iranian ships suspected of carrying materials destined for Iran's nuclear program, imposing limits on new foreign investment into Iran's energy sector, and punitive measures against leading members of the Revolutionary Guard, Iranian companies, and Iranian financial institutions.

In the same vein, 76 U.S. Senate and 333 House members addressed a letter to President Obama, demanding that he impose "crippling sanctions" against Iran, regardless of whether the UN Security Council goes along with them, and that Obama sign the Iran Refined Petroleum Sanctions Act which they have passed,

which prohibits business dealings with any foreign or domestic U.S. firm that has anything to do with Iran's oil industry. It's hardly surprising that the publication of this letter was paid for by the American Israel Public Affairs Committee.

Given this thunderous drumbeat for strengthening sanctions against Iran, it is important to note that China is refusing to go along, and that Turkey's Foreign Minister Ahmet Davutoglu reminded the press corps in Washington, that sanctions kill children, too, just as they did in Iraq. In the wake of the first Iraq war, approximately 1 million people, a great many of them children, died as a result of the sanctions [see **Figure 1**]. Back then, this author founded a Committee to Save Iraq's Children, which organized substantial shipments of aid to Iraq, and also transported injured and ill Iraqi children to Europe and the United States for medical treatment.

Now Israel is accusing Syria of having delivered long-range Scud missiles to the Hezbollah in Lebanon—a claim which the Syrian government is categorically denying. According to the *New York Times*, an unnamed Israeli official has argued that the Iran-backed Hezbollah's arsenal could deliver a counterstrike against Israel, in the event of an Israeli strike against Iran's nuclear facilities. Obama's own remarks of April 13, that the Mideast dispute is a "vital national security interest of the United States," which the *New York Times* characterized as a "far-reaching shift" in U.S. foreign policy, could supply the pretext for a so-called "breakaway-ally scenario"—whereby Israel takes actions ostensibly without U.S. approval.

Land-War in Asia

On April 14, Gen. David Petraeus announced a massive expansion and gear-up of military operations for a Spring-Summer U.S. troop offensive in Kandahar, Afghanistan. This offensive has in fact already begun, with special troops deployed against Taliban leaders, in preparation for the regular troops' offensive. These special troops include the Army's Delta Force, the Navy SEALs, the Joint Special Operations Command (JSOC) troops, and the Army Rangers.

An article in the British *Guardian* reports that irrespective of Obama's time-

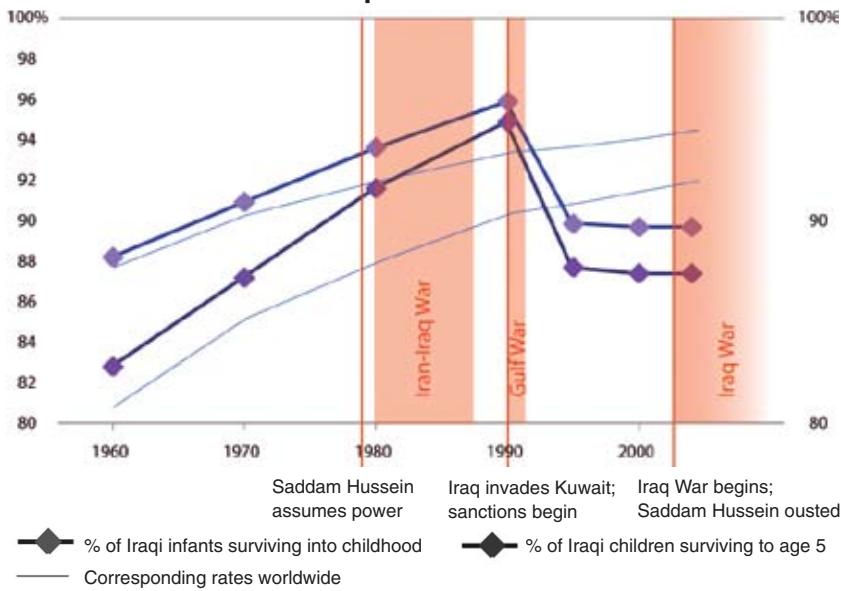
table for withdrawing troops from Afghanistan by 2011, the massive construction of airstrips and barracks at Camp Leatherneck in Helmand Province is an indication that military leaders are getting ready to remain in Afghanistan for many years to come.

Going in the right direction, at least, is legislation proposed by Sen. Russell Feingold (D-Wisc.) and Rep. Jim McGovern (D-Mass.), which calls for an end of what they characterize as the "counterproductive" war in Afghanistan.

There is no doubt about the great danger that Germany's army, the Bundeswehr, could also be sucked further into such a no-win, ill-conceived war in Afghanistan. And so, already this week, Gen. Stanley McChrystal is to arrive in Berlin to present to Germany's parliament, the Bundestag, his concept of "partnering," which essentially says that as a matter of principle, Bundeswehr troops are to participate in military actions jointly with U.S. and other NATO troops.

The tragic death of four more Bundeswehr soldiers in Kunduz, when their armored reconnaissance vehicle strayed into a Taliban stronghold, gives us just a foretaste of what's in store for the Bundeswehr. The vehicle that was hit was an Eagle VI, the same type that German Defense Minister Karl-Theodor zu Guttenberg has just ordered in Switzerland, to "improve" the protection of German troops.

FIGURE 1
Child Survival Rate in Iraq: Effect of the Sanctions



Source: Wikipedia, UNICEF.



Bundeswehr/Martin Stollberg

A German soldier in Afghanistan, patrolling in the town of Faizabad. What's the point of the Bundeswehr being there, only to be sucked into a worse war?

If it were ever to come to a military strike on Iran, this would result in a chain reaction with incalculable consequences. Already now, the entire region extending from Afghanistan to Pakistan, Iran, Iraq, and also into Kyrgyzstan—which Russian President Dmitri Medvedev has warned is in danger of becoming a new Afghanistan—is one big powder-keg. Germany can neither afford to be drawn deeper into a war in Afghanistan, nor be pulled into a new coalition against Iran.

Avoiding a New Dark Age

In the 14th Century, when the financial system of the Bardi and Peruzzi banking houses collapsed because of manipulation by the leading power at the time, Venice, a dark age ensued, in which one-third of the entire population, from India to Ireland, was wiped out by the Black Plague, starvation, superstition, irrationality, witch-burnings, flagellants, and the like. In Bosch and Bruegel's paintings, you can see the insanity on the faces of the people depicted there. So, if we want to avoid plunging once again into such a dark age—and that would be the outcome of a new war in Southwest Asia—we must move with utmost haste to end the financial and economic crisis, by instituting a two-tier banking system and a new credit system.

With regard to Afghanistan, the United States and the West must take up the offer from the head of Russia's anti-drug agency, to jointly destroy opium and cannabis production in Afghanistan, thereby drying up the source of financing for the Taliban and for terrorism

against Russia. Only after that is done, can there be a sensible reconstruction program in Afghanistan.

Even if it is difficult for the average citizen to detect the actual historic dynamic operating behind the apparent self-evidence of current events, a look back into history helps us to better understand why wars come about. Studying the prehistory of World Wars I and II can be quite useful. It is from that perspective, that we today must take seriously the assertions of such people as Bertrand Russell, who believe that war is an appropriate tool for population reduction:

“But bad times you may say, are exceptional, and can be dealt with by exceptional methods. This has been more or less true during the honeymoon period of industrialization, but it will not remain true unless the increase of population can be enormously diminished....

War ... has hitherto been disappointing in this respect ... but perhaps bacteriological war may prove more effective. If a Black Death could spread throughout the world once in every generation, survivors could procreate freely without making the world too full.... The state of affairs might be somewhat unpleasant, but what of it? Really high-minded people are indifferent to happiness, especially other people's.”—*The Impact of Science Upon Society*, 1951, emphasis added.

In the days and weeks ahead, the breakup of the Eurozone will no longer be possible to conceal. The crisis in Greece will be followed by even worse ones in Portugal, Spain, and Ireland, but also the potential state bankruptcies of Great Britain and the United States will make it clear that either the most important nations implement the LaRouche Plan for a new credit system, or we will plunge into a new dark age. An escalated war in Afghanistan, plus an unforeseeable chain reaction sparked by a military strike against Iran, would signify the imperial over-reaching, and sudden collapse of the financial system, which historian Niall Ferguson recently wrote about in his *Foreign Affairs* article. But it must not come to that!

The author is the national chairwoman of the Civil Rights Solidarity Movement (BüSo), the party of the LaRouche movement in Germany. This article, which is also being circulated as a leaflet, was translated from German for EIR.

Thai Monarchy Is Going Down With the British Empire

by Mike Billington

April 17—After a month of mass demonstrations in the streets of Bangkok by the Red Shirt-clad opposition to the government of Democratic Party leader Abhisit Vejjajiva, who had been placed in office by the monarchist/military elite, the government shot itself in the foot by violently assaulting the demonstrators, leaving 23 dead, including 5 soldiers, and over 500 injured. Yet the government failed utterly to remove the determined demonstrators from their positions. The failed use of force not only discredited the government, but has created a situation in which the fate of the monarchy itself is now on the line.

Lyndon LaRouche said, after the violence of April 10: “When a monarchy turns against the people, in such a fashion, the monarchy itself is a likely victim to go.” The few remaining Kings and Queens around the world do not easily forget the fate of France’s Louis XVI.

Thus it is that the Thai monarchy and its Privy Council took a drastic turn on April 12, two days after the bloody attempted crackdown. The Election Committee, appointed by the King and used in the past by the monarchists to dissolve the parties associated with deposed Prime Minister Thaksin Shinawatra (who is supported by the Red Shirts), was turned against their own Prime Minister, Abhisit. Acting on a five-year-old charge of illegal campaign contributions, the Election Committee ruled that the governing Democratic Party must be dissolved. While the case must go through the Constitutional Court and could take several months, one must ask, why is this royalist structure throwing out its own boy?

The answer is that the stakes are much greater than the survival of this government, even if Abhisit is British born, raised, and educated, and is trusted to implement Britain’s neo-colonial policies of globalization. With the world financial system in a state of advanced collapse, the imperial interests governing the international financial institutions are activating every destabi-

lization they can, from a frantic push for war against Iran, to an opium war run through NATO-occupied Afghanistan. Asia is the target, aimed at breaking up the recent emergence of Eurasian unity centered on cooperation among Russia, China, and India. In such a global crisis, the British do not want to lose their monarchy in Thailand.

The Economics of Monarchy

The state of “permanent crisis” in Thailand since 2005 was launched by the royalist/military elite in the Thai Privy Council, headed by former Prime Minister Gen. Prem Tinsulanonda. The elite were worried that the overwhelming popularity of Prime Minister Thaksin was a danger to their power. The monarchy promoted a “self-sufficiency” policy for the rural poor: a policy of bare survival without progress, the historic British imperial model of the “noble peasant,” thankful for a primitive life with just enough to eat, while control over the masses is maintained by elevating the King to an almost godly status. Prime Minister Thaksin, a former police officer and self-made billionaire in the telecom business, offered the poor in both the countryside and the cities an opportunity to progress, through educational grants, access to cheap and decent health facilities, and credits for farmers and rural villages. Although Thaksin and his followers swore their fidelity to the King, the monarchists could see that the allegiance of the masses to their neo-feudalist institution was threatened.

In addition, Thaksin stood up to the British demonization of Myanmar, establishing good relations through economic engagement, and also with Thailand’s other poorer neighbors, Cambodia and Laos. While working with the Myanmar junta to pacify ethnic drug lords and eliminate most of the opium production which had devastated Myanmar since the introduction of drugs by British colonial masters in the



An opposition “Red Shirt” protester, injured in the government’s April 10 assault on peaceful demonstrations in Bangkok. The military itself is split over the policy.

19th Century, Thaksin also waged a highly successful, if brutal, war on drugs within Thailand. Thaksin became a primary enemy of the British “Dope, Inc.” apparatus which runs the international banking institutions. For all these reasons, Thaksin was targeted for destruction by the British Empire and its minions within Thailand.

Anarchy on the Streets...

A movement of Baby-Boomer elites from Bangkok was created, wearing the royal color yellow, which held mass demonstrations against Thaksin in 2006, providing cover for a military coup in September 2006, and the establishment of a military junta run by the Privy Council. The junta imposed a wildly authoritarian constitution, such that when elections were finally held, with Thaksin’s followers winning by a landslide, the monarchists were able to remove the next two prime ministers over frivolous issues—in one case, for hosting a cooking program on TV while serving as prime minister!

By 2008, recognizing that they could not defeat Thaksin’s supporters in an election, the Yellow Shirts were deployed to carry out anarchistic street actions, occupying the Government House (the seat of government) for several months, and closing down the international airport for a week, bringing the nation to the brink of collapse. The Army was ordered to protect the anar-

chists, rather than remove them, and the anarchists were never brought to justice for their crimes. In fact, one of the leaders of the airport occupation, former diplomat Kasit Piromya, was appointed foreign minister in the subsequent puppet government.

...and Peaceful Mass Demonstrations

A parliamentary maneuver was used to place Abhisit and his Democratic Party in power, where they sit today, besieged by hundreds of thousands of Red Shirt supporters, organized as the United Front for Democracy, demanding only that new elections be held immediately.

The Red Shirts maintained extraordinarily peaceful demonstrations for such huge numbers for the past month, as the Abhisit regime refused to budge, claiming that next year was the earliest possible date for new elections. The government then declared a State of Emergency, forcefully shut down the opposition media, print and television, and ordered the arrest of the Red Shirt leaders.

The April 10 military assault on the peaceful demonstrators brought with it a breakdown of the military command structure. The military is badly split, with many flag-grade officers opposed to the illegal government and even more opposed to the use of force against the Red Shirts. Many retired officers have joined the pro-Thaksin Party, the Pheu Thai, now headed by another former prime minister and military leader, Gen. Chavalit Yongchaiyudh. Even the current Commander in Chief of the Royal Thai Army, Gen. Anupong Paochinda made known that he would not support the use of force, and his deputy was put in command of the assault.

Although rubber bullets and tear gas were used in the first, failed attempt to clear the demonstrators, Prime Minister Abhisit made public that soldiers with live ammunition could fire on demonstrators in self-defense. In the second assault, after dark on April 10, live ammunition was used and many demonstrators were killed. It is reliably reported that undetermined

military personnel, dressed in black, then fired upon the soldiers with rifles and grenades, killing and wounding scores of soldiers.

In the past, blood on the streets of Bangkok inevitably led to the resignation of the government and the appointment by the King of an interim government from the ranks of the elites. With the growing anti-monarchy sentiment, together with the King's age (83) and ill health, this is not likely to be repeated.

That both the British and Thai monarchies are terrified that the Red Shirt revolt will end in the collapse of the Thai monarchy itself, was confirmed in Washington on April 12, when Foreign Minister Kasit—the same Kasit who had been a leader of the Yellow Shirt occupation of the Bangkok airport—told his U.S. audience that the taboo against discussing the role of the monarchy must be dropped, and that the “rural poor” (i.e., Thaksin's base of support) must be given more power under a “reformed monarchy.”

Why is a leading monarchist offering to “reform” the monarchy? To save it from the mounting anger of the population. What Kasit had in mind was made clear when he said that the proper models for a successfully “reformed” monarchy were those of the British and the Dutch—the heart of the Empire!

The Army itself stands humiliated, both by the assault itself, and its failure to clear the demonstrators. On April 16, this humiliation was multiplied when Deputy Prime Minister Suthep Thaugsuban, who had been placed in charge of the State of Emergency, went on TV to announce that the “terrorists” (meaning the Red Shirt leaders) were in the process of being arrested; but within minutes, the news was out that the Red Shirts had all escaped. Prime Minister Abhisit immediately fired Minister Suthep as head of emergency operations and placed General Anupong directly in charge. Anupong, the day after the bloodshed, had said that the only route to a solution was new elections. The situation remains tense as of this writing.

The world is poised in a showdown between the decrepit and vile forces of the bankrupt international financial empire centered in London and New York, on the one hand, and the developing new geometry of a Pacific-centered alliance of the Eurasian powers and the United States under new leadership, on the other. Thailand can be a significant force in this new Pacific alliance, or be dragged to hell by the dinosaurs of the European monarchical powers.

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A Time of Redemption For Russia and Poland

by Rachel Douglas

April 16—Russian Prime Minister Vladimir Putin has led his country's official mourning of the death of Poland's President Lech Kaczynski and 95 other Polish officials, military officers, and other public figures, whose plane crashed on the morning of April 10 outside Smolensk, Russia. Sympathy for Poland has poured out in Russia, in a great array of demonstrations of solidarity after the tragedy, which, in turn, was linked with one of the darkest phases of relations in the long history of these two Slavic countries: the execution of over 22,000 Polish officers by Soviet security forces in Katyn Forest and other locations in the Spring of 1940, just a few months after the September 1939 Nazi invasion of Poland.

The Molotov-Ribbentrop Pact, then in effect, had allowed delay of a German attack on the Soviet Union (which did come, in June 1941), in favor of German preparations to move against the West; in the interim, Germany annexed the western parts of Poland, and Soviet forces occupied its eastern areas. President Kaczynski and other officials, including the upper echelon of Poland's military commanders, were en route to pay tribute to the victims of the Katyn massacre on the 70th anniversary of their deaths.

Prime Minister Putin had already stepped to the fore in this commemoration, joining with Polish Prime Minister Donald Tusk in a joint Polish-Russian government ceremony near Katyn on April 7. Though the long-secret Soviet dossier on Katyn was opened in 1992, Putin was the first Russian President or Prime Minister to attend an official event in honor of those killed in the massacre.

Lyndon LaRouche observed April 12, about the joint Polish-Russian mourning, that “this is redemption,” in view of such a difficult history. It is important, LaRouche said, that, led by Prime Minister Putin, officials as well as Russians in the streets are expressing a sense of solidarity with the suffering of the Polish nation as a result of this tragedy.

Russia's recent relations with NATO and EU



premier.gov.ru

Polish Prime Minister Donald Tusk (left) and Russian Prime Minister Vladimir Putin honor the victims of the Polish plane crash, near Smolensk on April 10.

member Poland have been less than smooth, although they have improved since Tusk succeeded the late President Kaczynski's twin brother, Jaroslaw, as prime minister. In 2008, Kaczynski gave ostentatious support to President Michael Saakashvili of Georgia, when the latter sent his troops to attack the province of South Ossetia, and Russian peacekeepers stationed there. Nonetheless, Putin led Russian officials in expressing unqualified sympathy for all the victims of the still-unexplained crash.

Outpouring of Sympathy

On April 12, before departing for Washington and South America, President Dmitri Medvedev was one of hundreds of Russians who laid flowers and signed a book of condolences at the Polish Embassy in Moscow. That day was a national day of mourning in Russia, with black-clad announcers on First Channel TV introducing footage of the flowers, candles, and flags at half-mast, as Chopin's music played. Striking interviews with ordinary Russians were included, such as a woman in tears who told of her decades-long fear of visiting the Polish Embassy until now, because in 1937 her Polish-born mother had been arrested and sent to a Siberian prison camp for a decade, after going to the Embassy to seek asylum. A Polish journalist, interviewed on Russian TV,

expressed amazement at the outpouring from Russians, and commented that "this is some kind of very important moment in our history."

Russian TV showed Putin embracing Tusk, as they visited the crash site near Smolensk on the night of April 10, and played Putin's impromptu interview to Polish TV, in which Putin told the Poles, "We are grieving and suffering alongside you... We are praying with you." Other footage from that evening included Putin and Tusk scrutinizing a laptop computer in the makeshift operations headquarters set up in Smolensk, as the Polish and Russian prime ministers took part in a Russian government task force meeting by video conference. They discussed with Russian Minister of Health Tatyana Golikova and Moscow Vice Mayor Pyotr Biryukov provision of accommodations and support for the hundreds of Poles who were on their way to the Russian capital to help identify their relatives, dead in the crash. This video clip reportedly has been widely circulated on the Internet with a Polish voiceover.

On April 11, Putin and Polish Ambassador Jerzy Bar saw off the plane which carried Kaczynski's body home. The Polish Air Force jet was escorted to the border by Russian fighters, in a sign of respect.

Chairing a Russian Government Presidium meeting April 12, Putin again expressed condolences to Poland, and took additional reports on the investigation, which he officially heads.

In Sweden, leading Swedish-Polish intellectual Maciej Zaremba said that Russian reactions to the tragedy in Smolensk have moved Poles profoundly. Besides the outpouring of sympathy from ordinary Russians at the Embassy, Zaremba pointed to three signs which have been well-received by the Polish people: Putin's putting his arms around Tusk at the crash site; Moscow Mayor Yuri Luzhkov's provision of free hotel rooms and meals for the 400 Polish relatives of crash victims; and Medvedev's reference to the historical connection between the plane crash and the Katyn executions. The Russian President called Katyn "a place of mystery"—using a word which, Zaremba noted, has "a spiritual depth and seriousness" in Russian, which Poles also understand: "a space for contemplation, wonder and wordless community." In a TV interview, Zaremba said he thought the mourning would "have great political effects in the future."

International Intelligence

Obama Policy Worsens Situation in Haiti

April 14—Because President Barack Obama cynically refused to authorize U.S. help for quickly relocating up to a million Haitians out of the Port-au-Prince flood plain *before* the rainy season hit—as Lyndon LaRouche and other leading Democrats had demanded—up to half a million desperate Haitians have now returned to the devastated area that they had fled from in the aftermath of the Jan. 12 earthquake.

The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) released its latest report on April 12, which says that there has been a “sudden increase in the number of displaced” in the quake area, leading to “the continuing increase in both the number of camps and the size of existing camps.” Rather than some 600-800 camps, they now estimate 1,373 sites in Port-au-Prince, Jacmel, Leogan, Petit, and Grande Goave. And instead of 1.5 million displaced, there are 2.1 million, as people return to the region “seeking to benefit from assistance being provided.”

In other words, huge numbers of desperate people who had initially fled Port-au-Prince to stay with friends and family in the interior, are now returning, and face the devastating rainy season.

Iran Holds Its Own Nuclear Summit

April 17—Iran answered President Obama’s nuclear security extravaganza of last week, with a nuclear summit of its own today. Organizers of the conference, entitled “Nuclear Power for All, Nuclear Weapons for No One,” claimed representation from 60 nations and several international organizations, including seven or eight foreign ministers and the deputy foreign ministers of Russia and China. Kazem Jalali, member of the Maj-

lis (parliament) National Security and Foreign Policy Committee, told the *Tehran Times* that the conference seeks to revive the Nuclear Non-Proliferation Treaty (NPT).

“The Tehran conference is a global call for the peaceful use of nuclear energy and the Islamic Republic of Iran is seeking to integrate states that are trying to attain nuclear technology meant for peaceful purposes,” he said. He also said that “through the conference Iran is announcing to the world that it is not pursuing nuclear weapons,” because to do so violates the fatwa issued by Supreme Leader Ali Khamenei.

The conference was opened by Iranian President Mahmoud Ahmadinejad, who denounced the “bullying” by certain nations through the UN Security Council, and called for the U.S. to be suspended from the International Atomic Energy Agency (IAEA). Despite Ahmadinejad’s bluster, it appears that behind-the-scenes negotiations on a solution to the standoff are continuing.

Russia and Argentina Make Nuclear Deals

April 14—Russian President Dmitri Medvedev reported, during his April 14 press conference in Buenos Aires with Argentine President Cristina Fernández de Kirchner, that “in the atomic energy sphere,” the Russian Federal Atomic Energy Agency, Rosatom, will be making a “several-billion-dollar investment” in the Argentine market “to be spent on the building of . . . nuclear reactors, as well as on the development of [related] infrastructure” in Argentina.

Among 12 bilateral agreements signed by the high-level Russian delegation that visited Argentina April 14-15, the agreement on cooperation in the development of the peaceful uses of nuclear energy is most striking. It specifies that the two nations will work “jointly in the design and construction of nuclear reactors in Argentina, and the supply of nucle-

ar fuel based on the [Russian] VVER [light-water pressurized] reactors.”

Rosatom President Sergei Kirienko said yesterday that Rosatom will compete for a contract to build two third-generation reactors in Argentina, able to generate 1,200 MW each. One of those will be Argentina’s fourth reactor, Atucha III, which Argentina wants Rosatom to help build.

Prince Charles Visits His Mom’s Poppy Fields

April 14—Britain’s Prince Charles visited British troops in Afghanistan on March 25-26, becoming the most senior royal to visit the troops there. He received a briefing from Gen. Stanley McChrystal, commander of U.S. and NATO troops in the country. The London *Guardian* reported that “during a two-day visit amid tight security, he was flown by Chinook helicopter to Lashkar Gar, capital of Helmand province, where he met local leaders, the Governor Gulab Mangal, and British soldiers at a patrol base *surrounded by opium poppy and wheat fields*” (emphasis added).

It was not reported where Prince Charles met McChrystal—for example, in a poppy field, a heroin laboratory, or on a carpet, where the Prince was sitting cross-legged socializing with the local governor. AP reported that “the 61-year-old heir to the British throne said troops can keep themselves busy in the field, but for the relatives left behind, it’s ‘ghastly.’”

The paper further revealed the setting where the British troops are keeping themselves busy: “At Patrol Base Pimon, nestled among the blooming pink poppy fields of Nad Ali, he met some of the 140 British troops holding the front line and was told by commanding officer Maj. Ian Lindsay-German: ‘It’s a lot more quiet out there now, but it hasn’t been cleared fully’ of insurgents.”

Clearing the fields of opium poppy is not on the agenda.

Only a Total War on Drugs Can Resolve Afghan Disaster

by Jeffrey Steinberg and Nancy Spannaus

April 19—A senior U.S. intelligence source has confirmed a report in the April 16 *Washington Post*, that, with the active backing of Secretary of State Hillary Clinton, U.S. Marines in the Marja area of Afghanistan's Helmand Province have begun a program to destroy the opium harvest, just as the poppy crop is ready for harvesting. "Hillary stepped in and pushed it through," the source confirmed.

Under the new program, which reverses the Obama Administration's policy of ending opium eradication, first announced in March 2009, U.S. Marines will be paying opium poppy farmers \$120 per acre to destroy their crops. And at the same time, Marines are cutting off migrant workers from the opium-growing region, who are vital to the harvesting of the massive opium crop.

By these actions, and a third track, which targets the opium dealers as they attempt to purchase the opium poppy from the farmers, the 2nd Marine Expeditionary Brigade is taking precisely the kinds of measures that Lyndon LaRouche has demanded, in recent calls for the impeachment of President Barack Obama.

Yet, don't be confused. As numerous military-intelligence sources have confirmed, this shift in behavior does *not* amount to the necessary shift in policy, toward cooperation with the Russians on wiping out the British

imperial game, by destroying the Afghan drug trade. The dominant Obama Administration approach remains the expansion of the British policy of land war in Asia that was engineered more than 40 years ago, as a geopolitical trap for destroying the Soviet Union and the United States alike.

The disaster awaiting the NATO forces is totally predictable, as U.S. and NATO forces commander Gen. Stanley McChrystal and his team plan for an assault on the birthplace of the Taliban, the half-million strong city of Kandahar. Indicative of the disaster the NATO forces will run into is the fact that the 1,000 tribal elders in the Kandahar region have let it be known they do not want the NATO operation. And, although McChrystal had allegedly promised that the operation would be carried out in consultation with these local leaders, generally reliable journalist sources have reported that the General has decided that the assault will go ahead anyway.

That's par for the course for this General, who, along with President Obama, is taking his cues directly from the British strategists who are determined to see the United States, in particular, destroy itself in the course of this conflict, while preserving the dope trade which is the lifeblood of their bankrupt financial system. Both McChrystal and Obama are implementing a policy which is tantamount to treason.

Clinton's Opportunity

As to the Helmand program to destroy opium, LaRouche noted that the opportunity for Hillary Clinton to push through this useful tactical breakthrough came as the result of several factors. First, there is a clear policy-vacuum at the Obama White House. And second, President Obama was desperate for a foreign policy "victory" by signing the just-concluded nuclear arms limitation treaty with Russian President Dmitri Medvedev. And the Russians were insistent that the United States had to take some action against the opium and heroin trafficking out of Afghanistan, which had been the source of funding and logistics for the recent spate of terrorist attacks in Moscow and in the North Caucasus—not to mention the epidemic of heroin addiction among Russians.

Recall that, on March 17, Victor Ivanov, head of the Russian Federal anti-narcotics program, was in Kabul, pressing for a full-scale opium eradication program. A week later, he was in Brussels, making the same demand before the Russia-NATO Council meeting. On March 30, Secretary of State Clinton sent a cable to the U.S. embassy in Kabul, authorizing the eradication program in Marja, describing it as "the best decision in the face of an array of less-than-perfect options." Two days later, on April 1, Drug Enforcement Administration (DEA) head Michele Leonhart arrived in Kabul for a three-day visit, to further push the eradication program, which has DEA backing.

According to the senior U.S. intelligence source, U.S. military and intelligence officers in the Helmand area had established solid intelligence that the overwhelming majority of funds derived from the local opium production (40% of world opium and heroin supplies come from the 155-square-mile area around Marja) were going to the Taliban and other insurgents, fully confirming LaRouche's warnings that any policy that allowed the opium production to continue was providing aid and comfort to the enemy in a theater of war, which was tantamount to treason.

The decision to permit the resumption of eradication, through payments to the farmers to plow under their own crops, is a victory, albeit a tactical one, for both Secretary of State Clinton and her Russian counterparts, including anti-drug official Ivanov, who made U.S.-Russian cooperation on the eradication of the narco-terror operations centered in Afghanistan, a precondition for overall U.S.-Russian partnership. Even

this limited operation is going to send Her Majesty's Dope, Inc. apparatus climbing up the wall—including those Russian "Mafiya" elements who operate out of British and Dutch offshore money-laundering centers like the Dutch Antilles, and who are the enemies of the Putin, Ivanov, Yakunin patriotic faction in Moscow.

Russian Pressure

Meanwhile, sections of the Russian government continue to push hard for the shift to a war on drugs.

At a joint press conference with the European Parliament's special envoy on the war on drugs, Pino Arlacchi, which was held following talks on the issue in Brussels April 14, Victor Ivanov said that the war on drugs must be waged ruthlessly, but so must be the effort to rebuild the economy of Afghanistan. Arlacchi urged Europe to join Russia for a war on Afghan drugs, because Europe is the number-one consumer of drugs from Afghanistan, followed by Russia.

Russia, Ivanov said, is ready to assist in rebuilding 142 economic facilities that were built by Soviet specialists in Afghanistan. Among them are the Jalalabad irrigation system, the Naglu hydroelectric plant, the Mazar-e-Sharif mineral fertilizer plant, and the Salang Tunnel.

"We are ready to invest in rebuilding these objects and, of course, we hope that NATO, which has specifically undertaken to maintain security in Afghanistan, will guarantee this for us," Ivanov said at the press conference.

More than 140 industrial facilities and other branches of the economic infrastructure built in Afghanistan by Soviet specialists are considered candidates for reconstruction using Russian expertise. The structures were set up before the U.S.-led NATO invasion of Afghanistan in 2001. Ivanov said "those 142 objects, which were built earlier by Russia, are today the base of the entire Afghan economy." Soviet engineers were involved in constructing these 142 industrial and infrastructure facilities in 1952-88, with funds provided by the Soviet government. The Pul-i-Kumri hydropower plant on the Kunduz River, the Naglu Dam on the Kabul River, and a nitrogen fertilizer plant in the city of Mazar-e-Sharif are among the facilities, as well highways, power lines, and gas and oil pipeline networks. According to Russian estimates, the facilities accounted for more than 60% of Afghanistan's GDP in 1970-80.

Will Singh Preside over New Indian Famine?

by Ramtanu Maitra

India's unwillingness to rejuvenate its vast agricultural sector, by not pushing through water management programs, power, education, etc., verges on criminal neglect. But, there is a lesson in India's story for most other nations as well. Not a single nation on Earth, during the last two decades in particular, has directed its energy and resources to build the foundation of an ever-growing agricultural sector and thus, to ensure food security to its own people. As a result, the world teeters on the brink of famine, ready to strike any time in some part of the world.

April 15—In the cacophony of numbers about India's growth and how it "managed" its economy with flying colors, amidst the ruins of a global financial collapse, what remains unspoken is the fact that food prices are soaring like never before. Neither Prime Minister Manmohan Singh nor his agricultural minister, Sharad Pawar, a sugarcane tycoon, has anything to say beyond reiterating over and over again that the cause is the drought of 2009, and that the crisis will blow away soon once the Winter harvest hits the market.

The reality is somewhat worse. India has at least 500 million people whose income is enough to feed the family, but with no surplus. These million of people have been now put to the sword, with the price of staples (wheat and rice) showing a 15-25% rise over its

price last year. Some other agricultural products, such as sugar, show an even steeper rise, but the poor in India have long stopped being major consumers of such products, because they cannot afford them.

That is the reality, and it is ugly, because those who took control of governing this nation of 1.1 billion people were fully aware that, throughout the 1990s and during the better part of the present decade, India's agriculture sector was growing at a rate of 2-2.5%. No one in the top leadership in New Delhi has the courage to address the issue the way it must be addressed, but they were often heard parroting each other, that India has achieved the status of the second-fastest-growing economy of the world.

The facts are right in front of these leaders: 60% of India's population depends on the agricultural sector, and its offshoots, to stay alive. A 2-2.5% growth rate of the sector they depend on for survival ensures two things: It keeps them permanently poor, and it destroys the future for a majority of India's next generation. Instead of addressing what should be considered as the key to India's survival and future success, leaders in New Delhi sing hosannas about the phenomenal growth of Information Technology, and its direct offshoots, which serves not even 1% of India's 1.1 billion-and-growing population. By all definitions, this is criminal negligence, with the potential of leading to deaths of innocent millions.



Famine during the British Raj in India (photo from 1868-75): the result of British colonial/Malthusian policies. Viceroy Lord Lytton told district officers, during the 1877-79 famine, to “discourage relief works in every possible way.”

Back to the Raj Days?

Indian farmers had gone through catastrophic food shortages for ages before Shrimati Indira Gandhi (1917-1984) moved decisively in the 1960s, with the help of the best agro-planners and agro-scientists, to make the country food-secure. That decision saved India from becoming a victim of the carnivorous IMF-World Bank predators. By the 1980s, India became self-sufficient in food, and the pundits around the world stopped claiming that India would fall apart because of internal upheavals caused by food shortages.

But, what Prime Minister Indira Gandhi achieved has been systematically undermined, wittingly or unwittingly, by those who followed her. According to the Indian English news-daily *The Hindu*, the neglect of the agricultural sector in the 1990s and the 2000s, drove as many as 200,000 farmers to suicide. While that rush of suicides among farmers has declined, New Delhi’s policy of considering the agriculture sector as an adjunct, and not a motor for growth, has continued, and if this is not reversed immediately, the days of the British Raj will be replayed in India’s farmland within a decade—with hell to pay for the nation’s “leaders.”

What happened during the days of the British Raj is not remembered by the people who have since taken over power in New Delhi. This is partly because they

were mostly British-educated, working with the British-trained *babus* [bureaucrats], and also because it is too horrid a past to recall. It is easier to have friendly relations with Britain, and other colonial masters, if these unpleasant issues are forgotten. In addition, most of those millions of people that were killed by the British-created famines were poor; they never got anywhere near power in New Delhi in the post-Raj days.

The famines that occurred in India during the British days have all been recorded. Nonetheless, a sample is given here, lest that situation be revisited because of New Delhi’s unwillingness to understand what Shrimati Indira Gandhi grasped: that the survival of India, and building of a future India, depend heavily on erasing poverty from India’s rural farmlands and, providing this vast, under-

nourished majority’s next generations with hope.

1770: Territory ruled by the British East India Company experienced the first Bengal famine; an estimated 10 million people died.

1783-84: Up to 11 million died in the Chalisa famine in the regions of present-day Uttar Pradesh, Delhi region, Rajputana (now, Rajasthan), eastern Punjab region (this is the Indian part of Punjab), and Kashmir.

1788-92: Another 11 million may have died in the *Doji bara* famine (Skull famine) in Hyderabad State (now part of Andhra Pradesh), Southern Maratha country (most of which is now Maharashtra State), Gujarat, and Marwar.

1800-25: 1 million Indians died of famine.

1850-75: 2.5 millions died in the Orissa famine of 1866 and the Rajputana famine of 1869; due to a generous relief effort, however, there was no mortality in the Bihar famine of 1873-74;

1875-1902: 7-8 million Indians died of famine (the Great Famine of 1876-78 took 5.25 million lives).

1943: The second Bengal famine resulted in over 3 million deaths.

These were the major famines. In fact, records indicate many more famines took place throughout Indian colonial history, claiming many more millions of Indian lives. But to the British colonial rulers, this was not kill-

ing, but more like culling of the Indian population.

Mike Davis, in his book, *Late Victorian Holocausts: El Niño Famines and the Making of the Third World* (2001), pointed out that after the 1877-79 famine, when some British liberals called for policy reforms so that famines would not take away so many lives, Viceroy to India Lord Lytton replied, "Let the British public foot the bill for its 'cheap sentiment,' if it wished to save life at a cost that would bankrupt India." He ordered: "There is to be no interference of any kind on the part of Government with the object of reducing the price of food," and instructed district officers to "discourage relief works in every possible way. . . . Mere distress is not a sufficient reason for opening a relief work."

Under the Raj, Indians had to accept that fascist diktat. It is unlikely that leaders in New Delhi will be as lucky as Lytton and his murderers' row were.

Why the Crisis?

The genesis of this crisis, which may make its presence known within a decade in a brutal form, lies in not doing what was needed to be done, and resorting to knee-jerk reactions to a mega-crisis. There are many, who were trained abroad and representing Wal-Mart, or business management consulting houses, or global financial institutions, who proffer their advice to the eager ears of New Delhi authorities, saying India does not have a food-generation crisis, but only a distribution problem. Many such lies are being circulated to prevent New Delhi from paying due attention to the agricultural sector, where the growth is less, and foreign direct investment is negligible. In other words, not much money can be made there.

Then again, take the case of Agriculture Minister Sharad Pawar. As an Indian news journal, *Tehelka*, pointed out: "When he took the job in the summer of 2004, many had hoped Pawar would use his vast knowledge to reform policy to begin pulling farmers out of poverty, while keeping prices down with lasting food stocks without increasing imports. But for six years the Indian Agriculture Ministry under Pawar—who the media has chronicled far more for his exploits in the management of cricket than agriculture—has pursued policies that have done little to mitigate the misery of the poor farmers, or to better manage food stocks. Instead, his ministry has gone to bat for a demand-and-supply market economy, for big business, for higher imports, and for water- and other resource-intensive crops such as rice, wheat and sugarcane. . . ."

Setting aside these petty detractors, the fact remains that New Delhi has not taken up water management and power generation the way it should have for the last two decades. These sectors are vital for agricultural growth, along with education and health care. New Delhi has done precious little to make a dent in the education and health-care sectors in rural areas as well.

It is likely that India will be generating a lot more electrical power in another two decades, and when that occurs, the power requirements of the agricultural sector will be met. However, the question is, what will happen to the agricultural sector between now and then? What will happen to the millions, and their children, who are increasingly undernourished, if not starving, because of New Delhi's policies?

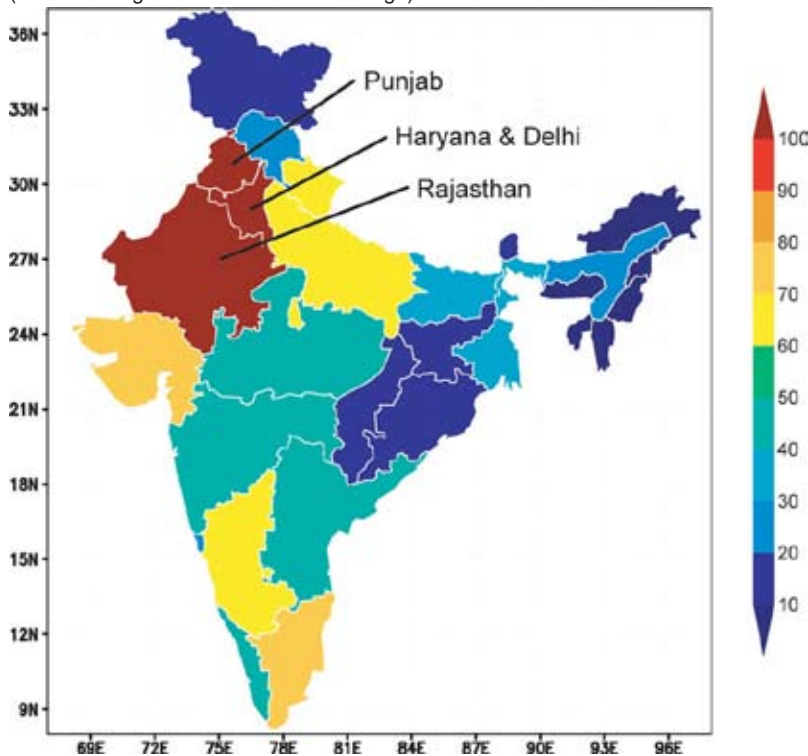
Even if there is a light at the end of the power tunnel, there is hardly any relief in sight for meeting India's water requirements for agriculture and other purposes.

According to a study by NASA hydrologists, Northern India's water tables have fallen by about one-fifth more than expected because of excessive use, posing serious threats to the farming, food, and potable water supplies. A team of hydrologists, led by NASA's Matt Rodell, said the water is being pumped and consumed faster than the aquifers can be recharged through natural mechanisms. Their research—published in the Aug. 20, 2009 issue of *Nature*—was based on observations from NASA's Gravity Recovery and Climate Experiment (GRACE), the NASA Earth Science Team said.

Figure 1 shows groundwater changes in India during 2002-08, with losses in red and gains in blue, based on GRACE satellite observations. The estimated rate of depletion of groundwater in northwestern India is 4.0 centimeters of water per year, equivalent to a water table decline of 33 cm/year. Increases in groundwater in southern India are due to recent above-average rainfall, whereas rain in northwestern India was close to normal during the study period.

"If measures are not taken to ensure sustainable groundwater usage, consequences for the 114 million residents of the region may include a collapse of agricultural output and severe shortages of potable water," said Rodell. Groundwater across the three northern Indian states of Rajasthan, Punjab, and Haryana dropped by about 4 cm a year between 2002 and 2008. "The northern Indian states of Rajasthan, Punjab, and Haryana have all of the ingredients for groundwater depletion: staggering population growth, rapid economic development and water-hungry farms, which account for

FIGURE 1
Withdrawals of India's Groundwater, by State, 2002-08
 (As Percentage of Groundwater Recharge)



Sources: NASA/Matt Rodell, with data from India's Ministry of Water Resources.
The three states that are labeled are those included in the Rodell team's NASA study.

about 95% of groundwater use in the region.” the NASA team said.

On the other hand, India gets a lot of rainfall—an average of 4 trillion cubic meters every year, although most of it over a short period time, say 10-12 weeks. Unfortunately, only 48% of the rainfall ends up in India's rivers. Due to lack of storage and crumbling infrastructure, only 18% can be utilized. Rainfall is mostly confined to the monsoon season, June through September, when India gets, on average, 75% of its total annual precipitation. Once again, due to lack of storage, the government is unable to store surplus water for the dry season.

Unfortunately, this uneven seasonal distribution of rainfall, occurs every year about the same time and is known to one and all, yet has not inspired authorities to develop better capturing and storing infrastructure, making water scarcity an unnecessary, yet critical problem. Instead, failure of monsoon rains, as was the case in 2009, is being mouthed by one and all, including Pre-

mier Manmohan Singh, as the reason for the present rise of food prices.

A Man-Made Problem

India's water crisis is predominantly a man-made problem. Extremely poor management, unclear laws, government corruption, and industrial and human waste have caused the problem, and rendered what water is available practically useless, due to the huge quantity of pollution. Meanwhile, the authorities go for band-aid solutions and play with people's lives, in the process.

India's agricultural sector currently uses about 90% of the country's total water resources. Irrigated agriculture has been fundamental to economic development, but unfortunately caused groundwater depletion. Due to pollution of rivers, India draws 80% of its irrigation water from groundwater. Anjana Pasricha, in her article, "India's farm sector fails to get sufficient attention," in *One World South Asia* on March 30, pointed out that agricultural scientists blame overuse of unbalanced chemical fertilizers, especially urea. In the 1960s, to raise food production for a populous country, India gave its farmers high-

yield varieties of seeds, and heavily subsidized fertilizers to make them affordable for farmers. The "Green Revolution" transformed agriculture in the northern states of Punjab, Haryana, and Western Uttar Pradesh. It helped India overcome decades of food scarcity, become the world's second largest producer of wheat and rice, build huge buffer stocks, and even export food grains, Pasricha said.

But because of the neglect of the sector, farmers have been caught in a vicious cycle. They use heavier doses of urea to coax the same yields from their land, but this degrades the soil even more. It also increases the crops' thirst for water, prompting farmers to drill deeper to extract groundwater for irrigation. But as a result, groundwater is running out, Pasricha reported.

One of the key individuals in Indira Gandhi's successful launching of India's Green Revolution, agroscientist M.S. Swaminathan, told Pasricha that these unsustainable farming practices have been encouraged by bad government policies. "This region has been



PIB

The late Prime Minister Indira Gandhi with constituents in Srinagar, in the State of Jammu and Kashmir. Shrimati Gandhi mobilized agro-scientists in the 1960s to make the country food-secure; self-sufficiency was achieved in the 1980s—and then lost, in the next two decades.

doing more or less land mining and water mining. It is no more agriculture, it is mining. Water has gone down and down,” said Swaminathan. “Part of it is due to wrong public policy, for example, free supply of electricity to pump out more groundwater, what I call ecological suicide. That is unnecessarily done for political reasons. Similarly, government only subsidizes nitrogenous fertilizer, with the result there is no balance in the use of fertilization.”

What Needs To Be Done ... Now

As water scarcity becomes a bigger and bigger problem, rural and farming areas will most likely be hit the hardest. Even if New Delhi deals with food shortages in the future by importing food from abroad—an absurd concept, considering the tiny food surplus that exists in the world today and may vanish at any time, and the size of India’s requirements—India will end up being a net importer of food, which would have massive ramifications for maintaining its sovereignty. It is exactly for that reason that India developed its independent closed nuclear fuel cycle, and Shrimati Gandhi ensured

food security in the 1970s.

India must now take on management of water on a war footing. Besides developing large reservoirs to store monsoon waters, India will have to manage the waters of its main rivers, the Ganges, Brahmaputra, Mahanadi, Godavari, Krishna, Kaveri, Indus, Narmada, and Tapti, which flow into the Bay of Bengal and the Arabian Sea, and hold the waters for storage and use. The Himalayan rivers, such as the Ganges, are formed by melting snow and glaciers, and therefore have a continuous flow throughout the year. The Himalayas contain the largest store of fresh water outside the polar ice caps, and feed seven great Asian rivers.

This region receives very heavy rainfall during the monsoon period, causing the rivers to flood. The coastal rivers, the Brahmaputra and the Krishna, especially on the west coast, are short in length, with small catchment areas. The peninsular rivers, which include the Mahanadi, Goda-

vari, Krishna, and Kaveri, flow inland and also greatly increase in volume during the monsoon season. Finally, the rivers of the inland drainage basin, such as the Mahanadi and the Godavari, dry out as they drain towards the silt lakes such as the Sambhar, or are lost in the sands.

In addition, India is now capable of mass-scale building of small nuclear reactors—first, those fueled by natural uranium, then, thorium-fueled—to desalinate water all along India’s long coastline. That water would not only be used for domestic and commercial purposes, but must also be stored in reservoirs for agricultural and other uses. These reactors can be 50-100 MW capacity, and Indian manufacturing facilities are quite capable of churning them out in large numbers. All it requires is direction from New Delhi, with a clear understanding that it *has* to be done, whether marketing managers approve it, or not.

If Manmohan Singh, and future Indian authorities at the helm of power, do not want a revisit of the famines created by the British Raj, it is difficult to see why New Delhi is pushing the agriculture sector to a massive crisis.

Italy Begins Return To Nuclear Power

by Claudio Celani

April 15—Twenty-four years after taking the absurd decision to shut down its nuclear power plants, the Italian government has begun the return to nuclear energy. Although success is not assured or the prospects immediate, the move represents a significant crack in the British Malthusian green dictatorship that has been dominating Europe, and thus suppressing prospects for Europe's essential participation in reversing the global economic breakdown. Italy decided that France would be the midwife to its nuclear renaissance.

On April 9, a Franco-Italian meeting was held in Paris, which marked a major step forward. Deals were signed between Italian and French industries and universities for cooperation and joint ventures to build four 1,600-MW nuclear power stations, to be operational by 2020. Four more will follow; the Italian government plans to reach a quota of 25% of nuclear-produced electricity by 2030, to reduce Italy's dependence on foreign oil and gas imports (over 85% currently).

After World War II, Italy was the first continental nation of Europe to produce nuclear power, and in 1964 already had four plants. Italy's program was started by patriot Enrico Mattei, founder of the national energy company ENI. Mattei, while drilling oil and gas in Italy and abroad, understood that the future lay with nuclear energy. In 1956 he founded a nuclear company, AGIP Nucleare, and in 1958 he signed a contract with the British NPPC company for a licence to build a gas-cooled nuclear reactor. After five years, in 1963, a 160-MW plant was operational, but Mattei did not live to see it, having been killed the year before.

In 1986, an insane decision agreed to by all political parties, after a referendum, led to Italy abandoning its nuclear program altogether, and to the even more insane decision to shut down immediately its existing six plants. This decision has cost at least EU35 billion

in direct costs, and EU50 billion more in money spent to buy energy abroad. Italy, today, imports electricity from its European neighbors, partly produced by nuclear plants! Of course, the real losses are much higher, in terms of scientific and industrial know-how.

The agreements with France are intended to regain all the lost capabilities and push the country again on the way towards progress. Italy has chosen France's EPR (European Pressurized Reactor) technology, and a consortium was launched last year between the Electricité de France (EdF) and the Italian electricity company ENEL, which will be the leader of the consortium.

The Italian business daily *Il Sole 24 Ore* published an interview with Areva's CEO Anne Lauvergeon, who described "the nuclear renaissance" as "not a myth but a real tendency." In five years, Areva's orders have increased fivefold, its turnover by 39%, and the company hired 53,000 new people.

Lauvergeon addressed the key issue used by anti-nuclear factions in Italy—waste disposal: "We are able to recycle 96% of the fuel utilized. Therefore, waste represents only 4% of the fuel introduced in the plants. The amount of such residues for France, where civilian use of nuclear energy has existed for 30 years, amounts to the size of an Olympic swimming pool."

Political Battle Ahead

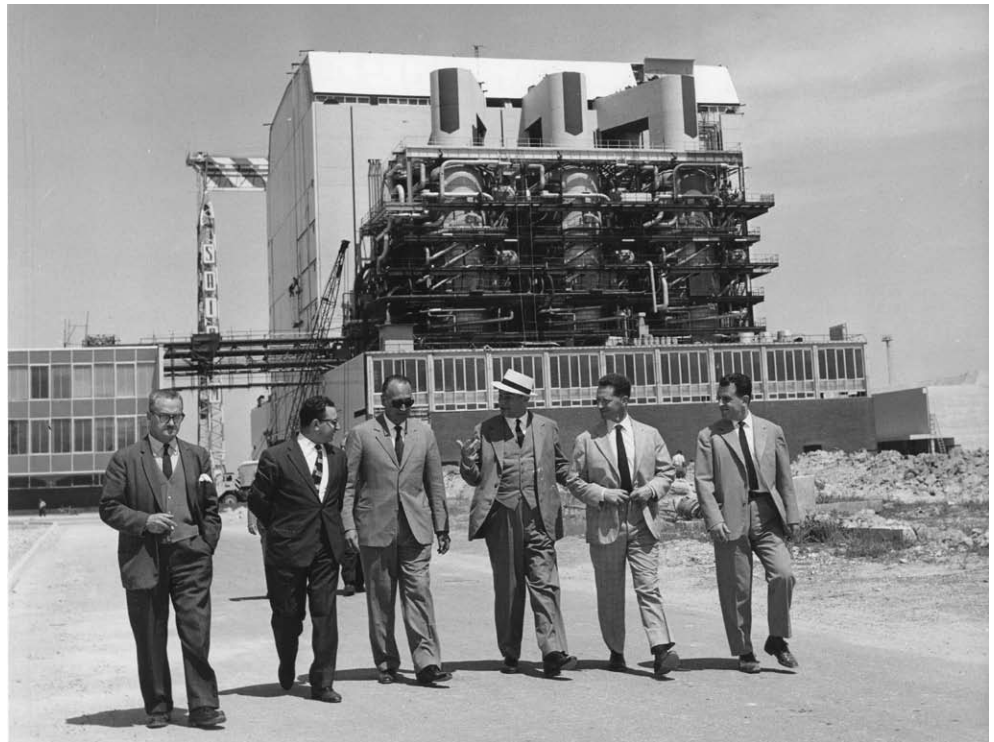
To implement its nuclear power program, the Italian government must win a political and educational battle. Years of mass brainwashing by the green movements of British Royal Consort's Prince Philip have induced a generalized, irrational fear of nuclear technology in the population.

In recent years, as Italians recognized the disadvantages of the nuclear ban on their electricity bills (30% higher on average than other European countries), a shift in favor of a return to nuclear energy had started. But as soon as the government announced its program, and said that a decision must be taken as to *where* to build the four new plants, Prince Philip's new flagellants went on a rampage, terrorizing the population. Greenpeace staged demonstrations at former nuclear sites, where most probably the new plants will be built, raising giant banners reading "Nuclear Emergency," and the popular mood tilted again, albeit with a narrow margin, against nuclear energy.

The leading opposition party, the Democratic Party (DP), has irresponsibly ridden the irrational tide, and its local administrators have issued proclamations banning construction of plants in their backyards. During the recent campaign for regional elections, all governors belonging to the DP proposed bills vetoing the construction of plants in their region. Even governors and gubernatorial candidates of the government coalition, afraid of losing the election, buckled to the hysterical anti-nuclear campaign. The Government-Regional Congress, a body which assembles central government officials and all regional governors, and has a shared jurisdiction on issues such as energy and infrastructure, voted against the nuclear program, with the result that the central government filed a complaint at the Constitutional Court.

But to the citizens' general surprise, the government coalition won a staggering victory in the March 28-29 regional elections, taking four regions from the opposition (see *EIR*, Feb. 19, 2010), and tilting the balance of power in the Government-Regional Congress. Things are now definitely easier for the government, but the problem is not solved. Industry leaders are worried that once more, the enemy could manipulate public opinion and "democratically" re-impose a ban.

In order to avoid that, a general education campaign is needed, which must address the fundamental issue: the paradigm of anti-progress ideology. This can be defeated only if an anti-oligarchical concept of man is adopted as a general approach by the pro-nuclear front. Nuclear energy is good, not only because it is cheaper and therefore industry and consumers will pay less, but because the scientific and technological progress represented by nuclear energy reflects the real anti-entropic



The late Italian industrialist and patriot Enrico Mattei (with hat) initiated the country's nuclear power program. It was completely shut down in 1986, but is now being revived, in a potential breakthrough for Europe.

pic nature of man and the universe. Italian leaders must adopt LaRouche's approach, an anti-entropic view of man and the physical universe, which means not only launching a nuclear program, but a full-fledged program for the development of Italy to promote the Common Good, to develop the creative potential of the entire population.

This means, for instance, government credit for a full-employment program based on high technology-driven investments. In particular, a 10- to 15-year development plan for Italy's relatively backward Mezzogiorno (the South), in terms of modern infrastructure and agro-industrial development. This is impossible under the current European Union system, which deprives Italy, like other member-states, of their sovereignty. The current EU setting endangers even Italy's current modest nuclear program, because it guarantees a financial crisis that will make any investment an impossible enterprise. Therefore, Italy must abandon the European Monetary Union as soon as possible, regain economic sovereignty, and set an example for the other "captive nations" of the EU's supranational bureaucrats.

Economics in Brief

Fraud

SEC's Goldman Case The Tip of the Iceberg

April 16—The U.S. Securities and Exchange Commission has finally decided to lift the veil from a tiny corner of the massive fraud at Goldman “Sucks,” by charging the company with an \$11 billion securities fraud against its own customers in 2007. Hedge fund bandit John Paulson had figured out that the shakiest parts of the subprime mortgage market were about to take a dive, and went to Goldman to find a way to make money by betting that the mortgage-backed securities (MBS) based on them would collapse.

Goldman let Paulson pick a package of those MBSs which he thought would tank the quickest, and then turned around and sold them to its own customers among “foreign banks, pension funds, insurance companies and other hedge funds.” These investors were told that the securities they were buying had been selected by an “independent, objective third party,” while actually John Paulson had chosen them as those most likely to fail the fastest, and was using Goldman to bet that they would fail. The suckers lost billions of the \$10.9 billion they invested, and the money they lost was passed through to Paulson, after Goldman took its cut.

This is just the tiniest part of the fraud at Goldman which a Pecora Commission-style investigation, as LaRouche has demanded be established, would find. What Goldman did is paradigmatic of the entire fraudulent system, which must be replaced.

European Union

German Professors Will Sue Against Bailout

April 15—The four German professors who initially sought to stop Germany’s adoption of the euro in 2001, have announced that they will be ready to bring

their challenge against the European Union’s bailout of Greece to the Federal Constitutional Court within days. In an interview with *Daily Telegraph* columnist and City of London mouthpiece Ambrose Evans-Pritchard printed today, they said they will ask for an injunction to block the transfer of German funds until the court has ruled.

While Greece has not yet requested funds from the European Union, it is expected to do so imminently.

The author of the complaint, Dr. Karl Albrecht Schachtschneider, law professor in Nuremberg, said he will ask the court for an expedited procedure. A ruling could occur within a week, but may take as long as six months. He will argue that the deal represents an illegal rate subsidy, threatens monetary stability, and breaches the “no bailout” clause of the EU’s Maastricht Treaty. “It is a question of law. The duty of the court to defend the German constitution. They have no choice other than reaching a lawful decision. This may cause a great crisis in Europe, but we already have a crisis,” he said. He will ask the court to freeze rescue aid while the case is pending.

Schachtschneider said the court tends to split 4:4 on EU matters, but could come to a definitive decision, as it did on the Lisbon Treaty when it ruled that the treaty could not be implemented by Germany in any way that violates the German constitution.

Real Estate

New Phase of Housing Blowout Is on the Way

April 14—U.S. properties subject to foreclosure action in the first quarter of 2010 rose 16% from the year-earlier quarter, the highest level the monitoring agency RealtyTrac has seen since it began reporting such data. Foreclosure filings—default notices, scheduled auctions, and bank repossessions—were reported on more than 932,000 properties in the quarter, meaning that one in every 138 U.S. housing units received such a filing.

Six million households are more than 60 days delinquent on their mortgages now; 4 million of them are more than 120 days delinquent, and will almost certainly lose their homes—the only question is how soon.

With this huge foreclosure overhang, and 11-12 million households owing more mortgage debt than their house is worth, experts on the housing market are waiting for another crash in home prices, and mortgage securities values, to hit. “Values” of *trillions* in near-worthless mortgage-backed securities have been kept from collapse only by government changes in accounting rules to save the banks, and by multitrillion-dollar bailout purchases of these MBSs directly by the Federal Reserve and Treasury.

Banking

Major U.S. Banks Fail Glass-Steagall Test

April 18—J.P. Morgan Chase and Bank of America both reported multibillion-dollar profits for the first quarter of 2010 last week, so EIR decided to examine those profits in the context of the Glass-Steagall Act (the FDR-era law that separated commercial banking and investment banking, and was repealed in 1999). It appears that both banks lost money on those aspects of their business that would be legal under Glass-Steagall, and made all their profits from the sorts of speculation, manipulation, and gambling which would be outlawed.

J.P. Morgan Chase reported a profit of \$3.3 billion for the quarter, all of it from the speculative side—investment banking, asset management, Treasury and securities services, and corporate/private equity. The banking side—that is, that part which would be permitted under Glass-Steagall—reported a loss of \$44 million.

Bank of America reported similar results: \$3.7 billion in income from its investment banking and money-management activities, and \$406 million in losses from its traditional banking activities.

For Civilization To Be Saved

People don't like to hear it, but it's true: Civilization is rapidly running out of time. Either existing trends are changed drastically, or we are looking at mass depopulation, and barbarism.

Fortunately, Lyndon LaRouche has presented a policy which can lead humanity out of the New Dark Age that the British Empire is intentionally unleashing. He will be outlining that policy, once again, on May 8 at his next international webcast, titled "What Has To Be Done If Civilization Is To Be Saved." The time available to act on that policy before irreversible disaster strikes is getting shorter and shorter.

The key to understanding and acting on what LaRouche has to say does not lie in detailed knowledge or experience in economics or strategic affairs. It lies instead in grasping the fact that man's future depends upon fostering the human being's unique nature as a creative mind, and that every system that has been erected to suppress that quality, is the enemy which must be destroyed. Financial systems, geopolitical systems, and mathematical-statistical systems are cases in point—and all derive directly from the British imperial system currently dominating world affairs.

Economic science, LaRouche's specialty, is the queen of all sciences, because it deals with how those creative powers of the human mind can, and must, create the conditions for mankind to achieve a more prosperous, a happier future. The requirement for increased potential population density, for higher energy-flux density of power sources, and for expanding man's frontier to the universe as a whole, all derive from the fact that the basic unit of value in an economy is the creative human mind. Americans, as part of a society built by a revolution against the oligarchy, still implicitly understand this fact—although the last 65 years have gone a long

way toward wiping out any understanding of the American System of political economy.

From this standpoint, the crimes of the British Empire should come sharply into relief. This financial empire asserts its right to dictate what happens in people's lives by determining the value of money. Hiding behind so-called "economic laws," they exercise control through so-called market forces, which, far from being objective, are simply ways to hide methods of theft. While particular acts of criminality, such as that currently being exposed by the disgusting Goldman Sachs, are singled out, the fundamental reality is that the *system* is rigged to steal from the requirements to build a human society.

The current crisis of civilization reflects the fact that the Empire's theft has reached a plateau—and, to try to survive, it has to gouge deeper. If permitted, that gouging will lead to dictatorship, and genocide, globally.

So, the first step has to be to remove the Empire's power, by declaring it bankrupt, and dumping their money. That act of bankruptcy reorganization is what LaRouche has called for as a Global Glass-Steagall reform, which would clean out the waste paper, and restore the powers of national governments to control credit, and money. Another name for this reform is a New Bretton Woods, an arrangement for a new fixed-exchange-rate system, which must be initiated by the U.S., Russia, China, and India, in order to succeed.

President Obama, a British puppet, represents an obstacle to this policy to save civilization. Removing him thus becomes a priority. But that's only the first step to putting our planet back on course. What we are really fighting for is to reassert our human nature as creative beings, for the world and our posterity.

See LaRouche on Cable TV

INTERNET

- BCAT.TV/BCAT Click BCAT-2 4th Fri: 10 am (Eastern Time)
- LAROCHEPUB.COM Click *LaRouche's Writings*. (Avail. 24/7)
- LA36.ORG Click on The LaRouche Connection. Select desired show.
- MNN.ORG Click *Watch Ch.57* Fri: 2:30 a.m. (Eastern Time)
- QUOTE-UNQUOTE.COM Click on Ch.27. Tue. 6 pm (Mtn.)
- SCAN-TV.ORG Click *Scan on the Web (Pacific Time)*. Ch.23: Wed. 7 am Ch.77: Mon. 11 am
- WUWF.ORG Click *Watch WUWF-TV*. Last Mon 4:30-5 pm (Eastern)

INTERNATIONAL

THE PHILIPPINES

- MANILA Ch.3: Tue 9:30 pm

ALABAMA

- UNIONTOWN GY Ch.2: Wed, Thu, Fri: 6 am

ALASKA

- ANCHORAGE GCI Ch.12: Thu 10 pm

CALIFORNIA

- CONTRA COSTA CC Ch.26: 2nd Tue 7 pm
- COSTA MESA TW Ch.35: Thu 5:30 pm
- LANCASTER/PALMDALE TW Ch.36: Sun 1 pm
- ORANGE COUNTY TW Ch.95/97/98: Mon 3 pm
- SAN FRANCISCO CC Ch.29: 2nd & 4th Sat 9 pm

COLORADO

- DENVER CC Ch.56 Sun 10 am

CONNECTICUT

- GROTON CC Ch.12: Mon 5 pm
- NEW HAVEN CC Ch.27: Mon & Wed: 6 am; Sat: 6 pm
- NEWTOWN CH Ch.21: Mon 12:30 pm; Tue: 6 pm
- NORWICH CC Ch.14: Tue 8 pm
- SEYMOUR CC Ch.10: Tue 10 pm

DISTRICT OF COLUMBIA

- WASHINGTON CC Ch.95 & RCN Ch.10: Irregular

FLORIDA

- ESCAMBIA COUNTY CX Ch.4: Last Sat 4:30 pm

ILLINOIS

- CHICAGO CC./RCN/WOW Ch.21: Irregular
- PEORIA COUNTY IN Ch.22: Sun 7:30 pm
- QUAD CITIES MC Ch.19: Thu 11 pm
- ROCKFORD CC Ch.17 Wed 9 pm

IOWA

- QUAD CITIES MC Ch.19: Thu 11 pm

KENTUCKY

- BOONE/KENTON COUNTIES IN Ch.21: Sun & Tue: Midnight
- JEFFERSON COUNTY IN Ch.98: Fri 2-2:30 pm

LOUISIANA

- ORLEANS PARISH CX Ch.78: Sun 11 pm; Mon 5 pm; Tue 4 pm; Thu 12:30 pm; Fri 12:30 am

MAINE

- PORTLAND TW Ch.2: Tue 10 pm; Thu 1 am; Sat Noon

MARYLAND

- ANNE ARUNDEL CC Ch.99; FIOS Ch.42: Tue & Thu: 10 am; Fri & Sat: midnight
- P.G. COUNTY CC Ch.76 & FIOS Ch.42: Mon 10:30 pm, Thu 11:30 am

MASSACHUSETTS

- CAMBRIDGE CC Ch.10: Tue 2:30 pm; Fri 10:30 am
- FRANKLIN COUNTY (NE) CC Ch.17: Sun 8 pm; Wed 9 pm; Sat 4 pm
- GREAT FALLS CC Ch.17: Irregular
- QUINCY CC Ch.8: Pop-ins.
- WALPOLE CC Ch.8: Tue 1 pm

MICHIGAN

- BYRON CENTER CC Ch.25: Mon 1 & 6 pm
- KENT COUNTY CC Ch.25: Mon 6:30 am
- KENT COUNTY (South) CC Ch.25: Wed 9:30 am
- LAKE ORION CC Ch.10: Irregular
- LANSING CC Ch.16: Fri Noon
- LIVONIA BH Ch.12: Thu 3 pm
- MT. PLEASANT CH Ch.3: Tue 7 am
- SHELBY TWP CC Ch.20, WOW Ch.18, UV Ch.99: Mon 11 pm
- WAYNE COUNTY CC Ch.16/18: Mon 6-8 pm

MINNESOTA

- ALBANY AMTC Ch.13: Tue & Thu: 7:30 pm
- CAMBRIDGE US Ch.10: Wed 6 pm
- COLD SPRING US Ch. 10: Wed 6 pm
- COLUMBIA HEIGHTS CC Ch.15: Tue 9 pm
- DULUTH CH Ch.16: Irregular. Ch.29: Wed Midnight; Fri 1 pm
- MARSHALL Knology Ch.67: & CH Ch.35/8: Sat. 8:30 am
- MINNEAPOLIS CC Ch.16: Tue 11 pm
- MINNEAPOLIS (N. Burbs) CC Ch.15: Thu 11 am & 6 pm
- NEW ULM CC Ch.14 & NUT Ch.3: Sun 6 am, Tue 9 pm
- PROCTOR MC Ch.7: Tue after 5 pm.
- ST. CLOUD CH Ch.12: Mon 5 pm
- ST. CROIX VALLEY CC Ch.14: Thu 1 & 7 pm; Fri 9 am
- ST. PAUL CC Ch.15: Wed 9:30 pm
- ST. PUAL (N.Burbs) CC Ch.21: Mon 7 pm, Tue 3 am & 11 am.

- ST. PAUL (S&W Burbs) CC Ch.15: Mon, Wed, Fri 9 am
- SAULK CENTRE SCTV Ch.19: Sat 5 pm
- WASHINGTON COUNTY (South) CC Ch.14: Thu 8 pm

NEVADA

- BOULDER CITY CH Ch.2: 2x/day: am & pm
- WASHOE COUNTY CH Ch.16: Thu 9 pm

NEW HAMPSHIRE

- CHESTERFIELD CC Ch.8: Wed 8 pm
- MANCHESTER CC Ch.23: Thu 4:30 pm

NEW JERSEY

- BERGEN CTY TW Ch.572: Mon & Thu 11 am; Wed & Fri 10:30 pm
- MERCER COUNTY CC Trenton Ch.26: Irregular
- WINDSOR Ch.27: Irregular
- MONTVALE/MAHWAH CV Ch.76: Mon 5 pm
- PISCATAWAY FIOS TV Ch.40, CV Ch.15: Thu 11:30 pm
- UNION CC Ch.26: Irregular

NEW MEXICO

- BERNALILLO COUNTY CC Ch.27: Tue 2 pm
- LOS ALAMOS CC Ch.8: Wed 10 pm
- SANTA FE CC Ch.16: Thu 9 pm; Sat 6:30 pm
- SILVER CITY CC Ch.17: Daily 8-10 pm
- TAOS CC Ch.2: Sat: 10 pm

NEW YORK

- ALBANY TW Ch.18: Wed 5 pm.
- BETHLEHEM TW Ch.18: Tue 6 am
- BRONX CV Ch.70: Wed 7:30 am
- BROOKLYN 4th Friday: CV Ch.67: 10-10:30 am TW Ch.34: 10-10:30 am RCN Ch.82:10-10:30 am FIOS Ch.42:10-10:30 am
- BUFFALO TW Ch.20: Wed & Fri 10:30-11pm
- CHEMUNG/STEBEN TW Ch.1/99: Tue 7:30 pm
- ERIE COUNTY TW Ch.20: Thu 10:35 pm
- IRONDEQUOIT TW Ch.15: Sun 10 am
- JEFFERSON/LEWIS COUNTIES TW Ch.99: Irregular
- MANHATTAN TW, RCN Ch.57/85, Verizon FIOS-TV Ch.35: Fri 2:30 am
- ONEIDA COUNTY TW Ch.99: Thu 8 or 9 pm
- PENFIELD TW Ch.15: Sun & Tue
- QUEENS: 4th Sat monthly 2 pm TW Ch.56, RCN Ch.85, Verizon FIOS-TV Ch.36
- QUEENSBURY TW Ch.18: Mon 7 pm
- ROCHESTER TW Ch.15: Irregular
- ROCKLAND CV Ch.76: Mon 6 pm

- SCHENECTADY TW Ch.16: Fri 1 pm; Sat 1:30 am
- STATEN ISLAND TW Ch.35: Tue 8:30 am & Midnight
- TRI-LAKES TW Ch.2: Sun 7 am, 1 pm, 8 pm
- WEBSTER TW Ch.12: Wed 9 pm
- WEST SENECA TW Ch.20: Thu 10:30 pm

NORTH CAROLINA

- HICKORY CH Ch.6: Tue 10 pm
- MECKLENBURG COUNTY TW Ch.22: Fri 12:30 am

OHIO

- AMHERST TW Ch.95: Daily Noon & 2 pm
- OBERLIN Cable Co-Op Ch.9: Thu 8 pm

PENNSYLVANIA

- PITTSBURGH CC Ch.21: Irregular

RHODE ISLAND

- BRISTOL, BARRINGTON, WARREN Full Channel Ch.49: Tue: 10 am
- EAST PROVIDENCE CX Ch.18; FIOS Ch.24: Tue: 6 pm
- STATEWIDE RI INTERCONNECT CX Ch.13; FIOS Ch.32 Tue 10 am

TEXAS

- HOUSTON CC Ch.17 & TV Max Ch.95: Wed 5:30 pm; Sat 9 am
- KINGWOOD CB Ch.98: Wed 5:30 pm; Sat 9 am

VERMONT

- BRATTLEBORO CC & SVC Ch.8: Mon 6 pm, Tue 4:30 pm, Wed 8 pm
- GREATER FALLS CC Ch.10: Mon/Wed/Fri 1 pm

VIRGINIA

- ALBEMARLE COUNTY CC Ch.13: Sun 4 am; Fri 3 pm
- ARLINGTON CC Ch.69 & FIOS Ch.38: Tue 9 am
- CHESTERFIELD COUNTY CC Ch.17; FIOS Ch.27: Mon 1 pm
- FAIRFAX CX & FIOS Ch.10: 1st & 2nd Wed 1 pm; Fri 10 am; Sun 4 am. FIOS Ch.41: Wed 6 pm
- LOUDOUN COUNTY CC Ch.98 & FIOS Ch.41: Wed 6 pm
- ROANOKE COUNTY CX Ch.78: Tue 7 pm; Thu 2 pm

WASHINGTON

- KING COUNTY CC Ch.77: Mon Noon BS Ch.23: Mon Noon
- TRI CITIES CH Ch.13/99: Mon 7 pm; Thu 9 pm

WISCONSIN

- MARATHON COUNTY CH Ch.98: Thu 9:30 pm; Fri Noon
- MUSKEGO TW Ch.14: Sun 7 am, Mon & Thu: 5:30 pm
- SUPERIOR CH & MC Ch.7: Tue after 5 pm.

WYOMING

- GILLETTE BR Ch.31: Tue 7

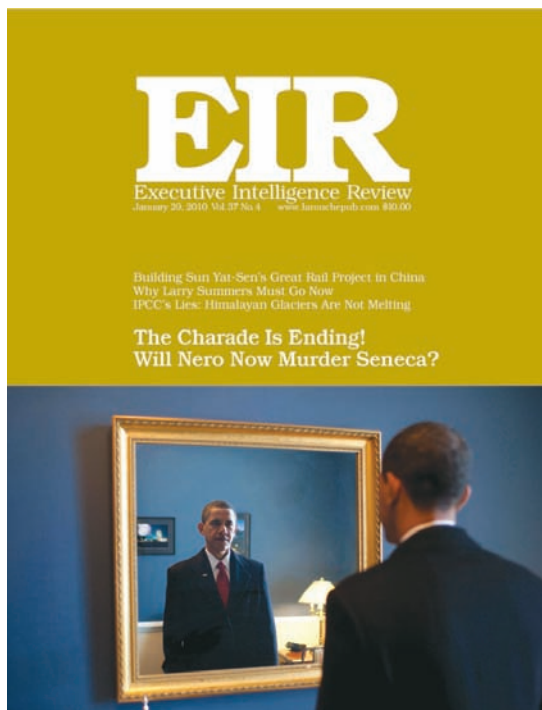
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