EIR Feature

LaRouche replies to Doomsday forecast by Castro

Part II

We publish here Lyndon H. LaRouche, Jr.'s "Open Letter to Fidel Castro," written on June 12, 1985. LaRouche's introduction appeared in EIR of July 2, 1985.

Comandante Fidel Castro!

I am obliged to respond to you personally, and publicly, by the current political situation within the Americas. For this purpose, I refer most emphatically to two published accounts of your estimate of the external debt-crises within the Americas. The first, is the extensive coverage provided in Mexico City's *Excelsior*, this March; the second, the account in *Folha de São Paulo*, Brazil on June 2, 1985.

I am obliged to respond directly and publicly, because leading circles of patriots in Central and South America expect me to do so. I am pleased to do so, as a public figure and editor; a dialogue with you, even what the Soviets classify as "harsh dialogue," is a necessary part of the life of the Americas, even if this occurs merely in the form of a journalistic activity. At this critical time, it is most urgent to construct new options, which might be considered for adoption by governments, including your own government. This journalistic dialogue between us might be the most fruitful for that purpose at the present juncture of developments.

It is not necessary for me to comment, upon those parts of your statements on debt-reorganization, which agree with my own consistent analyses and policies, since my April 1975 Bonn press conference on monetary reform. It is sufficient to name my 1982 *Operation Juárez*, the writing on the subject of the "Debt Bomb," which has been most widely circulated among leading circles throughout the Americas, and the financial authorities of London, Paris, and Switzerland.

I concentrate upon three topical points. The first of these three, are two recurring features of your recent remarks which include serious errors of economic analysis: your mistaken analysis of the relationship between development and levels of military expenditures, and, secondly, your implied underestimation of the degree of the catastrophe toward which presently accelerating economic collapse, world-wide, is carrying us. In addition to these two errors of your published

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A nuclear power project in Brazil. "There is no hope of shifting the economic situation sufficiently to halt the famine and pandemics now emerging, without a massive deployment of new energy-supplies. We have at present, no available means adequate to correct the energy-shortage, without nuclear energy. Without proliferating installations redesigned to be completed within approximately one year's construction time, the needed rate of reversal can not occur."

analysis of the current situation, you overlook the very specific measures, by means of which an economic catastrophe of the threatened magnitude may be prevented.

The impending biological catastrophe

In the persisting efforts to sell the brutish and illusory "Nuclear Deterrence" as proposed guarantor of avoidance of general warfare between the superpowers, there has been a great emphasis on the myth of thermonuclear offense as the "ultimate weapon," and great exaggeration of the deadliness of radioactive detonations. By exaggerating the actual degree of probable danger from nuclear weapons, the most deadly of all threats to the human species, pandemics, has been overlooked.

During 1973-1975, a task-force working under guidance of my March 1973 memorandum on a Riemannian approach to biophysics, produced a highly accurate forecast of the presently erupting 1985-1988 explosion of pandemic disease. The present eruption of pandemics, and rate of approach toward thresholds for generalized eruption of pandemics on all continents, is proceeding at the rate, in the regions, and by the means we forecasted, for this period, as early as 1974.

Unless there is, immediately, a sudden and rapid reversal in accelerating, 1967-1985, trends in nutrition, medical services, and sanitation, there will be an unstoppable eruption in both old and new varieties of bacterial and viral pandemics, from which no population of any part of the world will escape. Unless the needed reversal in economic trends bearing upon nutrition, medical services, and sanitation, occurs very soon, this eruption of pandemics will effect not only human populations, but will carry over into plant and animal life in such a general way, as to cause a general collapse in the quality of the biosphere itself.

I would not foresee that the biosphere would collapse altogether. Rather, the biosphere would fall to a lowered thermodynamic level, through aid of proliferation of old and new varieties of parasites and saprophytes, especially of the viral form. Such pandemics of human, plant, and animal life, are "nature's way" of enabling the biosphere as as whole to adjust to a qualitatively lowered level of average "energy of the system," just as cancer, for example, expresses a lawful adjustment to a degeneration of the level of the "energy of the system" of aged or otherwise disabled tissue.

Included in this trend of biological catastrophe, is a deterioration in the world's weather-systems, a trend already begun by aid of D.K. Ludwig's operations, in stripping parts of the Amazon rain-forest during the 1970s. The stripping of vast sections of the Amazon rain-forest, beginning the late 1960s and early 1970s, affected directly the stability of the most important of the world's five major weather-systems, the Amazon High.

The Amazon High shifted, as a result of the onset of laterization of vast areas which earlier supplied transpiration of columns of moisture by trees. This caused the Amazon High to shift into the Atlantic, setting off a chain-reaction among the major and secondary weather-systems of the planet. This effect both reenforced and was reenforced by such processes as the defoliation of the Sahel, and was reenforced by the decline in irrigation and fertilization of agricultural

EIR July 9, 1985 Feature 23 regions of the world, following the combined monetary and energy-crises developments of the 1970-1975 period, concluding with the 1975 Rambouillet monetary conference.

Although the percentage of the total solar-radiation throughput captured by plant-life of oceans and land, is below the limit of approximately 10%, and land plant-life a fraction of the total of capture by plant-life as a whole, a significant amount of marginal reduction in forest and crop lands' levels of energy-throughput, has a significant effect upon weather-systems. The weather becomes increasingly unstable, more characterized by violent extremes, and by drastic shifts in rainfall and related patterns. The degree to which land is richly forested or covered with high densities of crop-growth, regulates marginally the world's weather-systems as a whole. The growth of forests in land not required for agriculture, and increase of the density of bio-mass activity per area of cultivated land, contributes to stabilizing and moderating weather-patterns, and generation of efficient rainfall patterns.

Deterioration in stability of weather-patterns itself, affects activities of parasites. In this and other interconnections, biosphere development and weather-systems changes interact.

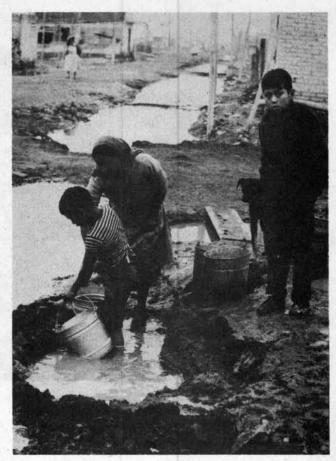
The case of interacting development of drought, aridization, famine, and human and animal pandemics in Africa, is exemplary.

It costs approximately \$1 million per mile, for rapid installation of new rail lines in Africa by aid of U.S., European, or Japan methods of engineering. So, for between \$3 and \$4 billion, a sub-Saharan trunk line could be constructed from Dakar to Djibouti. At comparable costs, intersecting trunk lines could be extended from Cairo into Tanzania, and from the Mediterranean coast, through Algeria, to the Dakar-Djibouti trunk. Without such rail-trunks, in strips also used for conduiting of water and power, it is logistically impossible to reverse current trends toward biological catastrophe in Africa.

This requires also, three major fresh-water development projects, of which the keystone is the construction of a Zairean basin, to supply surplus water to the central Sahel region, centered around Lake Chad. The other two, are a Western Sahel water-management system, and a Nile-system water management system, extending to Tanzania.

The third principal measure of infrastructural development needed, is the rapid construction of nuclear-energy complexes along the coasts and major internal water-conduits of Africa. By standardizing press-stressed concrete components, and related measures, efficient and safe plants can be constructed within a period of one year, using "crash program" methods of engineering. These should be installed in complexes of two to four units, of from 250 megawatts to 1.2 gigawatts each, creating thus both an agro-industrial "nuplex," and a generation-center for supplying the immediate region.

The development of subsidiary transportation routes, and regular truck transport, as extensions of the spine of major



"Unless there is a drastic shift in economic policy, the doom of tens of millions in Ibero-America is already sealed by the present state of those economies in terms of agriculture, industry, and infrastructure." Shown: Mexico.

water and rail routes, is essential to introducing an increasingly energy-intensive and capital-intensive mode of improvement in agriculture, combined with a development of urban industrial complexes in mutually beneficial relationship to rural development.

An aggregate of approximately \$100 billion, invested in infrastructure and agricultural development, in Africa, over a period of less than ten years, would begin to reverse immediately, existing pandemic and pre-pandemic conditions, and would enable these economies to rise to levels of predominantly, financially, self-sufficient further development.

In the Asiatic Rim, we have a much more favorable situation than in Africa. Although India's scientific and industrial development is dwarfed by the scope of rural poverty, India is approaching an urban labor-force of approximately 60 million, and is potentially a major industrial power on this account. The subcontinent of Asia will reach soon over one billion persons, and Southeast Asia approximately a half-billion. These nations have the aggregate means, both to build most of the needed infrastructural-development of the Rim, and to aid East Africa, both on the condition that technological cooperation is afforded from the OECD countries.

Although large regions of the Hemisphere are already at the threshold for pandemics, in the Americas, we have the best situation for rapid recovery, potentially. Argentina and Brazil have the industrial culture of capital-goods-exporting nations. The Golden Renaissance cultural heritage of Ibero-America, ensures that the literate portions of the population already have the cultural potential for efficiently employing the most advanced technologies; education, sanitation, and technology, supplied to the illiterate portions of the populations, can reproduce the capacity for employing advanced technologies rapidly over the span of approximately a generation.

The greatest problem in the world today, is China. Despite certain improvements in China's domestic policies, China has still a powerful resistance to the large-scale infrastructural development in depth, which is indispensable if China's relative potential population-density is to run ahead of the population of China. Otherwise, programs of population-control, through birth-control, will generate a catastrophic demographic aging of China's population, an aging which is doubly catastrophic for economies based largely upon labor-intensive modes of rural production.

There are other instances, in which "traditional cultures" are resistant to the social changes intrinsic to high rates of technological progress. On this account, the prospects for Ibero-America are potentially relatively the best, and India next.

Your estimate of 1988, as the point of the economic collapse of the U.S.A., is faulty on two immediate accounts. First, the probable point of the monetary collapse, lies during the interval 1985-1986, not 1988. Second, your statements underestimate implicitly, and massively, the qualitative aspect of the presently accelerating collapse of the global physical economy. In other words, your statements do not reflect the suddenness and rate of the urgently needed reversal of economic policy. Your proposals, insofar as they might appear to be relatively sound in form, would be appropriate only to the conditions which existed ten years ago, or perhaps earlier; such proposed actions would not begin to improve the situation as it exists and is developing presently. It is much too late for such modest changes; something profoundly more drastic is urgently required.

Military expenditures

As you know, from no later than the crisis of 1975 until a recent period, Soviet policy has implicitly supported IMF "conditionalities." There are understandable reasons for this Soviet behavior. First, IMF "conditionalities" and related monetary and economic policies, have successfully destroyed much of the strategic potential of the NATO alliance, by imposing "post-industrial" devolution upon the OECD nations and their developing-sector trading-partners. Secondly, the Soviet strategic policy has depended upon "New Yalta" and related agreements reached with the Anglo-American Liberal Establishments, the neo-colonialist Liberal Es-

tablishments which view the looting of developing nations through aid of IMF "conditionalities" as their vital financial interest. Only recently, as the Soviet leadership is confident that the Liberals' control over the Reagan administration is so great that President Reagan would not think of breaking with IMF "conditionalities," does the Soviet government encourage developing nations' collaborative efforts to bring down the IMF's policies.

Formally, the Soviet government has never been absolutely opposed to "technology transfer" to developing nations. Even when it supported IMF "conditionalities," as it did during the 1975-1985 interval, it has insisted on two points:

- 1) "We are not responsible for the looting of developing nations by colonial powers; therefore, we have no moral responsibility to sacrifice our resources to aid in remedying the effects of colonialism."
- 2) "External aid to developing nations must come out of redistribution of military expenditures by OECD nations. We will divert some of our military expenditures to development aid, only as supplements to massive redistribution of OECD military expenditures to such a program."

So, from 1975, until recently, the Soviet agencies have repeatedly excused their support for IMF "conditionalities" by such "logic."

Now, since Soviet channels have offered encouragement to support of anti-IMF-"conditionalities"-policies which I have proposed consistently during the same 1975-1985 period, the same, tiresome theme, that "aid must come out of redistribution from OECD military expenditures," persists. You incorporate that policy in your recently published proposals.

There are several flaws in that argument. Immediately, given the depths of devolution to which those economies have been reduced since the beginning of 1982, there can be no recovery in the economies of Ibero-America, without massive injection of spare parts and new capital-goods from the U.S.A. Such timely changes will never occur during the 1980s, except as a by-product of the increase of 1985-constant-dollar levels of U.S. military expenditures to between \$400 and \$500 billion annually. Additionally, the rate and quality of technology transfer required, merely to reverse the present rates of collapse of Ibero-American economies, can not occur, without the specific types of capital-goods exports from the U.S.A. generated by U.S. mobilization of a "crash program" of developent and deployment of the Strategic Defense Initiative (SDI).

Apart from the fact, that your proposals for redistribution from U.S. military expenditures, merely echo the standing Soviet line, there are two leading fallacies in your argument. First, the argument is politically fallacious, for reasons which I shall summarily explain. Second, the argument is based on a kind of scientific incompetence prevalent in nearly all

Soviet literature as well as among Western economists, upon ignorance of the very meaning of the term "technology." I deal with the first of the two indicated fallacies immediately, and so clear the field to concentrate upon the more profound issues of the second.

The fundamental issue underlying two U.S. wars against Britain, 1776-1783 and 1812-1815, was U.S. opposition to the colonialist policies of the British East India Company, the anti-Colbertist, colonialist "free trade" policies defended by the *Wealth of Nations*, of British East India Company agent Adam Smith. The traitorous Tory financier faction inside the United States, centered around the New England and New York-New Jersey faction associated with the traitor Aaron Burr, the partners and agents of the British East India Company, have been, from Aaron Burr to the present-day McGeorge Bundy, the advocates of Adam Smith's "free trade" doctrine.

This is key to understanding the relationship between ebbs and flows in the domestic and foreign economic policies of the United States. Subsumed under this, is the correlation between the military policy and economic policies of the United States during the present century to date.

The American Revolution of 1776-1789, associated in world history with "the ideas of 1789," was immediately the outgrowth of conspiratorial collaboration among the circles of Cotton Mather in the Americas, of Jonathan Swift among the anti-Marlborough faction in Britain, and Gottfried Leibniz. It was the deployment of Hunter and Spotswood from Britain, under Queen Anne, which revived the republican conspiracy in the Americas. The successive generation of the Mather-Swift-Leibniz conspiracy in the Americas, was led by Benjamin Franklin, who assumed leadership of this international conspiracy during the period of his 1766 trip to Göttingen University, where Franklin was integrated into the German-centered part of the conspiracy which had earlier included Leibniz and J.S. Bach.

The key to the economic doctrine of the American Revolution, begins with the institution of a governmental paper currency under the pre-Andros Massachusetts Bay Colony. The elaboration of this, to become what Secretary Hamilton, in 1791, named "the American System of political-economy," was chiefly the direct result of Leibniz's influence on the thinking of the scientist and political leader, Franklin.

The Americans rejected, variously, the physiocratic doctrine, both in its Franco-Swiss and British (Smith) version, and the colonialist British "free trade" dogma. Hamilton's, like Mather's and Franklin's economic policy, was broadly modeled upon Colbert's program for France, and upon Leibniz's establishment of economic science: that the wealth of nations is derived, uniquely, from that combination of government-sponsored development of basic economic infrastructure, and increasingly energy-intensive, capital-intensive development of technological progress, which produces successive increases in "the productive powers of labor."

The economic policies of President Washington, were

Hamiltonian derivatives of Leibniz's economic science. The policies of British-disoriented (Sir John Robison) President John Adams, were more ambiguous. The economic policies of Presidents Monroe and John Quincy Adams, revived the American System, which continued to be the policies of Henry Clay's Whig Party, through the administration of the Whig Republican, Abraham Lincoln.

In contrast, Presidents Jefferson and Madison ruined the U.S. military and economy, under the influence of an Anglo-Swiss agent and traitor, the Jacobin Albert Gallatin. Presidents Jackson and Van Buren were instruments of the interests of the British East India Company, through the families which today constitute McGeorge Bundy's so-called Liberal Eastern Establishment. Presidents Polk, Pierce, and Buchanan, were also agents of the British East India Company interest, with Buchanan an outright traitor.

Thus, between the flows and ebbs in American System policy, over the 1776-1865 period, Lincoln's administration consolidated the United States as a great agro-industrial and military power: So, the American System established the United States as a great power, and spilled its influence into the development of Friedrich List's Germany, Cavour's northern Italy, Meiji Restoration Japan, and the republican factions of Ibero-American states. This was the prevailing policy of Argentina until the period of President Theodore Roosevelt's notorious "Roosevelt Corollary," as well as the policy of the faction led by Benito Juárez in Mexico. (In the latter state, it is notable that General Santa Ana was directly a British agent, under the military direction of the Duke of Wellinton, whereas U.S. President Polk was also an agent of influence of Britain at the same time, in the same U.S.A.-Mexico war!)

The bankrupting of Jay Cooke, by concerted action of the Anglo-Swiss and Morgan interests, and a corrupted Congress's enactment of the treasonous U.S. Specie Resumption Act, followed by the establishment of the Federal Reserve System, destroyed the United States' sovereignty in matters of its own currency and national banking-system, placing the U.S. monetary system efficiently under Anglo-Swiss control.

Since the 1870s, the United States' government's policies have been a net balance of the opposing influences of the American cultural heritage and the increasing consolidation of financial, economic, and political power, in the hands of the Anglo-Swiss and their Eastern Establishment junior partners. The most critical of the developments subverting the United States, after the extended crisis-period of 1871-1886, were institutional changes wrought under the administrations of Theodore Roosevelt and Woodrow Wilson, after Polk—until Henry A. Kissinger, the most evil North American names in the internal history of Ibero-America.

This is key to the history of U.S. policy during the postwar period to date.

As Henry A. Kissinger bragged publicly, in a May 10,

1982 address to a London Chatham House audience, beginning with James Byrnes, every U.S. Secretary of State during the postwar period to date, has been an agent of influence of the British Foreign Office, not the interests of the United States. The same is true of the Morgan-centered U.S. international-banking interests, the offshoots of the Anglo-Swiss financier interests developed as partners of the African slave-trading and opium-trading of the British East India Company.

As you may have examined the documentation on this account, from the beginning of World War II, there was a continuing and bitter policy-conflict between President Franklin Roosevelt and Prime Minister Winston Churchill, because of Roosevelt's determination to eliminate the last vestiges of the colonial system from this planet in the postwar world. The spoiling defect in Roosevelt's war-policy was his share of his family's irrationalist hatred against the German people, the key to his support for the Morgenthau Plan and kindred errors. Otherwise, during the period 1943-1944, the foreign-policy establishment led by British Fabian agent Walter Lippmann, was already undermining and spoiling U.S. postwar policy. Within 48 hours of Rooscvelt's death, the U.S. anti-colonialist policy died, and Winston Churchill's neo-imperialist policies took over, over the issue of Britain's insistence on restoring the former French (read Swiss) colonies to France.

As the Anglo-Swiss-directed Liberal interest took over increasing power in the United States, the State Department and Treasury Department, and during the 1960s, the Agriculture Department, became bastions of foreign influences, with the professional military the bastion of patriotic interest, as least relatively so. To the degree that the relative commitment to military expenditures has been high, the materiel and logistical requirements of the United States have been promoted, despite contrary impulses from the State and Treasury departments. The simple logic of military capabilities, emphasizes depth of agro-industrial and infrastructural capabilities, and promotion of scientific and technological progress in the economy. So, high levels of military expenditures coincide with tendencies to return to American System political-economic policies, whereas low levels of military expenditures mean depressions caused by Britishstyle economic policies.

During this century to date, U.S. economic recovery has occurred only under the circumstances that the British encouraged the United States to mobilize for actual or possible general warfare. This was true in the aftermath of 1907 through the end of World War I. It was true, from 1938 through the end of the World War II. It was true, from 1948 into the middle of the 1960s.

In the case of World War I, Bertrand Russell walked out of Lord Milner's Coefficients, in 1902, not because Russell was opposed to mass-killing, but because he objected to Milner's policy of refurbishing an obsolete British navy and army by temporary adoption of a version of "Hamiltonian" economic-development mobilization. The British encouraged Roosevelt's reversion to high rates of technologically progressive investments during World War II, after opposing such policies for the United States, quite efficiently, during the 1920s and 1930s, because Britain desperately needed U.S. aid. Similarly, the postwar period. Once the Russell-mediated negotiations of 1962-1963 had been completed, and President Kennedy assassinated, the Anglo-Swiss establishments moved as rapidly as institutional resistance would permit, to transform the United States into a "post-industrial" scrap-heap, and to demobilize the U.S. military establishment.

The history of economic relations between the United States and Ibero-America, reflects such shifts in domestic U.S. economic and military policy. During World War II, the United States predominantly supported or tolerated governments in Ibero-America which had a military-logistical approach to the development of those economies. They always hated President Juan Perón, but they moved to topple these governments in a general way during the 1950s, without yet moving to crush the development of these economies entirely. With the mid-1960s shift toward "post-industrial," Malthusian policies, the benevolent neo-colonialism of the U.N.O.'s First Development Decade, shifting toward gradual crushing of the developing nations' economies, as typified by the U.S. break with Prime Minister Jawaharlal Nehru, under McGeorge Bundy's direction, during the first half of the 1960s.

There is more to this than economic policy as such. The development on which you should focus special attention, is the emergence of the Cini Foundation, at Venice's Island of St. George Major, at the close the 1950s. This development was organized by a certain religious order continuing ancient traditions of the Roman imperial families. The central feature of the Venetian interests' sponsorship of the Cini Foundation, was the proposal to destroy Western European culture from within, by introducing what was termed, then and more recently, a "cultural paradigm-shift."

The object was to destroy the Augustinian heritage of the Golden Renaissance: the sovereign nation-state, and commitment to principles centered upon Cardinal Nicolaus of Cusa's definitions of natural law, and that heritage of scientific and technological progress exemplified by Leonardo da Vinci, Kepler, and Leibniz. The object was to establish a new world order, modeled upon the Black Guelph objectives of the late thirteenth and fourteenth centuries' "New Dark Age," to establish an world oligarchical order modeled upon the Roman Empire's systems of satrapies and colonies, and to draw the Soviet Union, temporarily, into cooperation with such a reconstruction of global society.

The means employed to accomplish this "cultural paradigm-shift" was the so-called "counterculture," a dionysiac enterprise echoing the turn-of-the-century "Age of Aquarius" prophesies of Friedrich Nietzsche and Aleister Crowley, based upon the hedonistic devices of drug-culture, rock-

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culture, and "sexual freedom." The historic precedent was, indeed, the tactics of the ancient Phrygian cult of Dionysos.

It is essential to stress the fact, that the U.S. War in Vietnam was set into motion by the same circles, associated with McGeorge Bundy, which launched and directed the antiwar ferment from the close of 1964. By discrediting the United States in its own eyes, through the prolongation of such a war, the countercultural ferment was provided, in this antiwar movement, that concentrated basis through which to grow rapidly among U.S. youth. At the close of 1969, the Eastern Establishment created, overnight, a retooling of the shards of the exhausted antiwar movement, into an assortment of homosexual, lesbian, witchcraft, and other cults, all centrally pivoted around the 1970 "Sun Day" mobilization, the instantly-created "ecologist" mass-based movement.

This "ecologist"-centered "countercultural" movement, guided by think tanks avowedly dedicated to the "Age of Aquarius" project, such as Willis Harman's Stanford Research Institute branch of the London Tavistock Institute, has not only been the leading social battering-ram deployed to lead the U.S. economy and morality into a scrap-heap of decadence from within. Its effective sabotage of U.S. economic development, has been the chief means by which the United States has prevented the absolutely crucial deployment of nuclear-energy development to developing nations.

By the close of this decade, the combination of Henry Kissinger and the "ecologists" will have murdered many more human beings in the developing sector than died by actions of the Hitler regime. Out of approximately 400 million black Africans, the anti-nuclear, anti-development policies, of the Bank for International Settlements, Henry Kissinger, and the "ecologists," will kill approximately 300 million, through accumulated effects of famine and pandemics, by not much later than the end of this decade unless such policies are reversed. Tens of millions, or more, of the population of Ibero-America, are fated to be murdered in similar fashion. The influential George Ball, for example, has endorsed the reduction of the population of Mexico to about 30 million, by aid of the same economic methods used by the Nazi regime. The "Global 2000" policy, cómposed and issued by the Carter-Mondale administration, is explicitly a policy for committing the same kind of genocide, throughout the developing sector, which Hitler imposed upon the unwanted ethnic groups of Eastern Europe-but, on a

Such is the "cultural paradigm-shift" mediated through the circles associated with the Cini Foundation. These are the worst butchers in history.

When President Reagan first announced adoption of a limited version of my proposed change in U.S. strategic doctrine, in his famous, televised, announcement of March 23, 1983, the think tanks explained, that the real basis for their opposition to this policy was the certainty that such a mobilization would promote a pro-science outlook within

the population, causing a reversal of the countercultural "cultural paradigm-shift." This criticism of SDI is analytically correct.

If the adoption of an SDI policy, by both superpowers, eliminated the continuing nightmare of thermonuclear offense, the fact that science had eliminated such a monstrous danger, would prompt an explosion of scientific optimism among those populations in which the Golden Renaissance's cultural heritage were embedded.

The essential thing, is to restore the moral principle, that every newborn child, in every part of the world, has the sacred right both to a classical and scientific education, and to employment in a technologically-progressive, energy-intensive, capital-intensive mode. This must be the only axiom for defining human rights. The problem immediately confronting us, is economic, but the effort to deploy solutions to that effect, or the refusal to foster such solutions, is not economic, but moral and cultural.

In practice, such a shift could not occur, unless a crash program for rapid development and deployment of the SDI were to occur.

Open your eyes to what you have observed since your government first came to power over 25 years ago. During the recent 20 years, you have observed the United States entering stagnation, during the 1967-1970 period, and then accelerating collapse, over the 1971-1985 interval. You have commented on the extent of some of the misery this decline has imposed upon the poorer stratum of U.S. citizens. Ask yourself, then, "Has this accumulated experience with the past 20 years' continuation of the present monetary and economic policies of the United States taught leading U.S. institutions or the general electorate anything worth learning?"

It is the record of history to date, that populations learn less than nothing from such experience. Rather, if the collapse of civilization occurs gradually, populations learn to accustom themselves to the worst conditions, and to support or tolerate the institutions and policies which cause this decay. Observe, how the governments of Ibero-America behaved on the issue of supporting Mexico's President López Portillo in August through October 1982, when history could have been changed very much for the better by a show of support from even as few as two other principal nations of the Hemisphere, and what "lessons" those governments have learned since! On this account, the people of the United States are no worse than any other people.

Populations sometimes learn from experience, but people generally learn nothing, except under circumstances of abrupt and convulsive developments. So, it is chiefly through military crises, that the people of the United States, during this century to date, have returned to policies of promoting scientific, energy-intensive, capital-intensive development.

Ignore the brainwashed rag-tag in the U.S. Congress, which bleats over and over again their silly truisms about balancing the U.S. budget. Were I President, with the authority of that office, I would have mobilized the U.S.

electorate to support military budgets of between \$400 and \$500 billion annually, and the expansion of the tax-revenue base caused by this mobilization would have easily balanced the federal budget. Excepting a minority, U.S. members of Congress today, are bleating political sheep, easily bought at a modest price: mention of a menacing dossier, or promises of press and financial support for their petty political ambitions, or hope of riches afforded to them when they return to private life. They have no capabilities of independent judgment; they vote as the prevailing winds direct them. Their clamorous opinion on the subject of "balancing the budget" is only the bleating of silly, panic-stricken political sheep.

Convulsions will turn them abruptly, as the flash of lightning moves silly sheep.

Of course, convulsions appear suddenly, but they do not appear unannounced, unprepared. We are near the threshold of a convulsion, both in respect of developing circumstances, and in a build-up to the threshold of political explosions in the populations of many nations, including the United States. The more rapidly developments now drift in one direction, the more rapidly and extensively the course of developments will soon sweep in the opposing direction. Such are the laws of history; such is the current movement of history.

If the contrary were to prevail, if the tendency toward sharp reductions in U.S. military expenditures were to persist, then Ibero-America must expect the very worst from the United States. In this case, the prevailing matrices of U.S. domestic and foreign economic policy would be:

- 1) Anti-technological progress: support for a continuing "technetronic" drift into a "post-industrial" age, the "Age of Aquarius";
- 2) Continued acceleration of Malthusian population-policies, especially in monetary and economic policies toward developing countries, with greatest emphasis on reducing populations of nations which represent the relatively darker skin-complexions;
- 3) Subsidizing the collapsing U.S. economy by insistence on the "debt-for-equity" policies of Kissinger Associates, Inc., with greatest emphasis upon the looting of Ibero-America;
- 4) Eruption of "conventional warfare" military policies parodying the "Roosevelt Corollary": U.S. military capabilities maintained only in such categories and degrees.

In other words, given the conditions under which the U.S.A. would reduce military expenditures to the degree implied in your proposals, all Ibero-American economies would be subjected to more savage looting than at present, with increasing disposition to apply the "Roosevelt Corollary" in the form of military action in aid of "debt-collection." The British Malvinas base and other bases in the continent, would emerge as centers of deployment for combined Anglo-American and mercenary forces employed for

such "limited warfare" punitive operations.

The included lesson is, that one should never proceed to deduce proposed policies from from abstract arithmetic. One must always examine the political and cultural preconditions for adoption of each and all principal features of a proposal, and deduce from cultural and related institutional factors, how nations might in fact act.

The relevant principles of economy

Since you are a head of state, you have efficiently available to you sufficient of my relevant writings on the subjects here, that I need not restate the matter fully in this location. I cite my basic textbook, providing an introduction to mathematical economics: So, You Wish To Learn All About Eonomics? New York, 1984. On matters directly bearing on the issues to be discussed here, I refer to two recent articles featured in the weekly international news magazine, Executive Intelligence Review. The article, "Wassily Leontief Acts to Block the Effective Implementation of the SDI," in the June 10, 1985 issue, identifies the crucial points on the role of technology in economic development. A summation of the principles of mathematics required, is provided in "The Continuing Hoax of 'Artificial Intelligence,'" May 14, 1985.

The statistical background for much of this is supplied in the 1985 Annual Statistical Yearbook of the Executive Intelligence Review. Analysis of this background is provided in the April 15, 1985 edition of the EIR Quarterly Review, and in the June 15, 1985 edition. I may add, that since the EIR's LaRouche-Riemann forecasts were first issued, in November 1979, these have been the only accurate forecasts openly published by any public or private agency on the U.S. economy.

I summarize the following features of that material here, as it is necessary to do for an orderly discussion of the matter at hand. A more adequate elaboration can be obtained from the sources cited above.

Economic science was established by Gottfried Leibniz, beginning with his 1672 Society and Economy, during the interval 1671-1716. Work in this direction was begun by the collaboration between Cosimo de Medici and Plethon, earlier. The principles of hydrodynamics and machine-design were accomplished by Leonardo da Vinci. Political-economy was developed by the Erasmians in Tudor England and France, and at Naples, during the sixteenth century, when it was associated with such names as the "Commonwealth" faction of Jean Bodin, "les politiques," and "cameralism." "Cameralism" was the generic name for teaching of political-economy on the continent of Europe, into the early nineteenth century in Germany. Leibniz's development of economic science, was treated during the eighteenth century as a special branch of cameralism, "physical economy."

In addition to Leibniz's direct influence on development of economic science in Benjamin Franklin's North America, his economic science was sustained into the eighteenth century, chiefly by the circles of the Oratorian teaching-order in

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France and northern Italy, and as the teaching of "physical economy," under cameralism, in Germany. With the Jacobins' disbanding of the Oratorians, the continuity was maintained by Carnot's and Monge's 1794 founding of the Ecole Polytechnique, with Chaptal, Ferrier, and Dupin, the most notable French economists associated with the 1794-1814 Ecole.

Beginning the defeat of Britain, in 1815, the United States resumed the close military and scientific cooperation with France which had been characteristic of the 1766-1789 period. The reforms in U.S. war-plans and the development of West Point as a center of science and engineering under Commandant Sylvanus Thayer, beginning 1815-1818, were accomplished through aid of French military specialists and others who had been associated with the Carnot-Monge Ecole Polytechnique of 1794-1814. This coincided with the revival of the American System of political-economy as U.S. national policy, approximately 1818-1819, under the leadership of Franklin's earlier close collaborator, Mathew Carey.

Through the leadership of Gilbert Marquis de Lafayette, head of the Society of the Cincinnati, the U.S. military intelligence service of that period, the German Friedrich List was brought into close collaboration with Mathew Carey, during the period 1825-1832, becoming a U.S. citizen in 1830. List, a German economist and patriot associated with the networks of Friedrich Schiller, the Humboldts, et al., had come under Lafayette's sponsorship in Paris, where List had worked on the economics of Dupin and other Ecole-linked economists. List exemplified the merger of Hamilton's American System with French physical science and contributions to economic science. The work of the two Careys and List, defines the elaboration of economic science into the middle of the nineteenth century.

Those essential features of Leibniz's work bearing upon the issues of Ibero-American economic policy under discussion, are chiefly as follows.

Leibniz's concentration, was upon the implications of heat-powered machines. Essentially, given a defined quality of product, how does the increase of heat applied to power a machine affect the increased productivity of the operative employing that machine? On this basis, Leibniz discovered the conceptions of "action," "work," and "technology," as we have these in competent thermodynamics and economic science today.

The characteristic of a heat-powered machine, is a closed cycle of action. This action is measured as displacement along the perimeter of the closed cycle. The work accomplished, is the area subtended by that perimetric action. So, we measure action as circular action (not Cartesian straightline action), and work as the area subtended by circular action. Since Cusa's "Maximum Minimum Principle" [called the "isoperimetric principle" since the work of the Bernouillis] shows that no enclosed area is greater than the area enclosed by circular action, the amount of action represented by work, is the circular action needed to enclose the same

area: Leibniz's Principle of Least Action.

So, as Leibniz shows in refuting Descartes, the momentum, mass \times velocity, is the perimetric action, for the case that velocity is normalized as circular action; and, work is proportional to mass \times velocity-squared, for the same condition of normalization.

The action supplied to power a machine may be transformed, by increasing or decreasing the area over which it is applied by the machine. Such increase in concentration is called an increase of the energy-flux density. In the case that this increase occurs at a constant rate, the result is described by a self-similar spiral on a cone.

However, there is another aspect to these simple relations. This leads to the principle of "technology."

For simplification, take the case of two machines, designed for the same quality of output, in which the amount of coal-equivalent required to power each is the same, but that the operative employing the one has a higher rate of output than employing the other. This defines the cause of this difference as nothing but a difference in the internal organization of the machine. Imagine the general case: The ordering principle which subsumes all cases of relatively higher and lesser advantage in internal organization of machines (or other forms of productive processes), is the notion of "technology."

It is readily illustrated, as, for example, by comparing different economies, that generally, the rate of output (productivity) of operatives is proportional to the per-capita supply of usable energy employed to power productive processes. In this case, we must consider, in addition to the social cost of that operative's household, the social costs of producing the energy and producing and maintaining the machine. The ratio of the combined social cost of energy and capital goods to the cost of the operative's household, is a reflection of the capital-intensity of the productive process. Through increasing the energy-throughput per-capita, society produces more wealth per-capita in a capital-intensive mode, than in a less capital-intensive mode.

We must also consider, not only simple energy-intensity and capital-intensity, but the effective temperature at which the energy is supplied, the energy-flux density. As the energy-flux density is effectively increased, productivity increases.

There is a correlation among increase of energy-intensity, energy-flux density, and capital-intensity, such that the one can not be efficiently increased indefinitely without increasing the other two. The advancement of these three, also correlates with a required advancement in the internal organization of the heat-powered productive process.

Exploration along these lines, after Leibniz, led into the establishment of the Ecole Polytechnique, as a "science driver" kind of "crash program" institution for revolutionizing the economy and military potentials of France, following Carnot's successful launching of a revolution in warfare beginning 1793. Carnot led personally, in completing Leonardo da Vinci's work on machine-design, from the standpoint of heat-powered machines. This work led directly into the

founding of the theory of thermodynamical functions by the Ecole, and laid the foundations for the virtual establishment of the theory of functions by Gauss and his collaborators.

Until my own discovery of 1952, it remained unknown, how to construct functions which correlated a measurable increase in technology with a resulting increase in productivity. I was led to this discovery, out of my anger against the wicked incompetence of Wiener-Shannon dogma of "information theory." The mathematical expression of my consequent discovery in economic science, I next discovered in approximately 1952, how existing mathematics could define such a solution to the "information theory" fallacy; this latter I obtained, first through study of the work of Georg Cantor on transfinite orderings, and then by proceeding retrospectively from Cantor's work to that of Gauss's collaborator and successor, Bernhard Riemann. Hence, because of this ordering of the discovery-process, the discovery is known today as the LaRouche-Riemann Method.

The problem and its solution, are, summarily, as follows. We measure closed thermodynamic processes, in first approximation, by dividing the usable energy-throughput of the process into two categorical components. The first component, is the energy which must be consumed, or is unavoidably wasted, in maintaining the process at a constant level of potential. This first component, we name "energy of the system." If there is any energy-throughput remaining, after deducting the "energy of the system," we designate this residue as the "free energy."

We analyze such a process in terms of functions of the ratio of free energy to energy of the system. We correlate changes in this ratio with increases and decreases of the usable total energy-throughput of the process. If the correlation is positive, we describe the process as "negentropic." If the correlation is negative, we estimate the process to be "entropic."

However, we must discard the definitions of "negentropy" and "entropy" associated with statistical thermodynamics. This bears upon the wicked fallacy of the Wiener-Shannon dogma of "information theory," a doctrine derived from Ludwig Boltzmann's fallacious doctrine of "statistical fluctuations."

What we ought to signify, by the term "negentropy," are processes which are either living processes. or which have the characteristic thermodynamic behavior otherwise associated with living processes. A rigorous definition of this distinction, was first supplied by the collaborators Luca Pacioli and Leonardo da Vinci, working from Nicolaus of Cusa's principles of scientific method. They were the first to show, that living processes are distinguished from non-living processes, by the fact that living processes have harmonic patterns of growth which are congruent with the Golden Section. Later work shows, that we must exclude the extremes of astrophysical and microphysical scales from this statement. Between those extremes, the distinction discovered by Pacioli and da Vinci is absolute. In this range, har-

monic patterns of growth and morphology of function, which are congruent with the Golden Section, are either living processes themselves, or are a special class of artefacts producing by action of living processes, such as skeletons of animals.

This is the proper mathematical definition of "negentropy." All processes which are characteristically negentropic are constructions based on invariant harmonic congruence with the Golden Section; all other processes are characteristically entropic. Societies characterized by sustained increase of the productive powers of labor per-capita, are harmonically congruent with the Golden Section.

In brief, the physical "dimensionality" of technology and negentropy are one and the same. Technological progress is the form in which the creative-mental powers of the individual human mind supplies the negentropy that mind produces to the development of the productive process.

The most essential source of the incompetence of contemporary mathematics to solve this class of problems, is that, whereas the progress of modern physical science, from Cusa through Gauss and Riemann, has been based on a radically constructive (synthetic) geometry, free of axiomatic assumptions and deductive theorems, since the middle of the nineteenth century, taught mathematical physics has regressed from Gauss, to Laplace's program for restoring Cartesian principles. So, from d'Alembert's errors, through Laplace and Cauchy, through the fanatically anti-Gauss Maxwell and Boltzmann, modern mathematical physics, as taught, rejects what Gauss, and Dirichlet and Riemannn after him, proved. to be the physical geometry of physical space-time. Thus, mathematics has degenerated further, during the past 25 years of public-school and university instruction, into a radical logical positivism.

In my cited exposure of the absurdities of "Artificial Intelligence," among other locations, I specify the elementary features of a Riemannian hyperspherical manifold, and summarize the mathematical form which economic progress assumes in such a mathematics. Cusa's proof, that the only self-evident form of existence in physical space-time, is circular action, is the basis, through Riemann's work, for showing that the necessary elaboration of circular action adequate to account for the existence of physical space-time as we know it, is that the self-evident form of circular action in physical space-time, is continuous, triply-self-reflexive, conic, self-similar-spiral action. In that Gaussian manifold, through Riemann's further elaboration of the work of Dirichlet and Weierstrass, it is elementary to account for the most characteristic features of economic growth and economic devolution. Both technology-driven economic growth, and economic devolution, are in their elementary respects, Riemannian hyperspherical functions.

Without repeating here the mathematical elaboration supplied in other locations, the essential, the practical points flow as follows.

The successful growth or collapse of an economic process, occurs in successive upward or downward jumps. These

jumps correlate with increase or decrease of the energy of the system of the economy per-capita, and per-square-kilometer, and with correlated shifts in the characteristic metrical relations of production within the economy, including increases or decreases of the complexity of the social division of productive labor.

For this reason, economic processes are intrinsically "non-linear," and all "systems analysis" is intrinsically incompetent.

The focal point in the division of labor, through which technological advances are mediated, is improvements in the technology of capital-goods produced. This is such, that given a certain rate of scientific progress in two economies, the economy which has the greater capital-intensity will progress more rapidly. It is improvements in technology applied to capital-goods production, which transmit those improvements into production in general.

It is on this point, that one of the leading fallacies in Marx's Capital hangs, the fallacy of Marx's argument for "the tendency of the rate of profit to fall," in proportion to increase of capital-intensity. That, or a kindred error, is implicit in your publicized observations.

The issue, restated in simple thermodynamics terms, is this. Let the inputs and outputs of production be measured in terms of kilocalories of social costs of production. The rate of profit is expressed, in Marx's terms, as S/(C+V), and increase of capital-intensity is measured, so, in terms of C/V, or of (C+V)/V. Except for the case of simple expansion in size of the population, reinvestment of S' (net operating profit), has the effect of increase of per-capita C, to the net effect of increasing (C+V)/V. Thus, if the "rate of surplus value," S/V, were a function of employed labor, then the tendency would appear to be, that cumulative increases in (C+V)/V would "tend" to cause the ratio S/(C+V) to fall.

However, as is the case, if technological progress is transmitted by capital-intensity, then the productivity of labor is to that degree increased in proportion to the increase of capital-intensity, such that the result of investment in productive capital, in an increasingly energy-intensive, technology-intensive mode, causes the rate of profit to tend to rise.

In thermodynamics terms, the reinvestment of free energy in a closed process, has the effect of increasing the percapita energy of the system. Thus, if, during successive cycles of such reinvestment, if the free-energy per-capita of employed labor were constant or increased only slowly, successive increases in the energy of the system, per-capita, would mean a per-capita decline in the ratio of free energy to energy of the system. This would be the case, if it could be assumed, that the energy-cost of production of capital goods corresponded to the value of capital-goods with respect to the production for which they were employed. Here is the critical point of the analysis. If improved technology is incorporated in capital-goods produced, relative to the level of technology at which those capital-goods are produced, then the contribution to productivity achieved through employment of the new capital-goods is a value which exceeds Marx's estimate of the relative "price of production" of those capital goods. Thus, under conditions of technology-intensive production of improved capital goods, Marx's "tendency for the rate of profit to fall" becomes absurd; directly the contrary tendency prevails.

The reality of the process of development becomes clearest, once we compare the apparent social cost of production of goods with the energy-cost of that production. Since all inputs to households, as well as production, can be expressed in kilocalories of usable energy consumed, this measurement of energy-cost of market-baskets of households' and producers' goods, is implicitly feasible. Under conditions of technological progress, these energy-costs per-capita increase, while the social cost, as measured in labor-costs, decreases. Under these conditions, the constant-dollar prices of energy fall, to the degree that the constant-dollar price of the increased content of new per-capita market-baskets is less than of the earlier, less-content per-capita, market-baskets.

It is important for you to note, that in Capital, Marx made two crucial assumptions. As he states, as early as Capital I, he leaves the "technological composition" of capital out of consideration. He justifies this, by asserting that in the British model, technological progress is introduced only reluctantly. This is generally true for the British model, but is not true for the American System, for example. Second, like Walras and the positivist von Neumann, Marx's constructions are linear, whereas the real economic process is non-linear.

For this reason, high rates of military expenditures cost a society less than nothing, under certain circumstances. True, military goods in general are not households' or producers' goods; on such premises, it must appear that these goods are economically waste, and therefore a depressive tax upon the development of the economy. There is a fallacy embedded in so simplistic a view of the matter. The fallacy is the error of examining only the goods-output of military production, the fallacy of overlooking the process of production employed. If military production fosters high rates of technological progress in the capital-goods sector of the economy, the "spill over" of that improvement in the capital-goods sector, into the production of capital goods for investment in the economy generally, can cause a growth of productivity in the economy as a whole, yielding an increased margin of output exceeding the costs of the production of the military goods as such.

The leading considerations are:

- 1) The per-capita energy-throughput of the economy as a whole must be increased.
- 2) The energy-flux densities employed, must increase.
- 3) The ratio of employment in capital-goods production must increase relative to employment in household goods' production, while the per-capita market-basket content of household goods' production is increased through rising productivities.
- 4) Investment and production must be technology-intensive.

The success of such a policy, depends upon the percapita rate of investment in improvement of basic economic infrastructure: water-management, production and distribution of energy-supplies, transportation, and urban-industrial social and industrial infrastructure. The weight of infrastructure is so large in the economy, that during the postwar period of the U.S. economy, rates of improvements in infrastructure correlate precisely, by a delay of 12 to 18 months, with changes in the productivity of goods-producing labor.

Although infrastructure does not directly yield increased output of goods, it is the limiting condition which determines the general rate of productivity possible. Thus, in the postwar period, the increases and decreases in productivity in the U.S. economy correlate with the improvement and deterioration in basic economic infrastructure, by a lag-factor of 12 to 18 months. Thus, we see a general rise in the postwar period, into 1967, followed by a 1967-1970 stagnation, followed by an accelerating decline during the 1971-1985 period.

The proper fundamental measurement of economy, is in statistical units of "increase of the potential relative population-density." Since the labor-force, and the operatives' component of the total labor-force, is a function of the total population of households and the associated demographic characteristics of the households, the labor-force must be viewed as that activity of the society's households which produces both the means of existence of those households, and the means of production. So, in measuring energy-throughput, we measure that throughput both per-capita and per-square-kilometer. The two measurements are combined into one, by measuring energy-density per-capita-value of potential relative population-density.

So, we must expect that statistics for energy-throughput of economies at comparable levels of technology, would show a lower requirement per-capita for societies with high population-densities, and higher requirement for societies with relatively lower population-densities. This is what we see in statistics for such economies as Japan, West Germany, and the United States, for example.

Water-management, transportation, communications, and urban infrastructure, are essentially functions of energy-throughput, just as are the production and distribution of energy-supplies. So, the infrastructure-density required to sustain a specific level of technology, rises in proportion to the lowering of population-density. The function is approximately exponential, in terms of statistical studies of this comparison. So, the "factor" of infrastructure, is not to be viewed as added to the four conditions we have specified above; it is an integral aspect of those conditions.

The anomaly of military production

In military science, the correlative of productivity is firepower and mobility. This correlation is not merely an analogy. Weapons are simply scientific instruments or other tools, applied to service in the form of weapons. For every level of productive technology, there are weapons whose implicit firepower and mobility are superior in proportion to the productive technology they reflect. For every general advance in firepower and mobility of weapons, those technologies have comparable benefit as improvement of the productive powers of labor. The connection between the two, is the capital-goods production underlying the production of both.

Hence, to the degree that military production is technological-progress intensive, it forces changes in capital-goods production which must spill over increases in the productive powers of labor into the economy as a whole. Since firepower and mobility are life-and-death matters of military survival and victory, military production forces through technological progress even where ordinary investment otherwise might consider the benefit of technologically progressive investment speculative.

So, today, mass-production of so-called "conventional" weapons of warfare is a tax on the economy, whereas advanced-weapons production stimulates increases in productivity in the economy as a whole. The modern paradigm for this effect of military technology on productivity of labor is the Apollo-Program-centered research and development program of the early 1960s. This program spilled over technological advances into the general economy, to the effect that there was more than a ten-to-one return to the economy for each dollar spent on this program.

The anomaly is, that it appears absurd that society could achieve such benefits only as by-products of "crash program" mobilizations of military preparedness. It should not be necessary to have threats of warfare, to impel economies into the kinds of policies which they ought to pursue in times of peace. Unfortunately, Comandante, the threat of general warfare is very real, and increasing rapidly. Unfortunately, Comandante, during this century to date, nations have not yet learned to foster high rates of technological progress, except as a by-product of military mobilizations.

The SDI has the following implications to be noted here. First, Marshal V.D. Sokolovskii was right. Thermonuclear missiles are not an absolute weapon; developing ballistic-missile defense, based on "new physical principles," it is possible for major powers to develop sufficient firepower and mobility in defensive systems, to overwhelm the offense, such that even if a few thermonuclear weapons reached their targets, survival and the military advantage would lie with the defense. The price would be ugly, but it is the object of war, to win it and survive it, if one can not avoid it.

The central technologies of SDI, are three: 1) thermonuclear fusion; 2) coherently directed energy; 3) optical biophysics. Of all the weapons of general warfare, far worse than nuclear weapons are biological weapons, and, hence, the essence of defense is biological defense. These technologies, which the Soviet Union as well as the U.S.A. has been developing for defense, have inherently several orders of magnitude of superiority in firepower and mobility over existing offensive weapons. Implicitly, they are also an order

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of magnitude superior in cost. That is, implicitly, it is far cheaper to destroy a missile, by such means, than to construct and deploy one. Not only are these technologies suited to defense against missiles and aircraft, they are also the most effective technologies for defense in other aspects of warfare.

My central object, in proposing a shift to SDI in early 1982, was to buy time for both superpowers, to postpone for a decade or longer the general thermonuclear war which Nuclear Deterrence had made probable for as early as the late 1980s. The progress toward theater-limited nuclear warfare, which Leo Szilard and others had built into the future of Nuclear Deterrence as early as the late 1950s, had reached the point of maturation of precision weapons of offense, by the middle of the 1970s, that continuation of Nuclear Deterrence in that mode put a hair-trigger upon general thermonuclear warfare. Only a shift from Nuclear Deterrence, to strategic defense, could arrest this development. By establishing as rapidly as possible the strategic superiority of the defense, war could be postponed until the next round of predominance of the offense. Those precious decades are needed, to develop the conditions for moving beyond waravoidance, to durable peace.

These objectives could be reached, if the following conditions were satisfied:

- 1) That either the two superpowers agreed to an SDI policy, in place of Nuclear Deterrence, or that one forced acceptance of such a policy upon the other;
- That the technologies of SDI were simultaneously directed to such "common aims of mankind" as the space-exploration and space-colonization for which the three indicated technologies are indispensable;
- 3) That these technologies are also efficiently directed to general uplifting of the conditions of developing nations.

If those three conditions are fulfilled, SDI mobilization shows a route through decades of war-avoidance, toward general peace.

Again, on this point, I must refer to an error of Marx's. The history of mankind is not "the history of class struggles." The poet, dramatist, historian, and political leader Friedrich Schiller, knew history as a Marx miseducated under the influence of Hegel and Savigny did not. The known history of mankind is the bloody record of a permanent struggle between two opposing conceptions of man and nature. The one, takes as its point of reference Solon and Plato, the republican. The opposing force, self-described as oligarchism, takes as its point of departure the "blood and soil," mother-goddess cults of Chaldea, and the Mesopotamian, Roman, Byzantine, Ottoman, Hapsburg, and British empires.

Between those two opposing conceptions of man and nature, there is no common ground. There is no common body of law, by means of which the oppressed might appeal to law to secure relief from the oppressor. In conflicts between these two, there is no force of law, but only the law

of force. Those who talk of peace imposed as the alternative to the horrors of war, ignore the greater horrors of a peace under oligarchical subjugation. What is the purpose of human life, if man is reduced to the degradation of beasts?

The only durable peace, is a world in which oligarchism is either extinct or permanently powerless. That peace, and no other, is my objective. Without peace, there can be nothing better than war-avoidance, up to the point that the peace of war-avoidance is unendurable, that the price of war-avoidance is the hopeless degradation of mankind generally.

Like the great Cardinal Nicolaus of Cusa, I do not shy absolutely from the weapons and conduct of war, but I have other weapons which I prefer to employ. My preferred weapon is the weapon of Dante, Cusa, Leonardo, Leibniz, and Schiller, the weapon of republican culture. It is a simple deed, to kill, a deed accomplished more readily with practice. Yet, there are weapons which are more powerful, because their effect is more durable, the weapons of republican culture.

The source of power of the weapon of culture, is the laws of the universe, which are in accord with scientific progress, the laws by which Prometheus' cause prevails ultimately over the arrogance of the gods of Olympus. Not only can no oligarchy, however powerful, successfully defy those laws indefinitely. It is the nature of man, the potential with which each is born, the potential which places man above the beasts, to seek reconciliation with the laws of the universe, and to guide his actions in conformity with those laws. Wherever mankind exists, that potential insurrection of mankind against oligarchism exists, and with the aid of the laws of the universe, that insurrection will prevail.

The art of republican culture, is to quicken that principle within men and women. Yet, men and women die very soon; therefore, it is in a more durable force, the culture and institutions of peoples, that the principle must become efficiently embedded. The ally of republican culture, is scientific and technological optimism, just as the root of fascism and related evils, is the dionysiac bestiality of cultural pessimism.

In the practice of statecraft, we win this essential battle best, by employing the production of the very weapons desired for warfare, to inspire the cultural optimism by which republican culture is nourished.

The essence of this matter is the creative potential of the human mind. In a society which knows, that the source of the technology on which life depends, is the creative potential of the individual human mind, all newborn children are regarded as politically equal, as each, properly nurtured, embodies that potential. It is as men and women are degraded to objects of donkey-like labor and sexual lust, than one man regards another as he regards a beast to be subordinated to his hedonistic will.

In the case, that the prospect of warfare is the reality which confronts states, let the production of the weapons



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of war themselves become the means by which the precious quality of scientific and cultural optimism is fostered once again, as the cultural outlook underlying morality.

Let us end the tiresome chatter about "peace and disarmament." Only the worst scoundrels in the United States stand behind such chatter today, the scoundrels whose "peace and disarmament" means the peace of the grave for hundreds of millions of victims of IMF "conditionalities" and Malthusian dogmas in Africa, and tens of millions in Ibero-America. Let us face the reality of impending war, and by facing it directly, find war-avoidance in a shift of cultural values back toward technological progress.

Ibero-American development

There is no purpose to be served in mere debt-reorganization, unless this is integral to a radical shift in economic policy. Unless there is a drastic shift in economic policy, the

doom of tens of millions in Ibero-America is already sealed by the present state of those economies in terms of agriculture, industry, and infrastructure.

There is no hope of shifting the economic situation sufficiently to halt the famine and pandemics now emerging, without a massive deployment of new energy-supplies. We have at present, no available means adequate to correct the energy-shortage, without nuclear energy. Without proliferating installations redesigned to be completed within approximately one year's construction-time, the needed rate of reversal can not occur. Agricultural and massive infrastructural development must be the case, and the energy supplied to make this possible.

Otherwise, the needed objectives can not be met on present levels of world capacity for production of capital goods; nor can existing prototypes of capital goods suffice even on a considerably enlarged scale of production. The degeneration has gone so deeply, pandemics are so proximate, that nothing less than the proliferation of a technological revolution can meet the need. Nuclear energy, and the mobilization of the lines of supply needed for proliferation of nuclear energy, are the precondition for developing a base adequate to the development and deployment of the new technologies.

The technologies of the SDI are those we require immediately for this technological revolution.

Under "crash programs," echoing the 1794-1814 program of the Ecole Polytechnique, the Manhattan Project, and the postwar aerospace program, these objectives can be met.

Monetary reform is necessary, but by itself would be a remedy which arrived far too late. If it had come ten, or even five years ago, even as late as 1982, monetary reform might have arrived in time for Ibero-America. Now, by itself, it is too late. It is necessary today, merely as an included feature of launching of a proliferating technological revolution. Nothing less than that technological revolution can remedy the situation, under the advanced conditions of deterioration presently existing.

Fortunately, we have available the economic science needed to guide successfully such development, and we have around the SDI the technologies needed. Our greatest enemy is that misguided, obsolete thinking about economics and technology, which might deter us from taking this route.

On the one side, there is a horror looming, worse than nuclear warfare, imminent eruption of successive waves of biological holocaust. On the other side, there is scientific optimism unleashed in the grandeur of great projects. As President Charles de Gaulle understood, the essence of the great nation-state, is its dedication to serve a specialized, indispensable purpose, in aid of the defense and development of civilization as a whole. That is grandeur, the quality of moral inspiration which distinguishes the great nation's people from a collection of Hobbesian, Voltairean beasts. I would hope that you might recognize, prefer, and choose grandeur.

If so, a dialogue on the subject of our differences, would be a fruitful exchange.