

The new role for Russia in U.S. policy today

by Lyndon H. LaRouche, Jr.

In the pages following this introduction, **EIR** republishes, for a U.S. audience, an important 1995 report of Russia's Central Economic-Mathematical Institute: **Toward a Scientific Grounding for Economic Reforms in Russia**. The included purpose in publishing a report of that length here, is to remedy a pervasive, sometimes dangerously smug illiteracy, on the subject of Russia today, among most leading U.S.A. economists, think-tanks, and relevant other policy-influencing persons and institutions. The frank outline of Russia's recent and current economic situation, prepared under the Institute's Vice-Director, Academician Dmitri Semyonovich Lvov, should be most helpful to relevant public and private persons and agencies in the Americas and western Europe.

The institute's report does not pretend to answer all questions, but it provides most readers, including U.S. specialists on Russia, with a much-needed, fresh, and relatively comprehensive overview of the nature of the problems which must be addressed, if the U.S.A. or any other nation is to discover an appropriate policy toward the emerging, new Russia of today.

Since our implied topic here is a U.S.A. policy toward a Russia arising from the ashes of the Thatcher-Bush-dictated conditionalities, we introduce Academician Lvov's report, by situating the discussion in the context of U.S. strategic interest in finding a new quality of relations with both Russia and China. For an appropriate point of reference, return to April 12, 1945, the day of President Franklin Delano Roosevelt's most untimely death.

Elliott Roosevelt's account¹ of his father's anti-Churchill policy is corroborated by relevant sources. Throughout the war, it had been a leading concern of the President, that the new post-war world not be a repetition of that species of disaster which Britain, and its dupe Woodrow Wilson, had created at Versailles. On that

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



Lyndon LaRouche (at table, second from right) in a dialogue with Russian economists at the Economics Academy of the Russian Ministry of Economics, Moscow, April 25, 1994. Writes LaRouche, "Nations are saved solely because outstanding personalities act with pungency and force, to implement those desperately necessary measures which the mediocrity of prevailing opinion regards as unnecessarily radical, or even absurd."

account, the axes of Roosevelt's post-war perspective, were his constant search for agreements with a united China, and with Moscow, which might ensure that Prime Minister Winston Churchill's wicked designs for the post-war world would be prevented. The untimely death of the President, left the presidency in the hands of a poorly prepared successor, who proved himself the suggestible victim of such Churchillian "Svengalis" as Secretary of War Henry Stimson, Secretary of State Jimmy Byrnes, and Stimson's young protégé, and later Kissinger patron, McGeorge Bundy. So, the post-war world, to date, became a strategic disaster for all concerned, including her Majesty's common British and Commonwealth subjects.

The post-war world, which Churchill and Truman launched, has ended. The Soviet system crashed during 1989-91. In Russia today, the Thatcher-Bush-IMF "shock therapy" is virtually a corpse, which, lacking the price of a Moscow taxi, must stagger from house to house, begging the services of a funeral director. Meanwhile, the entirety of the IMF-pivoted, global monetary and financial system, is in a systemic crisis of collapse, even threatened disintegration. The ruling collection of establishment families, of Britain, North America, and much of Western Europe, is, like the British monarchy—old *anglichanka nagadila*² herself—desperately decadent, clinging fatally to a doomed tradition: like

2. Popular old Russian folk-saying, an uncomplimentary reference to the British monarchy.

Shakespeare's swashbuckler, Hamlet, in flight forward to the past, from a future it could not control.

Summarily: Since the late Nineteenth Century, Russia and China are the keys to the future, the keys to all Eurasia, and, thus, to the world as a whole. So, today's world has been turned back, with a vengeance, to the primary reality of April 12, 1945: The success or failure of U.S. attempts at cooperative relations with a united China and Moscow, will determine the success or failure of U.S. global policy, deep into the coming century.

Economics and strategy

The United States could not achieve any durable agreements with China or Moscow, if those agreements were not consistent with the physical survival, and social and political stability of those states. In Russia, like some other nations today, the economic crisis is immediately, systemically existential. In China, the crisis is not yet so immediately apparent, but the issues of economic policy for the future are not much less pressing. Unless and until the United States, and some other nations, come to their senses on current economic realities, no durable policy of relations with those two states (in particular) is possible. The most immediate issue, of course, is the precarious internal economic situation: short-term for Russia, medium-term for China.

The principal intellectual difficulty which impedes Washington's efforts to arrive at a competent understanding of the situation *inside* Russia and China, is that, to date,

most among the influential U.S. institutions, are hysterically unwilling to face the reality of the economic situation *outside* the former Soviet Union and China: both in the world at large, and, especially, inside the United States itself.

The crucial strategic fact which most in official Washington have so far refused to face, is the certainty that the existing world monetary and financial system—the IMF system, the U.S. Federal Reserve System included—is doomed, not eventually, but within the immediate future. A systemic collapse of those institutions is already fully in progress. Already, any among an array of probable early incidents could set off an immediate chain-reaction form of financial collapse throughout the planet. Such a crisis threatens to erupt as early as during the next dozen weeks, almost certainly before 1997.

Nothing could be done to stop that collapse, excepting a momentarily unlikely action by the United States government, to put the existing monetary system into government-controlled financial-bankruptcy reorganization. The leading circles of the world financier oligarchy manifestly agree with this estimate: Witness the ongoing stampede of insider investments, out of financial markets, into hoarding of gold coins and bullion, petroleum reserves, valuable metals, and food commodities. The well-informed rich are rushing to get out of the way of the oncoming financial hurricane, into the storm-cellars of hoarded gold bullion, raw materials, and increasingly scarce food-supplies.

Forceful initiatives for government-controlled reorganization of the world's already bankrupt financial systems, will probably occur eventually, probably some time during the coming eighteen months. Unfortunately, that action will probably wait until the publicly-perceived situation is one of such immediate desperation, that governments, then, believe they have the political support wanted to take such dramatic actions. What is certain, is that, come what may, the present international monetary and financial system is doomed to extinction during the short term.

We should not forget, that it is the nature of all leadership worthy of the name, that nations are saved solely because outstanding personalities act with pungency and force, to implement those desperately necessary measures which the mediocrity of prevailing opinion regards as unnecessarily radical, or even absurd. In the age in which not only mediocrity, but even "political correctness" prevails in virtually all influential circles, last-minute, hazardously imperfect action, is the best we might expect. Very many have already suffered and died recently, in Africa, in the Balkans, inside the United States, and elsewhere, all unnecessarily, because of the murderous combination of the pragmatic mediocrity and "political correctness" of both official Washington, D.C., and prevailing popular opinion among U.S. television's devotees.

To improve the old folk-saying, *It is an ill wind which does not blow some good*: Today's Russian scientific thinker

has the specific, if perverse advantage of an extremely rude and cruel experience: living through, in rapid succession, both the collapse of the Bolshevik system, and, after that, the more disastrous and rapid collapse of the, hastily imported, "free trade model" of Professor Milton Friedman, Prime Minister Margaret Thatcher, Ambassador Robert Strauss, Newt Gingrich, and George Soros. As reflected in Academician Lvov's report, among Russians, this double experience has fostered hostile suspicion toward those economic superstitions which are hysterically defended, until now, by the quackademics and most among the governments, of western Europe and the Americas.

Thus, one of the compelling features of Academician Lvov's report, is the freshness with which it applies its special, insider's qualifications, to reexamining critically its experience with many of the once-popular, underlying assumptions of both the Soviet and Adam Smith dogmas. On that account, a dialogue with the relevant scientists of Russia is not only indispensable for shaping an effective new U.S. policy toward Moscow; it is also a way of stimulating needed, new conceptions of global economic policy, which have urgent application in the world generally, the U.S.A. not excepted. It is in that spirit, and to that purpose, that we present the report of the Central Economic-Mathematical Institute.

Twice, during this century, most of the U.S. population was seduced into a Hollywood-style, fairy-tale delusion concerning America's relations with "our closest, British ally." This delusion became widespread during the terms of the two overt Confederacy-buffs among Twentieth-Century U.S. Presidents: Theodore Roosevelt and Ku Klux Klan-booster Woodrow Wilson. The cult of Anglophilia was also predominant under Presidents Truman, Henry Kissinger's President Nixon, the Trilateral Commission's Carter, and Mrs. Thatcher's Bush. It was, admittedly, a prevailing sentimental trend under the Eisenhower and Reagan administrations.

Contrary to Hollywood Anglophilia, the true character of relations between the United States and Britain, is clearly demonstrated in the anti-monarchy policies of George Washington, James Monroe, John Quincy Adams, Abraham Lincoln, William McKinley, and Franklin Roosevelt. The same truth is highly visible today, as London's remembered hatred of Franklin Roosevelt is reflected in brutish attacks upon President Clinton by Conrad Black's, Dwayne Andreas's, and former Ambassador Robert Strauss's Hollinger Corporation. Essentially, claims for an alleged community of principled interest between the United States and the British monarchy were always hoaxes; that point was emphasized most clearly by then-U.S. Secretary of State John Quincy Adams, in putting forward the draft of the anti-British Monroe Doctrine. The content of Adams's message on that subject, applies today.

From its beginnings, the vital interests of the United States of America have always been at irreconcilable odds with the British monarchy, from King George III, through

Prime Minister Winston Churchill's day, and under Queen Elizabeth II today. There can be no competent U.S. strategic doctrine or foreign policy, which does not proceed from understanding of the nature of, and reasons for the irreconcilable, principled difference in moral character between the British monarchy and the constitutional Federal republic of the United States.

It is a corollary of that same point, that there can be no competent understanding of the United States by any nation, unless that nation recognizes that the very national identity of the United States, and its most vital interests, are rooted, since no later than Royal Governor Andros's pranks of 1688-89, in a fundamental conflict of interest between the British monarchy and the continued existence of the United States. At issue is nothing less fundamental, than *two, mutually exclusive conceptions of man and nature*. The self-proclaimed British foreign-service agent of influence, Sir Henry Kissinger, has acknowledged that continuing conflict, albeit in his own, disgusting terms of reference.³ Kissinger has acted accordingly, as a British agent, during his 1969-77 "White House incarnation," and to the present day. Other nations, such as China and Russia, must also understand that; they would misjudge us foolishly, if they saw the United States, or Kissinger in different terms than have been set forth here.

The nations of the world should be forewarned. Conceded, that, from time to time, the people and government of the United States, appear to have forgotten that conflict with our traditional enemy, Britain's monarchy, upon which the continued existence of this Federal constitutional republic depends. That historic conflict will persist for as long as that monarchy continues, as it does still today, in the parasitical, oligarchical tradition of Venice, William of Orange, George III, Lord Palmerston, Edward VII, Winston Churchill, Bertrand Russell, and Margaret Thatcher. Nonetheless, whether, at any time, that conflict appears to be acknowledged or not, it will assert itself repeatedly, sometimes very violently, when it has been too long neglected. Never forget, as many veterans of World War II may recall discovering this historic fact within themselves: that historic conflict with *perfidious Albion* is always present, thus, beneath the surface of transient moods in our national public opinion; it is there, that

3. See Henry A. Kissinger, "Reflections on a Partnership: British and American Attitudes to Postwar Foreign Policy," keynote address of May 10, 1982, commemorating the 200th anniversary of the founding of the modern British foreign service by Jeremy Bentham: delivered at British foreign intelligence's Chatham House (Royal Institute for International Affairs). Official transcript supplied by Kissinger cronies at the Georgetown University-based Center for Strategic and International Studies. Kissinger entered the British foreign-intelligence service, under Professor William Yandell Elliott, in the Harvard University branch of Chatham House's Wilton Park arm, forty-five years ago. However, he first became a British asset within the U.S. intelligence service five years earlier, under General Julius Klein and Fritz Kraemer, in the Oberammergau unit of the U.S. occupation of Germany.

the true, historical character of our nation resides: that is the key to defining competently the strategic interest of these United States.

We of the United States, must once again adopt this conscious view of the British monarchy and our relations with it. Otherwise, we would be ruined by our own foreign policy, if nothing else. As, we, of the United States, must understand this crucial difference with the global, Anglo-Dutch financier oligarchy, so, the treaty partners of the United States must also face that reality, abandoning all popularized delusions to the contrary. This is the present global strategic reality, much more so now than at any time during the past seventy-odd years.

The Russia with whose heritage we must deal, is the Russia of Catherine II, which saved the imperilled United States: by leading in the crucial defeat of our British enemy by the 1780-83 League of Armed Neutrality. It was the Russia assisted by the U.S. naval commander John Paul Jones. It was the Russia of Alexander II which saved the United States: by threatening war against England and England's puppet, France, should Lords Russell and Palmerston, and Napoleon III, proceed with their intent to deploy naval forces against the United States, on behalf of the London-sponsored, Confederate slaveholders' rebellion. It is the Russia which British asset President Theodore Roosevelt betrayed to Edward VII's geopolitical game. Russia must emphasize that historic connection, as we must also understand the deep roots of the new Russia now struggling to express itself.

This point is key for understanding, more narrowly, the specifics of the present, global economic crisis, both as it is reflected inside Russia, and inside the United States.

Strategy and economics

As Academician Lvov emphasizes, one of the notable economic features of Russia, is that it possesses a high ratio of primary raw materials per capita. However, we are not Miniver Cheevys,⁴ not scornable, parasitical Physiocrats; to understand the hopeful future of Russia's economy, we must place emphasis, as Academician Lvov's report shows, upon the productive potential of its people. A comparison with Ukraine is instructive on this point.

Excepting its agricultural potential, its rivers, its coastline, the land-area of Ukraine has virtually no natural resources for industrial development, excepting the superior productive potential represented by its scientists and its educated population in general. Ukraine must subsist upon the margin of Value Added with which its competitive science and productivity of labor endow its products.

In the last analysis, that is also the key to the economic recovery of the new Russia. This is the economic potential,

4. "Miniver Cheevy . . . child of scorn," is the most popular of the poems of the banal U.S. writer, Edward Arlington Robinson (1869-1935), who had the misfortune to be patronized by President Theodore Roosevelt.

of both Russia and Ukraine, which Prime Minister Margaret Thatcher and President George Bush aimed to destroy: as stipulated by a contemptible preachment known as “the Webster doctrine,” as applied to Russia (and, Ukraine) under the terms of the IMF and Bush’s Ambassador Robert Strauss. As in Ukraine, the economic potential carried over into post-Soviet Russia, is concentrated in both the scientific establishment and the relative superior productive technological quality of programs of universal education.⁵

To this proposition, the present writer, for his part, brings a competence which is both traditional and also includes relevant scientific achievements which are unique. The tradition is that of modern European civilization since the Fifteenth-Century establishment of the first modern nation-state, the Commonwealth of Louis XI’s France. It is also the scientific and economic tradition of France’s Jean-Baptiste Colbert and Europe’s Gottfried Leibniz, as expressed in U.S. Treasury Secretary Alexander Hamilton’s anti-Adam Smith “American System of political-economy” and the influence of Friedrich List; it is met in Russian history in the influence of Gottfried Leibniz’s design for Peter I, and in the direct and indirect influence of List upon the economic practice and policies of the chemist Dmitri Mendeleev and Count Sergei Witte. The unique, additional consideration, is the present writer’s discovery of a scientific principle of physical economy, a principle of crucial relevance for understanding the way in which Russia’s scientific and educational potential must be applied, to overcome the disaster threatening that economy today.

The present writer’s televised Berlin address of Oct. 12, 1988, signalled this proposed application to the new Russia

5. Judge William Webster: President Jimmy Carter appointed him head of the Federal Bureau of Investigation; was CIA head for a time, under President George Bush. His name is attached to a doctrine which asserts, that, with the end of the “Cold War,” new strategic adversaries must be sought chiefly among those of our allies who might be construed a “competitive threat” to U.S. national economic security. This was complementary to the British Thatcher government’s launching, during October-November 1989, of the so-called “Fourth Reich” doctrine, under which the economies of former Comecon nations and Germany have been wrecked, for reason of London’s “geopolitical” fears of the economic potential of Germany-Russia economic cooperation in the post-Soviet era. The literary pretext for the application of the “Webster doctrine” to Russia (and, Ukraine) was premised upon the perception that the superiority of Russia’s scientists and superior education of the labor-force would permit post-Communist Russia to out-class the “post-industrialized” U.S.A. It is of implicit relevance to the publication of this report, that Webster, as head of the FBI, collaborated closely, beginning Summer 1982, with former U.S. Secretary of State Henry A. Kissinger and the London-directed Angleton-Lovestone-Cherne CIA network, in setting up a covert intelligence operation against Kissinger’s designated target, Lyndon H. LaRouche, Jr. Notably, during 1983-87, that U.S. covert operation reached out to involve the Soviet government at the highest level, first under General Secretary Andropov, and later under Gorbachov. Six years later, that operation, probably the most extensive ever run against any political target of covert operations in the U.S.A., resulted in a fraudulently secured indictment and conviction of LaRouche.

of the tradition of American System political-economy. In that address, which was broadcast to a national U.S. television audience that same month, the imminent collapse of the Soviet system and reunification of Germany was announced, and a policy of reconstructive cooperation toward eastern Europe was identified.⁶ That policy of reconstruction was later elaborated in significant detail, beginning November-December 1989, in policy statements and prospectuses issued under the rubric of “the European Productive Triangle.”⁷

This Productive-Triangle policy anticipated all the principal features, and more, of the later “Delors Plan” (see **Figure 1**). It proposed that the emergent world-center of economic progress, since Charlemagne, the approximate spherical triangle whose apices are Paris, Vienna, and Berlin, be mobilized as the pivotal technology-driver for all Eurasia, and that this triangle be the hub of a network of railway-spined developmental corridors, extending eastward and southward, across Eurasia, through such routes as Berlin-Warsaw-Moscow, Kiev, and so on, to the Pacific and to the Indian Ocean. Although the principles embodied in the Productive-Triangle proposal are either unknown or unfashionable in the classrooms and professional journals of the past quarter-century’s west European and North American academia, there is nothing in that proposal which is not implicit in established American System traditional doctrine and practice.⁸ This is readily within the established competence of Russia’s Central Economic-Mathematical Institute. The relevance of this for the present economic situation of Russia, is typified by the present writer’s special report of Feb. 20, 1995, to a committee of Russia’s State Duma.⁹

What is relatively new to Russia’s scientists, but indispensable nonetheless, is the author’s original discovery respecting the nature, and the problems of mathematical representation of, the causal relationship between a science-driver orientation in education and investment, on the one side, and consequent increases in the “macro-economic,” physical

6. “LaRouche Offers New Policy for Reunification in Berlin,” **EIR**, Oct. 21, 1988, pp. 40-42.

7. “Paris-Berlin-Vienna Triangle: Locomotive of the World Economy,” **EIR**, Feb. 2, 1990, pp. 26-35.

8. See Lyndon H. LaRouche, Jr., **So, You Wish to Learn All About Economics?: A Text on Elementary Mathematical Economics** (New York: New Benjamin Franklin House, 1984). This has been published in a number of languages, including a Russia edition: **Vy na samom delye khoteli by znat’ vsyo ob ekonomike?** (Moscow: Schiller Institute-Ukrainian University in Moscow, 1992). The nature of the sets of inequalities required to represent a modern physical economy is identified in this introductory text.

9. Lyndon H. LaRouche, Jr., “Prospects for Russian Economic Revival,” **EIR**, March 17, 1995. Also published in a Moscow pamphlet edition: **Memorandum: Perspektivy vrozhdeniya narodnogo khozyaystva Rossii** (Moscow: 1995), Bulletin No. 5, Schiller Institute of Science and Culture.

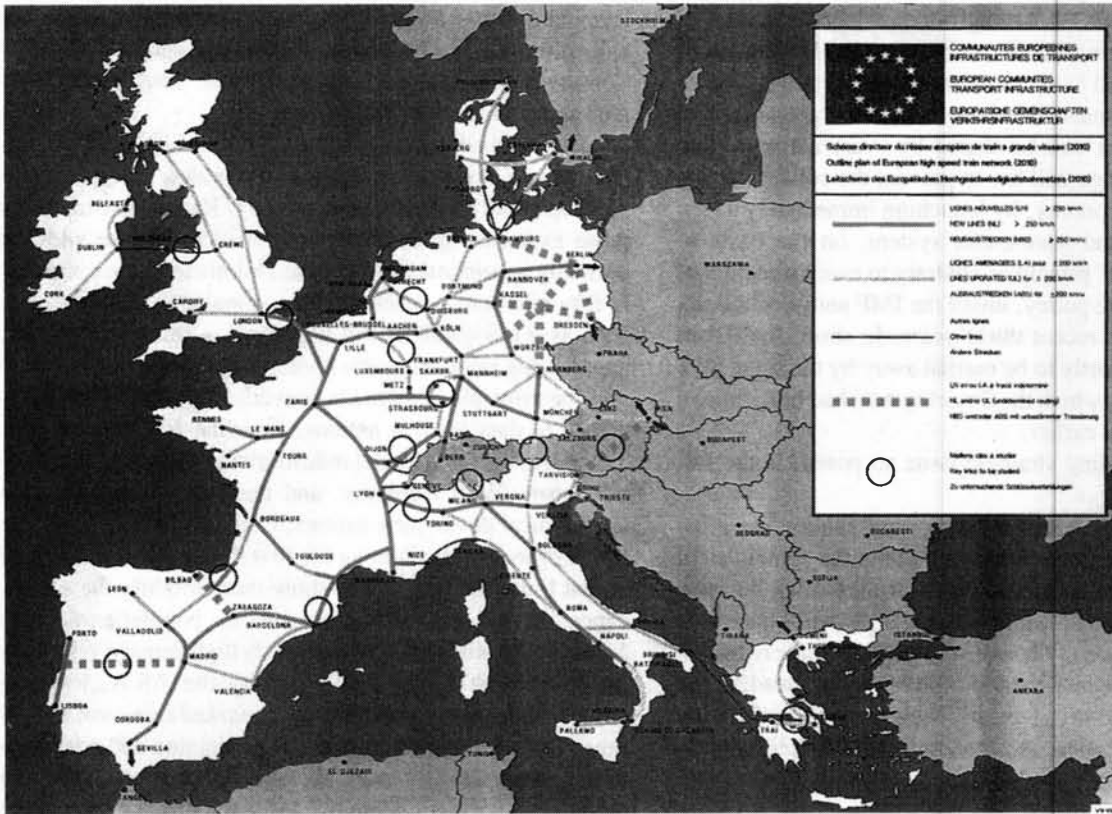
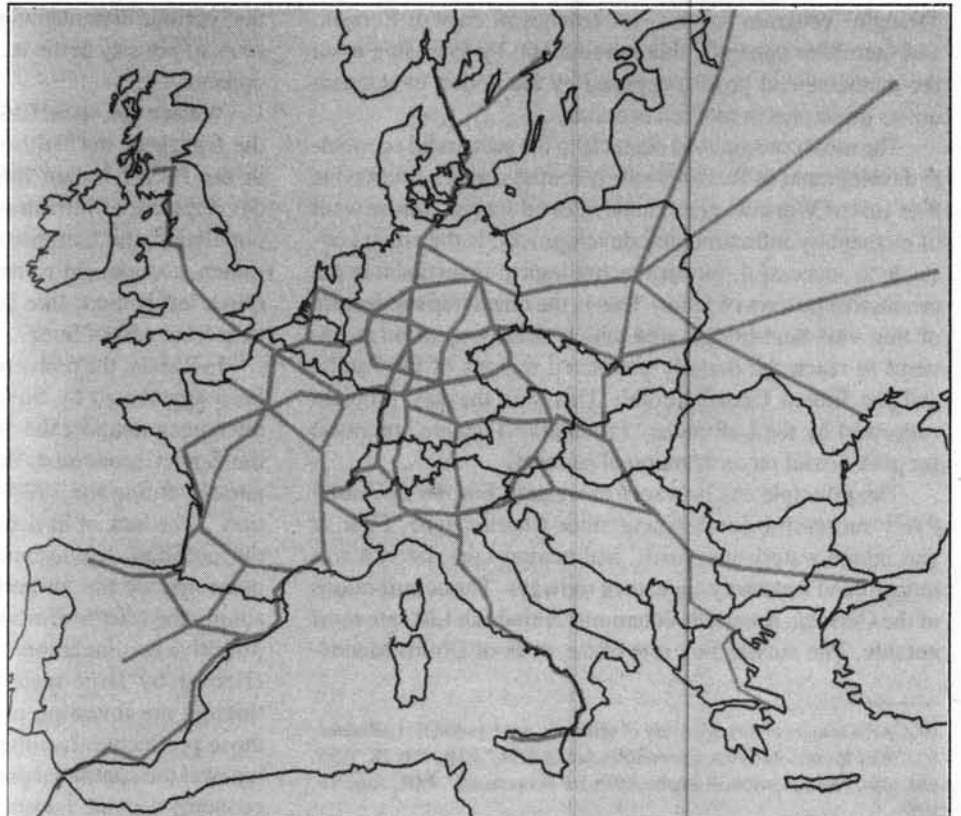


FIGURE 1
The Delors Plan and the
LaRouche 'Productive
Triangle'

The top map shows the 14 transport infrastructure projects that the European Union approved on Dec. 10, 1994. These were based on a White Paper that had been circulated by then-European Commission President Jacques Delors during the previous year. Construction is currently under way on several segments.

The rail networks of the Delors Plan bear a striking resemblance to those on the map below, the Paris-Berlin-Vienna "Productive Triangle" proposal of Lyndon LaRouche. The lower map was first circulated in August 1990—before Germany was reunified—in a German-language report published by EIR Nachrichtenagentur in Wiesbaden.



productive powers of labor of agro-industrial operatives.¹⁰

During the coming months, as the present, IMF-centered, global monetary and financial system disintegrates in a holocaust of reversed financial leverage, Russia's present, most crucial predicament will be shared by every nation of this planet. The challenge will be, to prevent the collapse of the Earth's physical economy, by launching immediately a new world monetary and state-credit system, on the basis of "American System" principles contrary to every direction of change in economic policy, under the IMF and World Bank system, during the recent thirty years. In short, the Adam Smith system is shortly to be carried away by the same Styx of dead history into which the Soviet system had been thrown an historical instant earlier.

The corresponding strategic issue so posed, is the following.

The discussion of Russia's economic reality and prospects, today, is the basis for laying down the principles of international cooperation among a strategically decisive combination of states, whose cooperation will shape that global reconstruction of the world's monetary and credit system, which must be launched as soon as weeks ahead, or not less than a year or so, at most. The future of civilization depends upon this; thus, are economics and strategy rightly conjoined.

Infrastructure policy

Let us summarize the implications of the "Productive Triangle" program for the vast reaches of eastern Eurasia, and thereafter conclude this introduction by focussing upon the mathematical problems posed by the notion of science-driver principles in modern economy.

The most conspicuous obstacle to the successful economic development of Russia's vast potentials, greets one as one flies east of Warsaw: great, undeveloped spaces, whose want of elementary infrastructural development, is the crucial obstacle to successful, modern technological investment in the productive powers of labor. This is the characteristic feature of that vast land-bridge area which development must traverse to reach the densely-populated regions of the Pacific and the Indian Ocean littoral. This was the key problem addressed by the LaRouche "Productive Triangle" proposal for post-Soviet reconstruction of Eurasia.

The principle can be traced in western Europe's cumulatively successful development since Charlemagne. First, it was inland waterways, roads, and market-fairs; later, it was more inland waterways, and then railways. The contributions of the German-American economist, Friedrich List, are most notable. The outstanding role of the work of Dmitri Mende-

leyev and Count Sergei Witte, in developing the industries and railways of late Nineteenth-Century and early Twentieth-Century Russia, prefigured the LaRouche "Productive Triangle" and later "Delors Plan" proposals.

The upshot of that successful economic history of western Europe and North America, is that one does not attempt to develop broad expanses economically. Rather, one traverses those expanses by development corridors, whose width is normally approximately a hundred kilometers, approximately fifty kilometers either side of a spinal artery of transport, such as a navigable inland waterway, a trunk railway, or, superseding rails, magnetic levitation transport.

The principle involved is conveniently illustrated by reference to data for five nations, from the 1967-70 interval. These are, the three model industrialized nations of that period: Japan, West Germany, and the U.S.A., and the two archetypical developing nations, China and India. Since the levels of technology among the first three, were comparable at that time, the similarities show more brightly the significance of the crucial differences in population-density: Japan's habitable territory: extremely high density, relatively speaking; West Germany: high density; the U.S.A.: low density. *High density of population is a marked economic advantage*: Transport between points of production and consumption, traverses shorter average distances, and the employment of basic economic infrastructure is greatly more efficient. In contrast, the lack of such infrastructural maintenance and development in high-density China and India of that period, demonstrates, with the force of a hammer, the roots of poverty in the lack of essential infrastructural development.

We see the same lesson, most cruelly demonstrated, in the legacy of the British and Dutch East India companies in the Pacific-Indian littoral. We see virtually no interior development of infrastructure, and, thus, a concentration of population and commerce in a relatively few, giant, slum-ridden, economically unmanageable, chiefly coastal metropolises left behind, like flotsam, by the colonial powers' retreat from east of Suez.

In Russia, the problem of late and under-development has been aggravated by Soviet economic history. The relevant phenomenon under the Soviet system, was a practice which the Soviet economist Yevgeny Preobrazhensky described, already during the 1920s, as "socialist primitive accumulation." The lack of in-depth infrastructural development, and the purblind "environmentalist" ideologues' knee-jerk lament against the alleged evils of "socialist industry," are simply the effects of what Preobrazhensky termed "socialist primitive accumulation": a one-time accumulation of capital, effected by large-scale "cost savings," savings obtained through not investing in repairing and developing much of those productive facilities and other resources upon whose renewal the continued productive and related functions of the economy depend. Looting tomorrow, to pay for today, would

10. On the subject of this discovery of principle, see Lyndon H. LaRouche, Jr., "Why Most Nobel Prize Economists Are Quacks," *EIR*, July 28, 1995, and, also, "Non-Newtonian Mathematics for Economists," *EIR*, Aug. 18, 1995.



This pipeline, built during the Soviet period, brings water from the Caspian Sea to a desalination facility in Shevchenko, Kazakhstan. A Eurasian development program must build infrastructure in the vast, undeveloped spaces east of Warsaw.

be another loose way of describing the problem.

In summary, the developmental strategy we have termed "the developmental corridor," is a way of creating the advantages of a relatively Japan-like density of population and productive activities, within a relatively small portion of a large territory. All other geographical considerations being equal, the development corridor would reach, as we have noted, typically, about fifty kilometers either side of a central transport-spine of waterways, rails, pipelines, and trunk power-lines. The development of the larger territory is accomplished somewhat as railway development opened up the western United States: by criss-crossing vast expanses with developmental corridors.

Without placing the emphasis upon infrastructural development so defined, a successful reconstruction of Russia would not be possible. Without the use of such modern forms of development corridors reaching from Berlin to the Pacific and the Indian Ocean, the required rate and degree of economic developed needed to satisfy the requirements of the populations of China and the Indian subcontinent would not be possible.

The vast absolute cost of the investment represented by such corridors' infrastructure, is no competent ground for objections. The percentile of the total labor-force of any modern nation, which ought to be employed in development and maintenance of basic economic infrastructure, is the largest component of a sane modern economy after manufacturing in general. Moreover, historically, as in principle, it is only through the mobilization of the resources of the state,

for creating credit, and supplying crucial portions of initial capital funding, that economic growth is stimulated. Since the state functions efficiently to this effect, only in its own sector of economy, basic economic infrastructure, it is large-scale infrastructure development, or related state projects, that stimulate high rates of physical growth in the private sector of the economy.

The only evolved form of successful economy, which succeeds in just that way, is what U.S. Treasury Secretary Alexander Hamilton was first to name "The American System of political-economy," the alternative to the Venice-modelled Anglo-Dutch financier oligarchy's so-called "Adam Smith" alternative, also alternative to the sundry feudal and feudalistic models of oligarchical society. The presently onrushing global monetary and financial collapse, is a catastrophe of that Anglo-Dutch financier-oligarchy system which has dominated most of this planet throughout the recent five decades, and all of it since the 1989-91 collapse of the Soviet system. This very fact clears the way for the urgent, and immediate restoration of the "American System" of national banking and state credit, as a total replacement for the collapsed international system.

Under those circumstances, one can no longer apply the presently habituated rules of thumb, employed to estimate economic success or failure of proposed economic undertakings. The characteristics of action within the world economy will have changed radically, from the rentier model of the Anglo-Dutch international financier-oligarchy, to new characteristics of action, typical of the American System.

LaRouche and Russia

On Feb. 20, 1995, representatives of Lyndon LaRouche and the Schiller Institute presented LaRouche's memorandum on "Prospects for Russian Economic Revival" to a hearing of the Committee on Economic Policy of the Russian State Duma, the lower house of Parliament (see *EIR*, March 17, 1995). "There exists no possible solution to this [economic] crisis, either for Russia or for the world," wrote LaRouche, "within the bounds of the previously accepted terms of dominant international economic and financial institutions."

A thorough treatment of the influence of LaRouche's European "Productive Triangle" proposal of 1989-90 appeared in *EIR*'s Nov. 4, 1994 issue, including a reprint of his Oct. 12, 1988 speech in Berlin, forecasting the reunification of Germany.

EIR's March 26, 1993 issue included LaRouche's report on the real history of the Strategic Defense Initiative, and his role as a back channel to the Soviets in exploring his proposal for what later became known as the SDI.

Thus, the proper choices for Russia, and the global opportunities for Russia to apply those choices successfully, converge in the upshot of the onrushing global collapse of the dying old, IMF-dominated system. Our concern should be, to build the needed monetary lifeboats as quickly as possible, to escape the doomed financial "Titanic," to reach the safe harbor of the new American System as soon as possible. We should not waste any of our precious, limited energies, and other resources, in service of any different purpose.

Creativity: the individual in history

To avoid a catastrophe within the world's present level of population, we must solve promptly the task of global economic reconstruction. The enormity of that task, imposes upon governments the prerequisite, that, within the assortments of previously taught economic doctrines, we must remedy not only clear errors, but also characteristic short-falls. We need not review such obvious academic refuse as apologies for primitive, barbaric, feudal, or Venice-style British culture. Among the economic doctrines of practice which reflect scientific qualities of thought, the most critical short-fall of virtually all of them, is the failure to address effectively the practical implications of the individual's hu-

man creativity in generating and sustaining technological and related progress. The general form of feasible solution to this specific challenge is, to date, the unique contribution of *the LaRouche-Riemann Method* in physical economy.¹¹

We now summarize the points which are crucial to the kind of international dialogue which we are supporting by publication of the report of Russia's Central Economic-Mathematical Institute.

Certain facts are promptly evident to any scientifically trained investigators who attempt to define a successful, sustainable model of economy in physical-economic, rather than monetary terms of reference. That leads directly to the notion of a pedagogical model expressed in terms of generally employed university-classroom thermodynamics; for this purpose, monetary values can not be used, since price has only a fictional value relative to any notion of economies as physical processes.

Although we have described this process of approximation in other locations, it must be summarized here.

In place of prices, one must employ the notion of physical-economic market-baskets of required levels of consumption. This must take into account consumption, per capita, per household, and per square-kilometer of relevant land-use, by households and by the process of physical production of the elements of which those market-baskets are composed. The latter includes basic economic infrastructure, agriculture and mining, manufacturing, and so on. We also include three categories of services: health-care, education, and science and technology as such, as physical components of the market-basket, since those three are crucial in defining the level of the productive potentials of the labor-force. We compare, then, the relationship between the per-capita and per-square-kilometer levels of output of these items, with those costs, measured as market-baskets of the same list of items, which society incurs in order to continue producing at that level of output.

This leads us, next, to an improved approximation: a valuation of consumption and production in terms of the rather obvious implicit functions. Think of whatever consumption is required to sustain a given level of per-capita, per-square-kilometer output—whatever that might prove to be—as analogous to "energy of the system." Thus, implicitly, any output in excess of the required energy of the system, may be regarded as analogous to "free energy." We have, thus, the general notion of a relevant ratio of "free energy" to "energy of the system," all expressed in terms of per-capita, per-household, and per-square-kilometer valuations. Think, next, of the observable effects of raising or lowering the level of the per-capita, etc., "energy of the system," upon the sustainable ratio of "free energy" to "energy of the

11. See "Non-Newtonian Mathematics for Economists," loc. cit.

system.” That expresses a notion of an implicit function.

The notion of this function must then be adjusted, to reflect the impact of the consumption of the “free energy,” as output, upon the functional ratio itself. The significant, the desirable, realization of that “free energy” output, is chiefly twofold: to extend the economy in scale, and to increase the capital- and power-intensity of that economy, thus increasing the level of “required energy of the system,” per capita, per household, and per relevant square kilometer. Consequently, the general requirement applied to the notion of the adjusted, implicit function, is that the ratio of “free energy” to “energy of the system” must not decline, despite the functionally unavoidable increase of the absolute “energy of the system” per capita, per household, and per square kilometer.

At that point, the investigator has implicitly defined all successful societies as characteristically “not-entropic.”¹² The application of the skills of the production-process engineer to the relevant economic history, results in a set of simultaneous linear inequalities, which describe the relative directions and rates of change of relations among consumption and production in “more-than,” “less-than” terms of approximation. That set of inequalities thus describes a required, and measurable *not-entropic* result.¹³

So far, so good.

In contrast to the axiomatically absurd assumptions of the late John von Neumann et al., every competent effort along those lines we have just described, has tended to produce results which are useful, but virtually all of which have failed to address the most critical of the underlying scientific problems. *The common root of each and all of those failures, is the ideologically-inspired blunder, of assuming, axiomatically, that the causal relationship underlying the economic process described, could be represented in terms not offensive to today’s generally accepted university-classroom varieties of mathematical physics.* It is on the latter point, in avoiding that academic sort of common error, that the unique significance of the LaRouche-Riemann Method appears.

This is a matter which has arisen repeatedly in Moscow, in discussions, among some scientists there, of the present writer’s discoveries in physical economy. That issue is the subject of the “Non-Newtonian Mathematics for Economists.”¹⁴ Some summary points, referencing that report, are appropriate here.

We have just referenced the most crucial methodological flaw within the practice of today’s generally accepted classroom varieties of mathematics, and mathematical physics. It is an axiomatic issue, an ontological issue fairly recognized under the rubric of *reductionism*. This error of method, may

be traced through the intrinsic incompetency of Aristotle’s method, back through such of his predecessors as Parmenides, the Eleatic. Modern neo-Aristoteleanism, better known as empiricism, is a more radical version of Aristotle’s method. As documented in earlier published locations, the embedding of the neo-Aristotelean, empiricist fallacy in the currently more popular varieties of modern mathematical physics, is to be traced, in every case, from the influence of the founder of the European “Enlightenment,” the Venetian monk and mathematician, Paolo Sarpi (1552-1623). This is traced through Sarpi’s direct influence over such of his assets as Galileo Galilei and Francis Bacon, continuing through such products of that influence as the famous protégé of Venice’s Abbot Antonio Conti, Isaac Newton.¹⁵

To understand how that problem has shipwrecked, repeatedly, recent decades’ efforts to construct a modern mathematical economics, one must understand how the same empiricist method, responsible for this recurring problem, earlier shaped the foundations of what became generally accepted choices among the older classroom varieties of economics doctrines. That problem of method has been introduced to the work of modern mathematical economics, by the following principal routes.

The systematic forms of empiricist theories of surplus value are traced entirely to the extremely influential network of salons, operating throughout Europe, established under the coordination of Venice’s Abbot Antonio Conti. Conti created this network as one organized around the Conti-created myth of Newton’s genius. Among Conti’s most relevant assets, for the case of empiricist economics, are the Physiocrat Dr. François Quesnay (of France), the hoaxster Pierre-Louis Maupertuis (one-time head of Frederick II’s Berlin Academy), and economist Giammaria Ortes (the wide-ranging Venetian monk and inventor of Malthusianism).¹⁶

Three principal, respectively distinct sub-types of empiricist economics came directly out of the “Newtonian” (i.e., empiricist) economics created by Conti’s network of salons: Quesnay’s Physiocratic dogma, the British East India Company’s Haileybury school, typified by Adam Smith and Jeremy Bentham, and Karl Marx’s **Capital**. Of these three, the first two, the Physiocratic and Free Trade dogmas, were developed explicitly, by Conti’s salon, as attacks on the previously established economic science of the Cameralists (e.g., Jean-Baptiste Colbert) and Gottfried Leibniz. Marx’s **Capital** was developed chiefly as an outgrowth of the British Haileybury school’s influence, but also under strong influence by the writings of Quesnay.

Each of these three is distinguished from the other two by an axiomatic difference in the way the origin of economic

12. Ibid.

13. E.g., *So, You Wish to Know All About Economics?* op. cit., passim.

14. Loc. cit.

15. “Why Most Nobel Prize Economists Are Quacks,” loc. cit., pp. 31-38.

16. Ibid.

“free energy” is defined.

Frondiste Quesnay attributes society’s “macro-economic” profit, solely to “the Bounty of Nature,” and thus credits profit solely to the God-given property-title, over both land and that human cattle called serfs, held by the landed feudal aristocrat. In other words, Quesnay identifies “profit” according to the method of Aristotle’s *Metaphysics*, as an *epiphenomenon* of the feudal property-title.¹⁷

Smith, the lackey of the British East India Company’s William Fitzmaurice Petty (“Shelburne,” or “Landsdowne”), parodies Physiocrats Quesnay and Turgot directly, on all points excepting the attribution of the origin of profit; Smith attributes profit, as an *epiphenomenon*, to “the Bounty of Trade,” and thus credits it to those Venetian-style Anglo-Dutch financier aristocrats, who, some might say “coincidentally,” owned Smith’s employer, the British East India Company.

Marx, following such Haileybury economists, as Smith had followed Quesnay, attributed the *epiphenomenon*, profit (surplus value), to what American anarcho-syndicalist ideologues used to apotheosize as “the horny hand of labor.”

All of these empiricist varieties of economic doctrines, and their outgrowths, were also forerunners of the modern “chaos theory” of Ilya Prigogine, et al. Quesnay’s version of “chaos theory” was called *laissez-faire*. Adam Smith parodied Quesnay’s *laissez-faire* whole, Anglicizing it as “free trade,” and apotheosizing it as a pagan god, *The Invisible Hand*. Apart from Marx’s views on the subject of a transitional form of society, which he named “the dictatorship of the proletariat,” Marx, partly at Frederick Engels’ insistence, defended “free trade” against the economists of the American System, pronouncing Smith “scientific” on this account, and the contemporary American System economists of his time, such as Henry C. Carey and Friedrich List, not.

The relevance of that bit of history for today’s problem, is located by the following comparison. In the attempt to apply the procedures of modern mathematical analysis to economics, the mathematical economist suffers a twin burden. More obvious, perhaps, is the burden of the leftover ideological baggage embedded within taught economic dogmas; less apparent to most, but more significant, is the ideological baggage lurking within the methods of today’s generally accepted mathematical physics itself. In both aspects of the matter, the erroneous axiomatic assumptions are identi-

cal; it is from the ideological baggage of Sarpi’s empiricist method in mathematical physics, that the central, epiphenomenalist features of the ideologies of Quesnay, Haileybury, and Marx—and of Norbert Wiener and John von Neumann—were derived.

Formally, the source of the problem is the plain error of assuming, that the cause of a phenomenon is implicit in the structure of the algebraic expression employed to represent a measurement of the relevant effect. The typical expression of this error, is the mechanistic notion of physical space-time, as kinematic interaction among moving bodies “floating” within the vacuum of idealized Euclidean space-time: the mathematics of Sarpi, Galileo, Hobbes, and René Descartes, as depicted, nearly two centuries later, by the gas theory of Britain’s Lord Rayleigh.

The apologies for such mechanistic schemes, presume that cause may be represented mechanistically, as an infinite, statistical chain-sequence of percussive interactions (plus analogous radiant action), and “action at a distance.” That is the method employed by Galileo, Newton, and others, in their parodies of the laws of gravitation and motion given earlier by Kepler. That is the Eighteenth-Century, so-called “Newtonian” method employed by Conti’s salon, to define empiricist economic dogmas, the Malthusian dogma of Ortes, and the radically “Newtonian” social theory of Maupeituis, Ortes, and Jeremy Bentham’s **Introduction to the Principles of Morals and Legislation**. This method, supplied to Hobbes by his mathematics teacher, Galileo Galilei, was the premise for his social theory; it was upon the basis of this model, that the central doctrine of British moral philosophy, and social theory generally, is derived.

The issue of method, summarily, is this. *Although we, can, and must, employ the indicated methods of mathematical-economics modelling to measure the not-entropic effect of “macro-economic” economic processes, it is absurd to conclude from that, that we might seek the cause of the not-entropic growth of successful economies in terms which can be represented by conventional mathematics.*

Although the causal connection can not be depicted by resort to conventional classroom mathematics, it is readily observed in other ways. The rise of the human population, from the level of several millions possible for a man-like higher ape, to hundreds of millions, and then billions, with a correlated improvement in the demographic characteristics of family households, is crucial evidence to this effect. Man is the only species which can repeatedly, willfully increase its species’ range of achievable potential relative population-density. The experience of modern European civilization, since the mid-Fifteenth Century, prompts us to refer to fundamental scientific, and derived technological progress in the productive powers of labor, as typifying the unique potential of the human species.

This latter observation points toward a solution for the

17. The Physiocrat followers of Quesnay, represented a stratum of France’s rural feudal aristocracy which had been known, during the Seventeenth Century as the *Fronde*, the pro-feudalist opponents of Henry IV’s, Cardinal Richlieu’s, Cardinal Mazarin’s, and Minister Jean-Baptiste Colbert’s efforts to continue King Louis XI’s policy of building France as a leader in establishing and developing the modern, anti-feudalist form of nation-state. The *Fronde* had been associated, deep into the Eighteenth Century, with the House of Orleans, and was, like Orleans, closely connected both to Sarpi’s Venice, and Venice’s other asset, the British financier aristocracy.

problem of identifying the cause of not-entropic economic growth. This also leads to the discovery of articulable policies, by means of which higher rates of such not-entropic progress may be realized in society's practice.

Any valid discovery of principle in science, has an effect equivalent to changing one or more among the set of axioms underlying an established formal mathematical physics. From a formal-mathematical standpoint, this has the effect of introducing an absolute discontinuity, separating the theorems of the new mathematical physics from those of the old. This is analogous to the communication of a metaphor, from the mind of the poet to the hearer, by means of poetic ironies. The idea corresponding to the metaphor, can not be explicitly represented within the poem; rather, the ironies (paradoxes) of the poem are employed to prompt the mind of the hearer to regenerate the solution to the paradox, which is the metaphor as conceived by the poet. These ideas are of the form of Platonic ideas, as distinct from sense-perceptual, or empiricist conceptions. All the essential ideas of principle in science and Classical art-forms are of this Platonic type.

This consideration leads us away from the empiricist's notion of algebraic causality, back to the Platonic notion of Reason, as that notion was employed by Johannes Kepler, and to the notion of "necessary and sufficient reason," as employed by Gottfried Leibniz. This leads us beyond con-

ventional mathematics, into the higher physical space-time geometries prefaced by Bernhard Riemann's 1854 *Hypotheses* dissertation, and the notion of the higher transfinite of Georg Cantor.¹⁸

Although this does not alter the form of the set of inequalities constructed to measure the effect of relative economic not-entropy, it enables us to locate the efficient causes of that effect, and to identify those changes in policy of practice by which that effect may be sustained and enhanced.¹⁹ In particular, it identifies the relationship between certain well-defined principles of education and related social policy, and the general principles governing the proper form of relationship to be established and maintained between man and nature. Above all, it removes that quality of irrationalist superstition which prevails in the teaching and shaping of economic policy, in both the classroom and the governments, today.

The important thing, is to put the economic-policy dialogue among the scientific communities of nations on this footing.

18. "Non-Newtonian Mathematics for Economists," loc. cit., passim.

19. Ibid.

Coming soon in EIR

The Schiller Institute, which in 1992 issued *A Manual on the Rudiments of Tuning and Registration*, Book I, is currently preparing the second volume of this two-volume series. Book I focussed on the principles of well-tempered tuning, registration, and the *bel canto* singing voice; the second volume will treat the entire array of instruments and voices which comprise the perfected Classical orchestral and choral medium.

Lyndon LaRouche, who initiated the project, met on July 30 with several collaborators to discuss how to present the crucial, thematic element of Book II: motivic thorough-composition, or *Motivführung*. His aide-memoire, written after that meeting, will be featured in an upcoming issue of *EIR*.

The first volume of the Music Manual, which presents the scientific case for a well-tempered $C = 256$ scale, created a sensation in the music world, with many leading opera singers, in particular, joining the Schiller Institute's call to return to the "Verdi tuning," from the stratospheric tuning which characterizes most performance today.



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