EIR Special Report

Systems analysis is white-collar genocide

by Lyndon H. LaRouche, Jr.

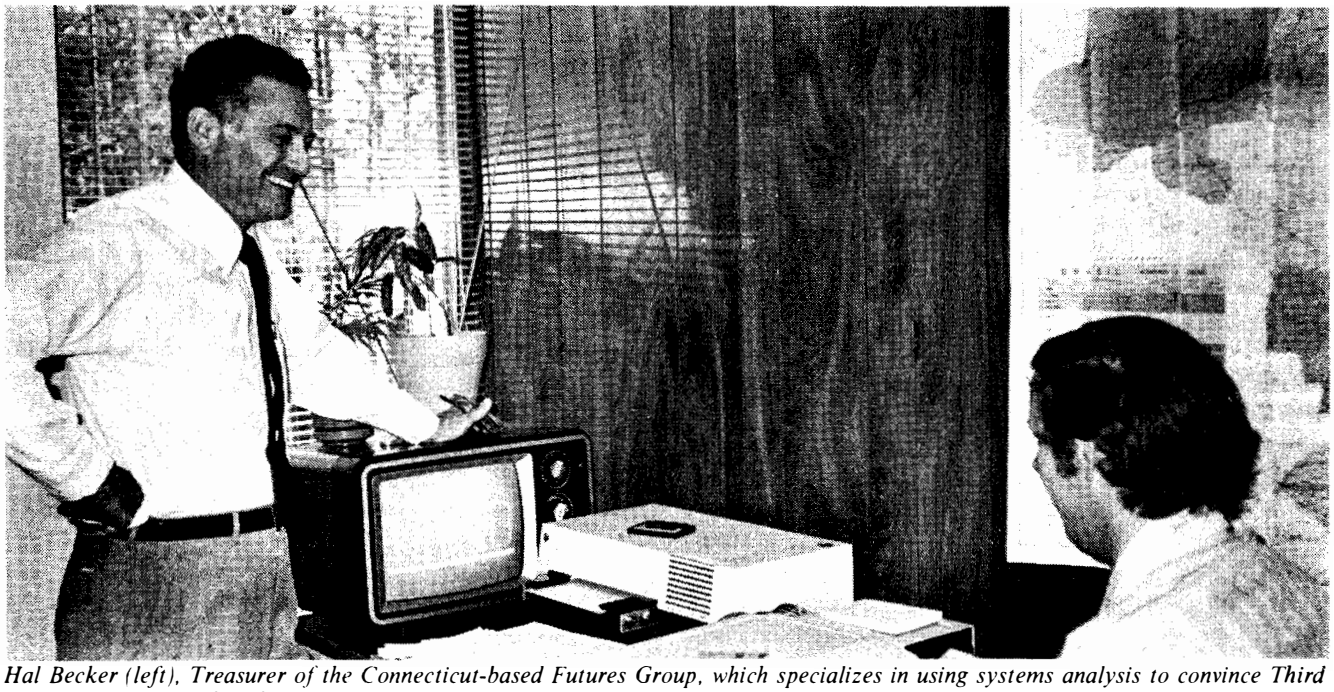
If you ask me which of the Nazi leaders was the most depraved, I tell you it was Hjalmar Schacht. You object? Then, let me ask you a question. Which has the more evil motives: an epidemic of pneumonic plague, or the chemist who deliberately unleashed that infection upon a major city?

It is an ugly, painful, but completely true fact: Each and every recipient of the Nobel Prize for economics has achieved academic fame for advocating policies which mean global genocide in today's practice. The case of the abysmally immoral drug-lobbyist, Professor Milton Friedman, is almost too obvious. In only one of his academic claims is Friedman correct; he is absolutely correct when he asserts that his monetarist doctrines are modeled upon those of the Nazi regime.[1] Are the other Nobel economics award recipients less evil than Friedman? To the helpless victims of the Auschwitz gas-chambers, all SS uniforms looked the same.

This brown stain on the Nobel Prize is no mere academic controversy. Consider such cases as the economics departments of Yale and Cambridge (England) universities, or of the Wharton School at the University of Pennsylvania. Whence come the policies of intentional genocide of such supranational agencies as the International Monetary Fund and World Bank? The economics departments cited are not the only sources of such genocidal policies of practice as "IMF conditionalities," but they are among the leading such sources, and very, very witting sources as well.

To locate the extent of this evil, there is no better reference-case than that of the Vienna-based International Institute for Applied Systems Analysis (IIASA). It is IIASA which bridges the pro-global-genocide forces of the NATO countries to the pro-genocidal faction in Moscow. No greater concentration of evil can be found outside the genocide-capital of the world today: Peking.

Like Aurelio Peccei's genocidalist Club of Rome, IIASA is a 1960s



Hal Becker (left), Treasurer of the Connecticut-based Futures Group, which specializes in using systems analysis to convince Third World governments that they need population-reduction programs.

creation of the NATO political-intelligence bureaucracy (e.g., the OECD). Since the late 1960s, IIASA has served as the broadest avenue of direct, two-way collaboration between the NATO command and officials of the Soviet KGB. Only the British Secret-Intelligence-Service (SIS) link into the hierarchy of the Russian Orthodox Church has approximately comparable importance to this same general effect.

IIASA is headed by a Soviet national, Dzhermen Gvishiani, son-in-law of the late Prime Minister A. Kosygin. According to Scandinavian and Austrian intelligence-sources, Gvishiani is one of the highest-ranking recruiters of Soviet spies currently in place in Western Europe. Through his massive penetration of leading nuclear-industry and other scientific circles, Soviet access to the most sensitive areas of military secrecy is assured. Nor is it irrelevant that Gvishiani cooperates closely with those outwardly pro-nuclear-energy circles within Western nuclear industry which are in fact working actively to neutralize pro-nuclear-energy efforts in the West.

Important as that espionage aspect of IIASA may be, Gvishiani's role as a Soviet KGB asset is the least interesting feature of his activities. In any case, NATO intelligence is well-informed of Gvishiani's Soviet rank and his activities on behalf of the KGB. Such matters have even been advertised in published news releases! NATO has not lessened, but has increased its collaboration with Gvishiani. For the NATO political-intelligence command, there are higher than cosmic considerations motivating NATO's intimate collaboration with Gvishiani.

Look behind Gvishiani: in Moscow. Look into leading circles of the Soviet command. Within and proximate to the Soviet Communist Party's foreign-intelligence organization, IMEMO, there exists a task-force, a constellation of influential figures associated with a project known as "global systems analysis." This project is currently reported as intending to release during 1982 a pro-global-genocide proposal. These Soviet circles brag that that Moscow report will be more radical than the Club of Rome's *Limits to Growth* and President Jimmy Carter's proposals for global genocide *(Global 2000, Global Futures)*.

Recently, the pro-genocide ("systems analysis") faction in Moscow has surfaced as a considerable factional force in the ongoing Soviet leadership-succession contest.

Look from IIASA westward. As we examine the pedigrees of the forces linked to IIASA through NATO channels, we encounter immediately all of the leading pro-genocide institutions and networks of the "West."

IIASA's special importance, by comparison with which the matter of spying becomes almost trivial, is that it is the principal official link between the pro-genocidal factions in both the East and the West.

The emphasis on "systems analysis" in IIASA's official title is highly significant. This brand of "systems analysis" originates, by that name, in the Cambridge University (England) Apostles. The Apostles, based on Cambridge's Trinity and King's Colleges, is the Cambridge arm of the command of British SIS. It is principally at King's College, among a circle including the neo-Keynesian Mrs. Joan Robinson, that this genocidal concoction called "systems analysis" was brewed.

In the United States, Cambridge "systems analysis"

is dominant not only in the economics departments of Yale, Princeton, and so forth. Some of the most important centers which combine systems analysis with planning of global genocide include the RAND Corporation and the Operations Research network based historically on Johns Hopkins University campus. Both these latter institutions were creations of British SIS's psychological-warfare division (PWD), the London Tavistock Institute (Sussex). The dominant think-tanks at Palo Alto, California are a significant part of this complex.

The academically influenced reader will pose a question to us at this point. "Is it not true," such a reader might ask, "that systems analysis is morally neutral, and that it is merely a coincidence that some people are misusing systems analysis to further their own genocidal purposes?"

The answer to that question is that the methods and procedures associated with "global systems analysis" are intrinsically genocidal. To promote and to employ such forms of systems-analysis techniques for policy-making is in and of itself an act of global genocide. In other words, *the promotion of such systems analysis is a prima facie capital offense under terms of the Nuremburg Code.*

Unless the influence of systems analysis is eradicated from policy-making of governments and supranational institutions, the resulting number of genocidal deaths will exceed by up to a hundred-fold the genocide perpetrated by the Adolf Hitler regime.

Now, we clear up possible confusion concerning interpretation of the term, "systems analysis." Once that is settled, we proceed to prove conclusively that the practice of systems analysis in the sense of IIASA's practice is in itself an act of genocide.

Three alternative meanings of 'systems analysis'

In the most generous view of the term itself, "systems analysis" might be employed by this or that person to signify one of three things. First, it might signify a kind of systems analysis practiced outside the realm of economic policy-making. Second, it might signify a form of economic systems analysis such as the application of linear-programming techniques to scheduling problems of a retail chain, an industrial corporation, or some other smaller-scale application to relatively short-term projections ("micro-economics"). Finally, it may signify what we have singled out for attention here: the application of economic systems analysis to whole economies or supernational complexes of economies ("macro-economics") over a period as long as a decade, a generation, or more.

Critics will no doubt argue that the principles of "micro-economic" systems analysis are almost identical to those of "macro-economic" applications, to whole national or supranational economies. There is a significant degree of truth to that argument. Nonetheless, "micro-economic" systems analysis is often either morally neutral or sometimes useful; whereas, "global systems analysis" is invariably evil.

See that delicious peach. It contains cynanide! No, you may eat it quite safely. However, if I extract the cyanide from a very large number of peach-pits, the result is not marzipan, but an instrument of homocide. Something relatively harmless, or even beneficial on a small scale, may be deadly on a large scale. We explain, briefly, how and why this analogy applies in the working-point at hand.

First, systems analysis in general.

It is sometimes useful to misrepresent a process by interpreting (misinterpreting) that process as if it were a network of interconnected chains of causes and effects. If such a fictitious network can be simplified, reduced to a matrix of the sort agreeable to present-day computer technology, a process which appears to defy mathematical analysis in its true form may be analyzed with a reasonable minimum of error of calculation by the methods of approximation we have indicated.

That will serve as a fair summary of the general meaning of systems analysis. Now, we shift attention to the application of such methods to economic analysis.

The application of systems analysis to economic and related cases developed during and out of World War II "operations research" practice. Economic-network problems (scheduling problems) were simplified in the descriptive form of sets of linear algebraic expressions, and calculations performed on the matrices so constructed. "Linear programming" is the most commonplace of the buzz-words put into circulation through such approaches. There were other aspects to the practice, but our illustration is quite adequate for the point at hand.

An industrial corporation (for example) wishes to optimize its paid-in profits from sales. It wishes to compare such profits with the production and distribution costs they incur, and also the capital expenses incurred by increasing sales by some amount, and consequently, the total cost of the realized profit-contribution from sales. Such a firm would begin the analysis required by projecting its share-of-market potential by delivery-weeks ahead (for example). To effect such deliveries, clearly the finished goods must be available for shipment at some predictable point in time in advance of the customer's receipt of such goods. To have goods available for shipment, the goods must be produced, and in finished-goods inventory on the shipping-date required.

If there were only one product in question, the calculation might be relatively simple. If numerous kinds of products are included in the mixture of goods included in an economical shipping-quantity to a cus-

tomer, the calculation becomes more cumbersome. Goods are produced in batches or streams. Batches must be in economic lot-quantities. Different products use different ratios of varying combinations of production and other capacities. Materials and semi-finished goods must be on hand to start the production-cycle for each unit of production scheduled. Purchase-orders must be placed in advance for such materials and semi-finished components. Inventory risks shrinkage and incurs the costs of financing capital committed to inventory . . . and so forth and so on.

The calculation of proper day-to-day increments to each aspect of the overall schedule can be performed by use of standard ratios of costs and so forth. Despite the several kinds of fallacious fictions included in the method and statistics employed, the benefits of making such an approximate calculation are very large, over the short-term, relative to the actual amount of aggregate error prompted by the fallacious assumptions.

We have outlined such an illustrative case to this relevant purpose. As long as these indicated and related forms of systems analysis are restricted in application to relatively smaller-scale ("micro-economic") cases over short-term spans, and with a carefully selected, limited number of considerations taken directly into account, such "micro-economic" applications are often beneficial—assuming that both the analysts and the management possess and excercize reasonable competence. The benefits vastly outweigh the errors caused by fallacious assumptions of the method employed.

The moment we shift the use of similar methods to whole national economies, especially over periods in the range of five years to a generation or longer, the benefits become relatively infinitesimal in respect to the gross errors arising from fallacious assumptions.

However, global systems analysis is not evil simply because it is intrinsically incompetent: There is something nastier than mere incompetence afoot.

As a final preparatory step, we provide the reader with a bird's-eye view of the rigorous proof we are about to summarize.

First, we shall give the proof that all healthy forms of human culture have economic processes which are characteristically *negentropic*. We shall explain what this term, negentropic, signifies, in respect to technological progress and growth in scale.

Second, if a society's economy can be fairly described, over successive periods, by means of linear economic models, that society is very sick, and will die unless radical changes are introduced to its policies of economic practice.

Third, if policies adduced from linear models are superimposed upon the budgets, investment-policies, and related decision-making processes of a society, such an imitation of the policies of Nazi Finance Minister Hjalmar Schacht leads consistently toward the use of both labor-intensive forms of forced labor, toward the expedient elimination of "useless eaters" which Albert Speer implemented on Hitler's behalf at such locations as Auschwitz, and toward colonialist looting-practices such as those the Nazis imposed upon occupied territories and populations of Eastern Europe.

We thus provide the rigorous proof for a fact which is obvious enough on other grounds to any sane and moral adult. Any influential person or persons who propose to insert Malthusian population-policies into the policies of practice of either governments or supranational institutions is a mass-murderer in the same sense as Hjalmar Schacht, Adolf Hitler, and Auschwitz's Albert Speer. Anyone who supports Malthusian policies, even as a simple, probably hashish-stinking "environmentalist," is an accomplice in mass-murder in the same sense as the SS guards at Auschwitz.

What we are accomplishing, in exposing IIASA as in violation of the Nuremberg Code respecting "crimes against humanity," is to show that Malthusianism criminality is not merely something superimposed upon economic policy-making. The axiomatic features of the doctrines of political-economy taught at most universities, and accepted by most of the economics profession today, is intrinsically a Malthusian doctrine, and thus intrinsically a cult-dogma of genocidal mass-murder of peoples.

The proof we summarize here is rigorous, but elementary. We require as included evidence for this proof nothing which is not properly within the intellectual reach of adults whose education has included a proper secondary-school education. With a reasonable amount of concentration, every intelligent adult with such an educational background can assimilate the proof we now develop.

A proof based on economic science

The prevailing reason our proof is not already common knowledge of literate persons is, as we noted, that all known university economics departments and most of the members of the economics profession today are incompetents, teaching and using a Malthusian cult-doctrine based chiefly on British political-economic teachings, or on the neo-positivist, radically-fascist versions of British political-economy associated historically with the Vienna school.

The first point to resolve in outlining the proof is therefore the question: What is a competent variety of economic science?

The most effective way in which to make the matter clear to the intelligent layman is to stress the fact that British political-economy first appeared a hundred years after the science of modern industrial economy had been developed in all essentials on the continent of

Europe. A century after the publication of the founding work of modern economic science, Gottfried Leibniz's *Society and Economy,* a lying operative of the Edinburgh division of the British Secret Intelligence Service (SIS), Adam Smith, published, on the eve of the American Revolution, a lying propaganda-tract whose popularized short title is *The Wealth of Nations.* Prior to this pro-colonialist tract, aimed chiefly against the Americans, the British produced not a single attempt at coherent apologetics in political-economy.

Adam Smith was immediately subordinate to the chief of Edinburgh SIS, David Hume. The point to be stressed in this connection is that the 18th and 19th centuries' SIS was interchangeable with the direction and bureaucracy of the British (and Dutch) East India Company.

This British East India Company, the principal financier and political-intelligence arm of the ruling families of Britain, was in fact under the financial (and political) control of interlocking financier interests dominated by the immensely wealthy and powerful family funds of Venice and Genoa, the financier interests of the Italy-centered "Black Guelph" families of Europe and the Middle East, the so-called "black nobility" of Czarist Russia, Austro-Hungary, Byzantium, and so forth.

These Venice-Genoa-centered financier interests, which financed and directed the establishment of the 1603 and 1660 British monarchy, have always controlled, since those dates, the financial center known as the City of London. The British East India Company, like the Dutch East India Company which owned the House of Orange, was a spin-off from the Venetian Levant Company.Most of the major insurance cartels of the world today are spin-offs and subsidiaries of Venetian-family rentier-interests based today in Venice, in Venice's colony known as Switzerland, and in the "unregulated, offshore" financial complex based on the British Commonwealth.

The British East India Company, including Venetian inside-control over that Company, is key to understanding all British monarchical policies from 1603 to the present date—although the swastika-bearing East India Company itself has almost vanished into the ranks of its numerous financial and political progeny. The British SIS today is the hard-core residue of the British East India Company.

The first academic chair in political-economy in Britain was created and financed by the British East India Company on behalf of that Company's agent, the Reverend Thomas Malthus. David Ricardo, a close collaborator of Malthus's (contrary to Karl Marx's frantic effort to deny this fact), was an official of the Company. So was Jeremy Bentham, the author of modern Jacobinism, and the inventor of the "hedonistic calculus" used as the basis for modern British political-economy by company official John Stuart Mill—and by William Jevons and Alfred Marshall. J. M. Keynes, Hjalmar Schacht, Milton Friedman, the fascist Fabian Society relic known as Friedrich von Hayek, and the Vienna neo-positivist lunacy of John von Neumann and Oskar Morgenstern,[2] are all direct offshoots of Bentham's and Mill's version of the Hobbesian "hedonistic calculus."[3]

Among all leading industrial economies today, all of the successful industrial economies developed during the course of the 19th century were developed under direction of a body of economic science directly opposite to every principle of British political-economy. These cases include the United States (1789-1866), France (into 1814), Germany (1809-1914), northern Italy under Cavour, and Japan (1868 to the present).

In each of these cases, including pre-Napoleon III France, the industrial development was predominantly a *self-sustained* progress in technology, education, and industrial and agricultural development. Only Britain, among those nations, based its industrial development at home on colonialist looting of regions and populations abroad. After the enactment of the treasonous Specie Resumption Act of 1876-79 in the United States, Britain's City of London had world-domination over financing of world trade and of debt of nations, a continued domination, much-revived since August 1971, which is the principal source of support of price of the pound sterling (through looting of other nations) today.

Modern economic science began more than three centuries before Adam Smith's *Wealth of Nations,* in the policies of economic development and military strategy formulated for early 15th-century Italy by the great Byzantine scholar and stateman, George Gemisthos Plethon. The 15th-century Golden Renaissance's development of statecraft was mediated through such principal channels as the School of Raphael. This School of Raphael produced the great Neapolitan culture which was the internationally admired jewel of southern Italy until the destruction of Naples by Horatio Nelson and such creatures as the Acton family of Britain. At the beginning of the 17th century, when formal modern economic science began, the world-leadership in the science of statecraft was Naples, especially the circle identified with Tommaso Campanella.

From these outgrowths of the Golden Renaissance two essentially identical schools of economic science emerged in 17th-century Europe. In France, where this science was fostered by a group known as *les politiques,* the name of economic science was *mercantilism.* (Through, chiefly, the connections provided by Benjamin Franklin, French mercantilism provided the foun-

dations for the *American System of political-economy.*) From Italy itself came *cameralism,* which was the name chiefly used to define economic science in Germany into the 1840s.

During the 1670s, during the same period Leibniz completed the discovery of the calculus reported in his 1676 paper,[4] Leibniz also published his *Society and Economy,* the founding work for all economic science since. Later, in 1952, this writer effected a major discovery in economic science, representing a further advance in the power of mercantilist-cameralist knowledge, but that discovery is merely an elaboration of conceptions already developed (chiefly) by Leibniz during the 1670s.

To define economic science as a category of specialized knowledge for the literate layman today, it is sufficient to compare the contributions of Campanella's circle and of Leibniz, and to trace the effects of Leibniz's revolution in economic science into the emergence of the American System of political-economy. Once we have accomplished that definition, that outline, we can then concentrate on the ABCs of economic science, free of the cult-nonsense spilling over into disinformed popular opinion from the university economics departments.

Cameralism and mercantilism were most essentially republican adversaries to the feudalistic doctrines of the 14th century and the Venice-directed Counter-reformation of the 1527-1653 period.

The feudalists, like the British today, were axiomatically *physiocrats,* who argued that all wealth of nations was derived ultimately from geographical accidents such as natural resources. The feudalists argued that the only source of profit to society is some form of rent, ultimately as "ground-rent" charges imposed upon the extraction of wealth from natural resources. Beginning with Adam Smith's *Wealth of Nations,* British (and, Viennese) political-economy expanded the physiocratic definition of natural resources to include human labor, defining human labor in the same analytical terms of axiomatic assumption appropriate to cattle.

"No," shouted the cicle around Tommaso Campanella. They echoed their republican (city-builder) predecessors, including Plethon, Leonardo da Vinci, et al., on this crucial issue. "The wealth of nations can not be sustained on the basis of geographical accidents such as natural resources. The sole, continuing source of wealth is the development of the productive powers of the population of the nation." Campanella's circle emphasized what we today would term public education, technology, and state action to foster public works and private enterprise based on advancement of technology. Campanella's circle also stressed the role of the machine and kindred development of tools of agricultural and industrial production. Such families of technologically advancing series of tools, they termed—as did Alexander Hamilton later[5]—"artificial labor."

The crucial thing lacking in Neapolitan and related forms of pre-1670 mercantilism and camerialism was Leibniz's contributions. The center of Leibniz's fundamental contributions to economic science was his elaboration of the principle of the heat-powered machine, "by which one man might accomplish the work of a hundred others."

Concretely, Leibniz went beyond the notions of machines powered by explosions (Christian Huyghens) and beyond the development of the first successful steam-engine in collaboration with Papin.[6] Leibniz generalized the notion of development of an indefinite series of improved sources of heat to power machines, and then examined the comparative features of machines in terms of the efficiency of their use of heat to multiply the productive power of labor. From these considerations, Leibniz invented three fundamental notions of all modern science, economic science included: *work, power,* and *technology.* (*Technology* was otherwise known among Leibniz's French followers as *polytechnique.*)

All of Leibniz's and associated contributions to economic science were embodied in the statecraft of Benjamin Franklin's factional allies among the leaders of the American Revolution. From 1783 through 1876, American policy was divided between two factions: the Federalist-Whig faction (Washington, Adams, Monroe, John Quincy Adams, Henry Clay, Henry C. Carey, Abraham Lincoln, et al.), who deployed the American System of political-economy, and the Jacobin opponents of the Whigs, including Presidents who substantially ruined the U.S. economy during their terms of office (Jefferson, Madison, Jackson, van Buren, Pierce, Buchanan). It was chiefly the influence of the American System which effected the previously-cited 19th-century economic development of the United States, Germany, northern Italy, and Japan.

The case of France's economic development (prior to 1814) was chiefly parallel to the American System, but based on the same mercantilist principles (e.g., Claude Chaptal, Charles A. Dupin). In the United States, Germany, northern Italy, and Japan—as in the Russian policies of Czar Alexander II and Count Sergei Witte—it was the influence of the American System, directly and by that name, which created all of the institutions responsible for those nation's economic progress during the recent two centuries.

The name, "American System," was coined by U.S. Treasury Secretary Alexander Hamilton in his 1791 Report to the Congress, *On The Subject of Manufactures.* This was the policy which brought the United States out of 1789 bankruptcy and crises into the prosperity which Jefferson and Madison nearly ruined. The influence of the British East India Company and its agent Gallatin over U.S. policies under Jefferson and Madison, was

stressed by a close collaborator of both Franklin's and Hamilton's, Mathew Carey, in the course of the depression caused by Jefferson's and Madison's pro-free-trade policies. Carey's influential writings and organizing contributed greatly to the revival of the (dirigist, protectionist) American System under Monroe and John Quincy Adams, as well as the revival of the U.S. military, which Jefferson and Madison had virtually ruined. It was the Whig Party which continued the American System policies, with aid of the German agent (and American citizen) of the American System, Friedrich List.

After the death of his father, Mathew Carey, and Friedrich List, Henry C. Carey, Lincoln's economic adviser, took the lead in international spokesmanship for the American System against the enemy, the British monarchy and the British system of "free trade."

In 1868, Japan's Meiji Restoration launched the industrial miracle of that nation (to date) on the basis of adoption of the American System of Hamilton, List, and Carey.

Although the sovereignty of the United States, respecting its principal components of national debt, national credit, and national currency, was treasonously subverted to Britain's advantage by the 1876-79 Specie Resumption Act, the institutions of public education and industrial and agricultural development were so deeply embedded in the popular consciousness and practice, that the impulses of such institutions could be eroded, but not destroyed, over the period from 1871-76 into the launching of the treasonous, Malthusian "post-industrial society" cult's policies during the 1960s.

In brief, then, mercantilism, cameralism, and the American System of political-economy represent different brand-labels for the only economic science, the only science of statecraft which has succeeded in producing *self-sustained* economic development of a capitalist economy. It should be added that the relatively successful features of the Soviet economy have always been adaptations of the principles of the American System to a non-capitalist form of economic development—ever since V. I. Lenin revived Count Sergei Witte's and Czar Alexander II's demand that Russians learn to think in economics like Americans.

The ABCs of mathematical economics

The fundamental expression for all mathematical analysis of economic processes is some expression equivalent to:

$$P = F[(n + m)/n]$$

in which P signifies *potential relative population-density;* F signifies some function, to be discussed here; and, n and m are *degrees of freedom in economic phase-space.* By degrees of freedom, we signify the *complexity* of the economy, as typified by its division of labor and by the complexity embodied in machine-tools and analogous forms of capital equipment of both production of goods and physical distribution of newly-produced goods.

The function is determined in the following manner.

In any level of technological development of society, only a certain range of man-altered conditions, typified by "natural resources," can be exploited at acceptable costs. As such man-altered conditions are necessarily depleted *by any unchanging mode of production,* the costs of exploitation of those conditions rises. Therefore, all forms of society based on the equivalent of "zero-technological growth" are intrinsically dying societies, societies wanting elementary qualities of moral fitness to survive.

Therefore, societies approximating "zero technological growth" policies of practice are societies self-condemned to die of "entropy," as we shall develop that point rigorously here.

It is only through technological progress that society increases its per-capita productivity, thus combatting rising costs of selected resources, and also increases the available range of varieties of usable resources. This technological progress necessarily increases the complexity of the division of labor, and also increases the complexity of the machines and analogous investments employed for production and for physical distribution of newly-produced goods.

Therefore, the successful continued existence of societies depends upon advances in technology in terms of increases $(n + m)$ in complexity of production relative to a previous level of complexity at a lower level of technological development (n). The mathematical function which corresponds to such an analytical requirement—$F[(n + m)/n]$—is best termed a "negentropic" function, or, alternately, a *Riemannian function,* the latter emphasizing the greatest 19th-century physicist, Bernhard Riemann (1826-66) of Germany's Göttingen University.

The proof that "systems analysis" is intrinsically genocidal is supplied within the limits of the most elementary features of such a negentropic, or Riemannian function. That proof, although elementary, is rigorous and conclusive, and would not be improved in any essential respect by introduction of more complicated mathematical-physical considerations.

The elaboration of the notion of potential relative population-density provides the uniquely appropriate basis for situating the proper interpretation of notions of work, power, energy, and technology. That two-phase elaboration suffices to prove conclusively why "systems analysis" is inherently the practice of genocide.

Potential relative population-density signifies the number of persons which can be sustained on an

average square-mile of habitable territory by means solely of the productive efforts of that population's own labor-force. This must be measured *relative* to both the variable quality of man-altered habitable territory and the level of technological development by which "ecological" characteristics are properly defined. It is clearly, the *potential* relative population-density we must measure, rather than the present census of population.

If one accepted the Club of Rome's adopted method, as in the fraudulent *Limits to Growth* of MIT specialists Meadows and Forrester, then this planet of ours was already grossly overpopulated when the level of several millions individuals was exceeded. If Meadows's and Forrester's arguments had been valid, neither Meadows nor Forrester could ever have been born to offer such fraudulent arguments.

Examining the historical (plus archeological) evidence retrospectively from the vantage-point of Leibniz's *Society and Economy,* the perpetuation of human existence over thousands of years to date has depended entirely on the emergence of new forms of society more advanced technologically than their predecessors. This advance correlates, in terms of an exponential function of some ostensible complexity, with increase of mankind's potential relative population-density. It also correlates, in a similar fashion and degree, with a geometric growth of the required average level of per-capita energy-throughput to society, relative to increases in potential relative population-density.

If we examine such historical evidence from the vantage-point of systems analysis, a most interesting feature of this progress of humanity comes to light, although systems analysis can discern this only negatively.[6]

As society advances, the variety expressed in elaboration of tools and of the division of labor in production of goods increases. This alteration in the input-output characteristics of the economy limits the application of any adopted set of linear algebraic descriptions of the economy to a narrow range in span and in time. The number and designation of input-output "lines" increases, with some lines dropping-out. The coefficients, as well as the array of terms within each "line," undergo alteration.

As Bardwell and Parpart emphasized, in explaining the total breakdown of all published "econometric studies" of effects of the October 1979 Volcker-Carter monetarist measures, when economic processes are radically altered in some determining feature, the transformations in the behavior of the economy are roughly analogous to what occurs when ice melts to form water, or water boils to form vapor.[7] (Or, the reverse process.) The changes, in short, are comparable to *changes in physical state* in a physical process. Another term is "phase-change."

In the simplest illustrative case, an economy undergoing concurrent growth in scale and productivity (technology), the systems analyst would be able to approximate the behavior of the economic process over relatively short terms, but would be obliged to develop a different model for a succeeding period than for the preceding period. If we can assume, as this illustration rightly admits the assuming of such a case, that technological progress is being ordered by a policy of practice prevailing in that society, then the different models developed by the systems analysts could be listed as a series:

$$a_1, a_2, a_3, \ldots, a_n,$$

to which we apply the conventional practice of identifying any arbitrarily selected one term, in the interval from a_1 through a_n, as a_i.

In this series of "systems-analysis models," to attempt to use model a_i to project the state of the economy under terms of model $a_{(i+1)}$, leads to highly inaccurate results. This is the key to the abysmal failure of the Chase, Wharton School, and all other standard "econometric" institutions over the period October 1979 to the present. It is conversely the key to the reason that the LaRouche-Riemann analysis has been highly accurate, and the only analysis which even approximates the reality of developments.[8] The LaRouche-Riemann model de-emphasizes the short-term, linear connections, and focuses upon the non-linear characteristics of phase-change in the economic process; that is why the LaRouche-Riemann analysis emerged under conditions following November 1979 as the only competent approach to analysis of the current process of global economic devolution (e.g., depression).

The series, a_1, signifies that within the span of approximate applicability of each "model," a_i, there are occurring "non-linear," hidden developments which are transforming the economy into the state represented by "model" $a_{(i+1)}$. In other words, it is those considerations which linear systems-analysis axiomatically ignores, those cumulative "non-linear" effects, which produce the ordered succession of transformations, a_i.

This is a more rigorous manner of stating a point we outlined earlier in this report. As long as linear economic analysis is limited to a short time-span, and is twofoldly limited in scale of application to limited, gross features of a "micro-economic" process, the intrinsic fallacies of linear analysis can be relatively ignored for purposes of calculation of estimated values. As we enter into the broader range of policy-decisions affecting the transformation of a_i into some successor state describable by $a_{(i+1)}$, it is the intrinsic fallacies of the linear method which predominate in the comparison of calculated and actual effects.

What we have outlined for the illustrative case, of successive phase-changes under conditions of growth, is true for the case of economic decline, the case for the step-wise collapse of the economy under continuation of the Carter-Volcker policy of October 1979.

There is no middle ground between growth and devolution. There is no possible condition under which a linear policy-model of an economic process can sustain equilibrium over a period of even several years in the modern world.

All linear models are intrinsically zero-technological-growth models. All societies governed by zero-technological-growth in policy-making are economies undergoing entropic collapse, being directed into a devolutionary series of phase-changes.

Thus, in any circumstance in which linear thinking respecting economic processes shapes the policies of governments, banking, and so forth, that society is being directed into a devolutionary spiral, which, if continued, means convergence upon genocide. Lowering of the effective productivity of the economy (e.g., through unemployment of goods-producing labor, cannibalization of existing productive capacities, etc.) has the ecological effect of lowering the potential relative population-density. When the potential relative population-density is pushed down, as by Friedman and Volcker types of monetarism, below the level of the existing population, genocide emerges.

Part Two of this article will appear next week.

1. LaRouche, Lyndon H., Jr., & Goldman, David, *The Ugly Truth About Milton Friedman,* New York, 1981.
2. *The Theory of Games and Economic Behavior,* Princeton, 1944.
3. LaRouche, Goldman, *op. cit.*
4. Leibniz's published report on the discovery of the differential calculus was sent to the Paris printer in 1676, as Leibniz was leaving France, to return to Germany. For unexplained reasons, publication of this paper, which exists and whose authenticity is determined by datable elements of the Leibniz archives, was suppressed. This date, 1676, is eleven years prior to Newton's publication of an unusable concoction on which his reputation as inventor of the calculus was alleged to depend.
5. Alexander Hamilton, Report to the U.S. Congress, *On The Subject of Manufactures,* 1791.
6. Valenti, Philip, "Leibniz, Papin, and the Steam Engine," *Fusion,* December 1979.
7. On "phase-change" analogy for economies, see Bardwell, Steven & Parpart, Uwe, "Economics: the Thermohydrodynamic View," *Executive Intelligence Review,* May 6, 1981.
8. Goldman, David P., "Why the EIR Model Beat Wall Street's 1980 Projections," *Executive Intelligence Review,* Vol. 7, No. 34, Sept. 1, 1980.

Profile

Club of Rome moles in the Soviet Union

by Rachel Douglas, Soviet Sector Editor

In April 1979, the popular Russian weekly *Literaturnaya Gazeta* introduced its readers to the International Institute for Applied Systems Analysis (IIASA) in Laxenburg near Vienna, Austria. "People At A Globe," was its title for an article that concluded with the reporter's vision of people peering over a globe of the Earth—"a live, huge, eternal, small, defenseless, slightly flattened ball."

The image is familiar enough from the tracts of environmentalists who would like to rid the globe chiefly of people. But who are these Soviet globalists?

Dzhermen Gvishiani, the Deputy Chairman of the U.S.S.R. State Committee on Science and Technology and the son-in-law of the late Soviet Prime Minister Alexei Kosygin, is the Soviet systems analysis promoter best known in the West, for he and McGeorge Bundy are co-chairmen of the board at IIASA. Most recently, Gvishiani was welcomed to the board of the Club of Rome.

A look at Gvishiani and three other leading proponents of systems analysis in the Soviet Union takes us deep into Soviet policy-making circles, for foreign as well as domestic affairs. The systems analysts, it emerges, are intimately bound up with Soviet support networks for environmentalist mobs in the West, including those who parade under the hypocritical banner of "peace," while their targets for destruction are nation-states and political factions that have some policies for economic growth and avoiding war.

The trail leads into a nest of Soviet think tanks whose mother is the Institute for World Economy and International Relations (IMEMO), a major source of the Soviet doctrine that technology under capitalism exploits workers, strengthens the West, and is therefore undesirable. IMEMO, founded in 1957 and expanded by networks of the old Communist International or Comintern organization, is a channel of Soviet liaison with the Club of Rome and the Socialist International. Together with the International Department of the Soviet Communist Party Central Committee and the foreign policy sections of the Committee for State Security (KGB), IMEMO-centered forces account for the Soviet contribution to international environmentalism and terrorism.

It is equally evident, however, that a substantial part of the Russian globalist cabal intends to enforce the anti-