

with this problem in dealing with the Soviet government. I was asked by the Reagan administration to set up a discussion channel with the Soviet government in 1981; I did it in 1982-83. Unfortunately, there were certain people here and certain people in my country as well as Britain who didn't want to do what I proposed.

It was no mystery to me. In 1983—as I explained to a gentleman you know, you can ask him, Yevgeny Shershnev, who was then a diplomat of the Soviet system, I said that if the Soviet government—the Andropov government at that time—were to reject what became known as the SDI [Strategic Defense Initiative], the cooperation I proposed, which Reagan confirmed at least in the initial period, then within about five years the entire Warsaw Pact economic system would collapse from the economic strains of the military policy they had.

In 1988 I stated publicly again, what I felt it was necessary to say: that the collapse was imminent, and what measures should be taken.

Unfortunately, the government of Mrs. Thatcher of Britain prevailed, and they persuaded Georgie-Porgy Bush, as I call him, to adopt her policy.

My policy was that I had been right in 1983, and that the Soviet government had been wrong. But my purpose had not changed.

My purpose had been to unleash new technologies through dealing with the defense problem, to unleash the potential of Russia and other countries together to transform this planet—which is still my policy today, and the policy I recommend to my government.

What happened is, Mrs. Thatcher and other idiots, together, decided that since Russia was down and weak, and a potential adversary, they would do nothing to allow it to survive. It is not just Margaret Thatcher; it is the whole faction of British intelligence which stands behind her, which is the same faction as George Bush in the United States. They both tried to destroy the present President we have, which I hope he will not forget.

What is being done is *a deliberate looting of the former Warsaw Pact territory*, to the purpose of ensuring that it never becomes a world power again.

Foreign finance and privatization should be looked at as the mechanism of sucking the blood of the nation. The problem is, every part of the world is suffering the same problem: Africa, Asia, all of Asia; China has a different kind of problem. South America. The particular problem inside the United States is the same. *We are being sucked to death by a cancer of speculation*. Our answer should be to understand that first; and second, to prepare, in the moment of weakness of the cancer, to cut it out.

If we do not do this on a cooperative basis, there will be blood and chaos on this planet. Therefore, we must act to establish understanding and cooperation among people of good will around the world, to do this.

LaRouche Addresses INION

Russia, do not repeat the West's mistakes

Lyndon LaRouche made this presentation to a seminar at the Institute for Scientific Information on Social Sciences (INION) on April 28. Subheads have been added.

I'm very happy to be here. I have been here for several days, and I have a certain psychological impression of the reaction of a certain stratum of the population of Russia, at least, to a series of catastrophes which to many of you, I think, seems unending: the transition from the sense of being part of a world power, to a nation in great difficulty. I think the psychological attitude toward these developments is extremely important in being able to understand them.

One must not look at these things from underneath, from a sense of inferiority in the face of calamitous events. One must, in a sense, come on top of the events and the processes and thus understand them.

Some years ago—1989—the world industrialized sector exploded at its most vulnerable point, at the point of the Warsaw Pact, Comecon system. It was obvious to me that this would occur, as I had the opportunity to discuss this with some Soviet representatives on an official level back during 1982-83, which was of an official character between the United States and the Soviet governments. My emphasis was that the Soviet system would collapse within five years if the continuing policy were maintained, as part of a collapse of the worldwide economic process.

The basis for that estimation of mine was based largely on Soviet literature—economics literature in particular. It was obvious that the stripping of accumulated capital assets, including nature itself, was reaching a point of collapse. And on the basis of certain elementary calculations based on capital cycles, it was obvious that approximately 1988, plus or minus a year or so, would be the point of collapse.

In critiques of the Soviet system, one should not exaggerate the role of the specifics of the Soviet system in causing the collapse. As you shall all see within a period of months or a year or so to come, the global financial and monetary system of the world will collapse—absolutely. The critique of the Soviet system should be restricted to the discussion and analysis of the reasons why it, among the industrialized countries, was a weak point. And I would say, with all due respect, that the admiration for the so-called western system as depicted in free trade theory, is not only exaggerated, but

highly dangerous.

In the real history of the past three or four centuries, no market system has ever succeeded in producing anything but a catastrophe. What was called capitalism, was started as a state economic system and always remained so, essentially, in its successful forms. It has always remained the responsibility of the state to maintain basic economic infrastructure. Two companies cannot agree to start a railway system between them. Two or three companies cannot agree among them to establish a national water management system. A

The Russian press reflects the belief that the disease of free trade is the superior alternative to communism. So instead of bowing to the statue of Karl Marx, you are now supposed to bow to the statues of Adam Smith and Ricardo. This tends to create an instinctive lack of appreciation for the fact that the entire global system is now about to collapse.

syndicate of doctors cannot create a national medical system. There are certain things which are essential to maintaining the entire soil of a nation, to maintaining the basic infrastructure, such as transportation, water, power of a nation, which cannot be left to the accidents of the market. You cannot leave education to the accidents of the market. You cannot leave scientific development to the accidents of the market.

In no case has any modern state provided the infrastructure of private investment development, except through state action on infrastructure and management of credit and currency. Speaking solely from a more or less socio-economic standpoint, from the outside and from study of Soviet economics literature, I have the following picture of the collapse of the Soviet system. First I'll describe the internal factors, then I'll describe the external factors.

What was wrong with the Soviet system

As you all know, the Soviet system in its military-scientific, aerospace-scientific sector maintained the highest quality of intellectual production. In military and aerospace systems, Soviet systems were bulky, they were inefficient. But they worked, because the scientists were able to use defective resources to achieve the results which other countries achieved with more adequate resources.

Looking at Soviet products in the military-aerospace sector, they worked—with the usual problems that go with any

such systems. In the civilian products sector, there was a catastrophe. The catastrophe had two causes: the lack of infrastructural development, and the difficulty in translating new technologies from the high-tech sector into the economy generally.

Of this one could say from the outside, that privatization (a real private initiative, not speculator privatization; entrepreneur's initiatives), would have been a great advantage in agriculture, and in manufacture of ordinary products of consumption, and so forth. Also, in a privatized sector of the machine-tool industry, because the entrepreneur is usually the means by which technology is translated from the high-technology sector into improved products and methods of production in the general sector. So the lack of productivity was compensated for by failing to invest in adequate infrastructure. Because from its beginning, by historic circumstances, the Soviet system was essentially a military-security system.

Therefore, the external pressures of strategic pressures pressed in on the Soviet economy in a special way, which deformed all the internal features. And different people from a different standpoint—I from my standpoint—believed that if some more durable basis for peace could exist, then many of the problems of the Soviet economy could have been solved.

But at the same time as the agreements were reached between 1955 and 1972, between the West and the Soviet system, what happened, especially from 1964-65 onward, was that the Comecon system became more and more infected with a disease which was being developed in the western countries. Let me emphasize this, because it's crucial to understand.

With a few exceptions, those of you in this room are much younger than I am. So therefore you did not, as I did, live through the wartime years as adults. Most of you did not live through the 1950s as adults. Therefore, you did not experience the pre-war, wartime, and immediate postwar period of oncoming war, the events of the 1930s, the war itself, and more importantly, the postwar reconstruction here in Russia as in other parts of Europe.

From 1945 on, all major industrialized countries, regardless of their social systems, went through a period of intensive postwar reconstruction. I think it would be brutal but perhaps necessary for one to draw a map of Russia from 1939 through the postwar period; to draw the areas of battle, to detail and document the intensity of destruction.

I was born in 1922. Look back at the statistics of men born in 1922 in Russian military history of the Second World War. A great part of an entire stratum of the Russian population was destroyed in war. Yet, despite all of the problems that this represented, there was in Russia, despite all of the horror, everything one can criticize, there was a spirit of reconstruction. The only true comparison you can find outside of Russia, is in Germany, where the damage was much

less intense, but was comparable.

The spirit of reconstruction was maintained around the world, into approximately the middle of the 1960s. I suppose some of you here have done studies in that area of economic history.

Around the world, between the years 1963 and 1968, radiating partly from the United States and France, and Germany, there was a fundamental change, which began essentially with the inauguration of the Harold Wilson administration in Britain. What the change was, is very simple, which is why I mentioned the war years and reconstruction period.

Throughout the world, up until the middle of the 1960s, the predominant view of nations and populations was the desire for the improvement of the conditions of life through the benefits of scientific and technological progress. Then suddenly, in 1962-63, there began to be the rumbling of the change: assassinations. The assassination of Kennedy; the attempted assassination of de Gaulle repeatedly by the same people who had assassinated Kennedy; Mattei in Italy before; Lambrakis in Greece; and in the aftermath of this, a change in governments. Adenauer disappeared from Germany, replaced by Erhardt—a different philosophy of government. De Gaulle remained until 1968, but the seeds of his destruction were already there in 1963.

Systematically, all of the leading figures of the postwar period who had been associated with reconstruction, disappeared. There emerged to replace them a layer of intellectual mediocrities, whose characteristic was softness toward a cultural change. We had the rock-drug-sex counterculture, which in some cases immediately destroyed people. But in a larger number of cases, it had a more insidious effect. You saw it in universities.

I was teaching on various campuses during that period, from 1966 to 1973, and was very aware of this. A growing percentage of the students had shorter and shorter concentration spans. The interest in a scientific method was largely abandoned under the influence of such Frankfurt School types as Herbert Marcuse in the United States. You had globally an influence which reminded us of the rise of fascism and the fascist counterculture in Weimar Germany.

Sociologically, the exemplary case is Martin Heidegger. Martin Heidegger was, in the 1920s, a close collaborator of Hannah Arendt, his mistress. He worked with Theodor Adorno, Horkheimer, and so forth. During the war, since he wasn't Jewish, he became a Nazi, a leading Nazi philosopher, the official philosopher of Nietzsche as a Nazi. He became a favorite of Adolf Hitler. At the end of the war, even though he was a leading Nazi philosopher, comparable to Alfred Rosenberg, who was in Moscow for a certain time of his life, Heidegger was suddenly cleansed of all impurities—officially, in France.

Then the U.S. occupation authorities and the British occupation authorities in Germany instructed the German Cath-

olic theologians to abandon Plato and teach the philosophy of the Nazi Martin Heidegger instead. To those of us who knew the philosophical history of the 1920s, 1930s, 1940s, 1950s, what had happened was that in the 1960s, what we had known as fascism became "the Left." If you look inside the internal history of the Nazi Party, including some of its films from the 1930s, you will find the form of anti-scientific environmentalism which we find today among the Left.

So no longer in the world economy was there an emphasis upon increasing the productive powers of labor through scientific and technological progress. The Frankfurt School theories became hegemonic, such as those of Marcuse.

Today, the students whom I saw in 1968, for example, whom I thought were idiots, fools, and dangerous ones, have risen to top positions in Wall Street, in corporations, and in running universities in the United States.

So you look at the mind of the American student today and the graduate today. We have people graduating from high school who look perfectly normal, but who have a 3,000-word vocabulary. It's lucky we have these calculators, because we have people who could not add and subtract; multiplication is a gigantic feat for them.

The result is a new kind of economy, a new theory of economy spread into practice on Wall Street and elsewhere. You can see the spread of this into the Comecon sector. You can see the spread of the speculative mentality into the sector; the spread of Margaret Thatcher's ideology. I mean, one should look at her and realize that anyone as stupid as that, does not represent what we want to teach our children. I have often said of her that she barely qualified to fly a broom.

So these factors of the world market and the increasing Comecon sector dependency on relations with and credit of the world market, contributed to the weaknesses in the Soviet sector in bringing about the collapse. I see a tendency, however, to assume that it was the Soviet system that caused the collapse; it wasn't that simple.

Plus you get, in the Russian press, a reflection of a failure to comprehend this problem and a belief that the disease which is called free trade, is the superior alternative to communism. So instead of bowing to the statue of Karl Marx, you are now supposed to bow to the statues of Adam Smith and Ricardo. This tends to create an instinctive lack of appreciation for the fact that the entire global system is now about to collapse.

Those who have been looking closely at what happened in the past six to seven weeks in western markets, have seen that. The George Soros who has suddenly appeared as almost a patron of Russia to some, may disappear from the market within a short period of time to come. Very simple lawful principles of financial markets. What is happening is the entire global financial and monetary system, must necessarily collapse very soon.

The reason I've gone through this, is not merely because
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At a seminar of the Economics Academy of the Ministry of Economics in Moscow, Dr. Wolter Manusadjan (standing) announces Lyndon LaRouche's full membership in the Universal Ecological Academy. Mr. LaRouche is in the center background of the photo.



Lyndon LaRouche with Prof. B. Fleishman.



LaRouche (right) autographs copies of his book in Russian, So, You Wish to Learn All About Economics?



Left to right: Dr. R.M. Suslov, Dr. Pobisk Kuznetsov, Lyndon LaRouche, and translator Rachel Douglas at joint seminar on mathematical and related issues of physical economy at the Economics Academy.



LaRouche (gesturing) speaks to Schiller Institute members and friends in Moscow. To the left of him in photo is Prof. Taras Muranivsky.

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of its usefulness, but to lay the basis for situating a very important scientific point. Instead of living under the pressure of these events coming down upon us, let us stand above them. Let us stand above them intellectually, and also emotionally.

The job of the intelligentsia as a function of society, is to provide society with comprehension of the events which are overtaking it. We cannot run around like chickens frightened by the fox. Our job is to be calm, clear, and to give clear direction.

The characteristic of this entire period can be summed up in one word from Plato: *change*. This is a fresh demonstration that science cannot be based on the relationship among things, in a simple sense. Science must be based on *changing relationships among things and people*. I recommend the *Parmenides* dialogue of Plato as one of the best and most intense pedagogical models for discussing this question.

Instead of trying to explain each stage of this process of change by itself, on the basis of its internal evidence, let us discover the laws which account for the change as a whole. That is where my business comes in.

How my discovery in economics came about

Many years ago, when I was still a much younger man, I was very much angered by reading a book called *Cybernetics*, by Norbert Wiener. What Norbert Wiener had to say about control processes among machines was very interesting and essentially, for practical engineering purposes, incontrovertible. But then, when it came to applying this same mechanistic concept to living processes or to the human mind, the man was a dangerous idiot. At that point, one should put Mr. Wiener aside, and go back to study Vernadsky.

Let me describe this to you, even though some of you are not economists or perhaps not mathematicians, but I shall try to make it clear. I became angry enough that I decided to dedicate myself to refuting this terrible person, a process which took about four or five years, and out of which I came as an economist.

It was obvious that Wiener had to be refuted from two standpoints: one, the standpoint of living processes, especially evolutionary models. But for several years I worked through the work of Nicholas Rashevsky, whom some of you may know comes from Russia, but he was an American professor at the University of Chicago for many years. In about 1938, 1940, he wrote two very important books on mathematical biophysics. And I think he reflected people like Oparin; but I later came to prefer Vernadsky.

That was very useful to me, even though Rashevsky failed to solve the problem. But he posed the problem in a very interesting way; and we must often be thankful to people who pose problems, even if they don't solve them. They prepare the way for the people who make the discoveries.

Because of these problems of dealing with biological systems conclusively, I instead looked at economics. It's

very simple, if you forget Adam Smith, forget all these crazy theorists, and look at economy from the standpoint of its being a physical process. All you need, as I had at the time, was knowledge of industrial processes. So with some scientific education and experience in industrial consulting, I applied this to describing a successful economy, using the basic industrial engineer's tools of bill of materials and process sheet.

So, you get two results. The first result is no problem for the mathematician, no problem for the Soviet economist generally: that the essential thing that makes an economy function, is to increase the free-energy ratio.

To measure that free-energy ratio in approximation, is a very simple thing. Take on the one side all of the essential inputs to the whole economy, all of the physical inputs of consumption by industries and by households, including infrastructure: transportation, water, power, and so forth.

Now you have to add only three services. The other services have no significance to production as such. The first is science and technology. Without that, you have no increase in productive powers of labor, and no increase in free energy. The development of power. Education as such; and we cannot have people graduating as physicists at the age of 35 from their more mature experience, and then dying at the age of 40. The demographic aspect of population depends upon sanitation and health care. These define essentially the input.

Now let us look at the reproduction of this input as output. Let's measure the total amount; the amount per capita, the amount per household, and the amount per square kilometer. Now let us subtract the input from the output. Now measure the ratio of the difference to the input. It's a very simple crude estimate, but it gives you a good, useful estimate of what's going on. If you competently calculate the costs of reproduction, then you will come up with a good national planning estimate. So far, you have no problem with the mathematician.

Then you come to the problem: that the energy of the system, as we call it—the combined infrastructural, producers' and households' market baskets of essential physical goods—must increase at the same time as the ratio of free energy to energy of the system increases.

Now, study Vernadsky from this standpoint. Say that the evolutionary model of the noosphere as described by Vernadsky has the same characteristics. And humanity is the part of the noosphere which is able to deliberately, willfully, do this.

So my problem at that point, was that all this thermodynamics said "no," but the facts said "yes." I'm a very stubborn person; I stuck with my facts.

I began to look for an honest mathematician. Then I discovered Georg Cantor, and I spent about three-quarters of a year on his last major work. And I discovered why most mathematicians tend to go insane these days, and where chaos theory comes from. Then I went back to look at Riemann

on the subject of the continuum paradox.

The importance of Cantor for me, was specifically that we do not recognize adequately today, that there is a higher, shall we say a fourth branch of mathematics, above the so-called transcendental. There is a branch of mathematics which deals with systems which look to be, to the ordinary mathematician, discontinuous and non-denumerable.

The notion of this problem goes back to the *Monadology* of Leibniz. All of the important mathematicians of the middle of the nineteenth century understood this; implicitly, also Lobachevsky here, with the idea of discontinuities, i.e., hyperbolic systems, as acknowledged by Gauss in his study of Lobachevsky's work, late in Gauss's life. This was the work of Dirichlet, the work of Riemann, the work of Weierstrass on the famous Weierstrass function; also of course, finally, the work of Cantor on this particular problem.

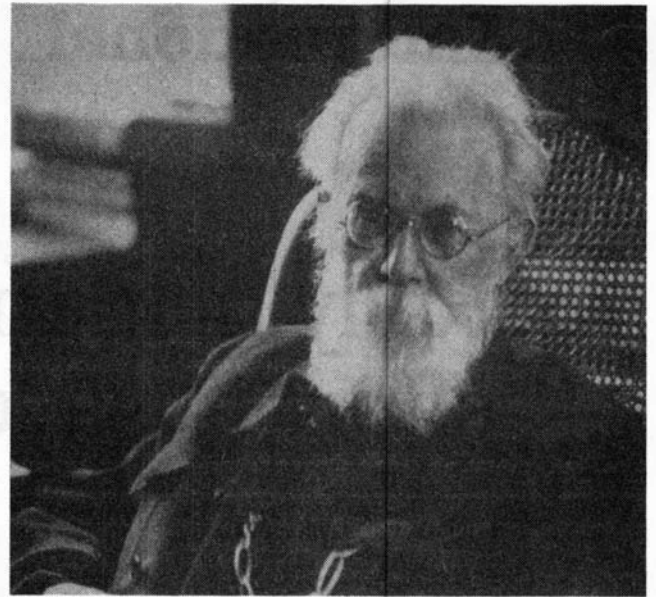
Then, in the twentieth century, a young Austrian scientist, later quite famous, Kurt Gödel totally discredited all of the fundamental assumptions of Bertrand Russell and John Von Neumann in a famous 1931 paper, "On Formally Undecidable Propositions of *Principia Mathematica* and Related Systems."

What Gödel essentially started to do with his own original work, was to replicate some of the discoveries which Cantor had made earlier. The higher mathematics of Cantor does not permit us to construct explicit functions of the type we normally use in mathematics; but it does permit human beings to rigorously define the way to solve certain problems which appear in a mathematical form, as in, for example, mathematical programming.

But what I want to emphasize to you, in a more general way in this connection, is this: The great philosophical issue of modern history has been the issue defined first by the empiricists' attacks on Leibniz and Kant's attack on Leibniz. The empiricists, such as Locke or Hobbes before him, all said man was essentially a *tabula rasa*, a beast who operated upon sensorial instincts. The work of the British radicals such as Adam Smith or Jeremy Bentham, the founder of British intelligence, or Thomas Malthus, were all based on the work of a Venetian monk by the name of Giannaria Ortes. Ortes's writings are the basis for all of the writings of Adam Smith, all of the work of Jeremy Bentham, and specifically, the work of Malthus, which is a direct copy of a work by Ortes.

The most rigorous definition of the controversy is given by Immanuel Kant in his *Critiques*. Kant was a little bit different than the British empiricists, of whom he formally was an exponent. Kant referred to this creative principle, this so-called non-linear principle which is characteristic of living processes and human creative thought, and said, "Well this might exist." The British (not every British citizen, but official British philosophy), of course, today will still insist that creativity does not exist.

As a matter of fact, this fraud called "chaos theory" was invented to try to explain away the existence of creativity.



Vladimir Vernadsky (1863-1945)

Kant said creativity might actually exist, but you could not know it. It could not be willful.

From the standpoint of study of non-linear systems, from the standpoint of Gauss, Dirichlet, Cantor, and so forth, we know, as we can demonstrate in the history of mathematics, that creative thinking can be rigorously, consciously defined. It is not a nebulous, intuitive matter.

In conclusion, I'll make the following quick succession of points.

The difference between mankind and the beast, is that mankind is capable of deliberately increasing his power over nature per capita willfully, in a form which is typified by—not restricted to, but typified by—scientific discovery. The most important thing to do for any human being is to make them aware that they have this superior quality as a member of the human species. The most important thing in building society, is to structure society so that this aspect of man which is human, is given its freest expression. The most important thing in education and in employment, is to give the human being an opportunity to do something which that human being knows is creative, and knows is useful to all society. To understand, therefore, the value of the individual person, as typified by this creative potential. To understand the importance of the institution of the family as loving nurture of this quality of individual. To understand the importance of the modern sovereign nation-state according to law, as the institution which is assigned to protect and nourish the individuals and the families.

If we accept those postulates, and look at the question of economy from its physical reality, then the violent succession of changes which we are experiencing, can be understood as from above. Then we of different nation-states can understand our common interest, and know how to work together to overcome the great crisis which is about to strike us.