

EIR Feature

LaRouche: How the future shapes the past and present

by EIR Staff

Lyndon LaRouche, in his keynote speech to the Labor Day conference of the Schiller Institute and International Caucus of Labor Committees (ICLC) on Aug. 31, launched a campaign to expose George Bush as the “drug-trafficking kingpin of the 1980s,” and to shape a “third force” in American politics, to defeat the Conservative Revolution in the Nov. 5 election. *EIR* reported on these initiatives in our issue of Sept. 13 (pp. 10-12 and 58-60). Here, we focus on the philosophical core of his two-hour speech, of which these tactical initiatives are an expression: the question of *time-reversal*. In the theoretical document that follows this report, LaRouche develops these concepts at greater length, with specific reference to mathematical economics.

How is it, LaRouche asked his audience, that the ICLC, the philosophical association which he founded over 25 years ago, has done probably more to change the course of history, than any other organization? “I’ll explain what I mean by that,” he said. “It’s a true statement.” And how is it that humanity, faced with the problems that we face today, can call up the power, not to “influence” the course of history, but to *change* the course of history?

To answer these questions, LaRouche said, we must understand that which most mathematicians don’t know: the difference between a human being and an animal. Human behavior is not determined in the way in which statisticians tell you that particles of gas behave. According to the statisticians, and the economists of the fascist Mont Pelerin Society, the past, by random interaction of individual actions, acts percussively upon a given process, so that the process is moved by an “Invisible Hand.” That is what Adam Smith believed, and Bernard Mandeville. According to this view, the past determines the future: This is called “lawfulness.” It is the basis for the entire economic theory which is taught in most universities, and by most Nobel Prize winners today.

“But, that’s not the way human beings react,” LaRouche said. “And that doesn’t explain the difference between man and animal, who behave in different ways.



The Schiller Institute chorus, under the direction of John Sigerson, performs Mozart's "Ave Verum Corpus," on Aug. 31, 1996. Left: Mindy Pechenuk, working with the chorus, shows the audience how the principle of time-reversal works. "You perform the composition," said Lyndon LaRouche, "with an understanding of the idea which you are generating, which will be clear only in the end."

Human behavior is not determined by the past. Human behavior is *motivated*, motivated by the future! Now, that sort of gives the mathematician a problem: How do you deal with the problem of time reversal as a principle of causality? Fun! Try that on your engineering specialist. How do you represent time-reversal, or apparent time-reversal, as causality, as a causal principle? How do you say that the future, not the past, determines the present?"

Unlike the animals, man's intent is to *change* the laws of his own behavior. Man's idea about the future, in that sense, becomes the cause for the choice of man's action in the present, an action which could never be projected from man's behavior and experience up to that time.

"Now, that happens in music, in Classical music," LaRouche said. "It does not happen in Romanticism. It certainly does not happen at Nashville." But, in real music, there is a principle of poetry, a scientific principle: motivic thorough-composition.

This principle was demonstrated in another presentation at the conference, by ICLC members Mindy Pechenuk and John Sigerson, with the Schiller Institute chorus, performing Mozart's *Ave Verum Corpus*. In order to understand this composition, LaRouche said, "you have to work your way once from the beginning through the end, and only when you've reached the end, and understand the process of development from beginning to end, do you know what the end is. Now, you don't perform the piece as if you were working toward the end, groping toward the end. But you perform the

composition, with an understanding of the idea which you are generating, which will be clear only in the end."

The discovery of new principles

Unlike the lives of animals, human life is not a *fixed hypothesis*. It involves the discovery of principles, new principles.

Take the example of Bernhard Riemann: He showed that the problem of the hypothesis, or the underlying axioms, definitions, and postulates of a simple Euclidean geometry, had not been considered. They are purely arbitrary; there is no scientific basis whatsoever for believing that they are true, and yet all geometry, all algebra, are derived from these false assumptions.

"For example," LaRouche said, "what are the basic assumptions of a Euclidean system, the space-time assumptions? That you have three direct senses of direction in space: up, down; sideways; back and forward. And you have one sense of time, backward and forward. Backward and forward is what you don't like to think about. That these are boundless, they extend to infinity in all directions. They are perfectly continuous, none of them are ever interrupted; you can always keep dividing them and you will never find a smallest point which is not connected. And then there is the attempt to take events, like a floating ball in the air, and map the size of that ball, the amount of space it occupies, and to map its movement accordingly, and to explain everything in terms of an algebra which is based on these assumptions of what a fourfold mani-

fold, a space-time manifold of that type, a Euclidean manifold, is. And it's all false."

The work of Gottfried Leibniz, Christiaan Huyghens, and Johann Bernoulli showed that there is such a thing as *equal time pathways*. So, normal space-time considerations don't work. This throws out the entirety of the so-called algebraic geometry of Galileo, Newton, Descartes, and so forth, said LaRouche. "Because space is bounded in a certain way, space-time is bounded. It is *physical* space-time, it is not abstract space-time, like an empty bucket in which events occur. Therefore, when we discover a physical principle, we must regard a physical principle, once validated by measurement, as a dimensionality of our physical geometry. And thus, all of the discoveries of principle which have been validated by mankind, correspond to dimensions of a physical geometry; and the greater the number of discoveries, the greater the number of dimensions. So, mankind's history is an expansion of this number of dimensions.

"And, the discovery which is implicitly developed in part by Gauss, but which Riemann refers to, the discovery is that the so-called curvature of physical space-time, mathematically, changes in a way that can be measured. So, by this kind of principle, you can validate the way things work, and validate your discoveries.

"The relevance of this to what we're discussing today, the political question is, that if you want to operate in the domain of politics, or art, or science, you must abandon the ordinary way of thinking which is popular today: the Baby Boomer/Generation X way of thinking. And you must think in terms of hypothesis, to this effect: Every time we make a discovery, by adding a principle to the repertoire of our understanding of how physical space-time functions, or artistic mental space, we are revolutionizing hypotheses. We are overturning the hypothesis which was generally accepted beforehand, and we are creating a new hypothesis."

How can we educate a citizenry that can make such necessary discoveries? How do we learn to think? We recognize that we have a human culture, and that everything that we've achieved, has depended upon certain valid principles and discoveries. It is by understanding those discoveries, re-enacting the act of the discovery, that the child learns what this culture is.

"When you re-experience the principle of Eudoxus, or the principle of Theaetetus on the Platonic solids, or other discoveries, like the Eratosthenes discovery we use so often: These discoveries bring you into a direct experience of the mental experience of the living Eudoxus, the living Theaetetus. You are experiencing the mind of a person thousands of years before you, in that moment. You are establishing a personal relationship with someone who was dead thousands of years before you, or hundreds of years before you. . . .

"Therefore, you have a sense, again, of what? You have a sense of time, you have a sense of isochronicity, that this person, thousands of years before, helped to make you. By what? By reinforcing and strengthening a principle by which

you could become you. That you have a personal, direct relationship with people who are long dead. You have, similarly, a personal relationship and responsibility to people who are long yet unborn. And, what you are, is you are a means to advance society, the continuity of the past into the future—which you can only do if you relive the process of discovery, if you reactivate from within yourself what a child does, when he learns how to play with blocks, for example, this agapic sensation, the higher quality of emotion referenced by Paul, as in *I Corinthians: 13*."

To know the future

How do we know the future? LaRouche asked. If you know that a certain principle of discovery leads to an improved curvature of physical space-time in physics, then you know mankind is operating on a higher dimensionality.

"We say, 'Therefore, if we explore space, for example, then we will gain knowledge which we otherwise will not gain, which will enable mankind in the future and, also, in the nearer term, to progress to a quality of life which is not otherwise possible. So therefore, we do it.'

"Some wise guy comes by: 'Well, what are you going to discover when you get to Mars?' 'I'm going to discover how to get away from your nagging!' 'We're going to discover how to increase man's power in the universe, how to find truth, a better truth than we know now; the power to solve problems that we can't solve now. So, we want to get there.

"Why do we want *every child* to have a university-grade education of quality? Why do we want every child to have access to a humanist quality of education, where the child learns to replicate the act of great discoveries, not merely to learn, as a preparation for higher education? Why do we want this? *Because that is the future!* Increase that which increases man's power, and you're going to solve the problems in the future. . . .

"That is the future. That is what we are to be. We don't know what the end-results are going to be, we have no idea of that sort of thing. But we do know, that the result must be improvement, an improvement which is consistent with the nature of mankind and mankind's needs. And each of us, as an individual, has the potential to make a contribution to that, and to live in life, sensing a beauty of individual human life, which is based on that principle. That is the future. It is that future on which we must act, in every present moment. That is the difference between man and a beast."

This is the approach required for statecraft, LaRouche said. This is the way we will defeat cocaine kingpin George Bush. "The practical politician has been the death of this nation, just like the mass media. And we reject the mass media, we don't depend upon them. We reject practical politics. You have to have the politics of science in principle, the science of hypothesis. And to understand, that in human affairs, it is knowledge of the future which determines the condition which the human will impose upon the present."