

any choice of President the Mexicans make. I mean, the question of the mayor of Mexico City, we know the hoax! I think I know the story fairly well. And his influence is not his populism, that's not his influence. His influence is seen by the people of Mexico City as a hero in fighting people who tried to deprive people of Mexico City of some advantage. And the attempt to victimize him for that, made him more popular—over the highway! He became popular because of the highway! And I know a number of other people who could be candidates for President of Mexico who probably in a sense are equally qualified. But his popularity is a historical fact of that nature. If I were President of the United States, I would respond accordingly. And our job is to make some good recommendations.

So, I'm not worried. I'm concerned sometimes about a lot of things, but—diplomacy is often better than force! If you're smart enough, you can always find a way to solve the problem.

LaRouche to Mexican LYM

Our Mission Today Is To Improve the Planet

Lyndon LaRouche gave this presentation to a meeting of the LaRouche Youth Movement in Monterrey, Mexico on April 1.

I'll start with a few things preliminary to what the main thing is I wish to say. First, I should announce that we have an official campaign slogan for our part of the Democratic Party's campaign this year. It is a slogan which we devised for Kesha Rogers, who is running for the chair of the Texas Democratic Party. It is "Out of the Bushes, and Into the Future."

Baby Boomers Don't Believe in Truth

There's something that goes with that. The problem of Boomers. And it's very important to have a clinical understanding of this problem. First of all, the Boomers would never save society, or themselves. Most of them are now 55-65 years of age, they're thinking of a graceful floating out of life, after which the future ceases for them. This is an unusual thing in human history. As you know, in most societies, in the Western Hemisphere, for example, the Americas, which were largely nations of immigrants or people who were struggling up from peonage, the attitude was that their children and their grandchildren shall have a better life than they themselves had. And this was the basic morality of most people in our society. As you know from your experience, generally that is not true today.

The generation that was born after 1945, at the end of the war, was conditioned by brainwashing. One of the organizations was the Congress for Cultural Freedom, which is essentially freedom from truth and sanity. So that's the way they were conditioned. And then, when the crisis of the 1960s hit, as these young people were entering adulthood, they became a phenomenon called the 68ers. They went insane, and they took their clothes off to show how wealthy they were. And mostly it was the wealth of a growth of hair.

But anyway, they had a different value. They didn't believe in truth. They'd been educated in school not to believe in truth. They became essentially a modern equivalent, in Europe and in the Americas, of the ancient Greek Sophists, which is infamous in history as the faction of ancient Athens which led Greek civilization into the collapse known as the Peloponnesian War. Things like the Peloponnesian War of course were the war in Vietnam; the earlier French war in Indo-China; the French war in North Africa, in Algeria; the U.S. war in Indo-China. And all in the context of a tension based on the threat of thermonuclear extinction of civilization.

This was a generation which was taught not to believe in truth. How to get your pleasure, how to get by, how to succeed. And, with that, came a lack of sense of responsibility for people they didn't care about, such as, in a sense, their own children. This led to a conflict, a conflict of generations. Not every person in the generations, but the characteristic behavior of entire generations. This became known as the 68er phenomenon.

To give you a very concrete example of this, right now. At the beginning of last year, at a time when I had significant influence in the Senate and in other parts of the Democratic Party, among the other things that I warned about was the immediate threat of a shutdown of the U.S. automobile industry. As some of you already know, because you have followed what I've been doing in the past year, the significance of the U.S. automobile industry is not simply an industry, it's not simply a place where many people are employed. The significance of the automobile industry is that it is the greatest single concentration of so-called machine-tool-design capability.

Now the machine-tool design is a connecting link between a scientific discovery, and the development of products which use those scientific discoveries, as I shall return to this in remarks today. It's based on an understanding of the meaning of a universal physical principle. A universal physical principle such as the discovery of gravity by Johannes Kepler. These and various other discoveries, have been translated, especially in modern civilization, into a mastery of nature as never before.

Now, what do you do in this area, when you discover a scientific principle, such as gravitation? You're discovering a principle which is universal. The object, called gravity, is as big as the entire universe, and it's an illustration of the fact



Left: The LaRouche Youth Movement at a rally in Mexico City, against the energy policy of the Fox government. The LYM is calling for a return to a nuclear energy policy, which has been abandoned in Mexico for 20 years. Right: LYM organizing in Buenos Aires, Argentina.



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that the universe is finite, but not bounded. Now, we can conceive the principle, but you can never see the principle as an object. You can see the effects of the principle, but you will never see the principle with your senses. If you can see it with your senses, it doesn't exist as a principle.

What we do, of course, as Kepler illustrates that, is you construct an experiment which demonstrates the existence, the efficient existence of a principle that you can not see. Now, the same method that you use to design a proof-of-principle experiment, is the principle of machine-tool design. You create an apparatus or something similar, where what you design to test for wouldn't work unless the principle existed. Now, once you've then discovered this principle or discovered its application in that way, what you're able to do in modern manufacturing is to take the same kind of people who construct designs of experiments, and they use the same method to now apply that principle to production and design.

This is a concept that is generally not taught and not understood in modern university education, for various reasons, but it is the fundamental principle of economy: man's discovery of universal physical principles, principles such as gravity which you can not see or feel, but which exist, and for which you can construct scientific tests which prove these principles exist as such. And then you apply these principles, to the practice of society.

Now, our best knowledge of the history of this notion, which is called *dynamis* in Greek, or *Kraft* in German, or *powers* in English, they're the power represented by universal principles which you can not see but that run the universe. By

applying these principles, we increase man's power to exist. We're able to change nature. We able to enable society to progress. But for man's ability to discover universal physical principles, human beings would just be another monkey, another ape, and the limitation on population would be, you would never have more than 1, 2, or more million individuals on this planet, living at any time in the past 2 million years. We don't know how long man has existed on the planet, but we must estimate about 2 million years. And you can never get a human being by evolution of a monkey, or even by employing or training certain kinds of human beings who think like monkeys. They jump all over the place, they have a lot of activity, they eat things, they throw things, they fight, they make big noises, they scream in their cages, but they're not human. So, the distinction of human beings is this power, the power of creative reason, which exists in no lower form of animal life. We now have over 6 billion people living on this planet. The reason that is possible, is because of the effects of human reason, the discovery of universal principles.

Think back to the automobile industry. The significance of the automobile industry, is that it represents—as in the United States—the greatest concentration of the trained experienced skill to transform ideas into products. It's the same kind of thing in agriculture, the same principle. Every improvement in the conditions of life in mankind depends upon this connection.

Now, what happens then, the Baby Boomer generation, the 68er, says "science is the enemy. We want a comfortable life. We don't want to work, we want to be rich." And this is



EIRNS/Gene Schenk

A LYM pedagogical exhibit in Los Angeles illustrates Johannes Kepler's principles of the quantization of space. Kepler's discoveries of universal physical principle are being replicated by the LYM internationally.

your management today. "We don't want to get our hands dirty. We don't want to do hard work." So therefore, when they look at the people in the automobile industry, this vast part of the U.S. population about to lose their homes and jobs, they don't say—the good ones will say, "Well, we must do something for those people." They will do nothing to save those jobs, to save that industry. That's where the problem lies. And when you live in a country like Mexico, and most of the countries in most of the parts of South America, you see a vast poverty, increased death rates and diseases. All of the afflictions of poverty, afflictions which could be corrected if we maintain a modern industry. But what has happened, the 68er says "No! We don't work anymore. We give our work to poor people in poor countries who work cheap." They came to Mexico to find cheap labor, and then they decided it's too expensive, so they went to Central America. And they keep going, more and more, to poorer and poorer people.

So this is the problem. Now, I have these Democrats—many of them in the Senate and elsewhere, but take the Senate in particular—who are good people, they are in a sense my friends. Some of them are my friends, most of them are my political allies. *But!* They're Baby Boomers. So they don't say that what we have to do for the American people, in particular, is to save that productive capability, on which the conditions of life of the entire U.S. population depends. "We must give the poor some charity." That's the problem of the Baby Boomer.

We have the same thing in Germany. The German politicians in their majority voted to send German troops into the Congo, to which a senior military officer in Germany said, "These people are Baby Boomers!" Speaking of the politicians. They don't have an efficient sense of morality. Some of them have good feelings about their friends and neighbors.

They're charitable, they care, but they're not efficiently caring. They don't recognize that there are certain principles on which the ability to meet the demands of people is possible.

Also, because they're sophists, they don't believe in science. They believe in computers. You ask, how do you think? They say, "I go to my computer and ask. I look it up on the Internet. I search the Internet. I scratch the Internet, when it irks me." They don't think! They don't conduct experiments. They talk, but they don't know what they're talking about. They can recite a formula, but they don't know what it means. They know it works. It's like trying to figure out why the Internet does what it does. You don't know. The Internet trains you to behave. You learn to behave as the Internet tells you. You learn to think the way your computer tells you to think. You're not operating the computer, the computer's operating you! This is what we're dealing with.

'Cheap Labor' Wrecks Economies

Now, this gets to the point. We have to deal with that problem in the United States. We also have to deal with it in South and Central America, where it sometimes takes a similar form, but at times a different form, because the conditions are different, though they will soon become about the same. There are two aspects of this: First of all, South and Central America were for a time a dumping ground for cheap labor, as in the *maquiladoras*. A dumping ground for cheap production in Mexico, in which in general, a person would get a job but could not afford to support a family on the income from that job. And from this, there was not enough money available to improve the infrastructure in the area in which the *maquiladoras* operate. So South and Central America were areas for exploitation of cheap labor. So Mexico today does not have the economic power it had in 1982. It would take five to ten years to rebuild the oil industry, the petroleum industry in Mexico, back to what it was in 1982. And think of what the petroleum industry represented to Mexico in terms of the overall economy. Education systems, all kinds of things, were paid for with revenues from the petroleum. So that has been destroyed.

In the United States, the illusion is that we are exporting all of our jobs, to cheap labor markets abroad. We exported our productive capacity to China, to India, to other poor countries. We keep looking for a poorer country, where people will work cheaper than they do in any other country. The conditions of life in these cheap labor areas are becoming worse and worse, because the cheap wages are based on the lack of infrastructure, the lack of a support of a family. The income is not sufficient to maintain families. It does not maintain the environment, it does not maintain the institutions necessary for a decent life. It is not because people in these areas are more productive. They're not; they work cheaper. They work cheaper because they have a lower standard of living, because their children have fewer chances for survival, because essential infrastructure is not provided in that society,

including things like safe water, health care, all these things are not paid for. Real education is a privilege of a tiny minority of countries of this type, and the attitude of the few who are educated tend to be oligarchical. "I'm important! My friends are not important!" That's the kind of condition we have.

So therefore, the mission today is how do we take a planet which has over 6 billion people, and how do we allow the population to grow, how do we improve the standard of living—in many parts of this world, most live in very poor conditions—we're running out of what we've called natural resources, or standard quality of natural resources, and currently we're doing nothing to correct that problem. That's why cheap labor.

And in the United States itself, we throw away the standard of living which is necessary to make us formerly productive. If you look at a map of the United States, an economic map, and you look at it over the past 27-28 years, you will see whole parts of the United States, county by county, which were productive 25-30 years ago, where people used to raise families on the basis of employment or industries, things like that, who not only maintained their families, but through taxation and so forth, supported educational programs, health care, and so forth. County by county, what we have is people working as waitresses or similar kinds of jobs. The economy does not provide the income—the local economy—to support schools, to support health care. People who had pensions are losing them. Health care is collapsing. Even doctors are being persecuted economically, at a time when health care is collapsing.

So the issue that faces the Congress today, under Bush, is that the Baby Boomer generation, which controls politics from the top—they don't run it actually but they are the ones in the elected and other positions of importance; the bankers control the economy, not the members of Congress—but they are Baby Boomers. They don't think that a modern industrial science-driven society is necessary. They are sophists. They don't believe in principles. They may believe in being kind, they may believe in charity for people who are suffering, but they don't believe in increasing the power of an economy which is dedicated to making possible the solutions to these problems.

So during the past week, the bankruptcy of the company Delphi came forward again. Leading members of the Senate and others, even while I was down here, were saying, "Yes, we've got to do something for those people who are losing their jobs"; but they won't understand the importance of saving the jobs themselves! They do not understand that it's science-driven technological machine-tool capability which is the medium of creating productivity, of providing a standard of living which is decent for people. They would say, "Let's share the misery with our neighbor," and you see that in Mexico and elsewhere since 1982. It's been the general pattern. It's a problem of the 68er phenomenon. This was a conspiracy, run by the same international financial crowd that

was behind Hitler. They don't like the modern sovereign nation-state republic.

The Problem Facing Ibero-America

What happened in '82 in Mexico was dictated from abroad by powerful financier interests. It was a determination to destroy Mexico as a stable, growing republic. And in large degree, they succeeded. You can see it in the banking industry alone in Mexico. In 1982, there were banks in Mexico which represented Mexican national interests. Now, the leading banks are controlled by foreigners. The destiny of the Mexicans is determined in that degree by foreigners.

The fight that Kirchner represents in Argentina, is a fight to restore the sovereignty of the nation against the international financial predators. You have an improvement in Chile with the new President, who got the Nazis out for the time being. That's what they were. That's what Pinochet was—he was not an approximation; he was, he still is—if he still knows what he is, he is. There's some question about that. But Brazil. . . . You have a fight, and the fight is, Brazil thinks it's a very big nation. They're thinking of renaming Brazil, from Brazil to "Big." Well, they do have the biggest river in the world, and the biggest self-opinion, and they don't speak Spanish. Then you see what happened in Peru. You see the conditions in Central America. You see the continuing trouble in Colombia. You see the threat to Bolivia, from pressure from the outside.

So the essential struggle today, which in a sense, Kirchner typifies for the hemisphere, is a struggle for sovereignty of nations, and the struggle for sovereignty is expressed around issues which are the sovereignty of the nation in determining its own future. The central issues are economic-financial, and they involve a struggle against powerful international financial forces.

So therefore, we are at a point where if we sit back and let this trend continue, this will not work. There will be no new empire that will succeed. They're stupid as well as being powerful, because remember the people who are doing this are largely people who are between 55 and 65 years of age: They're Baby Boomers. A Baby Boomer empire does not function. They don't believe in the essential elements of power, of real power, economic power. They want their kind of empire, so their empire will be just simply be a catastrophe for them as well as for all humanity.

Your Generation Must Lead

So that's the essential nature of the struggle. The other side comes down to you, in a very personal way. How are we going to change this? We're going to change it with your generation. You're not going to do it by yourselves, but you've got to push the Boomers into doing it, and they're lazy. You'll be pushing them 18 hours a day, while they're either sleeping or doing something else useless for 18 hours a day. In other words, you are going to push the Baby Boomer

generation into doing the things to save their own lives, as well as the lives of their children. They won't do it on their own! War which is led by Baby Boomers will be lost from the beginning. They lack the essence of command.

So what does this come down to? Who are you? What is there about you that is so powerful? Or should become so powerful? In a sense, you represent a selection within society of your generation, and you know it from people you associate with of your own generation. You find that your generation is corrupted, too. Demoralized, drugged, with no sense of moral purpose or commitment to society, but most important, a kind of moral impotence which they share with the Baby Boomer. "There's nothing we can do about it. You have to learn to live within reality." They will surrender rather than fight. They will kill one another rather than fight the enemy. So, some of you don't do that. Some of you want to find out what it is you can do, that can make your life meaningful, not necessarily rich, but meaningful. Because, when men die, whether they're rich or poor doesn't make much difference to them any more, but what they have done for society means a great deal. What they have done for society is a measure of their sense of personal identity. They're not animals. They're human beings. And they have an internal immortality which outlives them.

And look at what the average poor, even ignorant person of previous generations believed. "What are you doing this for?" you asked them. "I'm doing it for my children, I'm doing it for my grandchildren," they said.

Important investments in basic infrastructure and other things range from 25 to 50 years of life. A nuclear plant, a power plant, is an over 25-year investment. A major water system is a 50-year or longer investment. I can tell you as an old man, the most important things you do involve your conception of what is going to happen long after you're dead. And it's for those goals, that you do anything. You fight, you risk your life, you do what is necessary, not for what you get tomorrow as a reward, but for the sense of being able to smile after you're dead. "I did my job to take care of them, to preserve the contributions of those who came before me, and provide the foundations for the life of people who come after me." The sense of spiritual immortality.

What Makes Us Human?

Therefore, under these conditions, we come now to the crucial point. What makes the difference between human and animal. Let's take two things: simply and obviously, scientific discovery—valid discovery of universal scientific principles. No monkey can do it. Most professors can't. Because what you're taught in schools, generally, is: You sit in a class, particularly in a university, and you have maybe 500 to 1,000 students sitting in a large hall, and they're shouting something at you, or mumbling, and you have a book or manual or something, to read. You go to the computer and look up something on the Internet, and you walk out of the class. Now, you've

been exposed to a certain amount of what's called "information," but what do you actually know? What do you know that can be proved to be true as a principle? How many students of physics know how the principle of gravitation was discovered? Who could prove it? Who can prove what Kepler proved? Virtually none of the students in physical science. Who could prove why Euclid is a fraud? An outright fraud.

Let's take that example of Euclid. Euclid did his work about 50 years after the death of Plato. To the extent that there's anything in Euclid which has any value, it was represented as discoveries in geometry and related matters which had been made during the previous 100 to 150 years. So, what Euclid is, is a commentary on these earlier discoveries. Just remember, there is no original discovery in Euclid. All the discoveries reported by Euclid were made by earlier generations. And the fundamental assumption of Euclid is fraudulent. The idea that you can base science on the assumption of definitions, axioms, and postulates, is a fraud.

Now, this is a product of sophistry. Instead of saying, "I know something," you now say, "I know what I can repeat!" You come out of the classroom, and you repeat what you were told in the classroom, and you call that "knowing." You didn't discover anything! You uncovered what somebody left in the pathway. You don't actually know anything. You're full of opinions. "Well, I know this! All of my friends will agree with me!" Why? On the basis of gossip. You tell them a principle. They say, "It's not true! All my friends will disagree with you!" You tell somebody on the Caribbean Coast, there's a Pacific Ocean. "It doesn't exist! We were never there."

This is the kind of thing. So, you get into a thing where you accept socially accepted opinion. You repeat it. What you have to do is you have to actually discover and know for yourself what truth is. Now, this is what is the most important thing of all for you as a movement. When everybody else is confused, you must know the truth. If you don't know it, you should discover it, if it's relevant to the problem. So, you must develop the habit of creativity.

Now, what we've been doing, as you saw with this book-like product we made on fundamental principles—some of you have gone through some of this material.¹ What I did and had these young people in the LYM in the United States work on, I identified the essential area of knowledge, from the ancient Greeks to contemporary times. And then I assigned the youth and said, "Now, you volunteer to do the original investigation to discover what the answer is that I identified."

Now, the beginning is to attack Euclid as being a fraud. You can not derive a line from a point. You can not derive a surface from a line. You can not create a solid from a surface. Now, these are the elementary ironies, paradoxes, which are presented by Plato and by his predecessors among the Pythagoreans. You are subject to sophistry in schools, in which

1. Lyndon H. LaRouche, Jr. et al., "The Principle of 'Power,'" *EIR*, Dec. 23, 2005. Also available at www.larouchepub.com.



EIRNS/Daniel Platt

At a conference in Los Angeles, LYM member Brendan Barnett explains his topographical map of the NAWAPA-Plus plans for bringing water to drought-stricken areas of the North American continent. NAWAPA typifies the kind of 50-year or longer investments that are required to raise the living standards of every person on the planet.

they teach you that these are definitions of axioms which you must accept. And they tell you you must use essentially linear algebraic methods. So you use linear algebraic methods, and you jump ahead assuming that you've proven something. You've proven nothing! Because what you did was, simply assume that Euclid was right. And Euclid was a fraud.

So now you have, in modern society in education, you have Descartes. You have Newton. These are frauds! They're derived from the Euclidean conception. And you can prove this—the simplest one is the doubling of the cube, by geometric construction. Because the doubling of the cube actually demonstrates a principle which is beyond sense-perception. And once you've understood this question of the cubic question, now you begin to understand what science is, and what truth is. The point is, as I said a few moments ago, a universal physical principle such as gravitation, can not be seen or heard as an object by the senses. But you can prove its efficiency by experimental methods, by action which demonstrates the principle. Now the problem of most of the education you're exposed to, is the fact that this point, the most crucial point

about all scientific thinking, is not included in the educational standards and curriculum.

The Indispensable Role of Classical Music

Now take another question. Let's take music. Let's take modern Classical music, which is based on Bach. Now, don't think about keyboard music; you could be easily fooled. If you assume that the notes correspond to some frequency, which is standard, so that by hitting a key at the right pitch, you can make the music, is false. Because what you find the minute you face counterpoint, vocal counterpoint, or performance of a Classical string quartet, or the performance of a woodwind instrument, and take a composition by Bach, Haydn, Mozart, Beethoven, Schubert, and so forth, you find that you can not perform these adequately if you simply try to play the notes according to their pre-fixed standard frequency.

For example, you hear a chorus. They're singing the notes. Are they singing the music? Not necessarily the same thing. Because the standard of performance and the standard of the intention of the Classical composer, is the presentation of an idea. Now, what a good performance means, is that you hear the whole performance, from beginning to end, as if without interruption. Take the Mozart *Ave Verum Corpus*. The *Ave Verum Corpus* is based on a choral work, with a *de minimis* string accompaniment. It is organized according to a series of Lydian intervals. The way it's done with a good choral director, is to direct the voices to slightly adjust the tempering of the note, so the effect is you hear a process of development from beginning to end, not just the individual parts. This is what the great conductor Furtwängler referred to as "performing between the notes."

Now, very few people who sing in chorus actually achieve that intention, as intended. But by working for that effect, they begin to understand it. And with a reasonable approximation of what should be heard, you find that choral music of that type is one of the most powerful political instruments of communication. The significance of the Lydian intervals in the *Ave Verum Corpus*, which I recommended because it's a short composition, is a unity of a single conception, from beginning to end. What you hear is not the notes. What you hear is the process of development. The principle is the same thing as Archytas' discovery of the doubling of the cube.

The Domain of Creative Thinking

So the balance between the two, Classical culture—Classical music in particular—and physical science, is the essence of the education which is essential to you. Because your conception is to understand the universal physical principle, like Kepler's discovery of gravitation. Therefore, you get beyond this ordinary textbook education. You enter thus into the domain of creative thinking. And you find with music, if your attempt is reasonably good, that when you sing Classical works on the street or other occasions, you have a greater positive impact on getting the attention of a population, than

any other medium.

In ordinary scientific work, the mind is focussed on individual discovery of something about nature. In Classical artistic work, such as Classical music of this type, you are discovering also a universal physical principle. In the first case, in studying physical science as such, you're discovering a principle of what you call nature, the individual looking at nature. In great music, you're looking at the individual looking at the scientific genius of the social process. The principle of music and the principle of physical science mean the same thing, but they have a different form. In one case, you're looking at nature through the eyes of an individual man. In the other case, with great Classical music or art, you're looking at the process of creativity in the social process as such. The principles is of the same quality; it's a reflection of the natural quality of the individual human mind that differentiates between the ape and the human being. When you understand these points in this connection, you understand the nature of man, and you're capable of leading society, because you're not giving people explanations. You are solving problems, in a principled way.

Now, when you, as typically poor people who often can not have access to a modern university education, who see yourself in the middle of a population of people of your own generation who also have no access to an efficient education by what should be a modern standard, then you understand why I say that a youth operation should be divided on units of about 15-25 persons. See, this is the size of a good classroom. It's small enough so everybody has a chance to participate. It's large enough so you provoke participation. And that's the way you function. That's when you go from one class to another in a university.

And then knowing this, you look back a little further in history. Look back to the medieval period. The emergence of the university in Europe. Who ran the universities? The teaching was actually done largely by the students, and a few philosophers among the older ones.

So what we have to do, is make this whole population of your generation, make the whole generation a university, around ideas of creativity, and mix this business of studying physical science and art, together with dealing with the current problems and challenges of society. And use your youthful energy as a weapon, a weapon of ideas. The Baby Boomer can work maybe two hours a day, after which his arms and legs continue to move, but his mind doesn't. You have more energy, you have youth. You must combine that with the idea of making the entire generation a university. We need that self-conception in your entire generation, because we have to make great steps of progress in society in the coming periods. To create a population that could support those great changes, we need a population of young adults with a certain kind of energy and capability. And you can set fire to the trousers of the Baby Boomers, and that will get them moving. And that way, we can win.

Dialogue With LaRouche

The questions asked in Spanish were transcribed from the English simultaneous translation.

The Principle of Creativity

Q: This social process involving science and Classical art, is this a higher level than the Noösphere, which the first form—that is, that of physical science, between the individual and nature, which corresponds to the Noösphere? Is the social process a higher form, is that which you refer to as the fourth level? Is that what we're talking about, that immortality which transcends time and space in the universe?

LaRouche: In a sense that's true. The point is, is that as you know, we are dealing normally with the senses—Oh, there's something entering here [see photo]. Oh, I see, it's a nuclear plant cooling tower that has come on the scene! We'll see if it cools off the room, here. . . .

The point is, when you're dealing with the senses, here's the problem: In order to deal with this question, you first of all have to eliminate this question of sense-certainty. When you see, you are not seeing reality directly: You're seeing the effect of the actual activity upon your sense-apparatus. So, what you think you can see, or hear, is not what is there. What you see or hear is the effect of what is there on your senses. The physical processes of your mind see the effect, not the reality. But the development of those processes of the mind, in a baby and beyond, bring the child out of what's called a state of purblindness.

Already, obviously, when the child is in the womb—you know, you take the fact that you have babies who are born after six months' pregnancy, and generally in modern conditions, a child that's born after six months' pregnancy can survive and become a normal human being. Now, the interesting thing about this, which is relevant to your question: You ask the question: Since this child at the age of six months in the womb can hear the parents quarreling, what's the effect on the child?

So therefore, undoubtedly, the infant probably does recognize the mother's voice, which it heard before it was born; it had emotional feelings and so forth, which it experienced before it was born. At birth, it is not a *tabula rasa*, but the power of vision comes later, after you're born. And you have the purblindness of a newborn baby. So, the newborn baby, already being able to hear, usually, experiences the emotional feelings of the circumstances, must now interpret these things from the standpoint of this blur called vision. So now, what we do is, we actually have innate powers to be able to do this. So the concept of vision develops. The newborn baby is trying to adapt to the reality of the circumstances in this world in which he's been *dumped!* And trying to sort it out. The first thing it sorts out, usually, is "mother." And it begins to try to sort out some of these things, and find the relationship among them, in his or her environment.



EIRNS???

As LaRouche begins to answer questions from the audience, a LYM “street theater” crew enters, with one person dressed as a nuclear cooling tower and another as a uranium atom.

It happens that for various reasons, this process *usually* results in a perfectly sane result. So, the child’s mind does not actually see or hear the objects. It hears the effect of those objects on its sense-perception. Now the mind interprets these things, because your senses are like instruments, scientific instruments. They’re not the process you’re measuring, but they’re a way of measuring the process.

Now, when you come to something like a universal physical principle, this has an effect, which you are able to discover is a principle, but there’s no explicit discrete object for your senses. It comes as a dissonance, like a dissonance in music; it’s not a musical tone, but it’s a dissonance.

So, the mind now learns how to use this discovery, and that’s why it’s very important, as I emphasize this, going back to the Pythagoreans and Plato for this purpose. Take the case of astronomy: Now, most human scientific knowledge as we know it—as we know it, say for 30,000 years ago in Central Asia and places like that—came out of what was actually a transoceanic culture. Mankind did not come from the desert or the inland, and gradually come to the rivers and to the sea; the development of that which we call science today began in the sea. It came during periods of glaciation, when whole parts of the planet were under glaciers, like Antarctica or the Arctic. And at this time, the cultures that survived, were migratory cultures, transoceanic migratory cultures. You go down in Mexico, to the famous [archaeological] site; you’ll find one of the sites is a maritime culture site. So there actually were transoceanic cultures connected with other parts of the world, in the area we call Mexico, a long time ago.

There are certain characteristics in valid types of ancient astronomy. For example, we find calendars which are based on the migration of the geomagnetic North Pole. This involves a period of 16,000 to 18,000 years, for this cycle to occur. So therefore, the fact that somebody has a calendar that has this characteristic based in it, tells us they were using magnetic compasses for navigation! And also some of the ancient calendars, like the ancient Vedic calendars, indicate long-wave cycles of the Solar System.

So, mankind therefore, his culture and development of language, through Egypt for example, we know very well, as well as some other things: Now, if you take Euclid, and take him out and burn him—or you take a copy of Euclid, and you stand there and laugh for hours on end—“An idiot! An idiot!” “A fraud!” And you have professors jumping out of the windows. But, it was on this basis that European culture, in particular, developed, out of Egypt. For example the ancient Pyramids of Giza are an example of the culture which produced this, which was astronomy-based.

So, you look up at the sky, as they did, and you observe the stellar movements and also the planetary movements, and you construct calendars which are based on the time that you have a certain alignment of planets and stars together. Now, in the first approximation with the star system, it appears to ancient man that the star system is a system of fixed positions; that is, things change, but the changes always occur in a repeated way. Then, you get to another stage, where you’re looking at the planets, which are called the “the Wanderers,” and they’re problematic. So, you have ancient astronomy from European culture concentrated largely upon this question of the relations among the planets of the Solar System.

So that, if you happen to observe as Kepler did, the periods where there’s an alignment of the Sun, the Earth, and Mars together, that gave Kepler a way of defining characteristics of the orbit, the Earth’s orbit, now you find a principle, an aberration which does not conform to any regular measurement. That aberration is the basis for the original discovery of gravitation.

It was this discovery, as extended to the Solar System at large, which led from Kepler to Leibniz’s discoveries, because Kepler, out of his works, prescribed two studies for mathematicians to come after him: One was to develop an infinitesimal calculus, as Leibniz did. And Leibniz is the only one to originally develop it; the work of Newton has no relationship to a calculus, or a Cartesian system has no relation-

ship to a calculus, when you look at the calculus from the standpoint of Kepler's question. The second thing that Kepler said, is the study of elliptical functions, a problem which was not even approximately solved until the work of Gauss.

So, these are the kinds of questions, where you're dealing with something that can not be explained as a *regular* phenomenon, but is nonetheless lawful. Now, as with gravitation and elliptic functions, you're dealing with things which have no visible physical object. It's the same kind of object you're looking at in terms of the doubling of the cube. These are objects of the mind, they're not objects of vision. But they're real—contrary to the empiricists—they're real, because they're physically efficient.

Now, how do we conceptualize these things? This then defines us as being human as opposed to being an animal: these concepts, like the doubling of the cube by geometric construction, and gravitation, these two principles. And there's more to it, but this is what we as individuals, if we study science, can know about the universe. These are not things that are simply repeatable things in a simple sense, in life.

When you try to represent these in mathematical physics you come up with a very interesting problem, which de Moivre, and D'Alembert, and Euler called "imaginary numbers." But they're not imaginary. They're real. Because they correspond to the action of real, physical principles.

Kepler's Revolutionary Discoveries

The most crippling error in mathematics, economics, and physical science today, is the hysterical refusal to acknowledge the work of Johannes Kepler, Pierre Fermat, and Gottfried Leibniz—not Newton!—in developing the calculus. This video, accessible to the layman, uses animated graphics to teach Kepler's principles of planetary motion, without resorting to mathematical formalism.

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So, the naive mind says, sense-certainty: "What I see is what is." And what we know, is that some of the things we think we see correspond to reality. But there are other things that we can't see with the senses, which *also* correspond to reality: those things that do *not* correspond to visual reality, but are real, are universal principles.

Ah, now! Then you say, "How are these principles known?" Only the individual human mind can conceive such a principle. That experience can be *re*-experienced by other people. The people who have shared that experience now are able to communicate to each other on the basis of that shared knowledge: This process, of this kind of knowledge, is the basis on which the human species' power to exist is improved.

Go back another step. Let's take Vernadsky now: You have the Earth. It does exist—contrary to President Bush, it is not simply a branch of the Crawford Ranch. Therefore, the universal really does exist in this form. The approximation of the reductionist is, that the Earth is essentially not-living. And you have a whole normal chemistry which treats the Earth as a non-living thing.

Now then, you go into some geology, as Vernadsky did, and others, and you find that the outer shell of the Earth is created by living processes. These living processes use the same materials, as I said at the Tec; the same chemical elements are found in living processes as in non-living ones. But the chemical actions which occur which distinguish living process do not occur in non-living operation. So, you have the crust of the Earth, which includes the atmosphere and the oceans; these are products of living processes. Now you also know, by geology, that part of the Earth on the outer surface, which includes the atmosphere and the oceans, has been growing, as a part of the Earth. So now, the Earth is becoming, in percentile, more and more the product of living processes, rather than non-living ones.

Now look at another step: We look at the effects which no living process by itself can produce, except mankind. This is called the Noösphere. This is growing more rapidly than the Biosphere, which both are growing more rapidly than the planet as a whole, as a share of the planet. So, therefore, now you say, not only does man have creative power, but life has a power which non-living processes don't, and the human mind has powers which other living processes don't have. And the power of the human mind is greater than that of the rest of the system.

This power of the human mind is located in individual creativity, which is not a collective phenomenon. It's a process produced only by the individual human mind. In other words, you can't wire minds together to make them creative. So, therefore, look at that fact.

Look at the process of the change of the planet, from an abiotic planet, to a planet with a Biosphere, which grows relative to the abiotic planet, and then to a Noösphere, which grows relative to the biotic. So, we can't look at this process simply as a product of choices of individual behavior. This



EIRNS/Sergio Oswaldo Barbosa Garcia

LaRouche with the LYM in Monterrey. He told one questioner what is necessary: "Development of capabilities, no fear of fear itself, and no tendency to fly forward into fear. You can always lose your life; it can happen tomorrow by accident. So live every day as if it were the last one."

process of creativity, by which successions of individuals move the planet more and more into the human side, is not only a universal process, it's a process of the universe.

So, the fourth degree, is the fact that, by what we know from human behavior *proves* to us experimentally, that human behavior has a directed characteristic. Thus, we understand there's a fourth degree, higher than the individual, which is the principle itself. And that's the point.

The Lesson of Science

Q: How can we change this country when we have a political class that's so backward, that it doesn't even understand the principles of technology which previous generations knew? And because we represent a very small political force, we want to do things, but everywhere we look there are obstacles and things that get in our way.

LaRouche: Well, that's a matter where you're going to have to do it, aren't you?

Let's take the case of Christopher Columbus. Christopher Columbus is a product of Nicholas of Cusa, because Cusa, after the fall of Constantinople and the defeat by the Ottoman Turks in the Balkans, saw the collapse of the unification of the Christian churches, and a great threat to civilization as a result of this process. So he laid down a policy, that mankind, European civilization must conduct ocean voyages to circumnavigate the globe to find people on the other side of the Ottoman Empire. This was recorded in his will and testament as well. About 1480, Christopher Columbus, who was an Italian navigator working for the Portuguese, discovered this, because the bishop who was the executor of Cusa's estate,

was in Portugal. Through this contact, Christopher Columbus discovered this statement by Cusa, these documents. In 1480, Columbus wrote to the collaborator in Italy, for more information on this. So he got a map, and it was a map based on a measurement of the Earth done earlier, in about 200 B.C., by the great scientists of that period.

Columbus did further studies on the map, and was familiar with Atlantic oceanic currents (because the North Atlantic current goes like this [gestures] and the South Atlantic current goes like this). So therefore, the Portuguese couldn't get to the tip of South Africa, until they first went to Brazil. Columbus knew this, and therefore knew that the map was right, in the sense of how far across the ocean they would find land, which corresponded to the estimate given by Cusa's friend.

So, you find one individual, led an expedition across the ocean, based on

specific scientific knowledge, which found land where he expected it. And it was the land of a civilization which had existed before then, which was Cusa's mission.

So, that's the way society works: The individual in society, the individual human mind in society is the most characteristic power of society. It lies within the individual. And you have other people who try to behave like animals, like coyotes, hmm? and they are different. They may look human, but they don't behave human!

And that's your security problem. So, you think of yourself as a powerful genius with a security problem, and you understand society.

But, remember: The lesson of science, the power of the individual of mind represents the highest power in this universe. And every person who wishes to, touches that power.

Classical Art and Tactics

Q: I have two questions. . . This has to do with Classical art and science: When you have universal physical principles, in science there's a way of proving that they're true or false, because you have a machine tool that could represent the catenary, for what Leibniz did, the principle of minimal action; the Archytas model to represent doubling the volume of the cube—that's OK, that makes the individual happy to be able to discover that, because you can know if it's right or not, if it's true or not, in a complete and absolute way.

But in Classical art, it's the soul of the individual. You are talking about emotions. So, it's not something that's tangible. How do you know that it's right? How do you know, really truly, that a chorus will help us to organize politically the right



EIRNS

LYM members work on mathematics in a pedagogical workshop in Argentina. "Gauss isn't anything practical, it's not pragmatic," a questioner asked LaRouche. "It's not that Gauss helps me eat today, Gauss doesn't help me do something right now, but how do you differentiate this? Because we've got to be political leaders over the long term, especially when you're not around!"

way? That's my first question.

My second question is about a document you wrote talking about the difference between tactics and strategy. When we organize politically in the streets, we do things that are good, and they have good repercussions. But we don't need good things, we need things that change the geometry. So, how do we know that what we are really doing on a strategic level is efficient? And I think the point here is Gauss: I don't know how Gauss—Gauss isn't anything practical, it's not pragmatic. It's not that Gauss helps me eat today, Gauss doesn't help me do something right now, but how do you differentiate this out? Because we've got to be political leaders over the long term, especially when you're not around, when LaRouche isn't around! So, how do we do that?

LaRouche: Uh-oh!

Q: So, how do you do that?

LaRouche: Well, first of all, there is no real difference. Let's take music, first of all, on art: Let's take Classical vocal works and keep those in mind, but look at a much more simple challenge, the string quartet—Haydn, Mozart, Beethoven. Now, how do these work? The principle I mentioned earlier today in the principal address applies: That you have a modulation, a tempering.

For example, my late friend Norbert Brainin, was head of the Amadeus Quartet, which was the world's leading quartet, and the way they would rehearse is, he would say, "Let's do it again." Well, how did they know—if he didn't make any criticism of what they'd done before, how did they know what they had to do again? In other words, he didn't say, "That's

wrong, let's do it again to correct that." He simply said, *Let's do it again.*

What does that mean? Well, first of all, because the principle of music I referred to before is typical: A Classical string quartet is based essentially on Bachian conceptions of well-tempering. So, it's not vertical chords that define the string quartet. It is the developmental processes *across* the voices.

Now, there's always a developmental process, which is typified, for example, in the Lydian principle which is very commonly used in Classical composition. And what you're aiming for, is the effect that Furtwängler describes as "performing between the notes." In other words, you want a flow, which conforms to a process of development, so there's no diversion from that motion. It's like brightening and darkening a note in order to preserve the flow. An accomplished musician, like those in the Amadeus Quartet, when they hear something, they have an image of what they have performed as a reflection. When Brainin says, "Let's do it again," he simply said, "Let's try to get this

better than we did before." And what strikes them, is things that *don't quite fit the purpose*; which means you must make a very slight adjustment to the performance to prevent an incongruous development within the performance.

The principle here, is the effect of the *whole*, as this is affected by the part. In other words, it's a dynamic process, not a mechanical process. And any great musician, all of them, will tend to be trained on intonation; an accomplished performer will have a very precise sense of intonation, and does not need a tuning fork. Because the training and development is such that this is embedded in their mind, and they hear the composition as a whole in a special way, not from part to part. Sometimes reading a score gets in the way of trying to understand what the composition as a whole means. You want to get a conception of a *unit of idea*.

Now, in every branch of art, the same thing applies. Take a painting; take the work of Leonardo da Vinci, where he made a discovery, and he got away from this idea of rectilinear perspective. Look up here, at the mountains, for example, and you have a very slight haze or less haze. Now, consider at local points, what the texture looks like; go across one ridge to the next, and on the ground they will look quite similar in terms of texture. But when you see them from a perspective, say, from this hotel, the effective color changes. It's an effect of distance. So, Leonardo da Vinci changed the way in which he defined perspective for painting, in many ways. And when you look at some of his discoveries in draftsmanship, you are astonished by the profundity of genius expressed by what seems to be very simple things.

So, in art, the perfection of this sense of Classical princi-

ples of composition, which in a sense correspond to scientific principles: as for example, Leonardo da Vinci on vision—a genius on vision, which is a branch of physics. On the question of discovery of certain kinds of formations in wind formations: to represent that was powerful—and it corresponds precisely with scientific discovery in physical science, and in communicating ideas about man and nature, which involve processes which are larger than the individual.

For example, the *Mona Lisa*: Is she beginning to smile, or is she completing a smile? Which? It's a work of genius.

Is she beginning to smile? Or, was she smiling?

And this is true in all great art. The essential thing is the development of the mind to be able to see social processes, with the same fidelity that you think of a mathematical physical form of principle.

On tactics and strategy, organizing, and the Gauss example: Same thing, exactly the same thing! You're looking at the relevance of what you're doing to the process on which you're acting. I take a very famous British actor—he's a bad actor—Sir Laurence Olivier. And he was asked about what made him an actor in an interview, toward the long-overdue end of his life. He was a terrible actor; he had been trained, professionally, but he was a fraud! And they asked him, "Why, Sir Laurence, did you decide to become an actor?" He *glowed!* Look at me! Look at me!

This is not good acting. He became an actor to be admired on the stage as an object on the stage. A great Classical actor does *exactly* the opposite. The great Classical actor is trying to convey a historical fact, or something equivalent to a historical fact. Take *Hamlet* or the other tragedies which refer to legend in Shakespeare. Now these are societies, Hamlet's Denmark, or the Celtic societies, which like ancient Rome, were inherently rotten.

Now, some idiot would always say, "Well, what is the lesson of these plays? What's the lesson of *Julius Caesar*?" Well, the lesson is, there's nobody who's any damned good in the Rome of Julius Caesar! Why put a play on? Huh? *Lear*, they're all idiots! *Othello* is a portrayal of evil! *Hamlet's* a portrayal of evil! They're all crooks, they're all murderers, they're all thugs! Superstitious fools!

Why portray it?

Because, as Schiller put it, the idea of a Classical drama is to affect the audience so that the people coming out of the theater are better people than those going in. The purpose of showing evil in Classical drama is to give people an insight



Courtesy of Norbert Brainin

The Amadeus Quartet (now disbanded). LaRouche's late friend Norbert Brainin is on the left. "A Classical string quartet is based essentially on Bachian conceptions of well-tempering," said LaRouche. "So, it's not vertical chords that define the string quartet. It is the developmental processes across the voices."

into what evil is, especially the kind of evil that leads an entire society to its act of self-destruction. You see it in *Othello* for example, Shakespeare's *Othello* is a perfect example of that.

So therefore, the function here—and tactics is the same: Rather than trying to produce an effect which makes you feel good because you were such a smart person, or look so beautiful on that day, wish to be admired, or simply wish to get out of there—that you took an individual action as being *my action*.

Now, in a real action, you're like the playwright in a Classical drama, like Schiller: What you're trying to do, is to get people to see something—something that is relevant, that is important for them to recognize. And you're trying to find out the best way of doing that. Now, when you walk away from an intervention of some kind, you look at yourself as if you were the character on a stage. You go into the balcony of the theater, and you look at yourself on stage, and say, "What was I doing there?" And that's the question of judgment. Because the tendency, the danger is often that you react to a situation. Let's take a case as it applies to military problems. You take wars like Iraq: totally unjustified. No excuse. The search for a war with Iran: no excuse. Are there problems? Yes, there are problems. But does the fact that a problem exists, justify going to war? Is war an appropriate act? Obviously, the Vietnam War was a terrible mistake, by the United States. Anybody who's had any brains would admit it.

Also in politics, in general, it's the same thing. Often a politician acts stupidly, because he says, he wants to "get ahead." And he will let that influence his decision, rather than



EIRNS/Stuart Lewis

Classical actor Robert Beltran (center) works with a LYM drama workshop in Pennsylvania, coaching a performance of Shakespeare's Julius Caesar. "As Schiller put it, the idea of a Classical drama is to affect the audience so that the people coming out of the theater are better people than those going in."

the effect on the country. So, often you get impulses to react to a situation, which are not justified, when you look at them from a longer perspective.

So that your tactical actions should be shaped as much as possible by a strategic outlook. For example, I constantly got these questions here—people asked me, "What President would you support in Mexico?" I said: "That's not my business. I don't know them that well, anyway. And as a political figure of the United States, I shouldn't interfere. What my job is, is to act in way which may influence the process here, so some people in Mexico themselves may make an improved decision. My job here, is to inform the processes of decision-making."

In the United States, I'm doing both: I'm doing the one; I'm also in there making trouble. And I get into a lot of trouble! As you may have heard.

But the appropriateness of the action, as a form of tactical action to a strategic purpose, such as going into the balcony of the theater and remembering yourself now on stage: Can you say, that the action you took was appropriate to a strategic end?

Taking a Risk for Principle

Q: Mr. LaRouche, thank you for coming here. I want to ask you some questions that I think are important for us here, even if it's not your business, what's next for Mexico? You

mentioned some years ago that there was a strong international interest in the destruction of Mexico. What's behind the 2006 election process? What do you recommend for us as teenagers in order to be prepared, and in order to know what we have to be aware of?

LaRouche: First of all, remember, I was in the middle of this back then, in 1982. It started with my concern about the Malvinas War, which I tried to prevent, and continued to work on that during the time the war was continuing. In that connection, I came to Mexico for a conference, Mexico City. And in the context of the meeting, I was invited to speak with the President of Mexico then, José López Portillo. So, he asked me what was going to happen to his country. He said, "What're they going to do to my country?" I said, "They intend to destroy it, beginning about September." And of course, they started in August.

So, I wrote a paper, a long paper, called *Operation Juárez*, which was published in English and Spanish on Aug. 2 of that year, which dealt with

the whole problem of the reorganization of the debt of the countries of South and Central America. The policy I proposed, which had been discussed earlier, in the process of writing this document, was accepted by the circles of López Portillo. But we were defeated. The actions taken by López Portillo and his associates were brilliant, and—and courageous. His reflection on this, which was done at a speech given at the United Nations General Assembly in October, which some of you, I think have seen—we have it on the website—and others should see, particularly on this question, because it summed up the situation, the issue of principle involved.

At the same time, I had intervened with, among others President Reagan, and then crafted a proposal for a new policy initiative by the United States with the Soviet Union. This was presented by President Reagan on March 23, 1983, and was turned down by the Soviets, despite the fact that I'd warned them that if the Soviet government rejected the President's offer, the Soviet system would fall in about five years. It began to fall in six.

So I mention these two examples, because it's typical in history. You do not win every battle. But you do not base what you do, on winning battles. You try not to make mistakes, but do not necessarily lose a battle because you made a mistake: Sometimes you had to go to the risk of losing a battle, for the sake of a longer principle. Because of what happened to the

Soviet Union and Eastern Europe, I gained more influence internationally, so much so that leading forces in the United States set forth to destroy me, because of these two actions: my defense of Mexico against the foreign predators, and my proposal on what became known as the Strategic Defense Initiative. And they had reason to fear. I had, at that point, support from not only leading military and other circles in the United States, but leading military authorities in France, in Germany, in Italy, and other places. What I was doing was a real threat to the opposition, as in the case of the defense of Mexico. Looking back today, I say, "I did the right thing."

I was put into prison. They were going to kill me, but that was stopped. But because of the SDI, and the thing in Mexico—the fact that we *made* the fight to defend the sovereignty of Mexico, and also the sovereignty of the nations of the hemisphere—gives us an advantage that we can fight with honor, today, because we faced a battle that was forced upon us then, and set a precedent of which people today can be proud.

And that's about as good as you can do in history, in reality. You don't have to find a guaranteed victory. You have to have a sense of immortality: You have to think of what you're doing now, in terms of its effect on generations to come, and you have to say: Is your risk—like a soldier in battle—is your taking the risk justified? Is it necessary, even if it means possible defeat?

And that's what a Baby-Boomer can't do.

Science, Religion, Education—and Truth

Q: You talk about what's necessary to know the truth, as the strategic basis to resolve problems in general. Now what role does society play, does science play, and does religion play? Which of these are considered part of strategy in this search?

LaRouche: Well, obviously, most people who profess to be religious don't know much about it. At best they have a certain approximation of understanding. Most people, like religious people today, think generally of going to another world after death, which is a pagan superstition. You have to think of yourself properly in terms of your living in a universe. Your immortality lies *within* that universe, not some outside universe. Right-wing fanatics believe that God made a contract with them. The Creator was not bound by any contract. The Creator, if He's a Creator, has creative power. He has free will. You to say to the religious fanatic, "Watch out! This is not a dumb God you have! He may do something about you. So you better think about the rightness or wrongness of what you're doing."

Now, science and religion in the true sense, have no difference. Truth is not divided against itself. The one is the same as the other, when you understand this; that our knowledge of the universe shows that it's created, and it was created by a form of intelligence which we share. The part we understand the best, is science.

Q: I want to ask you a question on education. Education is a crucial basis for everything possible. When I go to school, are they really fooling me with what they're teaching me, or is this a basis for me to be able to discover things? How can you *really* get to the truth, to real knowledge, through education?

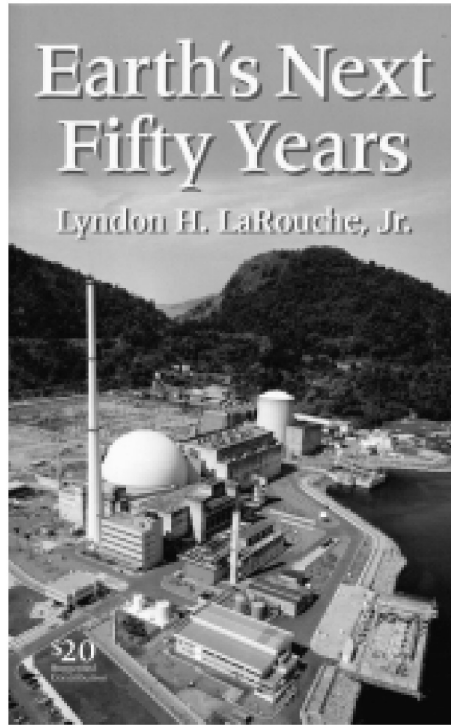
LaRouche: Well, the problem is that education today is largely defective. There are many people in the educational process who are very useful people. They have systemic problems, however. I'll give you an example from my experience with scientists who were associated with the Fusion Energy Foundation back in the 1970s and 1980s: That is, the scientists I worked with typified the leading scientists of the world at that time. On the questions of experimental science, that is, the science of physical experiment, they were very good. When they went to the blackboard to explain it mathematically, they became absurd.

The other part of the thing, was the division between what's called art and science. For reasons I've already given here, there is no difference between art and science, there's a difference in the subject of reference: One looks at the universe as a physical universe or a biological universe. When we look at art, we're looking at it as a social universe. The subject is the same. The difference is, in art, that the subject is also ourselves, our own social identity.

Individual Creativity and the Fourth Domain

Q: I have a question based on something of yours which surprised me. It's a footnote in the Spanish translation of "Man's Original Creations"; you said that Furtwängler was really excellent on a piece of Tchaikovsky (I can't remember which it was). One of the things that surprised was that it was Tchaikovsky, because from what I felt, what I've seen, what I think I understand well, is this idea that music works dynamically, not mechanically, for example in Bach. And from what I've studied on piano music in general, I've found Classical composers may present you something that breaks with what you've learned up to that point, and present an irony; they always resolve that irony, they take you to a better place. Even Chopin does this, which really impresses me a lot. But, what's the problem with the Romantics, how do they mess things up? At what point? Because, for example, when you hear these works, there are clearly elements which shows that they think, but what it is that spoils it all? What's the point at which Romantic works no longer function?

LaRouche: Hmm. Well, essentially that the Classical composer exists in the real world. The Romantic is providing entertainment—sometimes very close to sexual entertainment. Liszt is essentially a sexual fanatic with keyboard facility. No, as a matter of fact, Liszt was a protégé of Czerny, Carl Czerny. So Czerny brought the young Liszt as a young, talented boy to Beethoven. It was typical of Beethoven to give the following observation, into the face of Czerny: He said, "The young boy is very talented, but that criminal, Czerny,



The Russian-Ukrainian scientist Vladimir I. Vernadsky (left) developed the conception of the Noösphere—man’s creative activity—as the third domain of geological action, beyond the abiotic and biotic. LaRouche has developed this idea further, extending it to the science of economics, notably in his March 2005 book, shown here.

LPAC

will ruin him.”

In the Classical composition, as in all science, you never do anything for effect. You do it for a purpose. You do it for a moral purpose, in service of truth, not for sexual exercises.

Q: I’d like to ask a question I’ve had for a long time, which is that the fourth power is a really provocative idea. If we understand for example, the way Vernadsky deals with the issue of abiotic and the biotic, which as you said, takes control of, and becomes a leading factor, and then after that the Noösphere, so we have three domains. At a certain point in reading what you’ve written, and hearing what you’ve said, I thought of the fourth domain as being that of the transmission of those ideas which the Noösphere generates, the domain of the human mind. To be part of that dynamic process of transmission of ideas, that’s how I had understood the fourth domain.

Now, today, the only thing I could think of when you talked about the fourth domain was God, to just put it in a simple word, the guiding principle of all guiding principles. So, I don’t know—I don’t even know how to ask the question. It’s completely provocative. How do you know this?

LaRouche: Fun! Good! Okay, it really is fairly simple, in the sense, it’s elementary. But, elementary is not necessarily simple.

It’s simple in the sense, that there’s a very clear answer, a single answer. Getting to understand the answer, is not so simple. Not an uncommon problem in scientific work. There was a sense in the question, a point of dissonance that sud-

denly pops in, which may reflect what troubled him: You see, when you talk about the fourth principle, and you go to an ontological idea of identifying an object, the Creator as a object, it creates a certain ontological problem, which must be avoided. Because, in all these things, you must decide what it is you’re talking about.

What the effect is, is the action of this fourth principle, this fourth domain, which I describe as a domain. And when you try to change that from domain to personality, you’ve got a problem. You’re failing to distinguish the difference between the footprints and the person that makes them. The domain is a pattern of footprints; it is not the ontological personality which leaves the footprints.

What’s the ontology: You have to look at it from the standpoint as I pose it, as *physical geometry*. How is the universe organized? Let me try to get through the complications of understanding which may arise in the following way. All right, we start with the simplest aspect of the universe, the abiotic Earth. Now, that has a certain geometry. You say, “Is that the geometry of the universe?” No. Because once you introduce the fact that *life* is a universal physical principle, now you have to change your geometry. Because the principle of life is expressed as a difference in geometry of processes, from simply abiotic processes. When you put in the question of human creative behavior, suddenly you’re no longer in a universe which is *only* a combination of non-living and living processes. You’re in a different physical geometry.

Now, you get to the next stage. Now you consider, *what is causing this change in the geometry of the universe?* The

change in geometry is being caused, in this case, by human individual creative behavior. Now therefore, what is the controlling geometry which causes the creative behavior of the human individual to give this addition shape to the universe? That's why I call it a fourth domain, because it represents a geometry, a different geometry, than merely an abiotic, or biotic domain. And this admittedly, is a problem which is not understood. To me, it's a simple thing, but getting to see this simple thing is not so easy.

This has troubled all kinds of people up to modern times, again, and again, and again. In the course of my life, I have made a few important original discoveries, and this is one of them.

Discovery, Irony, and the Principles of Government

Q: What is the principle for being able to discern and detect a beautiful action from a non-beautiful action?

LaRouche: Mm-hmm. Ah! Well, if you're a human being, and you like humanity, and you want to make the life of human beings in general better, anything that really does that in some necessary way, is beautiful. Especially something that is a discovery, a true discovery of principle: Any true discovery of principle that solves problems for humanity, which are otherwise unsolved in that locale, is beautiful.

What is also beautiful: You have children, then some fussy old adult comes along and says, "Well, what are you gonna be when you grow up?" Today, most adults are afraid to ask that question. But, in former times, you would get some child who would spontaneously respond to a question they had not anticipated, and they'd say, "Well, I'm going to be this, and I'm going to do this because it will have this kind of result. And that will be my purpose in life." And when you find a child, just a little child, who in a childish voice, in a childish way, expresses this great idea of humanity in that way, it's very nice.

Q: I'm very bad at music. I'm not rigorous with an instrument. I'm trying to develop my voice. My question has a relationship to the question of leadership involving musical composition, because sometimes, one can't inspire others, or it generates vicious relationships. So how do you confront that, to involve people in a different kind of composition?

LaRouche: The key to creativity is called classical irony. It is closely related to a good sense of humor. In a typical situation, you find that people are saying silly things, but they're discussing an important problem. And the conversation gets worse and worse and worse, and you have an insight which causes everybody to laugh at the way they're behaving. That is an essential example of the principle of insight. It's irony.

For example, take the case of Shelley. Shelley was in Egypt, on a visit, and he had to write a poem, as an assignment of that group of people. So he quickly composed a poem called *Ozymandias*. And you should read it, think about it.

Think of it in those terms. This was done in a very short period of time, in a situation where he was very much concerned about some things, and this funny poem *Ozymandias* expresses an intervention which has come down through the ages as something that many people have laughed at, because of the insight it shows. So it's that same principle—the principle of irony—applied to any medium of communication, that is classical irony.

Q: In your writing, "What Is God That Man Is Made in His Image?" you say that, thanks to the 15th-Century Renaissance, the population density increased as a result of the first nation-state being founded in France, after Joan of Arc. My question is why, if it was possible for a population to grow in Europe because of the existence of a nation-state, why in a nation where you have the greatest population density in the world, throughout their entire history, they lived under monarchies, and they lived in extreme poverty. So how can you rely on the nation-state under these circumstances as a principle? What is it that allows you to say that the nation-state is an actual principle?

Second question: Thomas Paine, who wrote *Common Sense*, the pamphlet that led to the War of Independence in the United States, also wrote a book called *The Age of Reason*, where he says the Bible is a fraud, because the writings of the Old and New Testament are a fraud. He is very ironic and he actually makes fun of it; he says that scientifically, the Bible is false.

LaRouche: On Paine, it's simple. Paine came out of this Irish movement, where Franklin picked him up. He was employed by Benjamin Franklin as a propagandist of the American Revolutionary War. Many of the people who were inspired by the American Revolution were driven into a kind of moral decadence by the effects of the French Revolution. For example, Thomas Jefferson became corrupted as a result of this. He had a situation where the President, George Washington, was almost isolated, except for Alexander Hamilton, in terms of leadership in the Presidency of that period. The mother of John Quincy Adams became really a menace! John Adams became disoriented; he became pro-British. He took repressive measures against the American people, or part of them.

Remember, you have to know that the French Revolution was organized by London. It was organized by the Freemasonic societies in London, working with the British East India Company. From July 1789 to 1815, Continental Europe was being destroyed by revolutions and wars. The United States, which had been a great influence in Europe before July 14, 1789, became corrupt, and people like Jefferson who had been heroes while Franklin lived, became corrupted by these circumstances. And the British were able to take over much of the United States, as a result of this, from 1812-1814 on. The United States was restored by Lincoln's victory in the Civil War, at which point there was an upturn. But Europe, as such, has been corrupted since the time of the death of

Louis XI in France. You have the case of the Habsburgs, who were responsible in Spain for organizing religious war that continued to 1648. The renewal of European civilization began with the Treaty of Westphalia in 1648, which put an end to religious warfare.

Then, the Treaty of Westphalia was largely the work, in negotiation, of Cardinal Mazarin, who had been sent to France by the Pope, and Mazarin's protégé, who organized French science and the French economy at the time, Jean Baptiste Colbert. Probably the highest rate of scientific progress in Europe until the present day occurred under Jean Baptiste Colbert in France. This was the period of Leibniz, and the friends of Leibniz, the circles of Leibniz, and Pierre de Fermat, and that crowd.

Then, you have, again, the religious wars. You have various wars organized by the Anglo-Dutch Liberal forces. You have the rise of the Dutch East India Company. You had the evolution of the British East India Company, which was an empire which dominated Europe from 1763 until almost the present time. The most important enemy of civilization in terms of power is the international circle of bankers centered on London to the present day.

The problem is the corruption of the people. You see it now! The Baby Boomer generation is an example of the effects of corruption on the children of people who fought in World War II. You have to know those times. I lived through those times. I came back from military service at the end of the war. I'd been under Franklin Roosevelt then. I came back from Asia in the Spring of 1946, and it was a different society. We still had a good economic policy, in general, but we joined with the British in conducting repressive wars against the nations of the so-called developing sector. We adopted a policy of preventive nuclear war which dominated the world until 1989, recently. They transformed the children of my generation into Baby Boomers, by a systematic campaign of corruption, which was organized from the time they were *born*, by a program modelled upon the same corruption—it was called sophistry—which induced Athens to destroy itself in the Peloponnesian War.

Civilization is not measured in merely abstract forms. There are systematic principles of government, and these are valid. But government is not done by abstractions. Government and leadership in society are done by living human beings, and if you have corrupted human beings in government, you're going to have a corrupted society. There is no simple mathematical formula for this. Some of us have to realize, that we have to take personal responsibility for ensuring that the principles of good government are preserved.

Sometimes you have to defend government physically. You have to defend good government physically, when it is threatened. But the basic thing to prevent getting to that point, is providing leadership, which prevents that condition from arising. You have no weapons. You're not fighting, but you have minds. You're part of this nation, you're part of the

youth of this nation. You have the privilege of what you are, and what you can accomplish. Your weapons are the weapons of developing the strength of the nation, the moral strength of the nation, by trying to lift the people up to a higher conception of themselves, to induce the people of Mexico to make better people of themselves.

Q: This is comment more than a question. I wanted to just share a few words with you. I just had the honor of meeting the movement of Lyndon LaRouche Friday, hearing the symposium at my [inaud.]. I didn't know anything about the movement you represent. I've seen a lot of [inaud.], and I've become stronger. So, I've written down something with a certain purpose, so I want to share this with you. Let us not allow this valuable presentation by Lyndon LaRouche, to stay only in this room. I'm sure that all of us who are here, who are very grateful. I'm from Mexico City and I installed myself here, and retain communications, so we can continue and expand what is being presented here, today. That is, in fact, the idea of your movement. Therefore, I'd like to ask your organizing committee to be part of this organizing committee to produce a transcript of everything from here. I hope we will all allow the seed that LaRouche has planted today to grow and to have results, even though you may feel you have to motivate a sense of will and immortality in people, when the difference between our hopes and dreams in search of the common good of all humanity, shall be carried forward.

Music As a Source of Happiness

Q: I'm really sorry to lower the level of discussion here, with what is perhaps a very reductionist question. I'm wondering about the way scientific questions are addressed, and what is the best way to address the issue of music in particular—given that there is a real decadence in the way we've been educated. We haven't been truly elevated to a proper way to understand phenomena.

So, my question is regarding music: Is it sufficient to return to the original discoveries, or is it necessary to read Socrates to help us give birth to new meaning? For example, Professor Brainin is no longer around. How can I, with my problems, find an understanding about the idea in music? Because in the music conservatories, they teach music in a really mechanistic way. And I can't perceive of a way, of how you can find an idea in this musical score itself. So I want to ask you if it's necessary for someone to help us, and if so, how do we go about doing that?

LaRouche: There's one exercise I recommended particularly, which is key for this, which I've used often, and which you can deal with. And you may therefore assist other people in the process of dealing with it. One of the key works, crucial works in defining all Classical music, is a work which was done by Bach, for Friedrich der Grosse, Frederick the Great, called *The Musical Offering*. Now, if you trace the history and



EIRNS/Sergio Oswaldo Barbosa García

The LYM chorus performs at the Monterrey event with LaRouche on April 1. “We find that when our young people become involved in . . . regular, consistent vocal work, there’s an emerging comprehension of what we’re really doing. Not just simply to repeat something, but to do it better, to have deeper insight.”

the impact of *The Musical Offering*, throughout the history of composition, through Brahms, you’ll find that there’s constantly a dialogue going on with Bach and his successors. So you had a revolution, in the case of Mozart responding to Bach, on the basis of an inspiration by Haydn, in which *The Musical Offering* was key. The six quartets all reflect this idea of the Lydian mode and its implications.

Then, you have the same thing in Beethoven. A great number of the Beethoven piano sonatas are all based on the same thing: Bach—Beethoven was a complete student of Bach. Mozart had been influenced, as Haydn had, by Carl Philipp Emanuel Bach, but then he became acquainted with the direct work of Bach, about 1781-82, and made revolutions in music, as a result. He became a composer of fugues, many of which are lost, but he was a prolific composer of fugues. Beethoven used the same material. He did a summation of this in the *Opus 132*, which is a perfect example of this. This is what inspired Felix Mendelssohn. This in turn was what inspired Schumann. This is what inspired Brahms. And all the way through, there is a constant dialogue among Bach and these other composers. They’re all working on the same problem, the same objective, and responding to what one another has done.

Perhaps, as you know, for example, you have a passage in the Andante of the Third Movement, a transitional passage, which then becomes the basis, on which Brahms composed his Fourth Symphony. It’s the same thing. So therefore, the difference between today and then, is this dialogue among composers. It’s like a community of people talking and working with each other.

With the introduction of Romanticism, Modernism, Post-Modernism, and whatnot, this continuity was broken. Take

for example, today, one of the leading relatively young performers at the keyboard, Andras Schiff, who is now doing his recording of a Beethoven cycle. Schiff’s method, and you can hear it from his keyboard performances, is based heavily on a strict discipline in Bach. He eliminates completely this false interpretation of music, which you find in bad interpretations of Chopin as an influence, where they tried to romanticize Chopin, who was a Classical composer, not a Romantic.

So, the key thing here on music in general, is the dialogue. There are creative problems of a scientific nature, which arise in music, which are best typified by the Bachian tradition of the treatment of the Lydian mode. So rather than trying to say what is the method they use, to compose, to

work, the trick is to become an integral part in oneself, a part of the dialogue with them. There are certain subjects in music which are musical subjects, which are of human relevance for today. Modern musical education and practice, with few exceptions, has lost contact with that. People try to perform these works, but you tell them, they are trying to speak in a strange language whose meanings they don’t understand.

The best access to this, in general, is, however, from the vocal standpoint. What you were going through here, today [referring to choral warm-up exercises before the meeting], the question of the shading, of the tempering, from Bach and similar kinds of work, and choral work. We’ve used, often, the *Jesu, meine Freude* of Bach as a key training, because it has some interesting problems. It’s the best of it for that purpose.

We find that when our young people become involved in this, as they are in Europe and in the United States, for example, there’s an emerging comprehension of what we’re really doing, which is associated with *regular, consistent work on vocal work*. Not just simply to repeat something, but to do it better, to have deeper insight. It works! It’s a wonderful world to live in. We’ve wonderful geniuses as friends, who can come to life at the keyboard, in music. It’s a source of happiness.

Building Nation States Without the Oligarchy

Q: I’ve been with the movement for about six months. We have objective proposals for infrastructure, and nuclear energy, the ideas that should be carried out to be able to build a future, which, as you’ve mentioned, right now, we have no future. So my question is, what do you think is the most efficient way to make the movement’s plans also be more efficient, because we don’t have a lot of time to wait for this



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How do we carry out our plans for infrastructure and nuclear energy development? We don't have a lot of time to wait—right now we have no future, a youth asked. Here, the Laguna Verde nuclear plant in Mexico. This was the only unit built, although there were plans for a fleet of Mexican nuclear plants in the 1970s.

to come about. And no one is more concerned about this than we here, because this is *our* future we're talking about? And how big should the LYM be?

LaRouche: Well, as big as you can find people who are qualified to be members of it. It's that simple. Do the best you can.

But you have to be objective about this problem. Mexico does not have sovereignty at present. You can not expect Mexico's sovereignty to come back to it so easily, after all these decades. We have international responsibility. As I've said before—let me emphasize again in this connection: I take a strategic view of this question. As I said the other day, the nations of the Americas are very special in the world. Because there were some parts of the population, as in Peru or Mexico where, shall we say, the biological stock of the population, was here before the Spanish arrived. But then, the best of the Europeans—apart from a few unwanted characters, who tried to turn the farmers into peons—most people who came from Europe, to North America, Central America, South America, came not so much to get away from Europe, but to get out of the reach of the European oligarchy. And Europe, still to this day, is culturally contaminated by the influence of the oligarchic state of mind.

Now, our idea was to build, in the Americas, nation-states, which realize the objectives of European civilization, the objectives of the 15th-Century Renaissance, without the oligarchy. The idea of the leaders of this, was that we would then transform Europe by our influence and example. Because of the French Revolution, the Napoleonic Wars, and similar things, Europe has never realized the objective. Their culture is defective, defective in this very strong influence of oligarchy. The worst problems we have with the Americas are from the influence of European oligarchism in various parts of the Americas.

The case in Mexico, of Juárez is exemplary, because he represented—biologically and in every other way—a typical Mexican, and a hero of the struggle for liberty. And despite all the other problems and so forth that happened here, largely because of French and other influence, nonetheless in the 1930s, there emerged a sovereign Mexican state, a republic of some solidity. It still existed here in 1982, with all the imperfections, all the problems.

Now, what we've always struggled for, those of us who understood this better, is we understood that the states of the Americas had a *natural affinity*, because we have a common heritage from this modern European civilization: the idea of creating nation-states which are not ruled by oligarchs, with constitutions which are based on the development of all of the people. Even when this was not practiced, *the idea of this* was there.

Now, at this time, we've come to a great crisis in this civilization. Now we see emerging, after nearly 40 years of various kinds of problems, a movement toward cooperation among the nation-states of the Americas, coming from the tip, South-North. It's easy to make a list of all the imperfections in the cooperation among these states, but the idea that fragmentation is disaster, prevails. [Brazilian President] Lula, whatever he thinks, knows that he has to cooperate with [Argentine President] Kirchner. You have an imperfect development in Chile, but it's certainly getting rid of fascism—that's good. There's a difficult situation in Bolivia, and we have problems in Peru; they create a coup there. There are problems in Colombia. You have a situation in Venezuela, which is very complicated and very interesting. But you have this drive in South America toward cooperation.

Mexico is very important in this cooperation, from south of the Rio Grande to the tip of South America. *Mexico is a very important part of that.* The United States is implicitly an important part of that.

Therefore, I'm concerned about global things. I've had ideas for Europe and so forth, all these things. *But:* Respecting the Americas, I understand the responsibility of the United States to help these states of South and Central America *to break the bonds of imprisonment.* But you can not free a slave who does not want to be free. And therefore, even though the power in Mexico or these other states to free themselves, is limited, the fact that they do not want to be slaves, and have a clear spirit of defending their nations, means we have people who *do not want to be slaves.* And people who do not wish to be slaves, given the opportunity, will free themselves.

So, what Mexico can do is limited by circumstances: But if the *spirit of Mexico demands freedom*, then the first presentation of such an opportunity will be a success.

Fighting the Cause of Evil

Q: Next week, it's going to be one month since a very terrible murder happened here in Monterrey, by a youth, an adolescent, who stabbed a seven-year-old boy and decapi-

tated a three-year-old. There's a whole terrible story behind this. I knew these kids, the girl involved; I studied with her. So the question is to us, in the LaRouche Youth Movement: I want to try to understand what happened. It seems extremely evil, it's really ugly. I don't know what idea I should have about this, because I just don't understand it! These are kids of my age, they're just children. So that's my question.

LaRouche: Well, what you are describing, as offhand, sounds like evil. You can't always go by the surface events, as you reported them. But you could quickly develop a sense of the probable pattern of the crime. In other words, you can define lines of investigation, both criminal investigation, and for trying to diagnose the phenomenon.

Now, this kind of thing has a Satanic quality. Because, the quality that you described—you see, murder is a simple thing; but when you have murder with mutilation of symbolic implications, then you may be dealing with something Satanic. You may be dealing with drug use also, which may induce certain states.

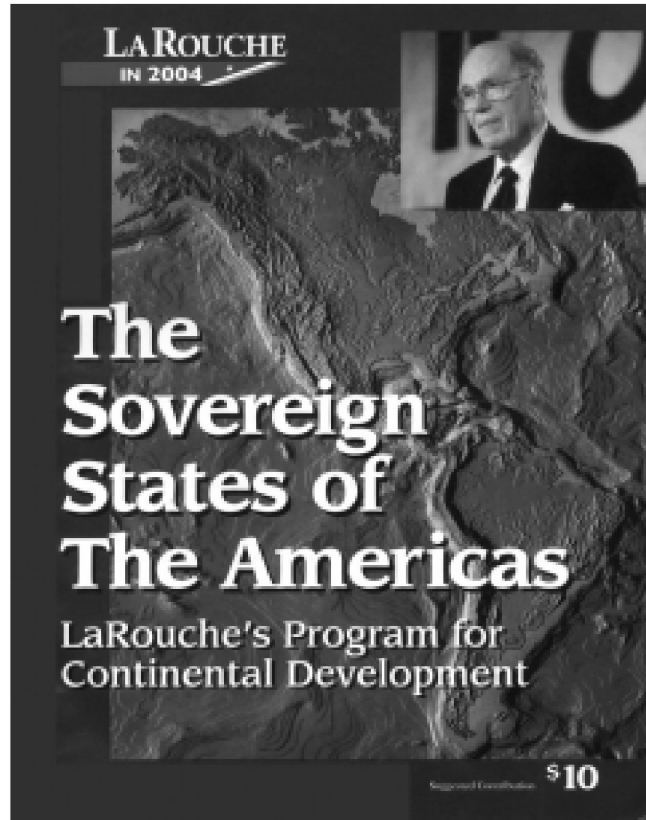
But the key thing is to understand—looking at this, that's only an hypothesis. If I were investigating a case like that, these are the first things that would come to my mind. This is not an ordinary homicide. It's a killing of children. So therefore, the killing of children itself has significance. And then the characteristic of the crime is important.

There is a significant spread of Satanic cults, which sometimes overlaps the drug traffic, and sometimes not. See, the kind of border drug traffic here, is one of the first things I would keep in mind on this, because it has effects: You may produce a certain type of personality, promote it.

I don't think I can give you a conclusion beyond that, but except you have to be able to think about what this means, what this means in terms of the lack of organization of society, what can go wrong. And look at something more general: the sacredness of human life. The sacredness of the life of children. In a healthy society, we look at children as the future of society. The parents, first of all, and the grandparents even more strongly. And therefore, when this happens, the reaction is "Children! Children!" And it indicates a breakdown someplace.

I can't give you the answer, because I don't know enough of the facts. But the questions I would ask is, is this an isolated act, or an aberration? Or is it a product of a condition which tends to promote things like this, which may not be directly related to the act itself, but enter into it?

I would say that the thing that bothers me in this kind of thing, or, shall we say, heightens my concern is: We have a border crisis. The border crisis is caused by the impoverishment of Mexico, and the use of this area, of these states in Northern Mexico, as roads of transit. And I also know that, we've got in various parts of the world, including in the Americas, you have people with one degree or another of professional killing capability. You have a weakening of government; you have a tendency for the formation of gangs; and in



LaRouche in 2004

A LaRouche in 2004 Presidential campaign pamphlet. "The nations of the Americas are very special in the world," LaRouche said. "Most people who came from Europe, to North America, Central America, South America, came not so much to get away from Europe, but to get out of the reach of the European oligarchy. And Europe, still to this day, is culturally contaminated by the influence of the oligarchic state of mind."

the recent experience of the world, as you see in the case of Colombia, some of these gangs are extraordinarily capable in military capabilities. They create an environment of a government within government, governing a territory in which this kind of thing, or things like this are more likely to happen.

So, my generic answer therefore is, taking such things into consideration, I think that solving this border question between the United States and Mexico, is extremely important. We have to have the pacification of this area. We have to have pacification, in order to make it possible to have economic development. We need economic development in order to have pacification. So, it's a sophisticated question, in which I can give no more definite answers than that. But I think, if you think about it that way, and say we're in a war to save civilization, so first fight war, to try to make sure things like this don't happen.

Develop Your Intellectual Capabilities!

Q: This is a question, this is a hypothesis, and an analysis, maybe a generational analysis, because I realize we always