

# Art and Science: Charting the Course For the Post-Cheney Era

*The LaRouche Show host Harley Schlanger welcomed Lyndon LaRouche, who spoke from Erbenheim in Germany, as his guest on Dec. 17, along with LaRouche Youth Movement panelists Riana St. Classis, Cody Jones, and Jason Ross. The LaRouche Show is archived at [www.larouchepub.com/radio/index.html](http://www.larouchepub.com/radio/index.html).*

**Harley Schlanger:** . . . This has been an especially bad week for Vice President Dick Cheney. And that's good news for our nation and the world. The Vice President in charge of torture, and now apparently, domestic spying, suffered a one-two punch this week, as his effort to make torture part of U.S. policy was defeated decisively by a bipartisan alliance in the Congress. Then, the very next day, yesterday, his drive to extend the Patriot Act, under which domestic spying has been revived, was defeated—and, again, by a bipartisan coalition.

Our guest today, is the intellectual driving force behind the succession of bad days and defeats administered to Cheney and the neo-cons. He's also pressing ahead with a second flank, organizing to reverse the now 35-year descent into a post-industrial New Dark Age. Coming out with a soon-to-be-published paper, "The Principle of 'Power,'" which he composed in collaboration with members of the LaRouche Youth Movement [*EIR*, Dec. 23]; then again, this morning (this is a very busy man we have with us), he released a memo on the subject "Rebuilding the U.S.A.: Travel Among Cities."

I'm talking, of course, about Lyndon LaRouche. And we'll be joined later by a panel of LaRouche Youth Movement members who participated in the project with Mr. LaRouche: We'll have on with us today, Cody Jones, Jason Ross, and Riana St. Classis.

So, we'll begin by welcoming to The LaRouche Show, Lyndon LaRouche. How are you today, Lyn?

**Lyndon LaRouche:** Well, I think I'm probably alive and fairly well.

## A Bad Week for Cheney

**Schlanger:** Lyn, this has been a very bad week for Dick Cheney. Give us the story from your perspective on these developments.

**LaRouche:** Well, there are a whole series of things. You know, actually, on Nov. 9 of last year, we found a Democratic Party which was about to give up the ghost for the time being,



EIRNS/Stuart Lewis

*House Minority Leader Nancy Pelosi "played a signal role" by announcing a Democratic initiative to save the economy, by moving ahead with an industrial-based development program.*

after the events of Nov. 2. And I began to kick a bit (as I am prone to do), and we got the Democratic Party, or some of them, moving, and we got the whole party pretty much moving in short order, so that, in point of fact, that the George W. Bush, Jr. Administration, the second administration, has actually been a lame-duck administration in the making from the beginning of the second inauguration. It really never got off the ground. But a lot of things that had been started in the first Bush Administration, rather ugly things, such as the war in Iraq, and other things of that sort, kept catching up. We weren't rid of it.

But, we're now at the point, that you can say, probably, that Rumsfeld is on the way out; he's as good as gone, and knows it. So, about the time that the first quarter of 2006 comes to an end, Rumsfeld will probably be out by that time. And that's all, in a sense, in the program.

You have, also now, a process of a White House which is becoming pretty much of a barren land. You've got the President in the Oval Office and a few old hands there hanging on. But there's not much activity going on there. He's going to be giving an address which won't mean much—make a

fool of himself. And, Cheney's out travelling.

And Cheney's in deep trouble—for a whole series of reasons, not because of this or that, or the Congress. What's happening is, there's been a buildup, first in the Senate, of resistance to Bush's plans to rob Social Security. That got jammed up. Then, at a later point, you had this DeLay process—DeLay got into trouble, and the Republican Administration's control over the House of Representatives began to weaken. And now, you have a situation where both houses of the Congress are in a process of resistance to this Administration: the torture business; one fraud after the other perpetrated largely under the direction of Dick Cheney. Dick Cheney's in trouble—he's lost Libby. The neo-cons who were the big funders from Hollinger Corp., who were funding the neo-cons—the head neo-con, Conrad Black is in deep trouble in a Chicago court. Things of that sort.

So, the problem now, is not how do we defeat Bush, Cheney, and so forth; that's already in process. The question is, how do we get started on the things that have to be started now? In other words, we have an impasse, in which the Bush-Cheney Administration is a failure, and there's no sign that it's going to be anything but a failure from here on in. But on the other hand, we have the forces of a bipartisan group which is taking shape, the overwhelming majority of Democratic Representatives and some Republicans, constituting a majority, really in both houses of Congress.

We've not yet got our act together. We have not yet got the Executive branch orders which have to be shaped, to deal with what is oncoming as the most dangerous international financial collapse in modern history. It's coming on fast.

## LaRouche vs. Rohatyn

**Schlanger:** Well, there've been some dramatic events on that just in this last week to ten days. There was Nancy Pelosi's speech at Harvard [EIR, Dec. 16]. And then, your old synarchist adversary, Felix Rohatyn, took to the pages of the *Washington Post* to try to block the momentum behind your initiatives in the Congress, to reorganize the financial system and to restore an FDR-style approach to rebuilding infrastructure. How do you see this battle unfolding?

**LaRouche:** Well, there are actually three figures in the battle outside the members of the Congress: One is me; that I've been pushing for measures which I think are absolutely indispensable, to keep the world from going into a dark age, among other things, but to deal with this onrushing, general financial crisis—worldwide: not just the United States, not just the United States and Europe, not just the Americas and Europe, but worldwide. There's no part of the world, that can survive, successfully, for the coming two generations, unless certain initiatives come from the United States.

So, my main concern is to get those economic reforms in place, and to get the Congress mobilized behind it, to get other institutions, and hopefully get the Executive branch moving on this, now, quickly. Because the crash is coming on fast.



*Former Federal Reserve chairman Paul Volcker agrees with LaRouche on the need for monetary and related reform—in opposition to Felix Rohatyn.*

It's already in process. It's not something that is going to "start" to happen, it is now happening. We're now in a crash. We're in a slide down, and we're about to go off the cliff.

So, I have my proposals. One of these proposals in a sense was satisfied by what Nancy Pelosi did, the leader of the House of Representatives, the Democratic leader; who, in her Harvard address, made what I've characterized as a new Tennis Court Oath, referring to the Marquis de Lafayette's proposal for a constitutional reform in France, during May-June of 1789. But that didn't happen, and other things did happen, and France went to hell. But we were close at that point, where, there is a revolt in the institutions, for which Nancy Pelosi played a signal role in announcing this, with that announcement, that we are now moving to try to save the economy, by a mobilization of measures which will get this economy out of the depression and moving ahead with an industrial-based development program.

So, that's where we stand.

The other thing, is, we have Paul Volcker, the former Federal Reserve chairman, who has been moving on this issue with his own ideas. They're pro-American—I don't agree with him, but I agree with him against Rohatyn.

Rohatyn is actually a European fascist. He's what we call technically, a synarchist banker. He has no particular loyalties to the United States, though he does attach himself, like a flea, to the Democratic Party. But, he's on the other side.

So, you have the three of us, who are outside the Congress—myself, Paul Volcker, and Felix Rohatyn the fascist—and we are in a sense, the ones who are pushing various kinds of approaches to general monetary and related reform. And you have people in the Congress who are moving ahead,



Liu Jin

*The automotive industry is capable of using its idle capacity to rebuild our transportation grid: airlines, rail, etc., including magnetic-levitation high-speed rails, like China's maglev (shown here), linking Shanghai to its airport.*

around the idea of saving the auto industry, saving other industries, going ahead with programs which will replace some of the auto production with other kinds of production of things we need. For example, we need a rail system. We've lost our rail system, we need a rail system. We could build it. The automotive industry is capable of using its idle capacity to rebuild that. We need to rebuild the airline system. We need a rail system which includes things like magnetic-levitation high-speed rails, so we get a more rational relationship between air travel and highway travel and train travel.

We need to reform our river systems, our canal systems; they're breaking down. Our power systems are breaking down. These are all things in which the auto industry's machine-tool-design capability, and production capacity, combined, would help us fill a lot of these gaps that have to be filled. They would also ensure that we kept intact the production potential which the auto industry represents.

So, there's a lot of discussion about this kind of thing, among the three of us, the three rivals: myself, Paul Volcker, and Rohatyn. And of course, Paul [Volcker] and I will tend to converge on agreement on some of this, against Rohatyn.

**Schlanger:** Well, your initiative this morning, to draft this memo on the rebuilding around the transport system, I assume that you had some idea in there of a commission in the Congress, since the White House doesn't function. How do you see that unfolding?

**LaRouche:** Well, first of all, what we need is this: We have, between General Motors and Ford and other things associated with them, like Delphi and so forth—here we have, outside our aerospace sector, which includes NASA, which includes the aircraft industry, our machine-tool capacity, of the entire nation, is concentrated in the automobile industry and its affiliates. This capacity represents a tremendous

amount of potential. Actually, the industry—General Motors and Ford combined—have much more capacity than we are presently utilizing, for production. But it also has a vital machine-tool design capability, without which this nation becomes a Third World economy.

Therefore, the point is, we need a rail system; we are no longer a united nation. You can not get into an airport someplace, or a train station, and get to some other part of the country by buying a ticket or group of tickets. That's vanishing! We've lost most of our rail system. We're losing our air-travel system. We're losing our barge and river system, as in the case of what's happened down in New Orleans, at the mouth of the Mississippi. Therefore, we've got to rebuild this, which is collapsing out of neglect and attrition over a period of nearly 40 years!

Now, the automobile industry, which makes automobiles, also has the capacity, using its millions of square feet of construction capacity, to make, within a course of even a year, completely new designs of new products that we need! For example, one of the things is to convert the auto industry to a kind of hybrid engine, to convert the entire structure of how we build, design automobiles; to rebuild our rail system; to improve our air-transit system; to fix up our rivers, that is, the things that go with fixing up the rivers and canals, and things like that.

What my proposal is, we put this whole capacity, this whole idea, into one Federal package, and create an entity which is responsible for using government-generated credit, to ensure that things that have to be done anyway, like supplying our power plants, rebuilding our rail systems, maintaining our water systems—including drinking water, for example—that these things be in one package which use the same capability, these millions of square feet of idle capacity, the employees who are now making automobiles, or should be making them, the machine-tool designers, who are essential to anything. And take this one package, and bring this economy with one fell swoop out of where it is now, as operating *way below breakeven*—if you look at our unpaid foreign debts and things like that, we're operating *way below breakeven*. Get above breakeven. And we can do it, by taking this section of our economy, putting it, temporarily, under government subsidy; in a sense, use this capability and expand now, and get moving back to becoming a real industrial power again, and not a half-baked former industrial power.

## A Program of Higher Education

**Schlanger:** I want to just shift a little bit, Lyn, into discussion of your new paper, because, I think what you've done is you've launched a profound revolution in the science of

physical economy and the related science of statecraft. And I know the three LaRouche Youth Movement members on the phone will get at you in a moment on this—but, this piece will appear in the next issue of *EIR*. What was your intention in writing this paper? What was your thinking behind it?

**LaRouche:** Well, there are two things. First of all, from the standpoint of the negatives, we have been destroying our economy. Actually, we do not have the capability that we had 40 years ago! We are a poor economy, and a broken-down economy, compared to what we were 40 years ago.

Now, part of this, is, we've lost skills. For example, competent scientific education, engineering education, in our institutions of higher learning; orientation toward these kind of careers, in primary and secondary education, have been lost. We are becoming a nation—a *dumb nation* economically.

Now, we have to get back to becoming an industrial power, again. Otherwise, we're not going to make it. And, with the world crisis coming, unless the United States takes leadership on this thing for a world recovery, there is not going to be a world recovery. You look at various parts of the world, there're certain interesting things happening in China, some interesting things happening in India; some potentially interesting things could happen in Europe. Russia is very a interesting question mark these days. But, they're not going to start a recovery of the world system, and the world system is on the edge of the greatest crisis in its modern history.

So therefore, we in the United States *must take the initiative* which moves the world as a whole, into the direction of a recovery policy. Now, this means that we have to not only recover the scientific potential we used to have, at the time that Kennedy launched the manned Moon landing, which was a continuation of measures which had been taken by Eisenhower in '57-'58. We've lost that. We have to rebuild our society.

Now, my view is this: There are certain known things that can be done very efficiently, to increase the level of scientific competence and engineering competence in our labor force. And obviously, these capabilities have to be introduced into the youth movement. They have to be introduced, especially, into the age-interval which corresponds to the normal university life, that is, of age 18 to 25, which is a time that people turn from adolescence into qualified employees in science and things of that sort.

So, what I did, is to lay out the basis for a program of higher education, and to utilize the LaRouche Youth Movement, which needs this anyway, to start the process of creating the model which people on that level of age-interval, can follow, with getting an *educational movement*, for a return to a powerful, technologically powerful, scientifically powerful, economy again. And, I thought, "Well, I'm writing this article on how to do this, but I'm not going to do it all myself: I'm going to challenge youth working with me, to jump on this, and with my knowing what they're going to do, let them discover what they're going to do!" Which is, I think, a good

educational program. And they've done it: We have a lot of material they've produced—I have not been directly involved in it; I specified what had to be created, they've gone ahead and done it. And this is all going to be presented, my article together with their examples, their explication, their extended footnotes so to speak, which will all be in a mammoth edition of *EIR*, the Christmas edition. And the purpose of this, is to help push an economic recovery, but also to shock the nation into saying, "We have to reform our educational system to fit the needs of the present and future."

## The Meaning of 'Power'

**Schlanger:** Now, I can tell you, we have had quite an extended process of deliberation which was set into motion by the way you laid out this project. And we have three people who were involved in three of the locals in pushing this forward. So, let me first bring on Cody Jones, who's in Los Angeles, here. Cody, go ahead.

**Cody Jones:** Yes, hello Mr. LaRouche. Well, the question I have, first off, is, one thing we've been wrestling with, is the challenge you've put out on the economic animations. And in looking at what you've called for in terms of what we want to animate, and then looking at this in terms of what we've been developing in something like the "Mathematica" program, some of the animations that Bruce [Director] has done for the elliptical functions and the higher transcendentals: How can we, in a sense, the way someone like Leonardo da Vinci took discoveries he had made in light and spherical perspective and then used those, brought those to bear, to communicate these profound ideas in his artistic compositions. We're trying to think about the artistic question of how can we take these ideas of these animations of elliptical functions, where you see a certain increase in degrees of freedom, kind of transformation from say, a sphere to a torus, and how do we then incorporate that into the kinds of animations we want to use on the economics, that communicate, really what you've discovered in physical economy; of the kind of transformations that take place whenever you introduce a newly discovered universal principle into the economic process?

**LaRouche:** Well, what we've had is a wrong educational approach—not entirely—there are a few institutions which have done better. But our general mass education, including mass higher education, has been tailored to play down the actual role of creativity. Instead of having young people, say at the university-age interval, instead of having them experience the process of discovering a universal physical principle, for example, what we do, is we give them a program of drill, in effect, in which they replicate, or "go through the motions" of constructing solutions, like solving crossword puzzles, for predetermined results.

This is wrong, in my view—always has been, in my view. That, the origin of science, and Classical artistic composition, is something which was relatively unique in our known history, to European civilization, starting with ancient Greece,

with the Pythagoreans, and Thales, and Plato and so forth. Now, that method had been known and has been used by the great discoverers. It was used for example, by Leonardo da Vinci, in his time, and by Nicholas of Cusa, a cardinal of the Church, who revived this into modern science. This was again revived, at a later point in modern times, in France, around Jean-Baptiste Colbert, and the great economic revival which followed the 1648 Treaty of Westphalia. This was done by Leibniz. It was picked up again, later in the 18th Century, by a group of people including Lazare Carnot, Monge, and by Gauss, and through Riemann and some other people.

So, the method of doing actual, original generation, of the discovery of a universal physical principle, in large part, has been a lost art, in terms of even higher education, as well as programs for secondary education.

So, my work on this was simply to concentrate: why the word “power” came in. “Power” is a modern term corresponding to the meaning of the Pythagorean term *dynamis*, from the Greek. This concept was actually reintroduced into modern science by Leibniz and his exposure of the frauds of Descartes. So, to bring this into play, this kind of geometric approach to making original discoveries.

So, what we did is, we took the foundation of this work in modern science, essentially in modern times, from Kepler, his followers, through Riemann; but take this particular period on the issue of the implications of the doubling of the cube as a geometric construction. Which is the most relevant, from the standpoint of modern science, the most relevant discovery that anyone has to work up to, and through, to have the foundations of competence in science in general, and in economics in particular.

So, what we did is, we just took some of the challenges, examples which I thought were the most important ones to portray, on this concept of power: power as the power of ideas, discoveries of principles that only a human being can make—no monkey can do it. This is the difference between a human being and an animal: to re-experience the challenge of working through some of these discoveries, as if the youth involved were making the original discovery *themselves*; which is, I think, what an educational process ought to be.

So, it seemed to me, that because of the great crisis that we’re facing, economic crisis, that we need a science-driver program to quickly get the United States and other nations “out of the mud,” so to speak, of our present depression: is to present that challenge to young people, of a generation who can no longer afford university. You know what a university education costs today, in terms of the average income of the average member of our society? Do you know what it costs for tuition for a four-year, decent university course? What the cost of living for the student, during that period is? Most people can’t afford it. They can’t afford it, in their lifetime! And we’ve come to the point, that to have a successful economy, we need to have most of our people enjoying the equivalent of a competent university education. Today, we just can’t

afford it! Not the way we could, say, in the 1960s, or back in the late 1940s or early 1950s. It’s gone!

So, here I have a bunch of people, young people. They don’t have a great deal of money—as matter of fact, they’re a very poor generation, they don’t have access to much money. They can’t afford this kind of education, generally. And therefore, how can we provide a general education, or general level of education, for all people in that 18 to 25 generation, or at least most of them, which qualifies them to develop into competence for driving an economic recovery, of this nation, and of the world?

**Schlanger:** You’re listening to The LaRouche Show, which is live on the web every Saturday, from 3 p.m. to 4 p.m. Eastern Time. Yes, we will have a show next Saturday on Christmas Eve, because this next week—this next couple of weeks, will be incredible, leading into the Jan. 11 webcast: On Jan. 11 at 1 p.m. Eastern Time, Lyndon LaRouche will be giving another in the series of webcasts that have been shaping the political fight, not just in Washington, but also internationally. So, you’ll want to tune in for that: That will be on the <http://www.larouchepac.com> website. And I would encourage everyone listening, and everyone on the internet and on the conference call, to go out and “organize up a storm” to get people on that, to get your Congressman to either come to it, or listen to it on the computer; send their aides over. Many of the aides in Congress are the same age as the LaRouche Youth Movement, and they’re beginning to get a good education, thanks to the work of the LaRouche Youth Movement in Washington, D.C.

I’m going to bring on our second participant from the LaRouche Youth Movement, who basically has been involved in setting up a workshop in Seattle to do some of the kinds of constructions that were inspired from Lyn’s paper. Riana, are you there?

**Riana St. Classis:** Yeah, I am.

## The Question of ‘Art and Science’

**Schlanger:** Okay, go ahead.

**St. Classis:** Hi, Mr. LaRouche. When we were doing the building of all these volumes and trying to really get into the Archytas construction from a different—. We were all really aware of a couple of different things. One was that we were doing intellectual archeology, something that you’ve discussed a lot. And also, that we were sort of grappling with—I don’t know—maybe the (I don’t know the right word), the “embryo” of the machine-tool principle: Because, as we were trying to do these things, to build these things, we were realizing what the Greeks, what Archimedes and the followers around Plato were probably having to confront. And then, we realized that we had to build machines, to be able to create the things that we had in our ideas, that we were trying to do. So, as we were doing that, we had the sense that that was something akin to what you had been discussing.



EIRNS/Stuart Lewis

*LaRouche organized the education of his youth movement around the concept of the difference between a human being and an animal: to re-experience the most important scientific discoveries in history, "as if the youth involved were making the original discovery themselves."*

And what we also began to think, was that this was probably the only way that you could communicate these ideas, and that it involved all of the principles that you discussed, including what Cody I think, was bringing up as well: this question of art. Because, in order to convey this idea, you actually had to bring to bear all of your capabilities.

I don't know if that's exactly a question, but could you comment?

**LaRouche:** Yes, well, Cody raised the question and you've raised it again, in this question of art and science.

You know, what I've done, is because of the limitations that we're working with, how do you get a general educational effect, in terms of a scientific outlook, and a Classical artistic outlook. And so, I emphasized this geometric approach to the rediscovery of the history of European science, as traced from, especially the Pythagoreans with the conception of power, which they associate with *Sphaerics*. And on the other hand, is to take some Classical artistic compositions, musical compositions, as challenges. *Jesu, meine Freude* for example, or the Mozart *Ave Verum Corpus*, which are what are called a *cappella*, essentially, works. And to get people to understand exactly what is the same principle which is expressed in an effective performance of, say, the *Jesu, meine Freude* or the Mozart *Ave Verum Corpus*—which I guess, all of you have discovered by now, is not such a simple thing. You do it with a chorus, you find out that you have to slightly adjust the voices to get the unity of effect, of the entire composition, that it's to be *undivided*, not a mosaic, but a continuous process of development from the beginning to end of a truly

Classical choral work.

And in that, you find out that you make very slight changes, as, for example, the *Ave Verum Corpus* has several changes, which are called "Lydian intervals." And these changes produce, when they're performed effectively, produce the sensation in the audience, and among the singers, which corresponds to a creative experience. It's where a genuine idea, rather than singing the notes that you read on the page, you're actually conveying an idea.

In making a discovery of physical principle, or in solving some of the challenges which implicitly I threw at you guys, with this article, you get to a point, where you actually get a sense of a breakthrough. And you get a sense of creativity, which most people do not get—or very rarely—in their entire educational experience.

So, my purpose here, among other things, is to get the emotion of this—for example: The emotion is fun, because, when you're experiencing the work of Archytas, this friend of Plato's, who was the commanding general, for example, of the forces of Syracuse at that

time—and you realize that you are experiencing, or in the case of Archimedes, or the case of some of the discoveries of Eratosthenes, of thousands of years ago, you are experiencing in your own mind *exactly* this special creative emotion, which they experienced at that time! And therefore you get a sense of what humanity is.

You know, we're all going to die, sometime. We're born, and we die. But we also have a sense of immortality. This immortality is associated with what we do which continues what was done before us; and what we do, to extend that experience to those who come after us. So that we see ourselves as, in a sense, experiencing immortality.

For example, now, the problem the Baby-Boomer generation has: They're now, generally, between 55 and 65, or something like that, those born in the immediate postwar period. And because of the things they've been subjected to, they tend to be a no-future generation in their outlook. This represents a real problem for people of the younger generation, young adults, because, here they are, they're the children of these fellows, who are about to go out of business as the leaders of society within about ten years! And here, the young fellows coming along, 18 to 25 and so forth, and they sense that their parents' generation doesn't have a sense of the future! But has a sense of trying to find a comfort zone, in which to live out the ten years or so of leading life they have left, and probably ten more years beyond that, before they die! That's horrible!

Human beings must have a sense of participation in coming generations. They must have a sense of their participation

in generations which went before them. And it's only in the experience of that which distinguishes a human being from a monkey: the power to make these kinds of discoveries, that a human being can look in a mirror and say, "I'm not a monkey." Otherwise, people behave, look like monkeys, don't they? They behave like monkeys, often, too.

So therefore, the important thing in education, is also *moral*. It's not simply becoming useful. A tool can be useful, but that doesn't make it human. But to become useful to society, is to express what a human being can do: It can make, and replicate, the discoveries of *ideas*, which have lifted humanity up above the level of the beast, and toward whatever the future can become.

So, what is needed, above all else, in difficult times like these now, is a sense of personal passion, a sense that what one is doing *has immortal significance*, in terms of reliving the past—you bring Archytas back to life; you bring Plato to life; you bring Eratosthenes back to life; you bring Cusa back to life; you bring Leonardo da Vinci back to life; Leibniz, Gauss, Riemann—bring them back to life! Because you can experience the ideas which were uniquely their creation, in yourself. You have a sense of immortality, in your connection to the past of mankind; in a sense, also, in the same way, a sense that what you're doing now, *will live, after you've died*. *It will be a part of the future of humanity*. It's that conviction, it's the joy of doing that, which is the motive, which enables a generation to accomplish great things.

Shelley refers to this in his essay "In Defence of Poetry": That there are times, special periods in history, in which the passion and ability to communicate, to impart "profound ideas respecting man and nature," is rare. Whenever mankind gets into trouble, as we're in trouble today, as our nation is in trouble today, what we need, above all, is to evoke from among our people, at least a significant number of them, this sense of the power of "receiving and imparting profound and impassioned conceptions respecting man and nature," what Shelley speaks of as the poetic principle. And, that's my purpose here. And that's what you guys are, both, so far—Cody, you, and Riana—have referred to: is this experience, this kind of thing, this poetic character, that you can evoke in terms of even physical scientific discoveries.

## Space Exploration: Managing the Solar System

**Schlanger:** Lyn, we have the whole board filled up with e-mails and questions. I'll try to get to some of them, but I want to keep the dialogue going with the LaRouche Youth Movement members, by bringing in now, Jason Ross, who's on the line from Oakland, and Jason is another one who contributed both to the article, but also to the discussion process with many other people who were working on it.

Jason, go ahead.

**Jason Ross:** Well, I had a question about space, as in nearby space, like the space exploration. We've been doing

some work on the Apollo Project, here in Oakland, and in regards to economics, we've been having a lot of success in forcing the question of economics, by intervening sometimes rather brusquely but pretty polemically, into the Economics Departments at the universities in the area around here. And we were looking at the Apollo Program from kind of, forcing the question of valuing something that's neither direct production, or infrastructure, but the scientific discovery process itself; because it seemed like that what the real value of the Apollo Program came from, not from (I don't know), selling Moon rocks to somebody.

And it seemed that, you say that it's been over a century since there's been a real breakthrough in scientific epistemology. Although we have discovered new things, the method hasn't progressed very much. Whether, if we followed through with what Pelosi laid out, of really going ahead with the space program again, that that could help force the same kind of discussion about scientific method, that's currently being forced about the method behind economic thinking.

**LaRouche:** Take the case of the Kennedy space program, as an example from my standpoint. This started, in a sense, you know, the space program—the rocket program had become moribund at Huntsville, [Alabama], which had been a leading center of this at one point, the Army program there. But then, after the '57 recession, which was a very deep and disappointing recession, I must say—I was there at the time, and saw it coming and forecast it, and experienced it when it occurred—the Eisenhower Administration decided to push a science-driver program ahead.

Now, as you know, probably from looking at some of the studies we were doing, that you had, Eisenhower was involved with MacArthur and with others, together with this program which involved Harry Hopkins during the 1930s. It included Lucius Clay, for example, who came out of that program. So, they went through this military-industrial program. And what Eisenhower did, was reactivate that, as President. Then, Kennedy came in, and Kennedy launched the space program, the Moon-landing program, by taking the elements which Eisenhower's program had begun to pull together. And the space program has really mystified people—it was really inspiring: We got 10 cents back for every penny we spent on it, in the time we spent on it.

You know, Marsha Freeman wrote recently, commenting on something I said some years ago, that one of the reasons we go into space, and to places like Mars, and so forth, and the Moon, is, we're trying to find a geology, a kind of chemistry, a geological chemistry and so forth, on these areas, which we don't find on Earth. Now, what we find there, are things we're familiar with, in large degree—that is, the elementary things are more or less familiar to us. But we find geologies, like we've found recently on Mars, which we don't find on Earth. But we find these geologies involve the same elements with which we are familiar.

So therefore, we find out, by exploring nearby space,



EIRNS/Sylvia Spaniol

*LYM member Jason Ross (left) teaches at a geometry workshop in Oakland, Calif.*

we're doing several things: We are looking at the Solar System as the place in which we live. And we realize that, just as we have to take care of the planet Earth, to make it livable, we have to make the Solar System livable. Now, we're not going to do that all at once, but we will never get to that, unless we start doing it! And therefore, by going out to the Moon, we made discoveries, we made very important discoveries, physical discoveries in the Moon exploration. We're making new, important discoveries on Mars, by finding geologies we are not familiar with. We're finding out the Solar System is somewhat different than we thought it was—and we're going to have to manage this Solar System (the human race is), over a long time to come.

Now, we have a very practical program which has come up in this same connection, which I've been focussed on. I've emphasized the work of Vernadsky, because Vernadsky was the one who really systematically codified the distinction among three specific categories of kinds of processes which are on this planet: You have processes which are non-living processes, that is, defined by experimental method. You have processes which are living processes, again defined as that by experimental method. And you have processes which he called, placed as the Noösphere, that is, the area of human mentation; where we have physical processes on this planet, which are becoming more and more important, a bigger part of the weight of the planet as a whole, which are due entirely to the creative powers unique to the human mind, and not to any other living process.

And so, therefore, we have reached the point, that we are going to have to manage the raw materials and similar things on this planet, to ensure that we have a secure future for humanity. This means that we have to go into new geologies,

and find ways of replenishing the kinds of materials on which human survival depends.

So therefore, as we go into space, we are discovering ways in which elements we're familiar with, that is, the so-called Periodic Table elements, we're familiar with those as elements, but we find they're behaving differently outside the Earth than they behave on the Earth. And this is part of the process we have to consider, in taking up the responsibility now, for beginning to manage the raw materials on which we depend, really than just using them up, as we have tended to do so far.

So, it's a very practical question, is that, we have to go into space with the idea that this, our Solar System, that we are going to be living for a long time, as a human species, and that we have to take steps now, to prepare the ground-

work, for managing whatever problems come up to threaten mankind's existence within the Solar System in the future. We're out there to understand the Solar System in which we live much better: We're prepared to take advantage of what we learn in the short term; and we are preparing also to deal with possible calamities, which we might have to overcome, in the future.

## Mastering Science for Future Generations

**Schlanger:** A caller has a question for you Lyn, that actually gets at another aspect of this question of scientific research: Lou, from New Mexico, wants to know your thoughts at this point on the research in fusion energy and the importance of that.

**LaRouche:** Well, obviously, it's a higher dimensionality. Not only is it a different order of magnitude than we deal with in the nuclear processes, but it's an area which behaves differently than nuclear processes. And it's part of the challenge of trying to manage this planet! We need those powers!

Beyond that, we have the question of matter/anti-matter reactions. Now, we do know what a matter/anti-matter reaction is. But the management of it, is somewhat beyond us now.

So, similarly, we had nuclear reactions, which is something which modern society has come to understand, or recognize. And then, later, the fusion processes, or the sub-nuclear processes, which are a different order of magnitude, those we have to master. And somewhere down the line, we're going to have to worry about how do we master this thing about matter/anti-matter reactions, as they're called today experimentally.

This is part of the necessary process.

Also, there's another part to this, where art and science



come together. As I spoke earlier, in response to Riana on this issue of immortality: This experience of immortality is extremely important to us. We are human beings. We live, if we are human, with a prescience of the future of mankind, and see our mortal lives as a part, but also an integral part, a functioning part, of the past and future of humanity. And anything that might affect the human species, millions of years from now, is really of concern to us today, it's because we truly think of ourselves as being mortal in our flesh, but immortal in our sense of identity as a living being. And therefore, we are concerned with what happens to this universe, because we expect to be living in it, or having an effect, a living effect, an immortal effect on it, for a long time to come. And we would like to sort of, fix things in advance, so things come out better in future generations, not just our own.

**Schlanger:** Well, that's one of the reasons we have to make sure that Dick Cheney is out very soon.

Now, again, there are a lot of questions on the board here, but I want to continue the dialogue with the LYM members. If we don't get to your question, we will forward these e-mails to Mr. LaRouche and he can answer them, as he tends to do.

So, Cody, do you have a follow up?

**Jones:** Yeah, a little bit in a different direction. But, on the organizing, particularly when you're dealing with Boomers, you often don't have a lot of time to lead them through the profound discoveries. But you had talked before about this prescience in the population, and I was wondering, even as perverted as it's become in the United States, in terms of our understanding of history, and our own history here in terms of Classical culture, is there something unique to the culture in the United States, which may be just unconsciously transmitted through the generations that we can tap into?

**LaRouche:** Yes, there is. You know, I've spent a lot of time on this, and probably because I have spent a lot of time on it, I probably have an advantage: that I deal with Europe a good deal, and I deal also with other countries in the Americas. I have cultural encounters, of a type which show me that Europeans are different than Americans—not every one, it's not that simple—but, as a category.

We think differently. We're much more optimistic than Europeans are, that's partly because of all the wars they've gone through, and because they never got rid of the legacy of aristocratic systems. The idea of equality is much more accessible to the American than it is to the European. They may say they think they're equal, but very few of them actually do, they actually show it. They always have a sense that somehow there's an aristocrat, or something, or some kind of superior being, or superior race or something; or vice versa, that the people who are *not* part of the aristocracy, are somehow inferior to those who are.

So, we have that peculiar sense, which is embedded in our history, and it's transmitted sometimes in subtle ways across generations. As I say, you know, looking at my own history,



EIRNS/Stuart Lewis

*LYM member Cody Jones, addressing a press conference in Boston, in July 2005, during the Democratic National Convention. Jones is a member of the Central Committee of the Democratic Party in Los Angeles.*

as I say, I'm about 200 years old now; because I have a memory, not of seeing this relative, but he was a dominant figure at the dinner table back in the 1920s, who was a contemporary of Abraham Lincoln. So, in a sense, in terms of my family experience, direct family experience, I'm about 200 years old. And in terms of my family, came into the United States, the first representatives came in in the 17th Century, one from England, the other from France. And later on, we had some Scotsmen came in, in the middle of the 19th Century.

So, I have a very conscious understanding and feeling about America. I know the history of our country—better than most people do. I associate myself with things that happened, that were done by individuals, like the Winthrops of Massachusetts, or Cotton Mather for example.

So, we have embedded in us, a reflection of a culture, which is distinctly American. And we react that way—sometimes we do. So that, when you deal with a European, you generally get a much more pessimistic reaction to the world situation, than you'll get from an American. A quick joke, a quip on the street, a piece of witticism, which is typically American. Humor of this kind, is the best way in which to convey political ideas. If you want to talk to somebody about a serious idea, quickly, tell 'em a good joke, that's relevant to the situation. And immediately, you're now on good terms: They're laughing, you're laughing, you're enjoying sharing a joke, and now you can discuss something more seriously, because your potentiality for creative thinking is there.

That's what the organizing process among us is like: We are unique on this planet, right now, in terms of the kind of optimism we represent. Any other part of the planet I know of, the same degree of optimism is not there. We have it. And my view in organizing is, what you have to do is, evoke in our people, the sense of the optimism which is specifically inherent to us.

## The 'University on Wheels'

**Schlanger:** Okay, we're down to just a little less than four minutes. I want to give Riana another chance—Riana, you have a question?

**St. Classis:** Okay, yes. It's a little bit related to what Cody said again. It seems that when we're working really intensely on these ideas, and doing all of these things, that we're able to communicate to each other in the Youth Movement fairly rapidly. And I also think, in a certain way, the way people focussed in on some of the things you were saying about the fourth phase-space. Even when we hadn't communicated with each other, it seemed that people were grabbing onto the same things.

But one thing we hit on as a problem, is bringing other people into that. And we just had a discussion here, because we were talking about the difference when we were a youthful Youth Movement, when there weren't many of us, and the difference between then and now. And one thing, is that we do have this development—but then, there also seems to be a barrier sometimes, because people realize that we are communicating in this way with each other, and they're intimidated by it. So, how do we overcome that?

**LaRouche:** Well, that's one of the reasons why I had this idea in writing this thing on the "Principle of 'Power' " to get some of your fellows involved in it. Because, the time has come that we have to go beyond just functioning implicitly as a kind of informal university, and to function more in part, in probably 40% of our time, or 30-40% of our time, is spent actually functioning as if we were a university. We have to have a sense of structure, of people who are coming around, who want to join a university. Not a university in the sense of the universities today, as they are, but in the tradition of what universities were, when largely students used to run universities. Of course, people had shorter life expectancies then; I guess it had to work that way. But, students were running universities, in just *exactly* the way that these projects were undertaken by the youth in this case. I thought it would happen that way, and it did!

It's simply, what came out of this, affirmed what I suspected would be the case: That what you have are classrooms essentially, were functioning in various parts of the United States with some degree of interrelationship. And working around the process of actually facing the challenge of re-experiencing a discovery of principle as a matter of construction. That is, the point is, you're taking something which is essentially intangible: a principle. Now, it's a physical principle, it runs the universe, but because it's universal, it does not have an exterior shape to you. Therefore, it's hard for you to recognize that it's an object! It's there everywhere, like gravity, it's everywhere. But, you can't pick up "a gravity"—because it's everywhere! It's too big for you!

But, how could you make gravity manifest? Could you construct something, which shows you the principle you know is there, which is not a principle directly, an object



EIRNS/Dana Carsrud

*LYM member  
Riana St. Classis,  
from Seattle,  
asked about  
how to introduce  
new people to  
their work.*

of sense-perception. Can you make that an object of sense-perception, or make its existence an object of sense-perception?

So therefore, when you construct certain curves, as machine-tool-design principle, as was done for example in Boston, with showing the logarithmic function and its relationship to the catenary function, by using machine-tool methods to actually construct something which makes a physical principle visible, by creating a shadow, which is tangible. Hmm?

And so, this kind of work, this kind of approach, together with the music work which is sometimes more difficult to get some people started with—but just do it! And you will find, I think, with this, and with the animations—as you know, we're accelerating the animation work. And by reducing certain principles, that is, historical principles like what happened to the United States over the past 60 years in this respect, or that respect, and making it tangible, making the effect tangible, so people can recognize these ideas and know how to replicate them and prove them themselves.

So, I think we're into a phase, where we're going to just do more and more of the organizational responsibility of which you would think of as a university, we're responsible for helping the other people in the organization who are coming in, to assimilate and to "catch up," shall we say. And once they sense they're being brought in, they'll be happy.

**Schlanger:** Lyn, I hate to do this, but we're out of time. So, people can get the *EIR* as a starting point. Also, Lyndon LaRouche will be holding his next international webcast, Jan. 11. Those of you who had questions who didn't get on today, please forward them via e-mail to the "Ask LaRouche" section of <http://www.larouchepac.com>.

Lyn, thank you so much for joining us today. And, Riana, Jason, and Cody, thank you. And to all our listeners, tune in next week, but put on your calendar, Jan. 11, 2006, the next most important day of the beginning of the New Year.