EIR Feature

LaRouche meets with Italian 'cold fusion' scientists

On April 4, Lyndon LaRouche participated in an informal discussion in Rome with a group of about a dozen Italian scientists, on methodological questions of scientific research and the new frontiers of science. LaRouche was in Rome with his wife, Helga Zepp-LaRouche, for several days of private and public meetings with parliamentarians and political and economic leaders, on the necessity to move toward a New Bretton Woods system (see *EIR,* April 17).

The participants in the scientific seminar came from Milan, Rome, Udine, and several other Italian cities. Some of them are part of a group of leading scientists engaged in cold fusion research. Among those in attendance were Giuliano Preparata, director of the study of the Theory of Sub-Nuclear Interactions, Department of Physics, State University of Milan, and a leading researcher in the field of cold fusion; Emilio Del Giudice, State University of Milan; Bruno Brandimarte, professor of laser physics for medicine and surgery at the Tor Vergata University of Rome; Francesco Celani, nuclear physicist, specialist in superconductivity, Rome; Stefano Bellucci, specialist in nuclear elementary particle research; Giorgio Iacuzzo, editor of the Italian edition of the international scientific magazine *Nexus;* and scientific journalist Paulo Bonetti.

A dialogue

The following is an edited transcript. In the general hubub of an informal discussion conducted in two languages, portions of some questions and statements by Mr. LaRouche's interlocutors were inaudible. These have therefore been summarized, and are enclosed in brackets. For similar reasons, we have not been able to identify all the speakers, although much of the questioning was led by Professor Preparata.

The seminar began with a brief discussion of the cold fusion work of Martin

Lyndon H. LaRouche, Jr. (left) talks with Italian scientists in Rome, April 4. "As you get smaller and smaller in the interval of observation," he told them, "the assumption that things become linear in their relations, is absurd. The smaller and smaller you get, the less *linear they've become."*

Fleischmann and Stanley Pons, and the conceptual problems in modern science. LaRouche emphasizes that his own life has been devoted to fighting against "the idea that you can linearize in the small." Our transcript picks up with his explanation of that point.

Giuliano Preparata: Can you try and explain this theory? Because I think I am on the same wavelength, but somehow the line may be different.

Lyndon LaRouche: It is not a mathematical concept. You know, Gauss had an understanding of this which caused him to term mathematics the "Queen of the Sciences," which did not refer to its sexuality, but referred to the fact that it is a subordinate aspect of science. The basis for modern science, is the conceptual standpoint of experimental physics, the idea that you discover a principle. Why? Because you've discovered that the existing mathematics is wrong. So therefore, you discover a small error or a larger error, which is persistent, it's stubborn. It defines a paradox, an ontological paradox in existing physics doctrine.

So, you treat this seriously, and you say, "I think I know what causes this apparent error. We have overlooked something, a principle." And usually, this comes in smaller and smaller, or greater and greater. And it's the astrophysical scale, in the largest sense, like the Crab Nebula, which poses a great paradox for physics: How do we have coherence in the effects of the Crab Nebula, way beyond the possibility of the speed of light in coherence? . . .

But the other aspect is the aspect raised by Leibniz. But, if you look at the trace of it, it comes partly from Cusa. You can trace it back to the work of the Sieve of Eratosthenes, which became important again in the Nineteenth Century, because it enabled us to look at these categories of numbers, different kinds of number systems, which becomes significant with the work of Cusa, and the *De Docta Ignorantia*.

So, this comes then from Leonardo, but we get then the process after Leonardo, of Johannes Kepler, who attacked astrophysics from this standpoint.

Now actually, in my view, it is Kepler whose approach to astrophysics defines the multiply-connected manifold, the idea of a multiply-connected manifold, that is, different kinds of astronomical cycles intersecting. And it's when we apply that notion of an interconnected manifold to the small, that we get some very interesting results. So, microphysics actually comes from astrophysics, in a sense. The methods of astrophysics, which is beyond the senses, so to speak, enables us to take an approach to microphysics.

Now, in this process, when you take any process which is defined as in a universal process, to define a standard manifold of reference, for any events, or two events in a manifold, you get into an extremely complex process of many cycles interacting, a very complex manifold. Then, this means that the characteristic of a process is now located in the very, very small, as we see in astrophysics, where you have long cycles of hundreds of thousands of years, with small cycles, which are annual, which are daily, and so forth, all mixed in together,

The late Dr. Robert Moon, one of America's leading physicists, works with children to replicate physics experiments of Ampère on longitudinal force. "In Classical education," says LaRouche, "the student had to re-enact every discovery. The student was not allowed to learn the answer; the student had to conduct a discovery, and make the experiment, or re-make the experiment."

along with certain physical cycles, like the things that cause the pulsation of the Sun, radiation in the Sun, which also have to do with microphysics, acting on the macrophysical level.

So, you look, and you say, if we look at any small interval of observation, but implicitly, any small interval can be very, very complex, as what Leibniz defined in his papers toward the end of the Seventeenth Century, as the non-constant curvature, the principle of non-constant curvature, which signifies that when we go to the very small, we do *not* go to linearization, that one of the greatest criminals—

Q: You are referring essentially to the fact that you can think of independent events, independent particles, or independent individuals, or something like that. Is that what you mean?
LaRouche: More than that. . . .

As you get smaller and smaller in the interval of observation, the assumption that things become linear in their relations, is absurd. The smaller and smaller you get, the *less* linear they've become.

Q: Which is at the basis—which is the basis for this so-called asymptotic freedom. They say, you go asymptotically, and then you see the free part that has no relation whatsoever with anybody else. And you're saying exactly the opposite. . . .
LaRouche: For example, the great experiment which demonstrated that principle, first, has reference to Kepler, but more specifically, to the work of Gauss, particularly its application of his original work on the *Arithmetica*. The application of this question of bi-quadratic residues to the problem of measurement in the field of astronomy, which led to his approach to the primacy in the discovery of the orbit of Ceres, and other asteroids, which demonstrates that within the very small, you must never assume two things: simple freedom or linearity.

Now, the Nineteenth Century divided, because you had a division between the Venetian School, as it's properly called, of physics in the Eighteenth Century, the school of the followers of, first, Paolo Sarpi, but especially Antonio Conti, who was the great organizer of linearization in the small, which included people like Euler, who was an agent of Conti—

Q: But what do you mean when you say he was an agent?
LaRouche: Under Frederick the Great. The Berlin Academy was revived by Frederick, but probably only two members of the Academy were actually human. One was Süssmilch, who did work on population, which was attacked; and the other was Gotthold Lessing. They wanted to bring in Moses Mendelssohn, but Frederick II got wind of that, and wouldn't let it happen. But these were the only human people in the thing. The rest were—

Q: You mean Voltaire, Maupertuis.
LaRouche: Oh, especially Maupertuis. Maupertuis was the greatest fraud that ever existed. As a matter of fact, Maupertuis was such a fraud, that even Voltaire couldn't stomach him.

Q: So, you think Voltaire was a pretty bad guy.
LaRouche: Oh, the whole crowd. Like Quesnay; the whole crowd. They were all agents of this network of Antonio Conti, based in Paris.

Q: So, this was essentially the basis of the lie.
LaRouche: That's right.

Q: And essentially, the root of modern positivism.
LaRouche: Exactly. Actually, it comes from Sarpi.

So, you have these two curves.

One is a curve which becomes—when Newton is totally discredited, as a result of that, the friends of Laplace, and, also, Lagrange earlier, had to run a defense of Euler.

Euler was the most serious opponent of Leibniz in mathematics. And it was Euler who laid the program in the Berlin Academy, which became the doctrine spread from Berlin, through all these circles. Out of this, you got, directly, Lagrange, who was a direct successor of Euler. And Laplace. When Euler went back to Russia, after leaving the leadership of the Academy, his successor was Lagrange, and Lagrange was essentially his continuer, who introduced his notion of analytic functions. The other person in the thing politically, was Laplace. Laplace had a protégé, who was a young Jesuit-trained idiot, but a very clever one, and also a great plagiarist: Augustin Cauchy.

Q: Plagiarist in what sense?
LaRouche: He's notorious. The whole Swedish case. The whole Swedish case. It was discovered, when he died, and they opened his papers, that he had actually stolen papers, and fraudulently copied them, and claimed the results as his own.[1]

But, what happened with Cauchy, is Cauchy invented the so-called Cauchy fraction, which is a complete fraud. It's convenient for engineering work, but it's of no value for scientific work. If you have to approximate the solution to a differential function, yes, then you want to put a limit theorem in there, to simplify the calculations, to make them possible, especially for engineering. But if you're trying to test a principle, you do not try to derive a principle from a mathematics which contains a limit theorem, because you've eliminated the very thing that's interesting. The thing that's interesting, is the *error* in the assumption that something is linear.

So, when we're doing scientific work, we're always looking for anomalies which demonstrate that the calculations we're using, contain an error, and the pursuit of that error to discover the principle which is hiding behind there. And so, therefore, the Gauss principle, which is Leibniz's principle of non-constant curvature in the very small. One of the best examples of this is some of the work of the Ecole Polytechnique.

What we've been focussing on,[2] as you know, in part, is the work of Weber on Ampère, which is what we've been onto ever since we were trying to defend fusion energy, back in the early 1970s, where I said, "This is nonsense. The Coulomb force is idiocy. It's primitivism. It's infantile ideology." And then Dr. Moon[3] said, "Well, yes, you're right, but this is Ampère, the longitudinal force.". . .

What we're also working on with this, is that Ampère had a great collaborator, who was extremely important for this theory, Fresnel. And Fresnel, on the question of refraction in a vacuum, raises the question of the nature of the propagation of electromagnetic radiation, which, in the Twentieth Century, involves the question of such things as gravitational waves.

You have, in France, a man in his 80s, a great physicist, Maurice Allais, who received the Nobel Prize for economics by denouncing the "Casino Mondiale." And he did a variation, a paraconical version of the Foucault Pendulum.[4] He used his position as a young physicist, as an official of the French government working on mines, so he had access to some deep abandoned mines, and used deep abandoned mines to study certain gravitational effects. And he was among those who observed that during an eclipse, the function of the pendulum was altered, which means that some gravitational effect is affected by an eclipse, which coincides, of course, with gravitational waves. And thus, this question of, to what degree physical effects are like—or, are photons projected like bullets across the universe, or are they self-propagated in some way? Is the radiation self-propagated in some way? And how does it interact with other radiation?

So, therefore, if you put together the implications of the work of Weber on the Ampère principle, in proving the Ampère principle, together with the work of Fresnel on the question of refraction in a vacuum and similar kinds of conditions, on the geometric principle, then you pose a lot of interesting questions.

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1. On Cauchy's fraud, see Pierre Beaudry, "The Bourbon Conspiracy That Wrecked France's Ecole Polytechnique," *EIR,* June 20, 1997.

2. See Laurence Hecht, "The Significance of the 1845 Gauss-Weber Correspondence," *21st Century Science & Technology,* Fall 1996.

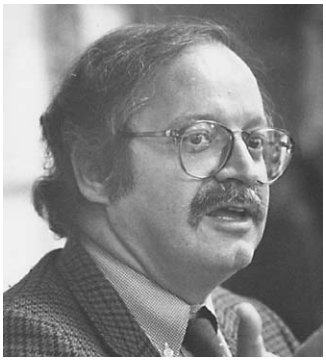
3. Dr. Robert Moon (1911-89), one of the world's pioneers in the development of nuclear energy, served on the Manhattan Project during World War II. He became professor emeritus at the University of Chicago, a founder of the Fusion Energy Foundation, editor-in-chief of the *International Journal of Fusion Energy,* and a close collaborator of Lyndon LaRouche.

4. See Maurice Allais, "The Experiments of Dayton C. Miller (1925-1926) and the Theory of Relativity" and "On My Experiments in Physics," *21st Century Science & Technology,* Spring 1998.

So, I've insisted that we work more or less on that direction. I've fostered that as much as possible.

Q: But I think you are referring to a great intellectual tradition, which, however, lacked the knowledge of—there was, at this end of the century, a great leap, a conceptual leap, and that is quantum physics.

LaRouche: But this comes from these people.



Dr. Giuliano Preparata

Q: [Professor Preparata points out that the great intellectual tradition which Lyndon LaRouche refers to, lacked the knowledge of a deeper layer of reality that has come to the surface during this century: quantum physics. And, owing to the intellectual leap of Quantum Field Theory (QFT), the "nonlinearity in the small," one of the leitmotifs of LaRouche's thought, is finally coming to light, from the very structure of the states of minimum energy of the physical quantum fields, gravitation, the electromagnetic, and the nuclear. The main idea is that, unlike in Classical physics, QFT gives the vacuum, the state of minimum energy, a well-defined structure, which influences in a fundamental way all physical events that we perceive as due to fields and matter. This is at variance with the expectations of Perturbation Theory, where the deviations from the vacuum are linear and essentially structureless.

Today, a large battle is going on around such different conceptions of the physical vacuum, and the hoped-for change of paradigm, which can no longer be eluded, depends on bringing these new ideas to people.]

LaRouche: If you look at it the way I look at this, because my work deals with the relationship between the human mind and the mastery of the universe, you have to realize, as was emphasized by Riemann, and also by others before him (Riemann most emphatically), that you must eliminate the so-called Aristotelean notions of space and time. You must not accept—you must not have an *a priori* conception of space. Once you put in an *a priori* conception of space, now you've invented a vacuum. Now your physics defies your vacuum, so now you come up with non-vacuum physics.

Wouldn't it be better to eliminate the idea that space and time are *a priori* notions? We don't need these concepts, they're totally unnecessary. What we need—

For example, everything is in flux today: the question of what we mean by time. If we eliminate, *a priori,* our so-called mathematical time, mathematical *a priori* space, and stick strictly to experimental physics, what do we know about time? We have all kinds of anomalous effects, in terms of speed of light, and other considerations, which are completely anomalous.

If we look at things like these fast-rotating binary stars, or look at something like the Crab Nebula, we get effects which do not fit any physics. . . .

The problem here, which Riemann is most useful for, is, if you look at man's relationship to the universe—which is what you should look at, I think, in the laboratory. People look at the laboratory, often, as a laboratory, where they have some little personal intimate relationship with some experimental subject matter, through equipment. How do we master the universe? Look at modern industrial economy, eh? So, out of the work of Leibniz, we've got the work of Carnot, who invents the modern machine-tool industry. Now, for us, in science, the machine tool is a reflection of a crucial proof-of-principle experiment. You build an apparatus. If you can build an apparatus which can prove a principle, you can use that very apparatus, to give you a method of creating a new technology based on the design of that, orthe perfected design of that apparatus.

So, when we discover a principle, a principle of the universe, and we use Gauss's and Riemann's approach, we say that the dimensionality, or the geometry of the universe, is based on the number of validated physical principles, and we have proven those principles. Therefore, it is the multiply-connected interrelationship among all these principles, which can not be demonstrated mathematically, because you must demonstrate it physically. You can not demonstrate the characteristic of action, you can not derive it abstractly from a geometry. You must experimentally determine what the characteristic of action is.

Q: [There's a famous lecture by Riemann in which he says that we don't even know whether space and time will be discrete or not.]

LaRouche: That's right. But you can't do it from the standpoint of abstract mathematics. Now, what we've done today, is we've created the illusion that you can take computer technology, and jam it full of mathematical programs, take your experimental data and put it in, and try, by those methods of approximation—statistical methods, essentially—cram your evidence into fitting with the little factors here and there, fitting the pre-existing mathematical theory. Whereas, in reality, every time you make a fundamental discovery, you change the mathematics. And people have lost the ability to create the new mathematics that we need. And the great achievement of modern physics, was to create, to invent new mathematics, to free us from the slavery to *a priori* mathematics, and to know how to design a new mathematics to fit our physics.

The other thing which is key in this, involves something else. Ask a very simple question: Why is it that the history of

the human species, unlike any other species, is willfully anti-entropic? There's no other species on this planet, which can willfully exert an anti-entropic relationship to the universe at-large. And the human species has done that more or less consistently, in every viable culture.

From a Riemannian standpoint, looking at the machine-tool example, what do we do? We make a discovery. Every discovery we make, is based on discovery of a paradox. . . . It won't go away. We can't smoothe it away. You can't talk it out of existence. So, there's something going on.

So, you come up with an idea, which you must then find a means of experimentally demonstrating. You have a solution. You must be able to experimentally demonstrate that. All right. This is the way our power increases, in more simple ways, earlier. But, it is discoveries.

For example, the early discovery of solar astronomical calendars, which is probably the paradigm for all science. We started to observe the astrophysical world. We were able to develop these calendars with great precision, using eyesight methods. This is the foundation.

So, what do we have? We have the accumulation of new discoveries which enter the human will. As willful capabilities of action, the potential existed before. We didn't know it. Once we know it, now we can willfully act, change our action on the universe, to get more power, by using these discoveries and turning them into what we call technologies. . . .

Now, the other aspect of this, the most interesting one, is the relation among human beings, because there's a problem. No one can observe by the senses the processes of cognition going on in another person's mind, when they make a valid discovery. How do you generate valid ideas, ideas that you can validate, when they are solutions to paradoxes which can not be derived by deductive methods? And you can not observe—you can not observe by the senses, the process of thinking which results in the discovery.

Q: So, that means that our mind can not be a computer.
LaRouche: No, it can't. No computer could be a mind. It couldn't be, because—

Q: So, this is another one of the fallacies of modern science, right?
LaRouche: Absolutely. This is really a cult. It's an ideological pagan cult, introduced by such followers of Bertrand Russell, or victims of Bertrand Russell, as crazy Norbert Wiener, and crazy John von Neumann, who introduced these crazy ideas. They became very popular—

Q: [It is thought that these people were extremely smart.]
LaRouche: They were clever, like thieves, like safecrackers.

Q: They've had an enormous influence.
LaRouche: That's one of our biggest problems.

Q: What can we do? Because it goes to the question of science in this society. I would like to have some light on this—
LaRouche: Let's go to the question of education, which is where part of the problem lies. Look at the changes in education, in science education and general education, in the past 30 to 40 years, actually longer.

We used to have a Classical method of education. The difference is between textbook education, and Classical education. In Classical education, the student had to re-enact every discovery. The student was not allowed to learn the answer; the student had to conduct a discovery, and make the experiment, or re-make the experiment. So, the student now *knew* the idea, because the student's own internal mental processes, which can not be observed by anybody directly, did this.

When a person goes through an educational process of reliving great discoveries in art and science, and that's the education, then the potential powers of creativity of the mind, which no animal has in the same way, are developed by the student. The student becomes cultivated, in terms of his relation to the physical universe, mental powers, becomes cultivated in respect to a relationship to other human beings; social processes.

That kind of education, is what produced the great scientists. For example, we reflect that, when we use the name of the discoverer in science. We say, "Here's the person who made this discovery. Here was the paradox they presented. Here's the solution they developed of the paradox. Here's the validation they made of this proposed solution." Now we have this name of this person, whom we remember in history from 50, 100, 1,000 years, or 2,000 years ago. And our mind is full of all these people, whose thoughts we have relived. We *know* them, but not because we shook their hands or sensed them. We know them because we have experienced the thoughts they experienced in making great discoveries. This becomes the cultivated person, the Classical personality, who has developed mental powers.

Now, the other side of what you have, is the clever fellow, like Johnny von Neumann, who had an almost mimetic memory for mathematical and arithmetic operations, who can go in and learn everything, and know nothing; who, in response to any discussion, would go to the blackboard, and immediately give, from memory . . . an elaboration of an arithmetic solution, which was usually wrong, but it was clever.

Or the case of Norbert Wiener, who was also a *Wunderkind* at Harvard. But he had this capability. He was not a conceptual thinker. He was thrown out of Göttingen twice, actually by Courant, for plagiarism, and thrown out by Hilbert for incompetence, for persistent, incurable incompetence.

Q: But he had a prodigious memory, or what?
LaRouche: Exactly. The human mind can learn, and it can

think. They're two different things. The ability—our culture has always based itself on a system of education, or a similar social experience, in which the individual child became an historical personality, especially in the area of the vocation, by reliving the great experiments and the great thoughts of the person before them, inside their own mind, so they became an historical reflection. And science, in this respect, becomes highly moral, because you can sense that you have a personal responsibility to be honest and truthful with a contributor who is maybe one hundred years or a thousand years dead. This moral relationship to the dead: that you must not betray them, you must not do anything corrupt. They become a part of your conscience. They won't let you do bad things, or cheat, or plagiarize, or steal, or lie. . . .

So the point is, is that we have created, in the educational process, in the generation of—In the increase in class size, for example; if you want to teach principles of science in Classical education, geometry, ancient Greek science, and so forth, to provide that foundation, what size of class do you have to have to get the result?

You want a class which is not more than 15 to 18 students. You want a class in which you can force an interaction, by a frequent interaction of the students. You present the paradox, ask them to find the solution themselves, once they're prepared to face this problem by their previous educational experiences.

Then you force interaction among the students who have begun to see something. Then the other students begin to share this, by the interaction. Then you force a consideration of, "Well, how do you prove this solution you think you have? What's the experiment?" Then you help them, and you gradually let them discover what the experiment is. And, this is how you produce a generation of scientists. And it was done often by autodidacts, like Leibniz, because they did that. They re-experienced the great minds of the past, personally.

We destroyed that kind of education, and said, "Now we have classrooms with thousands of students, and lecture halls," or whatever. Also by computer, or by video, at great distance. What do we do? We create a program to learn this. Programmed learning is the epitome of that. And they come out, they can pass the examination, but they don't *know* anything. They can babble all kinds of things, but you talk to them, they don't know anything. And, you find their memory goes as they get older, because if your mind is based on memory, that's the first thing you lose. The strong memory is based, as in poetry, on the ability to regenerate the idea. A strong memory is not memory, as mimetic memory; a strong memory is the ability to regenerate ideas.

Q: Sometimes there is a conflict between these two types of memories. Somebody told me, "You know why your book is not popular? Because it's completely new, and people would have to re-memorize things, and they don't want to do this." Most scientists today just memorize what they know.

LaRouche: It's like this environmental stuff. People say that the environmental theories are incompetent—they agree on that. They're all incompetent. Why do they do that? One says, "It's because they get paid to do it." That's partly true. If you're a young, aspiring person, and you want a career, you learn how to cheat and steal, mathematically, and go into a laboratory with a computer, and make a model that somebody wants to see, and fake it. Then, they'll publicize it in the press. Like the ozone hole: a complete fraud. Global warming: a

LaRouche on cold fusion

In August 1992, writing from prison, Lyndon LaRouche released a ground-breaking Science Policy Memorandum, titled "Cold Fusion: Challenge to U.S. Science Policy." He called for a "mini-crash program" of fundamental research into the phenomenon known as cold fusion, as well as related kinds of anomalous results. Four types of general public benefits are foreseen, he wrote:

"1. A significant contribution to general scientific progress. These experiments demonstrate that there are principled nuclear and sub-nuclear features of the *periodic table taken as a process,* which are apparently beyond the scope of established textbook doctrines. A solution for these experimental anomalies would therefore represent a significant advance within physical science as a whole.

"2. The mobilization of education and related resources for such crucial-experimental studies, would contribute significantly toward restoring a now rapidly vanishing scientific and technological literacy to the U.S. population and labor force.

"3. The shifting of U.S. national policy back toward emphasis upon a form of economy whose rising productive powers of labor are catalyzed by emphasis on a high density of fundamental scientific research.

"4. We should exploit the shame of those powerful agencies which participated in the political witch-hunt against the cold fusion scientists, to uncover the way in which such anti-scientific *pogroms* as these fraudulent libels, are enabled to exert such significantly damaging influence over both misguided public opinion and the shaping of science policy of public and leading private institutions."

LaRouche's memorandum is available for $20 from the Schiller Institute, Inc., P.O. Box 66082, Washington, D.C. 20035-6082, or from your distributor of LaRouche's writings.

complete fraud. Why do people swallow this? In part, because of deliberate political corruption. But, on the other hand, it's because these poor fellows aren't qualified to do anything else.

We used to have an industrial society. In an industrial society, you had to make things work. You would introduce new technological processes into production. You would sometimes, in production, face problems which are scientific problems, which had never been faced before. They just came up; particularly in high rates of technological progress, you would constantly run into problems.

For example, the modern machine tool is incompetent; they thought they could make it better by making it lighter, but you get less precision with a lighter machine tool than with a heavier one. So, you don't have the resolution.

These problems would come up in the process of production. You have a production schedule; you have to make the airplane fly, on time—not next century; this century. So, therefore, the person who is going into industry, even as a scientist or an engineer, had to have a commitment to the original solving of problems, not textbook solutions.

We have people today who are not capable of developing individual solutions under that kind of stress, which we used to have, because we had people who were creative. In childhood, they would do things which showed the promise for their future vocation. You'd have the child who's interested in going out and observing the stars and the Sun, and trying to understand elements of astrophysics, simply by eyesight, trying to make a telescope, and so on. This child would probably be good for something in science, later on in life. We've destroyed that; that's our big problem.

Q: Why has that happened?

LaRouche: Very simple. That's modern history. The history of mankind, is that 95% of the population, in all known societies, prior to modern times, lived as human cattle, not as human beings. They were serfs, or slaves, or something worse. Modern society, particularly as it developed from the Renaissance, in the Fifteenth Century, the emergence of the nation-state, which is based on the idea of the equality of the person, which meant universality, or tends toward universality of education, responsibility for the development of the family and the individual, by the society. The promotion of opportunities for technological, scientific progress, produces a society which is capable of increasing its productive powers very rapidly, where poor slaves and serfs couldn't do that. But, to the degree some education or experience or knowledge would come to the population, the population would achieve a high quality. Out of a high-quality population, you'd get citizens. And, you find that the more you educate, the better the education, the better the conditions of life, the more stable society is, because people are more rational, they understand, they *think*.

Now, suppose some people don't like that? They don't *like* a society in which the individual citizen is the wealth of society. They want a society of human cattle. And, think about how people breed cattle: You breed cattle for strength, for good meat, milk, and stupidity. Look at the breeding of wild cattle, what do you do? You take a wild herd of cattle, they're terrible to manage, very costly, very dangerous. So, you breed them for stupidity. Now, you want more meat, so you breed them for meat; you want more milk, so you breed them for milk. So, you've got a herd of stupid—

Q: That reminds me of the TV society.

LaRouche: More than that. . . .

We are engaged, particularly in the last thirty years, especially the last twenty-five years, we're engaged in a very obvious destruction of modern society.

Example: In 1969, we landed on the Moon. By 1979, we had lost the technologies which were indispensable for that. Yes! We starved the industries. Look at Italy! Look at the industries that have disappeared, look at the capabilities that have disappeared, vanished! Look at the energy crisis. Man's relationship to nature depends upon energy density per capita, per square kilometer. It also means the energy-flux density, per capita, per square kilometer. What have we done in energy production? The gentleman from Frascati can tell you. . . .

[You need] a very high, well-organized energy-flux density, in order to mine seawater to produce freshwater.

For example, in China, you have the river system which goes down the Bohai Basin, which goes into the Pacific. In the Bohai Basin, you have the greatest industrial concentration in China, outside of Shanghai. Now, the river comes from an area in Tibet, down through an area which is arid, which comes down to Beijing. Beijing is growing, so Beijing is short of water. If rainfall fails for a couple of years, they've got a major problem. Now, down at the end of the line, you've got the Bohai Basin. As a result of drawing down water supplies, they've lowered the water table, which means they have some salination from the ocean, coming into the former freshwater tables. So, what do you do? Well, China has adopted, for series production, its own version of the HTR from Jülich, the 100-200 MW reactor.

Q: A fission reactor?

LaRouche: Yes, high-temperature reactor. They're now developed. Now, the only solution for China on this, with a high-density population, the attempt to open up whole areas for civilization, to develop the areas in which people are backward, means a very high energy density is required. You're not going to build roads, you're not going to cover a high-density area with big four-lane highways and automobiles, the way some idiots would like. You're going to develop a very efficient mass transit; you're going to develop industries, and bring industries to where the people live. You're going to have to develop the area. This is all going to take, among other things, very high energy-flux density. The only way we

Science is developed as an integral part of the educational process. This idea of trying to get applied science separated from so-called basic research, is idiocy! The way you get basic research, is you get good scientists who are actually doing this work.

have, presently, to provide that, in an immediate way, on a large scale, is by the rapid series production of HTRs, which, in incredibly small sizes, can be installed very quickly, because of the concrete-settling factor. And which is the best way to do it. You can move the reactors by railroad—

Q: You don't seem to be interested in cold fusion. You think this is the only solution—
LaRouche: No, no. Look, the way I approached cold fusion was in two phases. First of all, we had the development of the so-called relatively high-temperature superconductivity.

Q: That hasn't really produced anything.
LaRouche: I know; it has not been developed, either.

Q: They have done quite a bit of work on this. . . . All this requires investment, but people don't want to invest in this kind of thing. They invest in all kinds of stupid things—
LaRouche: My impression is, that what was done with this—and Pons was very susceptible to that, he was trying to rush to print with patents, and trying to rush to print with money, to produce something he didn't know whether he could produce or not. What we know is, we have an experimental demonstration of an effect. We know the effect has to do with the relation between strong and weak forces, in the question of the whole nuclear theory. We know that. But, we don't know what it means. We have ideas, but we don't have something that we can say, experimentally, we're ready to produce something.

I think that what we have here, is this: We're at a boundary condition. And, this thing about Fresnel and Ampère is typical. Until you consider the implications of the Weber-Ampère longitudinal force, until you consider the implications that modern electrodynamics, as taught from Maxwell on, is a giant fraud, and until you admit that the whole Maxwell doctrine contains the fraud of deliberately excluding this consideration of longitudinal force, which—

Q: The question you're talking about is related to the interaction of the electromagnetic field with matter—
LaRouche: No, it's something else. Maxwell was worse! Maxwell was a deliberate, conscious fraud. Because this effect was well known from Ampère on; it was the foundation of electrodynamics; it was well known throughout Europe. But, Maxwell wrote, in an introduction to his work, and in letters on the question, that he had stolen, so to speak, the work of Weber, Gauss, Ampère, Riemann, and so forth, but he was not going to acknowledge any geometries "other than our own." So, what did he do? When he wrote his book, which was based on stealing from everybody, to put together electrodynamic theory, he left out things that were embarrassing to his metaphysics. What he left out, was the longitudinal force!

Now, what Weber proved, by his experiment, was that the so-called longitudinal force, or angular force, pertains very precisely to defining the realm of microphysics, as being completely different than the realm of macrophysics. By saying that the difference, this distance factor, in the reaction, defines what, experimentally, people refer to as weak and strong forces—which came up with us on the question of fusion, this Coulomb force nonsense. When you look at this in reality, we knew, from Ampère's work, already, that the Coulomb force was a fraud, when it pertains to microphysics. It doesn't work.

Then again, you see this question of the multiply-connected manifold. That when we get into the very small, we get into considerations which are not derivable, by linear methods, from the macro field, or from existing theories. What was needed in this case, in my view, which was the way I initially approached it in '89, under constrained circumstances, was to say, "We must have a crash program, which takes this entire area, with all the phenomena," instead of saying, "Are we going to have heat or electricity in so many years?" Forget it! Are we going to break through and find out what this means? Forget the end result; forget the commercial result. Pons's problem, where he got into problems, was that he was too much emphasizing the commercial result. And the problem, was that among all the people in the field, the whole thing became a debate, not over making a breakthrough in physics, but who was going to get the first commercial result.

Q: However, and this is what I have always been emphasizing: There was very little investment in the community, in the understanding of physical principles. This had to do with the fact that condensed matter is not what most people think it is.
LaRouche: Who knows what it is?

Q: Well, the physics in this century has had a lot of success in predicting and calculating the structure of atoms and molecules, the spectral lines, and such. So, the idea was, when you take an ensemble of these objects, of these elementary objects, and you put them together, then they will stick to each other, by the same kind of forces whereby two atoms stick together in a molecule, with an electrostatic force. You call this the Coulomb force. I would be totally with you, in that. So, the real question—and this is what we are trying to develop in our group—is, when you put a huge ensemble of molecules, of atoms, together . . . now, the force that regulates a piece of condensed matter, is not electrostatic anymore, but is based on electrodynamics.

LaRouche: Of course.

Q: Well, for you it's "of course," but if I go to any conference, and tell my colleagues the good news, they will tell me that I'm crazy! . . .

[*There follows a discussion, much of which is off-mike, led mainly by Prof. Francesco Celani, concerning the budget cuts in the U.S. fusion program, and the classification of much fusion research under military auspices.*]

LaRouche: We had some very good people who were involved in doing this, and we complained to them, and they explained that for governmental, budgetary reasons, or other similar reasons, on sharing money, they agreed to cut out certain things, to concentrate on one or two things. I said, "It's crazy!" The history of science is the result of many small experiments, which are not the big, super-experiments, but are the result of somebody trying to work out a proof-of-principle in some areas. Now, this plasma physics reaction is extremely important, and it's been virtually abandoned. Some people are still doing it, at Los Alamos and elsewhere, but it's generally kept, these days, under tight military wraps. Not merely to keep it from the public, but also, because the Congress does not approve of money being spent in this way. The same thing you've got here: There's no money for science. And, the key thing is, how do you get money for science as such? Forget the commercial implications. How do you create science? How did we used to do it?

Let's talk about the graduate students. What do you do? You have a couple of good people in science; they each have, in their own department, a collaborative effort. Each has their own students, who are promising young graduate students, working for their doctorate, who work under somebody with leadership, because they want to go into this area of experiments. And they work hard, they work all kinds of crazy hours, they make things work, they discover things, they write papers, they go to colloquys, they discuss. And this is how science is developed: It's developed as an integral part of the educational process, which is fundamental science. This idea of trying to get applied science separated from so-called basic research, is idiocy! The way you get basic research, is you get good scientists who are actually doing this work.

For example, the case of Edison: Edison is a prime example of that. Edison was working under the Philadelphia Franklin Institute—they were feeding him, because he was a great technologist. He electrified the world! How did this occur? It occurred because of the connection of Alexander Dallas Bache to Alexander von Humboldt, which created this German-American school of physics, which then applied itself to the Machine-Tool Principle, and produced a revolution, which was then copied in Europe in the second half of the last century.

We've destroyed that process.

The thing I'm fighting for, is not to find quick solutions, but to know that we need an educational system which produces science, and which produces science by students who learn the history of science, not as learning, but as *knowledge:* by going through experiments themselves. Someone who is faced with a new situation has a sense of how you design an experiment.

Take your own students: How many would know how to design an experiment in a new area they weren't familiar with? How were they trained? You get students and graduate students—what training do they have, even the best? Compared to what you knew, when you were being trained.

That's our real problem. First of all, society does not want to fund real science; they want to fund gimmicks. They're not interested in industry. In former times, you would have an industrialist who was interested in something, who would come to you: "We've got a problem." They learned you were working in some area, maybe you could make some suggestion, how they could solve the problem. That's how laboratories were funded. We used to have corporate interests as well as government interests, who would come to scientists: "Help us solve a problem." They are not investing anymore. You don't have individual entrepreneurs. What's happened to the machine-tool people? Used to be a great resource for science. They're gone, or most of them. Who has money, in these corporations, these days? They're not concerned with science; they're concerned with their little skimming, get-rich-quick, buy-the-company, milk-the-company, sell-the-company, close-the-company.

So, that's our problem. I don't think we should get tangled up in trying to accept this situation.

Q: The problem for people like me, who know, more or less, what's wrong with this—what can we do?

LaRouche: Just keep fighting, we do what we can do.

Let's put a political side on this thing. We have a great opportunity. What's the world like today? The whole financial system is going to be gone this year, so don't worry about it. Could be gone by summer. . . . You have a $130 trillion

hyperinflationary bubble, based in short-term derivatives. Derivatives are essentially gambling side-bets. They are the biggest single factor in the economy.

Q: How much??
LaRouche: $130-140 trillion. This is several times the total GDP of the world. These are current obligations, same-year obligations, many very short-term—weeks, months, days. Now, what keeps this thing going? This is strictly the result of what's called a price-earnings ratio. The expected gain, in nominal value, on a piece of paper, becomes a rate of return. And, as long as there's enough cash flowing in the market to keep people buying—it's like a chain letter—it goes. Now, think of it as a chain reaction. What happens, then, if the rate of inflow falls? The whole thing is purely speculative, based on the expected yields. What happens if the rate of cash flowing into these markets falls? You get reverse financial leverage. What you get, is like a thermonuclear implosion. Because nobody can pay. You've got $130-140 trillion, and nobody can pay it. This is several times the total value of all the other world financial assets, all assets on the planet. Which means, it is simply going to evaporate! If the banking system is still faced with obligations to pay these derivatives, because of the hedge funds, so-called, then the banks go. What happens if the banks go? What happens if Maastricht goes through, and there is no government anymore, to handle financial matters? Who comes in for the banks? It's a catastrophe. Thirty years of insanity has come to its logical conclusion.

Q: You say this is going to be over this summer?
LaRouche: This summer or fall. In this quarter, in April, May, June, the world is going to go through a worse crisis, far worse, than was experienced at the end of the year. It's not an Asia crisis; it's going to hit Europe hard. There will be major collapses.

Q: Worse than the U.S.?
LaRouche: Far worse. Europe is more vulnerable. Look at the investments of Europe in East Asia, South Asia, and so forth, relative to the U.S.

Q: Maybe Germany.
LaRouche: Also Italy. Italy is indirectly involved in this thing, heavily. The marginal foreign trade of Italy is all that keeps it afloat. Plus help from Germany. France will be heavily hit. The United States will be hit hard, but less so.

Q: Why? Because they have less investment there?
LaRouche: Partly. Because they have a stronger position; they don't have the vulnerability of Europe. Look, the German economy is running at a loss. There's no economy in Europe that's running at a profit, in real, physical terms. They're all collapsing. It's a spiral of collapse. Nothing can stop it.

What's the alternative?

Either we get a new monetary system, which I'm trying to put in, or the whole thing will go to chaos. A Dark Age, like the Fourteenth Century.

Q: What are the guidelines of this new monetary system?
LaRouche: In many respects similar to what we did in the 1950s with the Bretton Woods system. We use the experience of success in postwar reconstruction in Europe, under the Bretton Woods System, as a model of reference, as an experience to prove that it works. One day, just shut the whole thing down, and restart it, on the same day, simply by saying, "exchange controls, fixed currencies, no more speculation, capital fight controls," and also, a new program of economic recovery, which is a lot like the De Gaspari program in Italy.

Q: What do you think about the bubble on the Italian stock exchange?
LaRouche: It's being pumped up by all the European syndicates, to keep the stupid people believing that there's growth. There's no true growth; it's all a fraud, it's all a swindle. Where is it? Do you see added employment? Do you see more production? Do you see wages increasing? The economy's not growing; so, why is the stock market growing? You say, "Why is the cancer growing? If the cancer's growing, why isn't the person healthy?"

This is relevant to this point on science.

Now, the key to the future, is the center of gravity. You think of the world activity: Our activity is the activity of people—economic activity of people, for example—and the rate of change in this activity. Now formerly, under high-technology European civilization, the center of the world was not where the most people were, because the activity in European civilization was so much higher, per capita, than in the other parts of the world, that the center of civilization was the Atlantic Ocean. Now, as a result of what's happened over the past thirty years, that's no longer true. The center of civilization has now shifted to the great populations, which means it's in the Pacific Ocean. The United States' relationship to China, and then to India, and so forth, is the key center of the world.

China must grow. For China to grow, to meet its population's requirements and for stability, China must have high rates of capital formation in infrastructure and other terms, in the inner part of China—not just the coastal areas—and into the areas which are not yet developed, the arid areas, which need development. This means a very high rate of real capital formation, that is, in the amount of labor represented as capital, as opposed to the amount of labor engaged in production.

Now, you can not sustain a high rate of capital formation without a high rate of technological progress. Can't be done,

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because the costs of increased capital are such that it just depresses you, slows you down. Only by increasing productivity, which you can only do with technological progress, can you sustain high rates of capital formation. . . .

The Chinese are going in this direction. That's a billion people, 1.2 billion. That's a good beginning.

Now, the Indian and Chinese governments have shown mutual interest in collaboration in this direction. All of Southeast Asia, the leaders of Southeast Asia, are also thinking this way. Indonesia's about to become extinct! The IMF conditions have caused Indonesia, which is the fourth-largest population in the world, to blow up! It's on the verge of doing so. Japan is right now collapsing, it's committing *seppuku*. (If your face can't smile, make your stomach do it—with a knife.)

Stefano Bellucci: [The picture you present is so big, I have many questions. I see an historical conflict between maritime and mainland civilizations. It's not clear to me that the solution you propose, increasing productivity, is really a new answer. As for the Bretton Woods agreement, I don't agree that reviving an old solution, which was valid thirty years ago, would be the solution today.]

LaRouche: First of all, it is not possible for the human race to exist without technological progress, and the lack of technological progress is the greatest oppression, next to a lack of education, which has been imposed on any part of the world.

European civilization was a superior civilization. Why was it superior? You start with a very simple thing. Oh, there were many problems with European civilization, and you still have some of them: They're called oligarchs, and their lackeys. Humanity probably has existed on this planet for over a million years, but, unfortunately, the history is rather confused, because, for most of that period, we are dealing with these 100,000-year, 200,000-year cycles of glaciation, which means seas rising by 200 meters or more, or something like that, and falling, which means that civilizations are now buried in mud, from the time of glaciation, and so forth. But, from what we know of civilization, we have indications of man's existence in the cognitive domain—by the quality of tools—going back hundreds of thousands of years, a half a million years. But, what we know of civilization, or modern civilization, is probably not more than 9,000 years old, that is, the records of that. Most of that is not written; most of it is just simply evidenced.

For example, we know from a thing like an astronomical calendar, a solar astronomical calendar, which is very precise, because the universe is organized with long cycles, so you can tell sometimes, by a solar calendar, who made the observation and when it was made, because the calendar will tell you what the astronomical characteristics were of the sky at the time it was made. So, we know something about 7,000 years ago, maybe 8,000 years ago, about the internal mental life of the civilizations. Just fragments. As we come closer, we get more and more, into modern times.

But in historical periods, the condition of mankind on this planet has been *evil*. The most common evil, is what we call the Asiatic model, which is typified by the case of Mesopotamia. Mesopotamia began as a civilization that was a colony of the Dravidians, who were then the dominant civilization in the Indian Ocean, a great people—the so-called Harappan culture, of Mohenjo-Daro Harappa, were Dravidians, the "black-headed people"—who had this civilization going while most of the area of the world was under ice, or living as sea people. And, they had a very powerful maritime culture, and they made colonies. One of the colonies was called Sumer, where the people at Sumer did not speak a Semitic language; they spoke Dravidian. The Semites were simply cattle-herders, or wild, who became quasi-civilized, in that area, by a Sumerian civilization which collapsed, and led to the rise of an Akkadian civilization. In this whole period—in the whole period of the Middle East and Europe—the condition of mankind was 95% slaves and serfs. So, you had a brutal society, which was called Asian society. That was the general condition throughout Asia.

For example, how does Islam spread into the subcontinent of Asia? Why would somebody convert to Islam, from being a Hindu? Because, if you're a member of the lower caste, the only way to get out of being a member of the lower caste, is to change to a new religion, which was called, in that case, Islam.

The whole history of this area is a mixture, a confluence between the subcontinent's Asian cultures, which are the so-called island area, the land-bound island, bound by these great

mountains of the subcontinent, which always had a cultural diffusion, intersection with the Chinese. And you have these layers of development: original Buddhists, from the Fifth Century B.C.; then you have, later on, 900 A.D., you have the other kinds of Buddhists, the so-called Ceylon (Sri Lanka) variety, which spread. You have this overlay of ancient Dravidian religions, with Hindu religions, Chinese culture, all interacting in this area. So, there is no such thing as an Asian culture, or a culturally relativist different way of living.

What we accomplished in Europe came largely from Egypt. That is, the Greeks were the founders of European civilization, and were a product of nurture by the Egyptians, who nurtured them against the Semites, the Macedonian-based Semites, and also others. So, what we developed in Greek civilization, was the notion of *idea*.

An example of an idea: You look at ancient Egyptian sculpture, and you look at what's called the Archaic period in Greek sculpture. The Egyptians and the Greeks made tombstones, not statues. They're three-legged; they're all tripodic, to stand stably. Whereas with the work of great classical sculptors in Greece, like Praxiteles and Scopus, you sculpt something in mid-motion, which is unstable. A smile in mid-motion; a gesture of the arm in mid-motion. Everything is slightly off-balance, in mid-motion. And the *idea* of the sculpture is located in the imbalance. As in the case of Plato: You had the development of ideas. The notion of ideas. Now, in the Egyptian culture, we have no clear conception, from ancient Egyptian culture, of the notion of an *idea,* as Plato defines ideas.

Let's take an example of an idea, to illustrate the point. Take a scientific principle. Can you smell, see, hear, or touch, or feel otherwise, a scientific principle? If you can, it's not a principle. It's not a sense-event. A principle is an error in your interpretation of your sense-impressions, when there's a conflict in the evidence of your senses themselves. Your experience teaches you, on the one hand, that this is true. But then you have evidence, which you can not deny, also by the senses, which says it is *not* true, but something else is true. So then, you try to find an idea of what this is. And in modern society, when you have the idea, you test it, with a crucial experiment or observation. And what you come up with, you say, "No! To know how the universe works, we must account for the operation of this principle, interacting with other principles."

Now, the Greeks were the first to develop a conscious appreciation of ideas, in that sense. This applies not only to physics, as we see in the best of the Platonic school in geometry—Eratosthenes, for example, is a perfect example; and Archimedes, who is a by-product of the Greek school, though not the Platonic Academy, is the same thing. Take for example, the Sieve of Eratosthenes, or the attempts to determine the curvature of the Earth, to determine the distance from the Earth to the Sun and to the Moon. The first proof, in the Second, Third Century B.C., that the Earth actually orbitted the Sun, which was established by evidence. This is the product of ideas.

And you have art, Classical art, the great tragedies of Aeschylos, even as early as the way in which the Homeric *Iliad* and *Odyssey* played a very important part in shaping the Greek mind, which enables us to understand the Greek mind today. Very sophisticated stuff, not just stories.

So, European civilization is a product of two things. It's a product of the Classical Greek influence of ideas, which enables the mind of the European, so educated, to have a superior quality of mastery of nature and social relations. The second thing, which came with Christ, was the assertion that all persons were made equally in the image of God. That every person has the cognitive potential for mastering the universe, which no animal has, and that there is no difference, in terms of racial origin or other ethnic origin, in terms of this quality.

These two things—Christianity, which used and seized, as in the case of the Apostles John and Paul, seized upon the Greek culture which was hegemonic in the entire eastern Mediterranean at that time (they were all Greek-speaking, all the educated people of the eastern Mediterranean), seized upon this culture to create what became the kernel of a Christian, Graeco-Christian European culture.

Now, we still had, in Europe, the relics of the Code of Diocletian, and other relics of empire, empire typified by Babylon. It took a long struggle, typified by people like Peter Abelard of Paris, or later, Dante Alighieri, or the efforts around Frederick II, to create the approximation of a nation-state. The development of the Kingdom of the Two Sicilies, as a product of that, Aragon and Sicily. All these things. A struggle, which, after the great Dark Age of the Fourteenth Century, there was a movement, typified by the Brotherhood of the Common Life and the efforts of Petrarca, who was a continuer, essentially, of Dante, to develop the form of modern society in which, instead of the people being human cattle, living at the service of a small, oligarchical class on top, and its lackeys, that every person had to be regarded as being made in the image of God. Treated equally, as a citizen. So, you had the idea of a society which existed, not for its rulers, but rulers who existed for the citizens.

As a result of the Council of Florence and similar movements around Italy, you had a great movement in Europe, for a kind of nation in which the rulers existed for the people, not the people for the rulers. That is, the rulers must solve the problems of the people, in the sense of the nation-state. The development of this nation-state idea, and the ideas of general education, as by the Brotherhood of the Common Life, resulted in a rapid explosion in development of infrastructure, development of technology, development of medicine, and development of industrial progress, in a primitive form, at the end of the Fifteenth Century.

There was a great struggle in Europe between those who

wanted to maintain the feudal relationship, such as Venice, against those who were working, in the tradition of Dante and others, to create a form of society in which the oligarchy were not the owners of cattle, but rulers must only exist to serve the people, as rulers.

This led to the great explosion of fostering what became scientific and technological progress, which gave European civilization, very rapidly, a much higher power, physical and related power, per capita, than any other part of the planet. For example, until the Fifteenth Century, the human population of this planet never exceeded several hundred million people. Since the Fifteenth Century, as a result of the Renaissance, and the spread of the impact of this idea of the nation-state, to other parts of the world, you've had an improvement in the conditions of life which has led to an increase in population, to almost 5.5 billion people. So, this has been the greatest boon to humanity, as a result of these particular achievements in Europe, or European culture, despite all the bad things which we still had to deal with.

Now, what happens is, the great struggle in this century—for example, the time I was in military service, in India: The people of the developing sector, of South America, Central America, Africa, and Asia, the leaders, all wanted the right to two things: to have national, sovereign independence, of colonial powers, and overreach by the British and others; secondly, to have the right to access the same thing we in the United States had, in terms of technological progress. That was the great struggle.

In the 1960s, a group took over teaching in the universities, which was teaching that it was better to have cultural relativism. They would teach that there is no such thing as truth; there is only relative truth. And, that became the doctrine which dominates the educational institutions today, and dominates the world, to a large degree.

But an interesting thing about such processes, as in physics, is that no matter what you teach the atoms to do, they still remain atoms.

Q: Are you saying that this is part of a disinformation process that has been enacted, in order not to release the power of science and technology? Today you can see, that this "democracy" is such that nobody has real ideas. It's an evil empire. . . .

LaRouche: Despite the attempt by tyrants to impose ideas on people, people remain human, and people have creative power in their minds. So you have, in the history of mankind, constant insurgencies from the individual human mind, of resistance to false ideas. You have renaissances which occur, because human beings can not be irreversibly turned into something which is not human beings. It may take generations, but they'll fight back.

In China: China went through a horrible experience under Mao Zedong—the Great Leap Forward and the Cultural Revolution are compared, by Chinese today, to Nazism. Now, some part of even the Communist Party leadership, typified by Deng Xiaoping, who were in and out of Chinese prisons under Mao, came to power at about the time of Mao's death, and, after defeating the faction called the Gang of Four, took over. Deng Xiaoping, in his last years, was able to protect and foster a significant number of people and movements, which became the present government of China. In the process, during a period which was now about 20 years, China has undergone a revolution, so that China, today, is probably the most progressive, in terms of relative development, of any nation on the planet. . . .

Bellucci: [What about the dissidents? What about this astrophysicist who lived in the American Embassy for almost a year?]

LaRouche: This is not a pure society; this is a process. . . .

You see, what you've got is a revolt of the leading section of the Chinese people, which is now demanding justice for China and for the Chinese people, in their own terms. Helga has been there a couple of times, and others have been there. It takes the form of a neo-Confucian revival, renaissance, in China. The ideas, which are very much appealing to China today, are the ideas of Sun Yat-sen.

Now, let's look at India and China, in particular, from the standpoint of Italian science. What is the problem? If you require a very high rate of technological progress to maintain the needed rate of capital formation, what do you require? You require a science-driver machine-tool industry. Now, outside of Europe, the United States, Japan, and Korea, how much machine-tool industry is there left in the world, outside of what remains of the wreckage in Russia? So therefore, how are they going to solve their problems, and what should Europe's and the United States' mission be, in respect to Asia? Our job is not to try to sell them shoes, or consumer goods; our job is to assist them with the technology they need for their own large-scale infrastructure projects. . . .

What must we do in the world? Well, we must get rid of this nonsense that's strangling us. We must establish a relationship between the forces in Europe, and these forces coming up in Asia, which represent the majority of the human race. We must solve the problems in the majority of the human race, and find out what it is we have, that we should concentrate on, which would be beneficial.

Therefore, you say, all right, in the old days, in Italy, in the best periods, the Nineteenth Century, and so forth—after Betti and his crew, the whole rise of the hydrodynamics school of Italy, which is one of the greatest, in collaboration with Germany, with Riemann in particular—How did it work? It worked on the basis that you had scientific institutions in universities. The universities were producing the cadres for the industries, the scientific and other cadres for the industries. They were also producing the science for the industries. How? By the research work which was being done. The scientists

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in Italy had the job assignment, national assignment, of taking what was happening scientifically throughout the world, understanding it, and translating it into Italian, Italian practice, and producing technicians and scientists who could deal with that.

The other thing they were famous for at the time, is that they were developing original science, which was then a potentiality. Now, the industry and others would come to the scientists in the university and say, "We have a problem. What do you know? What can you suggest we should do?" And therefore, the professor, who had a retinue of graduate students, or a few of them together, would say, "Here's what we can try to do for you." And they'd say, "How much will it cost?" And you would say, "Well, this is what we think we need for a budget. We were going to do this research." And they would say, "Fine. Okay, we'll work with you." And the universities would then get a contribution for that department from the industries or so forth, to build up the department, to continue that work. And, that's how it worked.

That is the healthy, normal relationship. Now, we can't have that in Europe under present conditions, but if we have a relationship of Europe to China, India, and so forth, on that basis, then, we've changed things. Now we go back to that system.

Q: But, you know that there are imperial powers on this planet.
LaRouche: Oh, I'm well aware of it.

Q: They will try to stop everything.
LaRouche: Oh, of course. But, so what?

Q: So, how do you deal with that? They're very powerful, as you know.
LaRouche: I look at it this way. If you study the history of warfare, as in the case of Hannibal at Cannae, or, more importantly, Alexander at Arbela, or a few other cases, you will find that in the history of warfare is documented, how the superior minds of great commanders have turned certain defeat into absolute victory.

For example, Hannibal at Cannae. Hannibal had an inferior force, a vastly inferior force. But the Roman commanders made a stupid mistake, and Hannibal exploited the stupid mistake, and destroyed the Roman force. Hm? But, what you have to do, is keep working at the right thing, and seize your opportunities to win. And my concern is that we have a relationship between the President of the United States and China, which I'm concerned to see improved, that China is one of the great powers in a combination including the United States (I hope), which will push through the New Bretton Woods operation, which means we'll get through this period. But, that means we'll be opening the period—

Q: But you've seen how strong the International Monetary Fund and all these people are.
LaRouche: They're vulnerable. You have to look at it—

Q: They're vulnerable, but also the other people are vulnerable.
LaRouche: The point is, that Italy is known for its revolutionaries. In the recent period, there were no revolutionaries. So, you've got the wrong idea about revolutions.

So, the point is, this is a question of a revolution. What happens is, look at the history. Humanity, because of its tendency to *adapt* to bad systems as a matter of personal convenience and survival, humanity is only summoned to rescue itself, under two conditions. One, is its sense of a very pressing crisis, which can not be denied. Secondly, a leadership which provides credible leadership to the population for a solution to the crisis.

We've come into a time in which one thing is certain: A crisis is here. What is not certain yet, is that we have the leadership in the wings, who are ready to come out and speak. For example, in Italy, you see a process now, which is very interesting. In 1992, foreign agencies, using domestic assets, destroyed the Italian political system. It was done by a dirty operation, a foreign-directed operation.

Q: Who directed it?
LaRouche: Well, it came largely from London, but other forces were involved in it. The *Britannia* yacht sat off here and lined the politicians up in Italy who were supposed to go back into Italy and destroy the country. And they went back and did the best they could to destroy the country.

Q: But, in truth, corruption, was at a very high level.
LaRouche: What is corruption? The Italian system was built on corruption. How did it work? Look at the end of the war. It was built on black market arrangements, other arrangements. How did you survive? People survived by *amici d'amici*.

Q: But the system was vulnerable.
LaRouche: It was vulnerable, yes.

Q: Because, when you spend $100 to build anything, and yet, you know that it doesn't cost $100, but $30, just for an example. Also, the infrastructure, the building of things, everything costs enormously. You build a road; then, just because there are bribes, the road is built badly. You have no right to go and say, "Look, you have built a very bad road." So, you will see these bridges which go nowhere. Italy was becoming a very poor country.
LaRouche: Age is an advantage. I'll tell you, age is an advantage on these questions. Remember, I was here in 1975, and in 1976. Now, what happened was, as a result of the oil price rise, which was organized by London, you had a crisis in Italy. And this, of course, was partly the result of Mattei being killed by certain forces earlier, back in the 1960s.

Q: Because Mattei would be a little bit embarrassing to these people.
LaRouche: Exactly. What happened is, that in 1975, a crisis was organized against the lira by outside parties, chiefly outside parties. As a result of that crisis, the IMF came in and demanded that Guido Carli, the head of the Bank of Italy, become the virtual government of Italy. I was here in '76, and I talked to leading politicians on that issue, and it happened. They tried to stop it, but it happened.

So that, from 1976 on, Italy was being looted by the IMF. How did it work? It worked on manipulation of the lira and other things of that sort, on exchange rates. As a result of that, the progress which Italy had made in the earlier period, in reconstruction, as typified up till the middle of the 1960s by things like Mattei and De Gaspari, was broken.

So, Italy was essentially destroyed by this operation.

Q: And colonized.
LaRouche: Yes, *and treated like a Third World country*. You began to get forms of corruption which were based on that. For example, the postal system: You had to bribe somebody to get your mail. That kind of thing was going on.

But, this process was the *amici d'amici,* which was, "Look, my brother-in-law is eating at my table, and I'm poor. Will you get him a job?" The bribery would work on that basis. "If you get my brother-in-law a job, you get your mail." And this was the result of the degeneration of the reconstruction process.

The typification of that goes back into '76, at which time the leading concern in Italy, for a continuation of De Gaspari's program, was something which was actually formed by the Socialist Party, which was called the Cassa de Mezzogiorno. The Cassa de Mezzogiorno had the ability to unify Italy in a real sense. So, instead of people going from Calabria to Milan for a job, you could bring the jobs down to Calabria.

Then you had the great Sicily problem, the same thing. We still have the same fight about getting an important project, this bridge across the Straits of Messina, which should be done now, because you should integrate Sicily into Italy—

Q: Yes, but that's not progressing.
LaRouche: It's being blocked. . . .

Q: Officially, the question is a money question. The official position by the government is that all the technical expertise and so forth, the highest levels, of earthquake protection, and the improved international standards—but everybody agrees that we can not afford this bridge, because of Maastricht. That's the government's position.
LaRouche: The problem is that Italy stopped being developed. So therefore, you had this division of Italy between the rich and the very poor, which now comes up with this operation around Bossi, which is the same kind of thing.

Q: So, the Bossi operation is a foreign operation?
LaRouche: Oh, sure. Absolutely. There are Italians involved in it, but it's a foreign operation.

Q: Who is involved in that?
LaRouche: Look to the north.

Q: You mean Germany?
LaRouche: No. Look further north. Look across the Channel.

Q: London. It's always London.
LaRouche: London, the Netherlands, and people who are tied to it. You have people in Italy who are very much part of that.

Q: Why does London hate the Italians so much? Italy is a very good holiday place. They treat us like the Third World. They don't remember that we did it—we made the Renaissance.
Helga Zepp-LaRouche: Nicolaus of Cusa said that the two characters, the heavier, more serious German character, and the lighter, lovely Italian character, have to go together, because they bring each other to a higher level. I agree.

Q: But in the end, the idea, north of the Alps, is that the Italians are unreliable, vain. They don't take us seriously, culturally.

LaRouche: Very similar problem.

Q: Germany has had some beautiful music, but you know, in Italy we have done—
Zepp-LaRouche: Eighty-five percent of all the *beni culturali* are in Italy.

Q: That's right. So, this means something, doesn't it?
LaRouche: Of course it means something.

Q: So, why are we taken so low?
LaRouche: Very simple. Very simple. Because, first of all, the British oligarchy hates Italians. They hate them. They consider them an inferior Mediterranean people, just the way they like the Greeks.

Q: Like Churchill called the Italians "the soft underbelly of Europe."
LaRouche: All right, fine, but there's another part of the thing, which goes back—why does it work? Go back to the Nineteenth Century. How did Italy get its independence? Since the Hapsburgs and their friends in Italy would not allow the Italians otherwise to get their independence, the British intervened, together with the Napoleonic forces, and they brought in Mazzini, who was a British agent, and his friends, to organize the independence.

Q: Yes, that was the operation of the Masons.
LaRouche: Well, it was not the Masonry. That was the British monarchy.

Q: Yes, but the Masonry. Do you know who the most powerful people in Italy are? The Masons.
LaRouche: Oh, that's the British operation. But that's only the—

Q: That's exactly what's happening today. They are everywhere in the government, everywhere, and are against us.
LaRouche: But, what I'm saying, is that simply explains: The British have the motive, and they have the means. And the means was the way the Italian independence was organized. Because others wouldn't do it, the British organized it, through Mazzini, beginning with the middle of the last century, with his operation. Palmerston's man. So, Italy was like China: China got dope, and Italy got Mazzini.

Q: Thank God we also had a guy called Cavour. Otherwise, we would not have had the good things afterwards.
LaRouche: Yes, I know. That was the scientific approach. But also, you have to understand that similar things were done in Germany, they were done to France, they were done to other countries in Europe. This is not limited to Italy alone.

Q: So, we have to get rid of the Brits.
LaRouche: You have to get rid of the oligarchy. Don't worry about the Brits, they don't know which way is the door. The oligarchs are something else. They don't even know what their sex is.

Q: And the oligarchs are very powerful.
LaRouche: The oligarchs are simply a Venetian-style financier oligarchy, which has a longstanding relationship to Italy.

Q: Also Rome.
LaRouche: Sure. The old Venice. The British oligarchy is essentially an old Venetian colony.

Q: Well, I'm pretty sure that all these powerful oligarchies are in action even in the most crucial region now, which is the Pacific area.
LaRouche: Absolutely. It's a fight between powers.

Q: There was a transition, for instance, in mainland China, which is a crucial problem right now.
LaRouche: The Chinese are aware of this problem, but the Chinese are maintaining sovereign nation-state status, and insisting upon it. In the United States, the one policy which Clinton is clear on, is a commitment on this economic issue, to China. And they are concentrating on the China question.

So that if India, which also has many patriots, which is working to have closer relations with China, and China with closer relations to India—under these conditions, you have the majority of the human race organized against these fools. Under that condition, we win.

But, as far as the attempt is made, the entirety of the way this crisis was orchestrated in Asia, the crisis overall is international. What happened, is that under the conditions of deregulation, and globalization, you had people like Soros, and other hedge fund sharks, moved in, and made a market in currency offshore, by gambling house methods. The currency was brought down, the international institutions like the IMF backed it up—

Q: Now, also recently, there was a crisis.
LaRouche: Right. Well, Japan is committing *seppuku,* as I said, with its policies. So therefore, every effort in the world was made by these guys, during the last year, continuing this year, to destroy every country in Southeast Asia and East Asia, including China. China was also a target, but China's a tougher target to deal with.

So, the point is, yes, there is opposition. You know, my generation is a war generation. So, we are used to thinking about such things. But there is now an ongoing war between essentially two forces on this planet: War against these evil bastards who are doing what they're doing, trying to destroy civilization and nations, and those of us who are determined to stop them. But it's a war.

Q: You are talking about the Brits, you are talking about this oligarchy. How is this oligarchy in the United States doing?

LaRouche: It's an extension of the British one. It has three elements: one from New England, the people who were partners of the British East India Company in the opium trade, from Turkey and from India into China. That's the so-called bluebloods. The second group is a group of bankers, centered around Manhattan, beginning with Aaron Burr, who was a traitor to the United States, and also vice president.

Q: The one who killed your Hamilton.

LaRouche: Yes. Then also, you had a number of other bankers: J.P. Morgan, August Belmont, who was a total British agent. These guys are British agents to the present day. British allies.

Then, you had the third element, which is the Southern slaveowners, which formed the Confederacy. And those are the three elements of hard-core oligarchy, which worked together in the United States.

Q: What is their weight in the United States?

LaRouche: It depends. Obviously, they're not too numerous, they can be defeated. But as long as the American people are willing to tolerate them, they get by with it. These guys control the press. They control the media. You have two controls. One is the direct British control of the media. That includes, as in Italy, Rupert Murdoch. Total agent of the British Commonwealth.

Q: Murdoch was coming to Italy, but he was stopped.

LaRouche: He was going to try to bail out Berlusconi, I understand.

Then you have a second one, which is, in the United States, the Hollinger Corporation, which is British intelligence, as Murdoch is British intelligence. Then you have major press, the three major television networks, plus CNN: British.

Q: Also CNN?

LaRouche: Yes, sure. Look at it. What are they peddling? Then you have, in major newspapers, you have the *New York Times,* the *Boston Globe,* the *Washington Post, Chicago Tribune, Chicago Sun-Times,* again, controlled by the Hollinger Corporation. You have the *Los Angeles Times*.

Then you have the Associated Press, also controlled; *Reader's Digest,* controlled by the same people. Magazines: *U.S. News—*

Q: But essentially, the people read this. That's the point.

LaRouche: But the point is, remember what I said to the forum of the Chinese, two things. First of all, human beings: You don't change their nature by propagandizing them. They will still tend to respond to reality, as reality. They respond to the fact that—

Q: Yes, but they're painting a virtual world, as you know very well.

LaRouche: But it doesn't keep people alive, and people still—what happens when the television set goes off? Where's your virtual world?

Q: One should produce virtual bread and butter.

LaRouche: They will, they will. They'll give you a pill to make you think it's real.

No, the other thing is history. You see this in every population. You see it in the Italian population, including from the outside. There is such a thing as an Italian history. And you find, in generations in varying degrees, everybody who's an Italian has some part of Italian history in them. Italian history has a character. You find that there are certain paradigms, characteristics of Italian history. Some people have more of one, some more of another.

So, you have paradigms, cultural paradigms. I'll give you an example of my personal case, which I've cited. On my mother's side of the family, the most important person who was an influence on my generation, was born in about 1809, which means that now, next year, I will be 200 years old. Because the first conscious influence on my life, was this character, this person. So, next year, I'll be 200 years old.

Q: 190.

LaRouche: So essentially, this is the way things work. If you think about relations in families and experience, and you compare this with what a good Classical education is. A good Classical education is an ordering of one's relationship to history. You personally know people—If you relive what somebody thought 1,000 years ago, you know them from the inside. And therefore, you become an embodiment of that. And people of Italy, from art, everything they live in, absorb the effects of an Italian cultural paradigm, or several cultural paradigms. As in the United States: People have cultural paradigms.

Q: What do you think of Clinton? Is Clinton fighting against these people? Can he fight?

LaRouche: Yes. . . . Clinton is a contradiction. First of all, he's a '68er. That's his cultural paradigm. Sixty-eighters do not make decisions. They have strong opinions, but they also have cultural relativism. They're pragmatists. They don't have confidence in truth.

Remember, the '68ers were shocked by the nuclear effects and other effects that came down in the '60s. And therefore, they went into, by fear, extreme lability and suggestibility. They went into a world we used to call fairy-story world, or make-believe. They began to act out on the street: make-believe. They would have sex with fireplugs: make-believe. Whatever. This kind of thing. I saw it.

Q: But why wasn't he fought against by the oligarchy?
LaRouche: They did. But the point is, they had a problem. George Bush was clinically insane. They had to get him out of there. He was unpredictably insane. And this crowd around him, which was really the worst—

Q: So, the lesser evil.
LaRouche: Well, they said, "Let's get a weak guy, let's put a weak guy in and chop him up. We don't want strong forces." They thought they had everything under control. They misestimated. They often make mistakes.

Q: As you know, Rubin said, "No, no, we're not going to give a penny to the IMF." Then Monica Lewinsky came out, and then they—
LaRouche: No, the operation was the same operation essentially done against me in the 1980s, by the same people, mostly the same people. It's a secret intelligence operation, involving private agencies internationally. And it was directed largely from London, as against me earlier. The same crowd. And so, you have a secret intelligence operation, trying to destabilize the government of the United States. All of this other stuff, this sex story, is all simply decoration.

Q: However, they had an impact.
LaRouche: Like "Clean Hands" here. You find anything you can use against anybody, to destroy what? To destroy the independence of the country. People said, "Well, maybe he's partly guilty." "Wait a minute, fella. What's going on here? You're having a systematic destruction of the sovereignty of the nation."

Forget these other so-called details. What is really happening? Who is the criminal? What happens when the prosecutor and the judge are the criminal? Is treason a great crime? Is the deliberate, willful plan to destroy the sovereignty of a nation a crime against that nation? Isn't it an act of treason under many European constitutions?

Q: Can anybody prosecute a traitor? Under the present circumstances, no one. There is no legal responsibility.
LaRouche: I know, I know. That was why the system was set up the way it was. It was a time-bomb buried inside the system. But, however, there are ways of dealing with that, if governments are strong, and governments which will resist that. There are ways of impeaching them. And every one of them is probably a crook.

You know, there are various kinds of crookedness: committing obstruction of justice is a crime. If a judge does it, it's a crime, an impeachable crime. If a judge lies, it's a crime. If a judge knowingly convicts an innocent person, it's a crime. So that there are ways in which a strong government can use the power of impeachment to eliminate prosecutors and judges.

But the question is: Italy was put into a condition of weakness, in which divisions and other things meant that it did *not* have a strong government, that is a strong government decision. How many times did the government of Italy change? It wasn't a prime ministership, it was a revolving door. And you never knew which way it was going to revolve. So, that's the problem.

But, my view on this matter, on the political aspect of this, as on the science question: This is a war. I'm a warrior. For me, it's not difficult to understand, because I'm a warrior. Most other people will say, "Well, isn't there a way we can eliminate this problem?" I say, "No, we're going to have to beat these guys. You're not going to eliminate the problem by finding some tactic to eliminate the problem."

Q: But the first problem is to decide who is the enemy, and who is allied with you.
LaRouche: That's right. For many people, it is not so clear. One of the reasons it is not so clear for the citizen, is because nobody is speaking publicly, and loudly, and consistently, with a clear voice.

What is the issue today in Italy, as in every other country? The issue is between austerity for the sake of the financial system, and social welfare. Are you going to kill people, or are you going to bankrupt bankers? Which are you going to do? You've got to do one of the two. Which are you going to do? Are you going to bankrupt speculators, let them go bankrupt, or are you going to kill the people?

Bellucci: But to me, with the global market situation, you can take measures in one country, but you are in a vacuum which is very active.
Zepp-LaRouche: No, but it's everywhere the same principle, because in essence, the whole world situation is divided into two orientations. There is one group of people who say, "The paradigm shift which we initiated thirty years ago, has now come to its conclusion, and we have to reintroduce feudal society. We have to eliminate the majority of the world's population, we have to go back to a population density of, at most, 1 billion people, and we have to use natural causes to accomplish that, to increase the death rate by denying technology to the Third World, by stirring up regional wars, by causing subversion, by reducing agricultural production so that there is food scarcity, and then the Four Horsemen of the Apocalypse will take care of our problem, and we will control the raw materials after the crash. "

Now, this is what's going on in the Great Lakes region in Africa, this is what's going on in the Caspian Sea. These people are centered in London, but they have their suboligarchies distributed all around the world. They know the system is finished, but they want to position themselves to control the reduced population afterwards. And Maastricht,

Einstein's Theory of Relativity refuted

"Michelson-Morley-Miller: The Cover-Up" is the cover story of the spring issue of *21st Century Science & Technology*, which challenges the foundation of textbook physics, and opens a debate on the nature of light, its propagation, and all the related, fascinating questions about how the universe works. The fraud involved concerns the allegedly "null" result of the Michelson-Morley interferometer experiments around the turn of the century. This null result supposedly showed that the speed of light is constant and that there is no ether drift, which result was used as empirical proof of Einstein's Theory of Relativity. But the Michelson-Morley results were not null!

The exposé leads with the work of Nobel Laureate Maurice Allais, who reviews the 1925-26 interferometer experiments of the American scientist Dayton C. Miller, who repeated the Michelson-Morley work. Allais shows that Miller's interferometer results were positive, and that Miller's results cohere with the anomalies Allais found in his own experiments with a paraconical pendulum in the 1950s.

Accompanying the Allais article is an historical review of the Nineteenth- and Twentieth-Century experiments and theory concerning the Michelson-Morley-Miller work, which situates the importance of Allais's work. Associate Editor Larry Hecht begins with the origin of the wave theory of light in the work of Augustin Fresnel, Thomas Young, and Christiaan Huygens, and discusses the question of relative motion and aberration. Then he describes Michelson's experiments that were designed to test Fresnel's hypothesis, and subsequent experiments through the first decades of the 1900s, including the debunkers of Miller's work.

For more information, contact *21st Century*, P.O. Box 16285, Washington, D.C. 20041.

in a certain sense, is one of the tools. The IMF conditionalities toward Russia, or toward the Third World, are another tool. The whole idea of the balanced budget, is another tool. The whole question of the globalization, free market economy, neo-liberalist policies. So, that's one faction.

And then you have another faction of people who say, "No, we are at an historical change, a change of epoch where, for the first time, the human species, with the help of technological and scientific progress, can overcome this division into oligarchs and idiots, by educating the majority and eventually the totality of the people."

Now, it happens to be that the present government of China is very much in the second direction. For example, I participated two years ago in a conference in Beijing, which was called "The Economic Development of the Regions Along the Eurasian Land-Bridge." The reason I'm saying this, is because of your very earlier question, about maritime versus land-mass conflict.

There was a very interesting speech given by the sponsors of the conference, which said that through the development of the Eurasian Land-Bridge, meaning the infrastructural development and economic integration of all of Eurasia, that for the very first time in history, the geographical conditions no longer determine the advantages or disadvantages of a country. The first level of cultivation was maritime, then rivers, but now, by driving infrastructure into the landlocked area, and using this infrastructure, not only to exploit raw materials, like in the colonial period, but to bring the industrialization and the development into the landlocked areas, that you overcome the disadvantages, geographical disadvantages, of any part of the world you want.

Now, the Chinese are doing that. They're doing it with their interior regions. They want to pursue it through the Central Asian republics. There's a big dynamic going on in this direction.

Now, they said we need a vision of mankind for the Twenty-First Century, of how we overcome underdevelopment for all of mankind in this way, because we can expand the same concept to Africa, to Latin America, and change the whole way the world is organized.

It was very interesting, because at that same conference where I spoke, and the Chinese government spoke on that wavelength, there was also the representative of the European Union, Sir Leon Brittan, who is an arch-oligarch, who is an evil figure. And his speech was amazing. He said: "Well, first of all, politically, there will be so many difficulties along the region of the Land-Bridge, that your dream will never come true." It was an open threat. It was veiled in diplomatic language, but—

Q: They're seeing to it, that this has happened, right?

Zepp-LaRouche: And then, secondly, he said, "Okay, you can have your Land-Bridge, but it has to be built with money from the private markets. You have to have a toll booth system along the Eurasian Land-Bridge; every five kilometers a toll booth. And most importantly, you have to open your markets

to the WTO, to the IMF," and so forth.

Fortunately, the Chinese were very cautious. And I obviously did my part to warn them not to do this. Had China done that, they would have been victimized by the attacks of the mega-speculators, like George Soros, which have been hitting Southeast Asia since a year ago. But in China, fortunately, they were very careful. They did not make their currency convertible. They reacted in the opposite way, by shutting themselves up even more.

So, the conflict was there. Because this was an evil trick to lure China into submitting to the laws of globalization, to the advantage of a few mega-financial forces, and forcing China to resist it. So, this is why we put so much emphasis on China, because it's one of the places where the idea of using the nation-state for the defense of your people is the clearest.

We have, for example, the speech which Jiang Zemin gave at the 15th Party Congress last September, which I really looked at in great detail. And, it's a beautiful idea, of how China wants to double its GDP, which they will have arrived at by the year 2010, and how they want to have overcome any underdevelopment in their country by the year 2050, and make all of China prosperous for all of its citizens.

Now, which government in the West talks like that? Which government says we have a vision for two generations down the line? So, anyway, this is a very interesting perspective, which—anyway, you can actually, once you know what the crucial issues are, then you can take that as a litmus test. And, even if you don't know the predicates of a country or a continent, you can very quickly find out who is a good guy, and who is the enemy, once you know what the crucial issues are.

And the crucial issue right now, is either a return to feudalism—and there are many tricks and ways of accomplishing that. One is dumbing-down the populations with the most banal entertainment, and the most perverse kind of social activity you can imagine. And, the other side is to say, "No, we have to indeed elevate the people. We have to make them more intelligent. We have to increase the number of people who are really creative. And, we have to have a new Renaissance by studying the old one." I mean, how did the Italian Renaissance come into being out of the collapse of the Fourteenth Century?

The Fourteenth Century was an age of incredible usury, looting by banks, superstition, witch-burning, irrationality. It was a pit, it was a true pit of mankind. But then, if you study how mankind came out of this, it was because you had, at the beginning, a handful of people who would study Plato, who would study the Greek Classics. And out of that, the beautiful Renaissance was created, which laid the foundation of European civilization for five hundred years to come.

And, that's exactly what we have to do today.

You see, the Chinese are going back to their Confucian tradition, after the experience of the horrors of the Cultural Revolution. And, I think that we are at a point in history, where, if you take universal history, and look at the high points of each period, and revive those, that in this coming crisis we will be quite able to generate and inspire a new Renaissance. But, we will overcome what I call the childhood disease of mankind, which is oligarchism, by eliminating what Schiller would call the *Brotgelehrte,* the person who only wants to learn one set of facts, and who is waiting to collect his stipend or pension, and who is the biggest reactionary, because he refuses new knowledge, because it's associated with more work, and more anger and trouble.

Q: [What can we do to eliminate this problem of the *Brotgelehrte?*]

Zepp-LaRouche: By making sure that, through a humanist education, you have philosophical minds.

Q: What do you think of the family in America, now?

Zepp-LaRouche: Well, I can only tell you about the impact of the '68 generation in Germany, where the big slogan in '68 was "He who sleeps twice with the same woman, already belongs to the Establishment."

Now, the politicians have become more adjusted, and they marry a new one each time. But, as for the United States, I think it's in trouble.

LaRouche: In the United States, the problem is partly economic. First of all, it's the '68er generation, which is really a problem, and its effects on the following generation. But otherwise, for people to make the same income, family income, that they would make with one and a half or less jobs in the family in the 1960s, they now have to work three jobs, which means that you don't have a family. You have a bedroom.

You see, as in Europe also, as an effect of inflation and looting upon the cities, the increase in commuting. Now, commuting time has to be added to the workday. And you start adding an hour, an hour and a half each way, to the commuting to and from work each day, to get to some distant place you can afford to rent, or own, and that means you have a destruction of the possibility of family relations.

That then goes together with a general feeling that there is no security or happiness in life. Therefore, you don't have families based on happiness, except of a kind where two drunks are leaning against each other to keep from falling down.

And the result is, that you have the demoralization, and you have a very terrible problem of a virtual criminalization creeping into the minds of the young.

Let's take one case which I know from looking at it: the case of what's called the bipolar personality, which is an international phenomenon. The father beats the mother and

the oldest boy, and maybe some more. The oldest boy, and the mother, and the girls coming from that family, will tend to be bipolar, either as passively or aggressively, in their marriages. Their behavior in society will be like that, in relation to other people: bipolar relations. Extreme manic-depressive kinds of personality, coming from the experience of a young child being aggressively beaten as a very young child, and then beaten after that.

So, what happens is, that you have these syndromes, disorders in family relations, spread from one family to another in society, take hold more greatly when the degree of nurture in the family is lessened. That is, in a family in which the relations are productive among the parents and children, where there's some kind of productive, viable process, or something good has come into the family. But then you have the child who feels totally abandoned, in a sense, by the family. He's just a person who comes to a table sometimes, he runs around in the streets, does this, does that, completely divorced from any real social relations. The result is an acute degeneration of the family.

You see it in the divorce rates, and all these kinds of things go with it. People are no longer happy. They go running from one place to the other, trying to get a moment of pleasure. No happiness.

Paolo Raimondi, Moderator: Thank you. I think we will have to close this meeting. This is the first of a series of meetings, and Mr. LaRouche will be back again.

Preparata: As you know, we are very interested in what you're doing, and eventually to try and contribute the results of our research, which, it seems to me, as far as the scientific aspect of what has been discussed today here, we are much on the same wavelength, so we could profit.

We are now fighting. We are also fighters. We are fighting on a frontier now, to change the paradigm, the scientific paradigm, which the big discoveries during this century in quantum field theory, and in quantum physics, ought to be brought to bear on a deeper understanding of these phenomena.

That's the reason why, as you know, I've always been very interested in trying to keep this channel of communications open. The conceptual standpoint—because that is one of the ideas that you mentioned to which I resonated strongly, that from a conceptual standpoint, we can really try. As I said, I believe we are on the same road at the same time. And to see this idea of non-linearity in the small as important in both fields, we are realizing this kind of conceptual set of ideas into our understanding.