

The 20th Century Transformed Us From Earthlings Into Solarians

Lyndon LaRouche spoke by telephone to members of the LaRouche Youth Movement in Seattle, Aug. 13. This is a transcript of his opening remarks. Subheads have been added.

I've written a great deal recently, and spoken a great deal, which has been transcribed on various occasions, which covers a lot of territory, some of it new, some of it not so new. At the same time we're having a very interesting process here at these premises, among four young adults who were selected to lead a process of defining what an animation actually is and should be and why. That's coming along nicely. We are now going to expand this to about 15 of the LaRouche Youth Movement (LYM), not all assembled in the one place, but assembled in various places, but in communication with each other, including electronic communication of animations and related material.

So, we're getting into a new generation, a new generation of new generation; a new generation of the young adult generation, in which we are attacking, by this method, beginning with the case of Kepler, which is what we're doing essentially: We're replicating the core of Kepler's discoveries as something to be reexperienced, rather than described. And the team of four-odd, here, are working through the *New Astronomy* for this particular purpose.

What we're trying to make conscious is that the universe is not run by mathematical formulas. A mathematical formulation may be useful, but it's only a crude approximation of the shadow of an actual scientific idea. One of the problems we have in modern reductionist thinking, especially since the 1920s, increasingly, but even more emphatically since the end of World War II, science has been destroyed. . . . Science as practiced by the older generation, scientists typified by the best people in the Fusion Energy Foundation, died out, not only in the United States, but around the world. The people we worked with, the people we were in touch with, or their corresponding people we weren't directly in touch with, but indirectly in touch with, in the Fusion Energy Foundation, represented the last competent generation in practical scientific work and conclusions which we've had so far.

The Baby-Boomer generation, which was brainwashed in the theories of Norbert Wiener, John von Neumann—actually all coming from Bertrand Russell—this generation is intrinsically, with a few personal exceptions, incompetent in science.

They no longer believe in a scientific principle, a physical principle, they believe in a mathematical formula. And a mathematical formula is never more than a descriptive approximation of the effect of a principle, rather than a representation of the principle itself. That is, people believe that you derive scientific principles by deduction, or similar kinds of methods. They do not understand that you can discover a scientific principle, *only* by experimental methods. And experimental methods which show a discontinuity, which show the existence of a principle which is contrary to how you believe the universe worked before then.

That's our problem. So therefore, in dealing with the crises of the world today, which we'll be addressing in a series of events more and more over the coming weeks, we have to go in from the age of technology as we have known it recently, into a new age, in which nuclear fission and nuclear fusion are the hallmarks of science; in which nuclear fission and nuclear fusion, thermonuclear fusion, are regarded as the principles of organization of the Solar System as a whole, since the Solar System began its existence, as a solitary fast-spinning Sun, a long time ago.

Overcoming Incompetence in Science

So therefore, what we're doing, rather than allowing people to try to *learn*, what they might learn in a university today, including a so-called advanced one, we're telling them to go through the experience of *rediscovering* the essential foundations, in an experimental approach, of modern physical science today, to bypass what is taught as merely mathematics, and to look at mathematics from the standpoint of physical principles, rather than trying to mis-define physical principles as mathematical description.

That's the essence of the matter. Because this new generation, which many of you represent, the generation between 18 and 30 approximately, now, you are the future. The present world system is going to disintegrate—now! In these coming weeks and months, it will disintegrate. And the question is, what is the new system which will replace it? Will it be Hell? Will it be chaos? Or will it be something viable. So the trick is, to skip the failed generations on this account, to go back to the fundamentals of the founding of modern European civilization, and to its more ancient Classical Greek origins, and to develop a generation which

can lead in putting humanity back on the track.

We're now going to a point, which will be represented by a conference in Berlin. It will be a conference of the LaRouche PAC. And the subject of the conference will be essentially the future of civilization, indicating that the world has now got to change in the period of breakdown of the present world financial-monetary system, to go to a new kind of economy—a new conception of man, different than that which has been prevalent up to now—in which nuclear fission and thermonuclear fusion will be thematic features of a new kind of society, based on the principle of the sovereign nation-state, as the U.S. Federal Constitution essentially defines it, a community of nations, a community of nations organized as nations within continents, such as the continent of Eurasia, the continent of Australia included; the continent of Africa; the continent of South and North America: These are the primary organizations of society. These different parts of society, these continents, are composed of *sovereign nation-states* as the U.S. Constitution is a model for that, especially its Preamble.

The Future of Civilization

The new world will be a cooperation among nation-states. The leading theme will be in Eurasia, because that's the largest part of the world, or the largest continent, in which the cooperation between western Continental Europe and Asia is crucial, a cooperation which is pivoted on the role of Russia, *as a Eurasian nation, culturally and scientifically*. And therefore, the development of the population of Eurasia over the next 50 years, over two generations, is an exemplar of what we have to do.

Now, the issue of fission power, and thermonuclear fusion come in, in two ways: First of all, we have a shortage of water, of fresh water, available for human use. You see this in various parts of the world. Therefore, we're going to have to *make* fresh water. And the only economical way we can make fresh water, which is potable, in useful forms, is through nuclear fission, at this time. Therefore, we're going to shift from the idea of calories, which is an idiot's way of talking about power, to what we call "energy-flux density." That is, the concentration of power per square kilometer, the density of power, which comes out as the equivalent of the *temperature* of power: So, you have to have *high-temperature* reactors as defined in textbook physics, *high-temperature* power sources, in order to solve the chemical problem, which we must solve. And if you want to solve the problems of chemistry, you must go into nuclear fission and nuclear fusion.

So therefore, we have an economy which is based, in its power sources, primarily, on the Sun itself. We use solar energy only for one purpose, and that is, to make things green. We don't allow people to waste solar radiation, which is very inefficient in an inorganic way, but is very efficient in a living way, in the way that solar power enables chlorophyll to transform carbon dioxide into oxygen, and other things like that.



EIRNS/Lorna Gerlach

"A mathematical formula is never more than a descriptive approximation of the effect of a principle," said LaRouche. People "do not understand that you can discover a scientific principle only by experimental methods." Here members of the Seattle LYM are investigating the science of Sphaerics.

So therefore, we are going to have to have a nuclear fission program as the basic energy policy, globally, for the next quarter-century and longer to come. We are going to have to proliferate the construction of nuclear power plants. Presently we will be concentrating largely in the high-temperature gas-cooled reactor of the Jülich model or its derivatives.

New Approach to Raw Materials

We must also, however, deal with another problem: Not only must we provide economically, available supplies of fresh, potable water for every part of the world, and increase the water available to green the deserts, but we must also think ahead to the fact that we have a problem in chemistry: So far, we have relied, as human beings, on the chemical materials which are found in the Biosphere as deposits. That is, for example, water and atmosphere are products of living processes. They are not pre-biotic things. They may have a pre-biotic existence, but their proliferation as oceans and rivers and so forth, is a product of life, of the action of living pro-

cesses, not otherwise. And the atmosphere itself is created by living processes—it didn't come, shall we say, "naturally." It's not the bounty of Nature, it's the bounty of the action of life over a very long period of time, in transforming this planet from a *pre*-biotic phase, as we call it, into a process dominated by life.

Now, we are beginning to use up many of the so-called "raw materials," which were deposited as fossils, in what we call the Biosphere. We are using up those things we call "high grade," where the materials are deposited in the most convenient form, relative for our purposes. We have a growing world population, a population which must improve its standard of living, its productivity, which means we're going to use up these materials more rapidly. And those materials are becoming more costly as they become poorer in quality for purposes of today's kinds of production.

The Principle of the Sun

Therefore, we're going to have to go to a phase in life, in which society actually generates materials to supplement and replace those we extract from the Biosphere. Which means, that within a quarter-century, we must move into a *thermonuclear fusion economy* as a partner and in a sense, in the longer term, successor, to a fission economy. Remember, the whole Solar System, from the time that the Sun was all out there by itself, spinning very rapidly and shedding material, when there was no Solar System, the Solar System was created in a sense by a solitary, fast-spinning Sun, which created the planetary orbits, which created the planets, and so forth and so on. And created the Periodic Table, as we know it today.

So therefore, we're now going to have to go back to that, to the principle of the Sun. The power of man, to create Suns or to transform them, is going to be the future of mankind.

This means, also, that mankind is now defined no longer, as mankind confined to the planet Earth. There's no prospect for immediately large-scale colonization of the nearby Solar System, not even the inner planets, especially not Venus right now. Now, Mars is being looked at quite seriously, but that's for the future. We have to get there, but we're not ready yet. We're in the process of getting to that.

But what's happened is, since the work of Kepler, in defining and discovering the principle of organization of the Solar System—you remember, he was the first to discover that—we now have entered a period in which mankind is thinking of ourselves, at least scientific thinkers, not as people confined to Earth, as Earthlings; yes, we live on Earth, but we're not exactly Earthlings, we're Solarians, in this sense! We live within the Solar System. And our fate will depend increasingly on our ability to *manage* the Solar System. In the course of managing it, we will, in a sense, inhabit more and more of it, in various ways. And we'll take over more and more control of the Solar System.

Mankind as Solarians

We've now entered the age that we are Solarians, not Earthlings. We live within the Solar System: Our life on Earth is now depending increasingly on our ability to understand how to master and manage the nearby parts of the Solar System.

So, as we go into this conference in Berlin, which is coming up either the 6th or 7th of September, we are announcing the entry of mankind into a new phase: It is the phase of the realization of the purpose of the modern nation-state, and the affirming of the modern nation-state, as the U.S. Federal Constitution defines this best, as a representative today. We're thinking in terms of continents, in which cooperation among nation-states on these continents is the primary form of existence of societies. We're dealing in cooperation among continents, as the primary basis for organizing the planet. Continents composed each of sovereign nation-states, interacting.

We are entering a new era in terms of power: We are now going back, fully, to fission power, as the primary source of power, for man's use. Within a quarter-century, we'll be entering a new age, the age of thermonuclear fusion as a growing source of chemistry and power. We will be going into what is called an "isotope economy," in which the management of isotopes of the chemical elements will be a crucial part of our future, a crucial part of understanding the relationship between non-living and living processes, for example.

We're going into a period now, where we've already entered the age of being Solarians. We started back about the beginning of the last Century, as we began to think about exploring the Moon, reaching the Moon by rockets. That process has brought us into thinking about the Moon, not as the work of lunatics but of wise men. Once we understood that we could get to the Moon, and use the Moon as a launching pad for reaching the nearby planets, with human beings even, then we entered the period of being Solarians in our thinking. So, one of the accomplishments of the 20th Century is to transform us from Earthlings into Solarians. We will be Solarians, if we survive, for many thousands of years to come.

And we now have to change the world. We have collapsed societies, collapsed nations, failed states, especially the United States failed state. The President of the United States is a failed state unto himself: His ego makes him like that. Those in the Democratic Party who believe that Rohatyn is human, are examples of failed states of existence. We're going to have to go from failed states, to becoming Solarians: that is, people who live on Earth at the present time, and will continue to live on Earth, predominantly, for a long time to come. But in the meantime, we're going to, from Earth, we're going to take over more and more of the practical work of managing the nearby parts of the Solar System, and beyond.

So therefore, we are now all Solarians.