

## LaRouche to Polish Educators: Teach the 'Eureka' Principle

*On May 24, Lyndon LaRouche addressed a roundtable of 20 Polish science educators at the Warsaw Polytechnic University. The presentation was one in a series of meetings with parliamentarians, scientists, union and civic representatives, and Schiller Institute activists. LaRouche was introduced by former Polish Vice-Minister of Education Prof. Jerzy Oledzki.*

**Prof. Oledzki:** I am Mr. Oledzki from Warsaw Polytechnicum. The topic of this meeting is "The Future of Education and Science in the 21st Century." We are witnessing a period of history where there are many political-economic experiments in the global arena. At the same time, we ourselves feel lost quite often. Our task is to convey the truth to the next generation: Most of us are academic teachers, and our duty is to teach the students, and therefore questions concerning the future are very important to us.

We are very glad to have among us a man who is courageous enough to stand for far-reaching proposals. He is a man of great intellectual quality in assessing the present situation. He now will have the opportunity to present his ideas to us. The floor is yours, Mr. LaRouche.

**Lyndon LaRouche:** I would like to thank you for the introduction and your presence. I am very pleased, and very happy about being here. We are older people. Older people must advise the younger how not to repeat the follies of our generations. That is, we must be, in the sense of Plato, "philosopher-kings." What I will focus on, is the tasks of education, with a specific emphasis upon the new situation presented to us by the present, inevitable collapse of the world financial situation.

For me, the essential principle of science is a principle which Leibniz called *Analysis Situs*, which most physicists are acquainted with. Given an existing mathematical physics,

we proceed, as did Fermat, the famous French mathematician and physicist, with the question of the contrast between the reflection and refraction of light. We take the mathematics, and take the experimental evidence, and present it. In the same mathematics, we find often that we get contradictory results. And, specifically in the case of Fermat, as a result of his work, we had a new relativistic conception of time, which was forced upon European civilization.

It went through the work of people such as Huyghens, Leibniz, Bernouilli, the German Abraham Kästner, and through Gauss and Riemann. So, a complete, renewed conception of physics was developed as a by-product of the impact of the work of both Kepler, and this discovery by Fermat.

It is easiest to describe this principle of *Analysis Situs* in the language of experimental mathematical physics. Because we have, in terms of experimental work, very strict standards for defining what is a real, genuine paradox.

However, the same question arises in Classical artistic composition. For example, the difference between Bach and the Classical composers, as opposed to the Romantics, is defined in precisely this way. Bach and such followers as Mozart, Haydn, Beethoven, Schubert, Schumann, Mendelssohn, and Brahms, had a very definite method of composition, which seems formal, but is more than formal.

When you put these two together — the evidence of scientific progress, and the evidence of Classical artistic progress in composition and performance — we are forced into an understanding of civilization which is lacking among empiricists, Cartesians, existentialists, etc. That is, when formalism breaks down, because of the paradox I cited in the case of Fermat, we are forced on something which very talented young students know, and older professors forget: and that is the principle of *cognition*.

Formal logic is not the distinction of human beings. To a certain degree, we can create machines to do formal logic.



*Warsaw's Polytechnic University asked Lyndon LaRouche to give a presentation on education and science in the 21st Century, revisiting the subject he dealt with at length in "The Tragedy of U.S. Education," published in EIR, April 20, 2001. Prof. Jerzy Oledzki introduces LaRouche.*

So, you have today some insane people who think we can replace man with some new robots. But no logic machine can discover a new universal physical principle; only the human mind can discover it. Therefore, as the result of such evidence, we divide the universe into three types of interconnected, or multiply-connected principles.

### **Differentia Specifica of Life**

We have processes we classify as "non-living processes." But actually, since Plato—more specifically, since Pasteur—we have the conception of the fundamental difference between "non-living" and "living" processes. But then, we find, in the human being, a capacity which no animal has: It is the power of cognition, the power of reason, which enables us to discover a solution to a paradox, which by certain strict standards of measurement we can define as a universal principle.

Now, we have a case of a very famous Ukrainian-Russian scientist, who probably is one of the most important figures for the 21st Century, Academician Vernadsky. Vernadsky was a student of Curie (the son of Curie, the son-in-law of Pasteur), as well as of Mendeleev. Vernadsky went beyond this, but [he was] in the same school of Mendeleev, of Pasteur, and actually the French school of Arago before them. He went through this, to develop a conception of what he called "biogeochemistry."

By working in the school of Mendeleev—he studied originally under Mendeleev in Petrograd—showed a way of thinking about the relationship between living processes and what we call non-living processes. He demonstrated, for ex-

ample, that the atmosphere, the oceans, and most of the area on which we live on the surface of the Earth, is a biosphere. These things he called the "natural products of life." That is, one could measure a change in the characteristic of the planet, produced by the continuous action of life, or life transforming the planet.

He went further, in his work during the 1930s, and defined what he called the "noösphere," that is, the action of human cognition in transforming the biosphere, and transforming the relationship of man to the universe.

Vernadsky was also the founder of nuclear science in Russia and Ukraine. He introduced this study of nuclear physics as a source of energy into Russia in 1924-25. Especially, nuclear science was based on the influence of Vernadsky. He also introduced a methodological feature for experimental physical work, which is extremely important to us today. It's actually a Platonic concept, which put him into philosophical conflict with the Soviet ideology.

He is typical of those Soviet scientists who, despite their ideological deviation, were so valuable, that they kept using them.

Let me defend his method from my personal standpoint. The empiricist, or so-called materialist method insists, as Lenin insisted, that the universe, the objects we see, are a perfect reflection of objects as they exist. In other words, that the senses are the only true basis of knowledge. If you think about it, this is obviously absurd, because the human sensory apparatus is a product of a living process. The living process, through its sensory capability, translates the shadows of reality onto our senses. It is our job as human beings to understand



Warsaw monument to the Polish children killed in World War II. "We have to recognize that we are given a new-born child with all the potentials of humanity, a creature made in the image of the Creator."

this, and to discover what is the reality behind the shadows which our senses give to us.

### **Cognition and Children's Education**

Obviously, science—all real science—is based on this concept. Science is not accounting. It is not connecting dots, it is not counting objects. Science is typified by the discovery of a relativistic principle of time, through Fermat's famous experiment. In the paradoxes of experiments, we discover universal principles which are the reality of the universe in which we act.

Therefore, if we wish to educate children, if we wish to create a society which is just, we must, first of all, educate them in a certain way, which used to be called "the Classical humanist method of education." This method of education originated with the Classical Greek.

What we must do, as in the case of Plato's *Meno*—the famous story of the education of the slave boy—is, that we have to recognize that we are given a newborn child with all

the potentials of humanity, a creature made in the image of the Creator. This new creature is not born as an adult human being. As we know from experience, a baby is infantile. If you are successful with an infantile child, you turn it into a childish child, and if you are successful, you bring that child into a state of insanity called adolescence. (If, at the age of 25, a person acts like an adolescent, you class them as insane; whereas at the age of 16, you say they are normal.) Our job, therefore, is to transform babies into mature adults by the age of 25. But they are not dogs, they are not cows, they are not vegetables.

How, therefore, do you educate a human being, as distinct from a dog, or a cow? In the United States today, we educate people to remain infantile. A successful case of that type, is the current President of the United States, who is absolutely infantile. His irrationality, his emotional make-up, is that of a very sick, mentally ill infant. I can attribute that normally to his use of drugs when he was in college, but also to his family upbringing.

Obviously, the difference between a beast and a man, the characteristic difference, is this quality of cognition, quality of reason. The quality of making fundamental discoveries which can be proven to be true about the universe. So, our job is essentially to take a young child; and, knowing in the child there is the spark of the ability to make creative discoveries, our job is to enable that child to experience the great discoveries of principle of past civilizations, and to embody those discoveries in themselves.

The problem today, is that the current method of today's education, the so-called liberal education, destroys that potential in the child. You know what the experience is with a successful educational process, where promising young people come out of the educational process. You present them with paradoxes when they are ready for that paradox. You confront them with some experimental apparatus, to see what the paradox looks like experimentally. You try to get a group of not too many students—maybe of 15-16 students in a class—to worry about this problem, this paradox.

Maybe out of 15-16 students, two see what the solution is. Then you get them to communicate that to the other students. Then you confront them all with the experimental demonstration of the principle. So, you do two things: You develop them not only in their own individual habit of discovery; you also develop them in a special kind of social relationship.

This is the most crucial problem. The problem is that the ability to make a discovery is an individual activity, which can not be observed by the sense apparatus of an observer. You can never see cognitive thinking as a phenomenon; you can communicate it by replicating it in a second person. So, a group of students can recognize they all have the same experience of discovery, so that, when you educate them, they know the name of the person who first encountered the paradox.

## Why ‘Eureka!’?

I sometimes use the case of Archimedes. It’s a similar case. Archimedes screamed, “Eureka!” Why did Archimedes scream “Eureka!”?

So, you ask the students: “Why did Archimedes scream ‘Eureka!’? What was the problem he was working on? What do you think the solution is?” So, you describe ancient Syracuse, you describe Greek culture, you describe that he was a correspondent of Eratosthenes of Egypt. You present them with all this historical setting of this discovery, and of the personality.

And you leave the class to make the discovery. So, the first of the students who realizes what the discovery is, says, “Eureka!” So, in that way, the student knows that they are reliving a living moment from the mind of Archimedes, 2,200 years ago.

That’s the way we do science, the way we do things in music, the way we do things in artistic composition: Re-enact the great acts of discovery of the past in the mind of the living student of today. In many cases, the student knows personally the name of the person who made the discovery. It’s as if that person was still alive, and they had talked to them, would work with them.

And thus, the child’s mind, in a good education, begins to look like the famous mural in the Vatican, of Raphael, “The School of Athens.” You see the people in the painting by Raphael, they come from different times, they don’t live in the same time. But they are all in a great discussion, in the same painting. Isn’t that the mind of the well-educated person? That people from a vast expanse of known history, who are discoverers, have an immediate personal relationship inside the mind of the student.

This picture in the mind of the student, is called “con-science,” “scientific conscience.” From inside your mind, you can not do anything shameful under the eyes of these people you know from the past.

Well, that should be the goal of education, which applies not only to physical science; it applies also to Classical artistic composition.

For example, in music: Well, you have the principle of polyphony, which is very ancient. It’s from the time of Plato, well known, probably earlier. It was discovered in a more refined way by Leonardo da Vinci, in his work on polyphony, in his lost work on music. The student of the work of da Vinci, Johannes Kepler, applied the work of da Vinci on music, to solve the problem: how the Solar System is constructed. And the genius Bach, Johann Sebastian Bach, developed a method of counterpoint — which is still not understood by most music schools today — from which Classical composition came.

The same thing is true in painting. And, what we call the study of art, such as the Classical methods in painting, music, and so forth, combined with Classical methods of education of physical science — we call the study of history. History as

the history of the cognitive experience of man. From the study of history, we are able to develop the study of politics.

## The ‘Science-Driver’ Principle

This comes to the crucial point. The crucial point is that all productivity, increase of the productive powers of mankind, comes from this cognitive process we associate with that kind of science and that kind of Classical artistic education. Economics, physical economics, is man’s increase of our mastery of nature per capita, per square kilometer, with an improvement in the demographic characteristics of the population.

In this century, in the past century, we have had a number of “science-driver projects.” We have often referred to the history from Kästner through his student Gauss, the work with Monge and Carnot through the work of Riemann, as also a “crash program in science.” We have also the period of the work of Leibniz and his group, as another “crash program” period in science.

So, you find that man’s mastery of nature depends upon two things: the creation of the social and political conditions which foster the emphasis of humanity on developing the individual to make and implement steps in progress, based on discovery of principle. Which is why I have emphasized my field, physical economy, in which all these things come together, as I indicated to you in the few remarks here.

What it requires, is a form of “statecraft,” in which the object is to use the educational system in the way I described it, as the driver of policymaking for society. To understand man’s relationship to the biosphere, to understand man’s relationship within the biosphere, and to increase the power of the average individual in and over nature.

I saw this, by flying into Warsaw. We flew over these fields; we were flying low enough, so that I could see Polish agriculture. The problems of Polish agriculture were already notorious to me, so I was not making actually a discovery, but I was having a sensual effect in seeing it. What to do about unemployment in Poland and the Polish agriculture? This is an essential problem of statecraft. It certainly is not the biggest problem in the world; there are much bigger ones. But, it’s a typical problem of statecraft.

How do you solve this problem in a just way, not in a mechanical way? Not by thinking like an accountant, but like a humanist scientist: What do you do for the Polish farmer, to change the circumstances, in which a more healthy development for Poland as a whole occurs?

The obvious answer is to have a stronger educational system, which is Classical humanist, which goes in the direction I have tried to illustrate in my few descriptive remarks here.

## Existing Education Fails

As you know, from your own experience in teaching and related work, the existing educational systems are terrible. They are designed to train human cattle according to the num-

ber of places available for the employment of cattle. They are not designed to develop creatures made in the image of God. “You will get a job as a cow in this field, because there is place for a cow in this field.” We know that that is not competent education; it’s not competent economics.

Competent economics is changing the relationship of the typical individual to nature and society in general.

You saw this paradox of the Soviet system, which I studied for many years. In the military-scientific field, with the help of some gulag science, Soviet science in the military and related fields achieved wonders, given the resources available to them, whereas the Soviet economy, especially from the period of Khrushchov on, was a disaster.

You could not get science, as practiced in the military field, into the factory. Because the conception of man was mistaken, the goals of economy were mistaken. The goal of economy is the transformation of human individuals to a higher state of personal development. Not only to give them that capacity, but to give them that “intention.”

The greatest problem is the individual who may have the potential ability to learn a new skill, but who has not the intention to learn a new skill.

Take two examples of the university experience.

First of all, you have the case of the student that does not wish to progress—not because they don’t have the brain: They don’t have the *intention* to progress. They run away from the challenge, rather than facing it. Then you have another case, which was studied by an American scientist with the name of Kubie. You have the promising young graduate student, who seems very creative. When he receives his habilitation, his brain goes dead, because he does not want to be a scientist, he wants to make a successful career. And I have seen many of these in dealing with them: people of great talent, but they refused to progress. Why did they not progress? They had a different intention. They had an intention to progress in their career, but not in their profession.

The typical problem: The poor family says, “Go to school to learn to make a living when you become 16-18.” And our purpose of education should be: “Go to the education to become more fully a creature made in the image of the Creator.” And then, from my experience with this kind of situation, people who have *that* kind of self-conception, will tend to do good work, in whatever they have to do, because they wish to do good work. They will also be good citizens, and the children in their family will probably be fortunate.

So therefore, I think with the great crisis coming now, where everything that seems to be the world’s leading authority will disintegrate, we must look at this crisis as an opportunity for change, and we must build the conception of an economy as I have described: an economy which is committed to increase the productive powers of labor, through experiencing the great discoveries of the past, and making the new discoveries of the present and the future. The university must be the conscience of the nation. Thank you.

---

## Dialogue with LaRouche

---

*Here are excerpts from the discussion:*

**Q:** Mr. LaRouche, do you know any state or society which is following this educational program that you described? And the second question: What age should you start fighting for an individual consumer?

**LaRouche:** First of all, in the American tradition, which is called the American intellectual tradition, which was actually a creation of Europe—in the period of the American Revolution, it was impossible to develop healthy states in Europe, so you had people throughout Europe, chiefly the followers of Leibniz, because the American Declaration of Independence and Constitution were based on the ideas of Leibniz. As also from Poland, there were people who came to North America to establish a republic in North America, with the expectation—as in the case of the Polish patriots, who came to the United States—of coming back to their own country, hoping that the American success would lead to the repeated success in their own country.

The fundamental struggle is very simple, and it’s a struggle inside the U.S., as well as outside. We had Presidents, many Presidents, who I would consider pigs, not human beings. I won’t take the time to give you the list. We also had good ones, typified by John Quincy Adams, Abraham Lincoln. Roosevelt, with his imperfection, was also in the right tradition; John Kennedy was trying to be in the right tradition, before they killed him. So we have in the United States, which I represent in a sense, the “American intellectual tradition,” as it’s called, which is essentially the tradition of Leibniz and his influence. And this was our policy.

However, in the world there is another policy. It’s called the “oligarchical policy,” the oligarchical model, in which a small oligarchy aided by its lackeys, keeps the majority of the population mentally and otherwise in the condition of human cattle. The method in European civilization by which this degeneration occurs, is the Roman pagan method. In ancient Rome, it was called *vox populi*. I call it *vox pox*. Some people call it public opinion. [See *Feature* in this issue—ed.] Public opinion is a manufactured system of fables and lies used to manipulate a population to such an extent, just the way the Romans would take the Roman citizens into the Colosseum, to cheer for the execution of the Christians for the amusement of Nero.

In the case of European history, you have educational policies, of the type which I have been indicating in my speech, which I am in a sense an heir of. You have the Augustinian teaching orders, which introduced Classical humanist methods of education for young people to Europe. You had the Brotherhood of Common Life, from which many great figures of the Renaissance came. You have the constant recur-

rence of the attempt to establish what I described as “Classical humanist education.” The best educational institutions of the Catholic Church always emphasized that; and the case of the Humboldt educational system in Germany.

The point that I have been insisting on, is that we go beyond that, to generalize that the political administration of society must come from an educational process which defines the way in which politics is defined by political parties and by the population generally. The truth, the principle of truth, as opposed to fables, mythologies, and lies.

We have enough knowledge of this, to know what we should do. The question is, to find the opportunity to do it, and have the will to seize the opportunity.

### ‘Stubborn Optimism’

**Q:** I just was here, involved in techniques of creative thinking, in this university. But, the more I think about this, I can not see anything other than more obstacles to implementing this here. Firstly because our professors lose their motivation after their habilitation thesis work. Teachers often like training children, because they get stimulated by their feedback. But the students, when you tell them about basic laws, usually answer you, that it is enough to click the mouse, and everything is to be found in a computer, so this technical progress has softened them intellectually.

I would like, therefore, to hear and to focus more on this “problem of the will”: how to make people be more willing, to be closer to God. How can you inspire them? Because, this usually requires a very early stage of development, while the politicians now in power, will do everything to stop them. And they will tell you, that Plato’s idea to create an ideal state has failed, and they will tell you that it will always fail; because, in this period, it’s easier to inspire people to become better consumers, rather than to just take a bigger effort.

**LaRouche:** The problem is largely linked to a very evil fellow from Venice, with the name of Paolo Sarpi. He became the Lord of Venice, so to speak, in 1582, and he lived into the early part of the 17th Century. He was the founder of empiricism. He controlled a certain force in England around King James I. He was the creator of Francis Bacon; he was the creator of Thomas Hobbes, who was educated by the lackey of Sarpi, who was Galileo. He was the personal house lackey of Paolo Sarpi. And thus, you had the rise of British empiricism, and French cartesianism.

Now, the most interesting part of empiricism, the part that makes it the root of all modern evil: Sarpi looking deep into his own soul, said that man is inherently evil. And, I often suspected that Satan shudders when you mention the name of Sarpi. . . .

What is the God of Sarpi? It’s not God the Creator. Have you ever heard of a religious belief, called the bogomils? Well, you have a lot of religious belief in Europe, which is based on the bogomil model. It’s from this, that the idea of free trade came. The idea was, there is no truth; man is inher-

ently evil, greedy, and bestial. Therefore, you have to let everything happen, because under the floorboards, there are little green men who are adjusting statistics.

It’s an Invisible Hand. But it works with certain people. It’s mysterious. But, obviously it’s the intention, that they are considered superior. They also should become rich. And, if you worship the god of evil, maybe he will make you rich.

So, this was the rationalization used by the British monarchy, as the follower of the English empiricists.

This first came as an issue into Europe, around the figure of Kepler.

Kepler, in proving that Copernicus was wrong in his mathematics—as well as Tycho Brahe—pointed out that, if you made close measurements of the observations that he and Tycho Brahe had made, that the planetary orbit was of non-uniform curvature, and, therefore, you could not, by simple statistical methods, predict both the velocity and the position of the planet at any future time.

In first approximation, Kepler showed that the position and velocity were determined by equal areas, equal time. But from the standpoint of Copernicus’ representation, you had to say, what controlled the planetary orbit was an “intention,” not some mathematical formula.

So, Kepler’s discovery of universal gravitation, as elaborated and confirmed by the work of Gauss, became a generalization for the words “scientific principle,” “universal physical principle.” In other words, the universe is governed by what we call “universal physical principles,” which we discover by the method of paradox and contradiction and cognition.

Now what happens then? The empiricists say, “No.” That we can do this by a fixed statistical system, such as the proposal of Bertrand Russell, of John von Neumann, of Norbert Wiener, and so forth. And, this was the big attack of Mach, for example—who was an ultra-empiricist—the attack on Max Planck, on the question of the characteristic of action.

So, the point is, that in science—and you can prove it to your students as a teacher—in science, the principle is: universal principles, which are discovered, by solving paradoxes and proving them experimentally. And, by looking back to the Kepler work, you have the concept of intention, as Kepler defined intention. Like Fermat’s discovery of refraction. You discover the behavior in the universe which does not correspond to your statistics, but there is an intention, which we call universal physical principles. So, the universe is not organized the way that Paolo Sarpi and his friends argued: The universe is organized by intention.

Now you come up with a very interesting theological problem.

If man is created, if man can discover intention and use intention, what is the intention of man’s existence? The intention of man’s existence is an expression of God the Creator. Ah, if you accept the idea that the intention of man is dictated by the intention of God the Creator, what does that say? It



*Several hours of questions to LaRouche came from Polish educators and scientists at the Polytechnic.*

says that there is an underlying natural law in the universe, which governs, among other things, the way man treats man.

What you are describing, in the student situation, is: The student says, “No. There is no natural law.” What you get is cultural pessimism, in the form of pessimism about the very nature of God, man, and the universe. You get an image of a society, like the street urchins of Rio de Janeiro. Imagine children, 8 to 12 years of age, with no homes; they have no parents, no homes, they live by stealing. What you are describing—it’s happening in Poland, as in other parts of the world—is, the cultural pessimism has brought on this condition of the mind, which is approximated by the street urchins of Brazil. They have lost the conception of the dignity of man, of what creativity is, how the universe is organized. You have to give back to these children a sense of something which is true and they can believe.

The individual who tries to do that—it’s a very difficult work to do it alone, but, then you organize people around you to do it collectively, and one day, as is going to happen right now, the whole system collapses. At that point, you have the opportunity to get their attention and say, “It didn’t work, did it? Would you like to find a better way, and try it?” You have to have a certain type of stubborn optimism, and then you can deal with those problems. And since your optimism is not always immediately rewarded, it has to be stubborn.

### **The Sublime in Teaching**

**Q:** My question would be similar. . . . We have to go back to best examples, such as the Humboldt reforms. Those who promote infantilization, like [Zbigniew] Brzezinski, and

which are followed by the present leaders of the so-called educational reforms. . . . The greatest resistance to this infantilization process and dehumanization—algorithmization of the society—is to be seen in small countries like Norway. The ratio of teachers to pupils is the highest in Europe, and it’s not diminishing, like in Britain. I was greatly impressed by the fact that, in the last years, the best results in the international mathematical Olympic Games were taken from Iran, who were better than the Russians and Americans. . . .

**LaRouche:** In the education as such, this idea of a class size of 16 to 18 in a class, is extremely important. Because the point is, that in a class the teacher-pupil relationship has to be such that the teacher is attentive. A good teacher, as you know, has to have the mind of the student in the class in his mind. Because every student is different, and when you are teaching a class, you have to think about every student, with their individual peculiarities, in that class. And that basis is the way you are conducting cognitive interaction among the pupils.

What happens, then, if you don’t do that, even in a small class? Then the teacher is teaching *at* the pupils; he is not involved *in* the pupils. He would never know whether the pupils will go asleep, he is just so busy. Now, if you have a very large class—and you know this from teaching—it’s extremely difficult to maintain this proper discipline among the teacher-pupil relationship. The worst is the giant university classroom, where you have some poor idiot, a professor, or a teacher waving his arms pointing to diagrams, and what is going through the minds of the students, is not in his comprehension. He tells a few jokes, and they laugh, and he thinks

that it's a good class.

And, I would emphasize that the educational relationship, like the parent-child relationship, is the most intimate relationship one can imagine, because you are not conducting a conversation. What you are trying to do is to engage the cognitive processes inside the mind of the individual. You are trying to get a reaction from that pupil or among those pupils, which then shows the pupil has responded to what you said. Then you use the fact that one or two of the students responds, and you say, "Hey Johnny, what do think about what he just said?" Now, why do you pick on Johnny? Because you know Johnny, and you know that what you will get from Johnny, and from what this other student said, you are going to get the kind of reaction which will make something happen inside the class. You get something like a Platonic dialogue.

I think the best best way to train teachers is to have them work through competently, not in just reading, but as a study group reenacting the Platonic dialogues, which some Catholic theologians will call "spiritual exercises," because you train the mind to try to engage the inside, the cognitive powers of the minds of other people.

Now, as result of this kind of education, you get a moral effect. The teacher accepts a moral responsibility for truthfulness to the student. The first moral thing is, never tell a student they are right, when you don't know what they meant. The student will originally resist that—"You are trying to peek inside my mind. I am not going to a psychiatrist there."

So, you get that kind of reaction, but what happens is, that you establish a moral relationship between the students and the teacher, and among the students. This moral conception of discovering truth as an interaction among people, it's the most essential thing, as you know in education. You all know what a good class is. You know the class you love to teach, and the class you think is a terrible thing.

So, I think that's the best answer—we have to establish a clear conception of that.

I just want to add one thing to it. You had an evolution in the development of dialogue method in the Classical Greek, and also later, in Europe. Those of you who are familiar with the Classical Greek tragedy, also probably know Plato's attack on the Classical Greek tragedians. He attacked it in a way which is exhibited by the character of Socrates in his dialogues. In German, it is the *Erhabene* or the "Sublime." For example, take the case of Jeanne d'Arc: Friedrich Schiller wrote a play *Jeanne d'Arc [The Maid of Orléans]*. I have gone through this, and what Schiller does, with one exception, which is dramatically legitimate in the play, is, he actually replicates the actual case of Jeanne d'Arc, the historical case. This is recognized as the Sublime by the Church, in the canonization of Jeanne d'Arc.

From the accession of Henry II in England through Richard III, Europe was besieged by an alliance between Venice and the evil Plantagenets, especially the House of Anjou. In this period, from a region called France, this young shepherd

girl developed a mission to force the King to become King, as a mission from God. She didn't say, "You should be King"; she said, "God wants me to tell you to become King, and ordered you to become King."

So, she died for that reason, and she was canonized, because what she did, led to the defeat of the Plantagenets in France, led indirectly to the overthrow of Richard III, which introduced modern society into England; inspired two Popes; inspired forces inside the Council of Florence to give birth to the great Renaissance.

Now, this is the Sublime. In tragedy, you say the figure dies, because of a flaw in society, or in the leading figure. In the sublime drama, as in *Jeanne d'Arc*, she does not die uselessly, as an error. She puts her life at risk for a mission. The success of her mission, results in a change in the course of history. Her sacrifice is an inspiration.

Look, for example, you have Poland: Poland is a nation which has many heroes, many dead ones, many heroes. It's a nation of a resistance movement, a popular resistance movement. Many people died to make the nation possible, in many struggles against many occupations. So, in Poland, you had a moral effect of this, the sense of the Sublime. *We did not die for no reason.*

In education, it's the same: Education is a struggle with the mind of the student and the teacher. The great teacher accepts the object as a mission. The teacher thus acquires the authority of being a representative of the Sublime, which inspires the student morally. These are the great teachers, the great researchers, who created the great movements of discovery.

So, I would say there are many models, but no model is any better than the intention within it. The person who has the intention, and knows how to make the intention work, will succeed.

### **Poland's Moral Mission**

**Q:** I would like to thank you, Mr. LaRouche and your coordinators, for the mission you bring to Poland. I will tell you why: I personally had close contact with Cardinal Wysinski, the former Polish Primate. He was not only the conscience of the previous system, but he was very critical of, generally speaking, Western patterns, Western ideas. As far as I know, the Schiller Institute is the only intellectual environment, moral environment, which is critical, also, about the Western societies and the Western ideologies. What is very essential here, even today's lecture tells us, is this synthetic idea of both philosophical ideas and moral ideas, and how to apply them to a very specific decision in social life, economy, and politics, which is very important today. I have, however, some problems.

The first is the problem of efficiency, generally speaking. Because the question is, whether there is not a surplus of philosophy and high thinking in this message, which brings it to a lower efficiency? And, the second question is, how to



translate this very principled, highly philosophical attitude into efficient action programs?

This leads us to the next problem. When we are monitoring the present situation, we see that the oligarchical ideas are more popular, and they are dominating. The critical movements against that oligarchical current are marginalized. . . . Could you formulate, how you see the mission of Poland in this big, global world?

**LaRouche:** I do see a definite mission for Poland, which I referred to, in part, in referring to the case of Vernadsky, because Vernadsky typifies a sense of mission. He served a state with which he was not in political or philosophical agreement, but he made a great contribution to that state, which admired him, despite the fact of his disagreement, because he made such a great contribution. . . .

I also have a very specific conception of this, which I have written about and which I work on, which I do things about. Despite my years, I am still functioning, and I am still running for President of the United States. And, at this time, I intend to win, not because I am ambitious—I have got everything I want—but they need me in that position. Nobody else around is qualified at this time.

How do you have to look at the Poland situation from my standpoint? As I have said repeatedly, there are only three cultures on this planet which are capable of thinking efficiently globally: One is the British monarchy, which thinks only evil, but it does think globally. It's a culture that assumes unto itself, the responsibility for deciding how the world should be run. You have the great Russian culture, still thinks of itself as a great power culture. The United States thinks as a nation never defeated, and thinks globally. The nations of continental Europe do not. They have been conquered too many times, and there are too many great powers that are more powerful than they are. China, as the most populous nation of the world, can not think globally. There may be people in China, who think globally, but the Chinese culture does not think globally. Thinking of China and the outside world, they don't think globally.

So, therefore, the solution to the crisis is, how do you create a combination of sovereign nation-state powers to address the problem of today?

The problem is, the United States is obviously the nation which, you would think, should take that responsibility of creating that partnership. The partnership should be centered, however, in Eurasia. But, not only is Asia the great population center of the planet, the great geographical center of the planet, but between Central and Northern Asia, you have largely a wasteland. On the other side, you have East Asia and South Asia. Now, on the one side, you have Western continental Europe, you have the legacy of Classical Greek, which is called European, civilization. You have the impact of Christianity in shaping European civilization. In the culture of Asia, you have a different culture, even though there are elements, like Confucianism in China, and so forth,

which are agreeable; nonetheless, these are different elements, different cultures, different conceptions of man, God, and the universe.

So, all of us who think clearly and globally, come to one conclusion. I come to that conclusion, Pope John Paul II comes to the same conclusion. . . . We must have an ecumenical approach to the reconciliation of Asia, Eurasia as a whole. The relationship between Europe, and South and East Asia across Eurasia, is the determining factor in the future civilized history of mankind.

So, therefore, the issue is, at a time that the United States government and policies are about to collapse, the present government under George Bush is evil and doomed. It's incompetent and doomed. . . .

As was referred to earlier here: You have a change in the mood of people in Poland, politically. Poland had, first of all, the domination for a long time of Russia. They thought that the Americans would come, and things would become better. Poland would almost do anything the Anglo-Americans demanded. Now, people are saying: Economically, conditions in Poland are worse than they were under the Soviet domination. And the problem is, people hover between these two choices, which leave them in a state of pessimism.

We need a new conception of man, going back to the sovereign nation-state, and a partnership which will empower countries, such as Poland, to begin to act as Poland for themselves within a partnership, not as satrapies of a conquering world empire.

Therefore, my opportunity to cause a revolt against what Bush represents, and what Nixon represented, and what Carter represented in the United States, now, which is what I am working on; we are having some significant success on this. . . .

### **A Closer Look at the 'New Economy'**

**Q:** I have two questions: Countries like Poland will face shrinking funds for fundamental scientific research. How would you see that situation? Because, what we can see is, there is an economic argumentation behind this. Why spend huge sums of money on research in a country like Poland, if the other countries can do it better or cheaper?

Second question: I would like to refer to the globalization problems and the development of new information technologies. They are not essentially changing the questions and problems that we are facing, but they basically change the fighting environment.

**LaRouche:** First of all on research. The first function of research, is not necessarily to produce a result. The point is, if you do the research in your own country, if it's research into either fundamental principles or technologies, then the research gives you a technology, a science which is yours. Intellectually yours, part of your country. Otherwise, you are begging at the backdoor of somebody who has it. You are crippling your population, by denying them the right to access

to actual knowledge of what is important for the world as a whole.

Now, globalization doesn't work, it can not work. The model of globalization as proposed today, is the Roman Empire. The model today, is the collapse of the Roman Empire on an accelerated rate. You can not have a globalized system which will exist. Globalization is already destroying the globe and the nations in it.

Now, the information society is highly exaggerated. It was invented by an idiot by the name of Norbert Wiener, who worked together with von Neumann; both of them were fools who were kicked out of Göttingen for incompetence, and justly so. They were followers and virtual satanic acolytes of Bertrand Russell, who probably was the most evil man of the 20th Century. They denied the existence of fundamental physical principle, as Russell said explicitly at the 1929 Solvay Conference.

The systems analysis is a complete fraud, except for communication as such; information theory is a fraud. A system of communication, fine; it means something. But, as a system of thinking, it means nothing. Any system which is based on a linear system, can not possibly replicate the act of cognition in the human mind.

So, you get, by its own definition, an entropic society.

Now the other part of this: This present wave of so-called information revolution, was started under President Carter. It was called the Third Wave. Three political figures were most significant in starting it: One was Newt Gingrich, the later fascist, who put in the Gingrich reforms. The second one was Alvin Toffler, a very strange person. And the third one, was Al Gore. This was sponsored by a section in the military, to develop certain kinds of weapons systems, which would function on the basis of automatic fire control. You saw this in Desert Storm—these little machines which they were using, like children playing with toy games; they were controlling military systems with that.

The other part, today, about the Information Society: The New Economy was started in the United States in 1995, because they knew, at that point, the entire U.S. economy was about to collapse. What they did, was they raised the fear that the computer systems of the world would go bankrupt, when the year 2000 hit—Jan. 1, 2000. So, what they did, was they poured a vast amount of money, under the pretext of curing what they called the "Y2K problem."

So, they poured a tremendous amount of money into this, which created a great financial boom in the production of this equipment. The institution never made any money. It made money strictly on financial speculation. It never made an earning. That is, its earnings were always less than its costs.

In the year 2000, this reached the point that it was about to collapse. They kept it going until Nov. 7, 2000, the date of the U.S. Presidential elections. With hundreds of billions of dollars poured in to create a totally artificial appearance of a

great, new market. It has now collapsed. In the United States alone, during the period since the beginning of the collapse of the New Economy bubble, the United States alone, in terms of market values, has lost over \$10 trillion, which compares with an estimated GDP of the United States of \$11 trillion. These firms are collapsing one after the other. Bankruptcy and mass unemployment in this sector are now spreading throughout the United States, internationally.

The whole telecom industry of Europe is collapsing, bankrupt: British Telecom, German Telekom, Italian Telecom, French Telecom—they are all collapsing.

So, it's coming to an end. We are coming back to basics. We are coming back to reality, to realize that electronic communications, in better systems of communications, are useful. They save labor, but they do not create ideas.

Only human beings can create ideas.

So, this is one of the great problems we have to deal with. This is the leftovers of a delusion, that we can substitute computers for the human brain. We can't. And, there is no computer you could possibly design now, which could replicate a true, non-linear system. We have some complicated systems, which are called non-linear, but they are not truly non-linear.

So, there is nothing to be afraid of in this area. We are back to basics. Back to mathematics and physics.

# NOW

## Are You Ready To Learn Economics?



What should you do after the economy crashes?

Read LaRouche's latest textbook and find out.

**ORDER NOW FROM**  
**Ben Franklin Booksellers**  
P.O. Box 1707  
Leesburg, VA 20177

We accept MasterCard,  
VISA, Discover and  
American Express.

OR Order by phone,  
toll-free: 800-453-4108  
OR 703-777-3661 fax: 703-777-8287  
\$10 plus shipping and handling  
Virginia residents add 4.5% sales tax.  
Shipping and handling:  
\$4.00 for first book,  
\$ .50 each additional book.