

The cultural basis for a new world economic order

by Helga Zepp LaRouche

This speech was given at an EIR seminar in New York City on May 29. Titled “The ‘Machine-Tool Principle’: The Key to Global Economic Reconstruction,” the seminar was attended by diplomatic personnel and others from 24 nations, and two journalists. The speakers, in addition to Mrs. LaRouche, were Dr. Godfrey Binasisa, the former President of Uganda, and Schiller Institute leader Dennis Speed. During her stay in New York City, Mrs. LaRouche also addressed a meeting of more than 250 people in Chinatown. That conference received coverage in several newspapers in Mainland China.

The subject I want to speak about today, is the kind of economy, the kind of economic principles, that the Eurasian Land-Bridge, as the cornerstone for a just, new world economic order, must be built upon: namely, what Lyndon LaRouche called the “Machine-Tool Principle,” and the corresponding need for universal, Classical education, and the associated idea that it is *only*, entirely and solely, the creative potential of the individual, which represents the source of wealth in society. If mankind is to come out of this crisis without a major disaster, it will be the Land-Bridge Era which will dominate the world.

I cannot start this part of the discussion, without addressing the ongoing genocide in Africa, even though Dr. Binasisa has already spoken about this, because, if we do not stop the ongoing, unbelievable genocide in Africa right now, and evoke in the population of the United States in particular, but of the world in general, an absolute outrage, but also a *passion to stop this genocide*, I do not think that mankind will have the moral fiber to implement the kinds of reforms which are necessary to overcome the economic depression. And, therefore, it is our view that our ability to get President Clinton to use the power of the United States to stop the genocide in Africa, is identical with the question of the survival of the human species in general.

Now, let me give you some of the facts. The entire international media—not in large quantities, but here and there, for quite some time—have been reporting,



Helga Zepp LaRouche, known as “The Silk Road Lady,” lectures in Beijing, China, May 1996. The conception of a new, just world economic order, based on the Eurasian Land-Bridge, she states, “is not a utopia, but it is very, very close, and all we have to do, is to mobilize enough forces to create an environment where this reorganization can be done.”

especially the *Philadelphia Daily News*, about two weeks ago, that Winston Churchill and other British leaders knew the Nazis were killing the Jews, from the first massacres in June 1940 on, until the final gassings in the concentration camps in 1945. It has been revealed now, that British intelligence was able to intercept German police radio messages which reported about this mass killing; that the British were in possession of, cracking the codes of these messages from Day One.

I should also mention that the British *Guardian*, just last week, reported that in September 1942, a certain individual with the name of Gerhard Riegner, who was at that time the representative of the World Jewish Congress, sent cables to Jewish leaders in London and New York, stating that he had retrieved from a well-placed German source, the detailed plans of the Nazis for the Final Solution; and, that on advice of the British Foreign Office and the U.S. State Department, these Jewish leaders in London and New York chose *not* to publish the existence of such a plan, until November 1942. One has to know, that maybe some German people knew about the genocide, maybe some others, but for sure the general public, in Germany or in the United States, did *not* know the extent of the Holocaust of the crimes of the Nazis. As a matter of fact, when General Patton finally arrived in Buchenwald, and saw the extent of the crimes, he reacted with horror. It was General Patton who coined this famous notion, “Never again!” Never again genocide, never again Holocaust. It most emphatically was *not* the

Anti-Defamation League or somebody like that; it was General Patton.

One has to compare the knowledge which British Intelligence, Winston Churchill, and other British leaders had about the genocide committed by the Nazis, to what the governments of the world know today. What does the international media know today? Only in the recent weeks, have some American papers, like the *Washington Post*, the *New York Times*, started to report about the genocide in Zaire; but, in the international media, since at least January, there were articles in papers like *Le Monde*, *Le Figaro*, *Libération*, *Frankfurter Allgemeine Zeitung*, and others, reporting this genocide. So, there is absolutely no question that the international community was aware of the genocide in the Great Lakes region, and they were also aware *who* was leading the war of aggression at the beginning against eastern Zaire—that it was *not* some rebels in Zaire, but that it was the Armed Forces of Museveni from Uganda, of Kagame of Rwanda, and that there was certain clear-cut international support for this.

Genocide: now, as then

Now, what we are looking at, therefore, is exactly what happened in the '30s and the '40s. When we say that we have to make a comparison—“now, as then”—and understand that it is exactly the same thing that is going on, one should also know, that while it is now a public subject of discussion that one of those to benefit from this genocide is one of the big raw materials firms, Barrick Gold, a Canadian firm, on the

board of which you have George Bush and the former prime minister, Mulroney, from Canada; that it was the father of George Bush, Prescott Bush, who happened to be the chief executive officer for Averell Harriman's banking firm, in 1932-33. One should also note the fact that it is in the public record—and we researched and published this in a book which was never challenged by Bush—that Averell Harriman, who was at that time the head of the International Eugenics Association, supported Hitler's race theories in the *New York Times*, publicly.

In 1932, when the Nazis had some major losses in the elections, Hjalmar Schacht was sent to London, and there he met with Montagu Norman, who at that point was an employee of the Averell Harriman banking house, who then, through the intervention of Prescott Bush, the father of George Bush, sent large amounts of money to the Union Bank in Germany, to support the Nazis, and this money enabled them, with the help of the Social Democracy, to topple the Schleicher government, and to create a crisis in this way, so that Hitler could come to power.

One should also note the fact that it was the *New York Times*, among others, that publicly, in their editorial line, supported Hitler until 1933, despite the fact that his policies were absolutely known. But, I think that all of this is topped by the fact that the British *did know about every killing by the Nazis from 1941 on*.

Now, our magazine, *Executive Intelligence Review*, is presently compiling all the reports which were published in the media internationally in the last six months about the genocide in Africa. Of all the different documents which were publicly available, I want to mention a 10-page memorandum by the organization Médecins Sans Frontières, that is, Doctors Without Borders, called "A Brutal Strategy of Elimination in Eastern Zaire," where they document the fact, based on eyewitness reports from local aid workers in Zaire, that at least 190,000 out of 340,000 Rwandan and Burundi refugees have "disappeared," which is a nice word for being killed by the Kabila-led ADLF forces and the so-called Tutsi Legion, consisting of Ugandan and Rwandan Army personnel. And, Médecins Sans Frontières described how this was done, basically by the denial of food and medical help, by the destruction of the humanitarian infrastructure, by the use of the humanitarian aid organizations to create illusions for the refugees who were hiding in the forests, to lure them out of the forests and then kill them, in an absolute killing-frenzy.

The world knows this. But, what the world generally sufficiently isn't aware of, is the question of *cui bono*: Who profits from this incredible tragedy?

On May 9, ten days before Kabila declared himself President, he met with a group of financiers in Lubumbashi, in southeast Zaire. This meeting was organized by a firm called America Mineral Fields (AMF), and the list of participants is the best guideline to see for whom Kabila liberated Zaire/Congo. The head of AMF is a person called Jean-Raymond

Boule, who, during the 1960s, ran the DeBeers diamond operations in Zaire. Boule has business links to Tony Buckingham of the infamous Executive Outcomes mercenary organization in Africa, which is one of the largest on the continent.

Now, it is very interesting that the AMF headquarters, supposedly, according to the British press, is in Hope, Arkansas, which is, of course, the hometown of President Clinton. And the British press, in an absolutely outrageous attempt, tried to concoct a "Clinton connection" to this Hope, Arkansas, while the reality is that what is in Hope is just a shell company, while the real headquarters is in Toronto, Canada.

Now, participating in this meeting were the following corporations—and I'm naming them now in great detail because it's on their behalf that this genocide is taking place:

Bunting Warburg, which is a division of Swiss Banking Corporation based in Toronto;

Goldman Sachs, which is a Wall Street investment firm;

Value Investing Partners, which is a London-based hedge fund;

Deutsche Morgan Grenfell, represented through their South African branch;

C.M. Oliver of Toronto, Canada;

Canadian Imperial Bank of Commerce-Wood Gundy, which is one of the five big commercial banks in Canada, and if you look at the board of executives of that firm, you find a good cross-section of the entire Anglophile, Anglophone Canadian elite;

Marathon Securities, a Canadian investment firm;

Yorkton Securities, a British investment firm;

Nile International of North Carolina;

Breco International of Great Britain;

National Securities of London;

Northern Mining of Ontario, Canada.

Now, it is these firms primarily, which, together with Barrick Gold, represent the Anglophile Commonwealth constellation behind the Great Lakes genocide. One should also take very seriously, an article which appeared in the *London Times*, in which they say that there are now new African leaders who are redrawing the maps which were drawn up at Bismarck's Berlin Conference in 1884, and that they represent a network of friends and allies, from Angola to Eritrea, and are that behind Kabila. There is, according to the French, an Anglophone conspiracy, in which the British supplied the know-how of the imperial era, and the Americans the money and the military training for the Tutsis. And then, the *London Times* says: Well, there is some truth, there is such a conspiracy, and among the beneficiaries of this conspiracy, according to the *London Times*, is George Bush and the ex-prime minister of Canada, Mulroney.

Everybody knows that Barrick Gold has acquired 80,000 square kilometers of land in the northeast of Zaire. Now, who is this alliance of friends and allies? It is, on one side, naturally, Museveni, the pet politician of the British in Africa;



Left: Gen. George S. Patton, Jr., April 1945.
 Right: A U.S. Army medic looks for signs of life in a boxcarful of victims at the Dachau concentration camp, 1945. It was Patton who first exclaimed, "Never again!" Looking at what is going on in Africa today, states Mrs. LaRouche, "we must give new meaning to this idea."



also Kagame, Garang, Afwerki in Ethiopia; Zenawi in Eritrea; and, according to the London *Times* article, they are preparing the next showdown with Savimbi in Angola, Abacha in Nigeria, Moi in Kenya. They want to topple the government of Sudan. Those people are so happy to support Museveni, who publicly declared that he wants to unite Africa, like Hitler united Germany. Now, obviously, he's not so strong on his historical facts, but the fact that somebody would dare, today, to come out with such a statement, is quite incredible and reflects the policy of *Schrecklichkeit* [terror] that these people are committing.

If you take this article in the London *Times*, unfortunately, that is the reality. And, it confirms what Mr. LaRouche, several months ago, warned President Clinton: that if the United States would not move to stop this genocide in Africa, this

situation would become a quagmire, much worse than Vietnam represented for the United States. You can already see that this is happening, and it is, I think, safe to predict that even the position of the self-proclaimed President Kabila, is not going to last very long, and that the danger of generalized chaos and continuation of genocide exists.

Why the raw materials grab?

Now, why is all of this happening? We have pointed out for some time, that the reason for this raw materials grab, the reason why these interests want to get hold of gold, diamonds, strategic raw materials, oil, natural gas, and so forth, is because these elites—power elites, not moral elites, for sure—know that the financial system is finished, and that the financial collapse is inevitable, and they want to be in a position

to control these strategic raw materials for the period after the collapse.

Now, Mr. LaRouche, who correctly predicted the crash of '87, and the shakeout of the markets which occurred between March and April of this year, when the Dow Jones temporarily lost 10% of its assets (altogether, \$870 billion was wiped out) predicted that the financial system is in for another shakeup. One immediate trigger point is the hyper-fragile situation in Japan (that was the reason why Alan Greenspan went to Tokyo). Mr. LaRouche had already predicted in April, that the international financial institutions would try to postpone any such financial crash until at least after the French elections. Now, you can see that even the trick which Chirac tried to employ, by simply pulling early elections, did not function; he already is the big loser, no matter what comes out of the second round, simply because the population was able to see through this tactic as a trick.

But, you can also see how fragile the financial situation is, by the decision yesterday evening, European time, by the German Bundesbank, to reject the attempt by Finance Minister Waigel to again use a trick to fill the German budget hole by simply upvaluing the gold reserves of the Bundesbank. This was really unconstitutional, because these gold reserves of the Bundesbank are there as a last resort, to be used in case of absolute catastrophe, to save the population, to have some last reserve. And, Waigel, who is obviously Mr. Hard-liner on the Maastricht criteria, had to admit again and again, that he has budget holes: DM 20 billion this week, another DM 20 billion next week. So, he wanted to upvalue this gold, and this was rejected by the Bundesbank, which, according to the German constitution, is autonomous, and therefore has more weight in this question than the government does.

All of these are just symptoms of the situation, and the financial disintegration of the system is absolutely inevitable, because this system is hopelessly bankrupt. If this financial system were to collapse, the danger is that the world would plunge into a global new dark age, in which the developments in Central Africa are really only the writing on Balshazzar's wall, for what would happen to mankind as a whole. If this is not stopped, if this idea, that you can kill people by the hundreds of thousands, by the millions, to grab raw materials, and get away unpunished—if this is the law of the world today, then it is very easy to see that in the not-distant future, the world will be ruled by mafias and armed gangs, by mercenaries, by those who have weapons, because they will be the only ones left with access to food, and mankind will plunge into barbarism, probably worse than that of the 14th century, when the monetary system collapsed, and, because of the Black Death and similar diseases, the population was reduced by one-half, from India to Ireland.

As a matter of fact, if you take the condition of the world, from Africa, to Russia, to large parts of Latin America, it is very clear, that if you apply the principles of physical economy and what amount of population can be maintained by

what kind of agricultural and industrial capacities, that the world's population is in danger of collapsing to the level of several hundred million people. Even if China is probably in the best shape to avoid such a destiny, I think that China, too, would be very much plagued by a collapse of the world's financial system and the resulting consequences.

This is *genocide*. And, as I said, we have to evoke passion in the population of the world to stop that, because, if we don't, then we have said the final word about ourselves and our morality. We have to create the conditions, where President Clinton can come out and say, "Never again!" and denounce this as the genocide that it is, and use the power of the United States to stop it. Which it could. Nobody can tell me that the United States cannot get lousy Museveni to stop what he is doing! I only have to remind people of what happened in Desert Storm, when the United States displayed its capability. And you don't have to do it; I think it would be enough to *hint* at this possibility.

That is the first question. But I want to also use this horror, to point to the fact that the idea that grabbing raw materials, grabbing gold and diamonds, represents wealth, is a completely idiotic idea, because the idea that raw materials represent wealth is utterly wrong, which I will demonstrate momentarily.

The strategic key: U.S.A. and China

But, as we stated before, at press conferences in this place and many other places, it is the view of Mr. LaRouche, the Schiller Institute, and our international organization, that the only hope to get out of this world crisis, is that President Clinton, together with China, organize a reorganization of the world financial system and that other countries then cooperate; but without the United States and China as the cornerstone, it does not function, because the power of the British Empire, as represented in the food cartels and the raw materials cartels, in the City of London, in the Commonwealth control of the world, is simply too strong. President Clinton therefore must call for a New Bretton Woods summit, to reorganize not only the bankrupt financial system of Wall Street, but to reorganize the world financial system, as it was done in the old Bretton Woods system. The focus of such a reorganized world financial system would be the Eurasian Land-Bridge, i.e., the integration of the Eurasian continent through the concept of land-bridges, integrated infrastructure, railways, high-speed trains, highways, waterways, energy production and distribution, and communications, as the vital precondition for the economic integration of Eurasia; and that this Eurasian integrated space, which then would represent about 4.5 billion people, would extend through land-bridges into Africa, through the Bering Strait to North America, and through the Americas in general. Because we think that rather than grabbing raw materials, and trying to survive that way, this program of global reconstruction is the way out.

For those of you who attended previous seminars, I want

to point to the fact that from that standpoint, it is a very important step forward, that President Clinton is agreeing to continue extending Most-Favored Nation status to China, because, obviously, the alternative would be bordering economic warfare, and that would really ruin the basis for all of this. Also, an extremely important step in the right direction, was the recent summit of President Jiang Zemin with Boris Yeltsin in Moscow, where they agreed on strategic cooperation between China and Russia, including the so-called quadruple relationship among China, Russia, India, and Iran.

Obviously, if you look at these countries, which are key for the Eurasian Land-Bridge development, they represent the centerpiece of any successful reorganization of the world economy. It is also—maybe not *as* important, but interesting—that even France’s Chirac (who is otherwise totally immersed in the Maastricht craziness), when in China, agreed, in a final document with the Chinese leadership, that China and France want to work together for a new, just international world order based on rationality and justice and development of all. Now, for Chirac to say this—I’m not putting too much weight on it, but obviously, he felt that he had to scramble, because of the election.

The importance of all this is, that the alternative, where to go, is already defined: a New Bretton Woods conference and the Eurasian Land-Bridge.

Now, there are presently in Washington and elsewhere three views about whether this perspective is realistic or not. The first view, is that this idea of a reorganization is not desirable, that the IMF/World Bank system is okay and does not need any repairs. The second view, is that this would be very nice, but that it’s politically not realizable. And, the third view, which is held by important people in Washington and elsewhere, is that the crisis will assert itself, and then the only alternative is chaos or the kind of reorganization proposed by Mr. LaRouche.

Let me just leave it at that, because I want to come to the actual subject of my presentation.

Two opposing worldviews

What is at war here, are two irreconcilable, opposing conceptions of the human individual person. On the one side, you have an image of man, a notion of man which is associated with Plato and with Christianity, and which was reconfirmed in the Golden Renaissance in the 15th century: namely, that man and woman are each made in the image of God, and that they are made to exert increasing dominion over nature, and that that is their role and function in this universe. Then, you have the opposing view, which is a mechanistic notion of man, that man is just a talking beast—an idea which comes from the Enlightenment, which was expressed by people like Mandeville, Voltaire, Montesquieu, Hobbes, Locke, and many, many others—that man is evil by nature, really bestial, and therefore, it’s okay if you have a small ruling elite of maybe 5%, over a large mass of backward people, who are

not really human; and, therefore you can dispose of them, you can kill them, as the Spartan state in ancient Greece could kill the helots anytime they wanted to.

That image of man was represented by Cecil Rhodes around the turn of the century, who had the idea that he wanted to depopulate Africa of black Africans, in order to make room for it to be inhabited by whites; this view was the view of the Nazis, very clearly. They thought that Jews, gypsies, and other people, were not really human. That is also the view clearly expressed by Henry Kissinger, who, when he was national security adviser to Nixon in 1974, wrote a document which was called NSSM 200, which I advise everybody to get hold of—you can find it in the Library of Congress—in which he says, in an absolutely unashamed fashion, that the raw materials of the world really all belong to the strategic security interest of the United States, and that therefore the United States has the right to reduce populations around the world; because, if you have too much population growth in Africa, or Latin America, or Asia, then these people will gobble up too many raw materials. Therefore, it was the foreign policy of the United States at that point, under Kissinger and Nixon, to convince governments to impose population-reduction schemes; and, that if these governments are not willing to cooperate, in his view, then it is even legitimate to use the food weapon to convince them to do that. Kissinger says in this document that one has to be careful that this is not looked at as imperialism, but one can cover it up so that these real aims are not so obvious.

That same view of man, that man is not really human, obviously is also the basis for the policies of Barrick Gold and the other firms which are behind the genocide in Africa. Now, I think it is very clear, that the specific difference between man and apes—which Prince Philip, head of the World Wildlife Fund, denies exists. Prince Philip basically says that there is no such difference, and that men are just talking apes. (He may speak for himself, but not for me, for sure!)

The difference between man and ape is *the ability of the human individual to generate valid metaphors*. What is a metaphor? A metaphor is an *idea*, which had no existence in the language as it was used up to this point, and, nevertheless, represents an efficient principle of the universe, for which you really need *poets*—poets and scientists—to give a name to something new, which did not exist before. Therefore, in Classical science, since the Academy of Plato, all scientific ideas came into existence as human knowledge, through this process of metaphor. And it is one of the most crucial aspects of the specific contribution and fundamental discovery that Mr. LaRouche made, in the period between 1948 and 1952, when he confronted the information theory of Norbert Wiener and John von Neumann, by recognizing the fact, that information theory was absolutely incapable of describing *real economic processes*, because information theory *cannot* describe the relationship between the individual’s ability to generate metaphors, the sovereign creative process of the individual,



Left: Statue of Friedrich Schiller (right) and J.W. Goethe, in Weimar, Germany. Right: Wilhelm von Humboldt. It is uniquely the Classical humanist form of education, developed by Humboldt and inspired by Schiller, that fulfills the requirements of a developing economy. Each student replicates the creative discoveries of the entirety of mankind up to that point.

and the subsequent gains in the productive powers of labor through scientific progress.

The Machine-Tool Principle

This progress is what we call “the Machine-Tool Principle.” And, upon this principle, depends all successful sustained performance of the agroindustrial economies. Now, to understand this, it is necessary to master Plato’s concept of hypothesis. The application of the Socratic method to any proposition in geometry, leads to the adducing of an underlying set of definitions, axioms, and postulates, and constitutes a theorem-lattice. At each level of production, at each level of the economy, at each level of scientific knowledge, you have a specific hypothesis, which describes a set of such definitions, axioms, and postulates; there is *no* system of either mathematical or any any other thought in general, which is not determined by such an efficient underlying hypothesis.

Now, most people are not self-conscious, and they just think that what they think is self-evident; but, if you investigate what are the axioms of your thinking, then you come to the conclusion that these are related to what we call the theorem-lattice. So, for example, if you are a Greenie, if you are an environmentalist, you have a certain set of axioms and assumptions which are coherent with that ecological world outlook—I’m just giving this as a pedagogical example. This is important, because if you want to *change it*, you have to first be conscious of what these axioms are in your own thinking.

Now, in economics, as in experimental physics, any “fact” of nature, which cannot be made efficiently consistent with existing generally accepted physical assumptions, constitutes a paradox. Such paradoxes are crucial for valid experimental physics and economics.

If you look at the history of scientific progress, you can

say that it appears in the following form: that, according to an existing physical doctrine, a certain fact is impossible; even though that fact ridicules that aspect of existing opinion, that existing opinion does also contain a lot of efficient truths. So, therefore, both in physics and in economics, progress requires two indispensable steps. First, you have to define the principle of nature which the paradox expresses; and, second, once an experimentally valid principle has been adduced, you create a *new* hypothesis to supersede the hypothesis underlying the old scientific knowledge. Qualitative scientific progress occurs in this way. Now, when such a scientific new discovery occurs, you cannot simply *add* the new principle you discovered to the old hypothesis, but you have to create an entirely new hypothesis, and consider in which way this newly discovered principle impacts *each and every item* of definitions, axioms, and postulates of the superseded hypothesis.

It is for this reason, that textbook learning, or, what today dominates our universities—multiple-choice learning, that you learn, for example, for a medical examination, by having questions with three possible answers, and before you take the examination, you go into these crash programs of learning by heart, and you say, “a, or b, or c?”—that this actually has absolutely nothing to do with human knowledge, because it does not address this problem. It’s a completely linear approach.

It is only the Classical humanist form of education, which fulfills this economic requirement. The system which Wilhelm von Humboldt invented, inspired by the German poet Friedrich Schiller, in the 19th century, which is called the Humboldt educational system, is exactly that each student must replicate in his training, the knowledge of the entirety of mankind up to that point. Naturally, not all the ridiculous footnotes and secondary literature, but the crucial qualitative steps of science, of literature, of great art, in the following way: The student, in acquiring real *knowledge* and not simply stupid “learning,” must be confronted with the same paradox which represented itself to the person who made the initial discovery. He must be confronted with what he believed up to this moment. Then, the student must be encouraged to overcome this paradox, by generating the solutions to that paradox. This, he can obviously not do through the receipt of information, but only by reenacting, in his own mind, the discovery of the original discoverer. This he can *only do* in his sovereign cognitive processes, in his own private, personal mind, not by some objective form.

So, if the student in this way goes through, not *one* discovery, but a succession of valid discoveries, then he learns something much more fundamental than textbook principles. By reexperiencing much of the history of human knowledge, he acquires what Plato called *the hypothesis of the higher hypothesis*, to understand that the evolution and expansion of human knowledge is absolutely crucial to comprehend history itself. This kind of training is also necessary to qualify the student

in an environment of technologically progressive production. It is also key for developing the moral qualities of the student, because only if he learns universal history in this way, if he learns the history of natural science, geography, the history of great art, the history of music, that he has a *moral obligation to give the talent which he received*, from his parents, from the generation in which he lives, from his teachers, to have a noble obligation to give this talent, more enriched, to future generations, and to add, through his own creative contribution, to that heritage.

This is the question of moral character, because only an individual who thinks in this way, has a moral obligation to society as a whole. Therefore, it is this kind of acquiring of knowledge, which is also important for the identity of man in the image of God the Creator; because, when man tries to imitate the most noble ability of the Creator, namely, to himself create, to be creative, only then is he truly in the image of God.

Therefore, such an education must be associated with scientific progress, and it is from that symbiosis of education and science, that society obtains the principles which revolutionize the strategic machine-tool sector, and the labor force which is qualified to assimilate the revolutionary changes in an efficient way.

These changes in the technological environment of education and production are what increase the productive powers of labor per capita, per household, and per square kilometer. These creative powers of the individual human mind are the sole source of sustainable profit in economics (see **Figure 1**). So, the rate of improvement in the characteristic conditions of life in general, of entire societies, is in proportion to the extent and quality of compulsory education, and to the fostering of scientific and technological progress. The preconditions for increases in the productive powers of labor, lie exactly there. These preconditions represent the basic economic infrastructure, and they are the essential responsibility of government, because, for example, the fostering of investment in capital-intensive and power-intensive modes of scientific and technological progress, may occur in private firms, but if the government does not provide the framework, such as through tax incentives or other means, then this will not function.

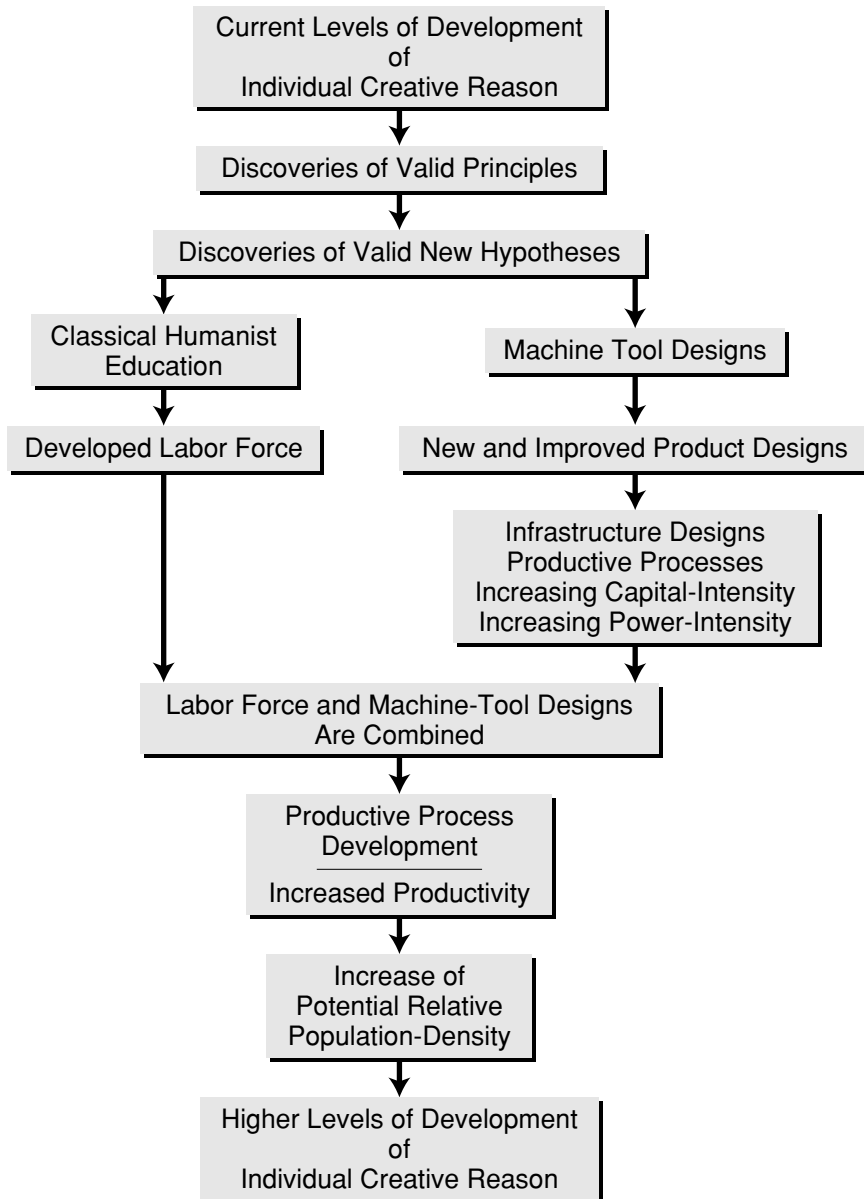
The nation-state: to secure the common good

This is basically the reason why the economies associated with the emergence of the European nation-state, which occurred for the first time in France of Louis XI in 1461, and in practically all the centuries till the middle of the 1960s, led to such improved conditions of the life of the world population, compared to all previous cultures, worldwide.

There are three aspects to why the modern European nation-state, in which the government was obliged to secure the welfare, the common good, of the people—as compared to the previous imperial forms, where a small elite was just inter-

FIGURE 1

How the Machine-Tool Principle is situated



ested in their own privileges — is the superior form of government. This was located in three basic principles: first, that the state was responsible for universal, compulsory humanist education of the entire population; second, the fostering of investment in capital-intensive and power-intensive modes of increase of the productive powers of labor; and third, in the fostering of high rates of transmission of valid new discoveries of principle into the productive process and product design, through a high-density role of the strategic machine-tool

design sector, in respect to per-capita productive output.

Now, I want to point to another aspect of this economic principle. In 1876, during the 100th anniversary of American Independence, at the time of the World Exposition in Philadelphia, there was a gathering of the leading industrialists from around the world. Among them was Emil Rathenau, who later became the head of the famous German firm AEG; and also Franz Reuleaux, who was at that time the head of the German machine-tool sector. And, when he saw the economic principles which were presented at the Philadelphia World Exposition, he wrote his so-called “Letters from Philadelphia,” which were a very dramatic challenge to German industry, because at that time, the free-market economy principles had taken over German industrial thinking. Reuleaux challenged that, and said: Everywhere today there is the principle to produce “cheap and bad,” or to put it better, “cheap and therefore bad,” because at that time, people had adopted the British free-market economy idea, that if you wanted to be competitive, then entrepreneurs have only one way of proceeding: cutting prices to undercut the competition. Reuleaux noted that, even in the area of public works, this was the case: Contracts for buildings and railways were always given to the lowest bidder; and he said that it is absolutely scientifically certain, that the economy will go downhill if you proceed in this way, because the secret of a blossoming economy, is the maintenance of a good price, but, at the same time, the increase of the quality of the product.

As history has demonstrated, Reuleaux’s challenge to the German industrialists in the 1890s was successful, so that already by the middle of the 1890s, German industry had turned the name “Made in Germany” — which the British had enforced, basically to hurt German industry, in order to say, “This is a bad, cheap product” — into a sign of high quality, which it remained for a very long time, until the recent period.

Now, 120 years later, the German economy has reached a similar branching point — and one can say the same thing for

France, Japan, Italy, France, and others. The world financial system, where presently 99% of all financial transactions are tuned toward speculation, has led to the present crisis of the banking system, the collapse of investment in the former Soviet Union, the enforced logjam in investment in western Europe, through the Maastricht strangulation—which was really designed to strangle the European economies—all of this has led to the worst economic crisis in Germany since the Second World War, and the highest unemployment figures since Adolf Hitler came to power.

The myth of globalization, outsourcing

The free-market profiteers have this logic of globalization, to which they claim there is no alternative. They say that German jobs, which are relatively high-standard, relatively high-cost, could only survive in competition with eastern Europe, Asia, and Latin America, if German industrialists would go into cost-cutting and outsourcing, and, because of this international competition, Germany could no longer afford a health system, high pensions, infrastructure, and all of these things, and, therefore, what was required, was outsourcing into those countries where you have cheap labor.

Just as it was 120 years ago, that idea, of cutting prices, of going for cheap labor, is absolutely wrong, and is a disastrous direction. Just as, 120 years ago, it was the increase of the cost per capita for education, health care and social security, for research and development, infrastructure, which was the way out of the depression, so it is today also *not* the orientation to the so-called world market, but the development of the productive powers domestically, which is the reason, and the *only* reason, for an economic blossoming. As it was 120 years ago, once you increase the productivity of your domestic labor force, then an export boom is the by-product. But, if you do it the other way around, it doesn't function.

Now, the myth of globalization is normally accompanied by the utopia of the post-industrial society: the idea that the service sector would somehow replace the Industrial Age. Pittsburgh is being pushed as a model, where they eliminated steel factories, and they now have casinos, and hairdressers, and other service-sector jobs; while it is very clear that the expanding service sector is only possible if you have reindustrialization on the highest technological level, because you can only expand services, if industry is doing well, not if industry is collapsing. It is, therefore, the volume of the creation of wealth in production, which determines what we can afford in terms of services. If you shrink production, the basis for the service sector melts away.

Also, one has to address another aspect, because people who are used to thinking in linear, mechanistic ways, somehow think that production is limited by a certain living standard, that once everybody has a Mercedes, once everybody has a refrigerator, then somehow the market is saturated, and production comes to an end. That is an idea which some peo-



The vicious toll of “outsourcing”: This child in Honduras has fallen asleep, while making softballs for the “free market,” to help keep his family alive.

ple have. Now, there must be no concern that we will lack work in the future, because there is no such thing as a fixed basket of goods and services which, asymptotically, eventually will go toward zero.

Just think about the following question: If we were to give up the technologies of the last hundred years, how many workers would be necessary to get one satellite into orbit? Or, how many nurses would be necessary to heal an eye problem, with ultra-short light impulses of 1 gigawatt per square centimeter, which is today done in laser application in medicine? How many nurses do you need, if you take the technologies of the last hundred years out of the picture? These questions sound absurd, because they're posed in the wrong way: The fact is, that without modern technology, such possibilities would not exist, even if you had millions of workers. The main function of technological progress is *not* the replacement of manual labor; this is a common idea that many trade unionists

have, the Marxists have, but this is not really the case. The real role of technological progress is the enlargement of human capabilities to utilize processes of the physical universe in a goal-oriented way. And in this way, there are emerging new production techniques and products, also new types of tools, which can bring into being entirely new economic areas, with millions of new workplaces.

An example of this was the chemical industry and electronics, in the last century, and, even if you take into account automation, designed to replace manual labor, this also has other beneficial results. For example, today in Germany, there are 60,000 industrial robots. They are mainly used where human work is problematic for health reasons, for example, in car production, in the welding and painting of the finish, which produces vapors that are bad for your health. Now, industrial robots have created a new branch in machine tools, where presently, in Germany alone, 20,000 engineers and technicians are deployed.

So, the source of wealth absolutely is *not* raw materials, or even a fixed machine-tool capacity, but it is the creative powers of the mind of the people, which redefine previously worthless dirt, as newly discovered raw materials, and develops entirely new branches of machine-tool design. Therefore, the center of a good economy must be the development of the creative powers of the entire population.

The oligarchs, the enemies of the human race, have recognized that, and it is most noteworthy that the infamous former editor of the London *Times*, Lord Rees-Mogg, wrote in a recent article, that in the coming Information Age, all necessary knowledge can be produced by 5% of the population, and that, therefore, 95% of the population does not need to be educated anymore.

The vital role of the ‘Mittelstand’

Now, let me point to the decisive role of the *Mittelstand*, the middle-level industry. In Germany, this is basically defined by the limit of 500 workers or employees. In Germany, this is for sure — and it used to be so in Japan — the hard core of the productive part of the economy. In Germany, only 1% of the industrial firms are so-called “big” industries, while the small and middle-level industries represent 60% of all the workplaces, 70% of all the taxes paid, and 75% of the profit taxes paid.

Why is this middle-level industry so important? First of all, mostly in Germany, but also elsewhere, the boss of the business is at the same time the owner of the capital. This is very important, because it excludes the disease of the “shareholders,” and, therefore, the idea of going for quick-buck profit, but rather, people think in terms of long-term success, because the fate of the company and the fate of the family are immediately connected. The typical German middle-level industry also has a situation where the owner knows the details of the production process and has a personal relationship to the employees, and therefore works more as part of a team,

and therefore the firm has a much more flexible response to new challenges. They have, on average, a much higher ratio of highly qualified workers, and therefore, the *Mittelstand* functions as the transmission belt for innovations.

Obviously, you don’t arrive at the *Mittelstand*, middle-level industry, by splitting up a big firm. For example, if China wants to renovate or reorganize its state-owned industries, this will not be accomplished by just splitting the big firm into many, many parts, because the secret of success does not lie in the size of the firm per se, but rather in the ability of a qualified boss, preferably an engineer or a scientist, and a highly qualified team of the workforce. Only if a national economy produces enough entrepreneurial personalities, and if you have, in addition, a high degree of education of the employees, can you have such a *Mittelstand*, as a transmission belt of scientific progress.

In Germany, one other aspect is relevant, and that is the so-called dual system of education of apprentices. Contrary to the model of the Anglo-Saxon countries, where the firms are more in charge, you have a combination of public schools, which defines a minimum standard of education for everybody, with the specific interest of the individual firm.

For example, in Germany, the machine-tool sector has virtually no large firms at all. The ten largest machine-tool builders in Germany only represent 6% of all people employed in that sector, and the 6,000 German machine-tool firms employ 1 million people; but they are, nevertheless, in many areas, leading in the world market. Now, in 1995, a consulting firm, whose head was Herman Simon, wrote a book called *The Secret Champions*, in which he investigated 500 German middle-level industries which are all leading the world market in their specific area. Now, of these secret champions, 37% of them are in machine tools, 12% in the electro-industry, 10% in metallurgy, and on average, they have 500 employees. More than half their production goes to export, and, if you take components which they sell to other firms, which then assemble these components into a larger product, which then goes to export, they produce 70% for export.

The leaders of these “secret champions” are mostly engineers or natural scientists. The average age of the bosses of these firms is a relatively high 67 years, and nearly all of these firms have made decisive technological innovations and a permanent improvement in the production process, which many times was the result of the invention of one exceptional employee. The study comes to the surprising conclusion, that it is not the outsourcing which brings any profit to these firms, but the superiority in quality and reliability.

The Fraunhofer Institute for Systems Technique and Innovation Research came to the same conclusion: that outsourcing, which people thought would result in incredible profits for the firms that are doing it, indeed had the contrary effect: It led to a loss of flexibility, and that even the outsourcing of the most unproductive areas of their production did not

have satisfying results, but what *had* the best results, was the application of the most advanced technologies in Germany, which would then lead to an increase in the production of wealth per employee, up to 50%.

The Stuttgart consulting firm Management Partner produced a study in July 1996, which says that the initial euphoria of outsourcing has completely disappeared; that one-third of all firms did not really succeed at all; and, when German industries were outsourcing into Poland and Czechia, because of the cheap labor, it turned out that this was “milkmaid accounting,” because they immediately had problems with maintenance, consulting, the lower qualifications of the personnel, and, even though the motivation of the workforce was very high, they were not used to the high rate of technological change; and then, on top of that, within a very short time, the increase of prices on the domestic market basically eliminated the benefits for the country into which the production was outsourced.

Now, the Czech Republic is a typical example, because when the Soviet Union collapsed and the Comecon disintegrated, Czechia, under the leadership of Vaclav Klaus and Vaclav Havel, was hailed as the showcase of the IMF reforms. Klaus imposed the most rigid reforms, privatization, with no respect for the social consequences of these reforms. And, today, Czechia is totally in chaos: You have strikes, you have a collapsing banking system; the krona is collapsing. Czechia is a new Mexico, as a result of these policies — which we, by the way, told them, back in 1990. I was just in Prague two weeks ago, and people remembered that we had warned them in 1990 that this would happen.

Therefore, the way out of the crisis is *not* cutting prices, is not austerity, outsourcing, and all of these things, but it is research and development. It is applying the principles of physical economy and the maximum scientific and technological progress.

Never again!

Let me go back to what I said at the beginning. When you look at what these people are doing; what the Nazis did then, and what these multinational firms are doing now, when they are grabbing the raw materials, with the illusion that that represents wealth; the genocide which we see in Africa, and Nazi economics, are based on the same principle. It is the idea that you can use human labor, as it was done in the concentration camps, to extract the last iota of strength, until people die, and if you reduce the calories to 800 per day, as the Nazis did, it was predictable that the victims would die after a couple of months. The same thing is happening, de facto, with the raw materials grab in Africa today. Because these people figure that they don't need many people to mine the raw materials; they just need some slave labor, and guns, and goons, and that way they can accomplish what they want.

That is why these things are related: because, you see, there are two philosophies. One is control of world raw

materials, the theory of Margaret Thatcher, who, in her memoirs, wrote that the doctrine of the free-market economy is, “buy cheap, sell expensive” — and make usurious profit. We completely reject that. That is the way to doom, catastrophe. We say that it is only the increase of creativity of the individual, because that defines what is a “raw material.” I can take a stone and hit you over the head with it, and kill you, and then it's a weapon; but I can also take a stone and say, “There are the following iron ores and other strategic minerals in this, and I can extract them, through the following production processes, and then it's the raw material for producing maybe an aircraft, or I don't know what.” So, a raw material is defined by the level of technology by which I attack that raw material.

When General Patton arrived in Buchenwald, he said, “Never again!” As you know, especially in this country, there are many people who like to use this phrase. There is the famous Daniel Goldhagen, who runs around and talks about how all Germans were Nazis and perpetrators; well, I'm interested to hear what Daniel Goldhagen has to say about the fact that now, the British leaders, including Churchill, knew from the beginning what the Nazis did. Does that mean that all the British subjects are perpetrators too? In any case, I think we must give new meaning to this idea, “Never again!” And we must arouse, in the whole world, the passion for people to demand from President Clinton that he stop this. We have to also understand, that for Clinton to go against these raw materials cartels, takes courage, and a mobilization of the population, because these people are known to kill without mercy, and they have done this in the past. “Never again” today, means to bring the perpetrators of today to justice. I think that if you do not confront that, then we will not have the just, new economic order which we need.

I think we can accomplish it, but it requires that all people of good will around the world work together, to take the very promising developments which are emerging, under the leadership of China, but now, also, increasingly, Iran, India, and other countries — the Land-Bridge conception — to open up a new era of mankind. This is not a utopia, but it is very, very close, and all we have to do, is to mobilize enough forces to create an environment where this reorganization can be done. I am absolutely convinced, that man will not forever be equally confronted with good and evil. I'm convinced that the Manichean view of the world is not correct. I believe that this Nazi-like oligarchical thinking — that there should be a small elite and a mass of stupid people — that that can be overcome, and that when we reach a situation when we have universal education for every child on this planet, that we will enter a completely different era of mankind, in which people will be happy to be scientists, discoverers, composers, poets; and that a new Renaissance will be possible; and that we will look back at the misery of today, as just the last outbreak of a childhood disease of mankind, and that people will become adults, as a human race.