Exclusive Interview

Club of Rome founder Alexander King discusses his goals and operations

The following interview with Dr. Alexander King, founder of the Club of Rome, was conducted May 26 in Paris by EIR's Laurent Murawiec and Dino di Paoli.

EIR: When the United States launched the Space Shuttle, there was a groundswell of public support for science, technology and related matters. In your mind, Dr. King, does this imply a backlash against the kind of influence on public opinion represented by, for example, the 1966 report by Anatol Rapoport of the Tavistock Institute? He analyzed the effects of science and technology on American society in light of the NASA moon-shot effort, and reported too much respect for science among the population, recommending a counter-effort.

King: Well, public opinion is a very labile thing; it changes very easily. Since 1968, there has been a gradual demystification of science, and an increasing resistance to new technology. This, of course, is the sort of thing that goes up and down. Science occasionally has some big breakthroughs, like the first man on the Moon, and then it becomes popular. But then, the pendulum swings the other way.

The Space Shuttle is typical. At the moment, people are relatively pleased with that kind of thing. But something else will happen, and public opinion will go the other way. . . .

EIR: I mentioned Rapoport's report because it seems to have had an enormous impact on future thinking about science and technology. After the report, NASA started to be scaled back, for example. Much work later done resulted from its conclusions, that there was an excess of science in society.

King: I doubt if that report as such has had as much influence as you say. Nonetheless, it was a very good report, the culmination of a movement of thought occurring in many places at the same time. Many people had the same doubts about science and technology that Rapoport expressed.

EIR: Could you give us some picture of how this idea arose—as you put it, in many places at the same time?

King: I think this is something that has happened over and over again since the beginning of Man's history. Sometimes, the same thing has been invented in three or four different places simultaneously. It happens because people are working in the same direction in many places, and all the background, all the environmental preparations have been made—it just comes out like that. It is very common, and I think we will see more of this. It also happens in public opinion. In 1968, when we had the student troubles here in France, it happened simultaneously everywhere else. And the anti-pollution lobbies, the conservationists coming out and influencing governments for the first time—all this happened simultaneously in many places.

In fact, some governments have been working on this for nearly a hundred years. The public had not reacted. But then, new inventions, and new ideas often make their appearance in history with movements which are sometimes very complicated, but which manifest themselves in many places at the same time. That is standard.

EIR: In other words, for the idea we are discussing here, you mean to indicate that, for example, Aurelio Peccei was off working on his own; you were working on your own, and so forth?

King: Yes, I have been here in Paris for about 20 years. I was a director-general of the OECD and then general secretary. Even then, a Danish economist, Thorkil Kristensen, and I talked over this many times.

The Club of Rome originated in a feeling that growth for growth's sake was not good enough. None of us in the Club of Rome have ever been against economic growth. We have been identified with zero-growth, true, but we have never been for it. Anecdotally, I can tell you about that.

In the period when this was happening, Thorkil Kristensen wrote a paper for the Council of Ministers of

the OECD on the problems of contemporary society. The ministers discussed it—before the événements [student and labor strikes of May 1968 in Paris—ed.]. What was discussed was the question of educational unrest, the question of the need for deep educational reform to make young people much more attuned to what was happening, much more in tune with societal realities. The discussions raised the question of environmental destruction, the question of alienation of the individual, rejection of authority and many other things of that kind. They all came up at the same time.

Kristensen and I felt that governments, although willing to debate these things, were not capable of acting quickly enough or responsively enough to these changes. The bureaucracies of governments, even more than the ministers, are post facto mechanisms. They only react after events, and do not foresee them. They are not prepared for them.

It was at that time that Kristensen and I got in touch with Aurelio Peccei. The Club of Rome was actually born inside the OECD, around such concerns.

EIR: Did the OECD do any work on this educational question prior to the Paris événements?

King: Yes, quite a lot. We were very interested in educa-

Alexander King: a subverter of science

Dr. Alexander King, CBE (Commander of the British Empire) and CMG (Commander of the Order of St. Michael and St. George), has taught chemistry at the Imperial College, London and headed the British Scientific Mission in Washington from 1943 to 1947. Beginning in 1968, he was director general for the Scientific Affairs Section of the Organization for Economic Cooperation and Development (OECD), an apparatus considered a subordinate feature of NATO, but actually its policy controller.

Dr. King also heads the International Federation of Institutes for Advanced Studies, the coordinating body for seven such institutes, with membership heavily overlapping the Club of Rome. The International Federation of Institutes for Advanced Studies is based in Stockholm, Sweden and Paris, France and has close ties to the Tavistock Institute, the Sussex-based flagship institution of British intelligence's psychological warfare division.

tional programs. We invented the whole question of curriculum reform, trying to teach mathematics and chemistry, etc. in new ways. We were the only body that began to look at education in terms of its economic impact. We were very much criticized for this. The ministries of education were all culturally based. Education was something that passed down the riches of posterity to new generations, in their view. To tie education to the economic wagon seemed terrible. But they exaggerated and misconstrued our purpose, as always.

What we were trying to do was to examine the educational system in relation to the economy—it is a very big relationship. You have to look at education in terms of the needs of the future economy and the kinds of jobs that are going to be required. What kind of training is required, intellectually as well as in the ordinary sense of socialization.

EIR: Were you involved in the project to transform the way mathematics is taught, the so-called New Math?

King: Yes, yes, yes. We pioneered it, very much so! At that time, under Kristensen, the OECD was a very innovative place. I was in charge of science and technology, and education, and we had our internal policies. Our policy was roughly that we should be at least five years ahead of the thinking of the nation-states; second, however, we should never appear to be more than two

Our policy was to look at everything that is new, at speculative matters, matters of uncertainty. We had many failures, but then again, when we were successful, and the nation-states would get interested, we had completed our catalytic role. We would drop those activities and begin new ones. It was a very mobile and very interesting approach.

years ahead. Otherwise, we would be killed!

When we started the curriculum reform, a number of people, particularly in America, at MIT, were very interested. We found a number of French mathematics teachers terribly interested. We also found people in Germany and the United Kingdom, too.

After about three years, we had national commissions for curriculum reform on various subjects in all membernations. At that point, we decided we had done enough of that, and we dropped it. The ministers [of the membernations] thought we were crazy! The thing was successful, so why were we stopping it? But we had catalyzed it, and that is all we intended. By the time we finished, there was an economic section in the ministries of education in every nation-state in the OECD.

EIR: Who headed the economic section in France?

King: Ah, well, France was not very keen on this....

The primary work was done in the United States.... We were in on all kinds of colloquia connected to this. A number of Frenchmen were very keen on this.... Ber-

trand de Jouvenel [head of the International Association of Futuribles, many of whose members are now ministers in the Mitterrand government—ed.] is a very good friend of mine, but he was not very much involved, although extremely sympathetic.

The main proposals for methods and techniques came from groups at Princeton and Ohio State University, and their members became our advisers for three years. Then, through the Mediterranean Regional Project, we worked in six OECD Mediterranean nations—Greece, Turkey, Italy, Yugoslavia, Spain, Portugal—putting through educational reform plans in all of them. So, we started lots of things, lots of things, long before the May 1968 événements.

EIR: So in a certain way, you might be considered the fathers of the *événements*? I mean, of course, the intellectual fathers.

King: Yes, We were very sympathetic to many features of the *événements*.

EIR: I would guess that General de Gaulle was not very sympathetic toward you?

King: Yes, well, France was not one of our great supporters at that time.



McGeorge Bundy

The Ford Foundation helped us a great deal at OECD. We started a center for education innovation, outside the purview of the normal budget, financed half by the Ford Foundation and half by industrial enterprises, especially Royal Dutch Shell.

We were particularly helped by the British minister of education at that time, Tony Crosland, one of the very bright and inno-

vative people in the Labour Party—a big loss that he died.

The beginning of the Club of Rome enters here. Many of us felt that the nation-states of especially Western Europe were not looking at the long term, but were bound up with short-term electoral cycles, and far too traditional. So, I was looking around for something to do. I had never heard of Aurelio Peccei. Peccei came to the fore in a very strange way.

Peccei came by way of David Rockefeller and his group, Adela [Association for the Development of Latin America]. It was a consortium of financial people trying to do something about industrial development in Latin America. It was headquartered in Argentina. Gianni Agnelli, the head of Fiat, was very much a part of it. Of course, at that time, Peccei was president of Olivetti. Agnelli had put him in there. You know how the Italian industrial mafia works.

Aurelio—well, it was like this: the Adela people were planning their first meeting between U.S. industrialists and financiers and their Latin American counterparts. It was held in Buenos Aires. They wanted a keynote speech which would be forward-looking, long-term—not the "Year 2000" stuff, but a 10-year perspective, perhaps. They wanted it delivered in fluent Spanish, but preferably not by a Yankee. Peccei, having been president of Fiat Latin America for a long time, speaks fluent Spanish. He gave the speech.

It was a very intelligent speech—a very good speech indeed.



David Rockefeller

Actually, I only saw the speech later. As far as I could tell, the United States government knew about it. David Rockefeller, perhaps, let the Department of State have a copy of it. The Englishlanguage version was placed on sight-tables at the United Nations, particularly at Unesco, and the U.N. Committee on the Application of Science and Technology to Development (Unacast). This

was all back in 1967 or 1968.

Dzhermen Gvishiani: a mole in the U.S.S.R.

The Club of Rome has a ready-made influence in the Soviet Union in the person of Dzhermen Gvishiani, the son-in-law of the late Premier Aleksei Kosygin. Gvishiani, from Soviet Georgia, is deputy chairman of the U.S.S.R. State Committee on Science and Technology, and codirector with McGeorge Bundy of the International Institute for Applied Systems Analysis (IIASA) in Vienna.

Gvishiani is a trade negotiator for the Soviet Union with the West. He is also a de facto founding member of the Club of Rome, who has brought to the Soviet Union such Club members as top people from the inner councils at the Organization for Economic Cooperation and Development.

"It is a naive... and in some cases a reactionary attitude," announced Gvishiani in a recent article, "to believe that the only goal of developing countries is the attainment of a level at which they will be able to reproduce the entire social order, with its technological progress and the nature of mass consumption, that is dominant in developed capitalist countries."

Strangely enough, it was a Russian, the Russian delegate at Unacast, Dzhermen Gvishiani, who was one of the first to respond. He picked up the speech, put it in his briefcase, and read it on the way back to Moscow. He decided he wanted to get in touch with this man, Peccei. Peccei has some of this in his autobiography, but he did not give the name of the man—Dzhermen Gvishiani. Gvishiani found Peccei's views tremendously interesting.

EIR: Is this when Gvishiani's International Institute for Applied Systems Analysis was founded?

King: It is all connected. Gvishiani wanted to get in touch with Peccei, but he had never heard of him, and this speech he had was merely signed, "Aurelio Peccei, Military Academy, Buenos Aires, November 1967." So, Gvishiani wrote to his American colleague at Unacast, who sent him a couple of copies of the speech. He asked him to "find out for me who this Peccei is."

The American, quite well known now, was Carroll Wilson, the professor at MIT who authored the recent coal report—he's quite a person, I can tell you. But Wilson, too, had no idea who this Peccei was. He passed Gvishiani's request along to me. But I, too, had never heard of Peccei.



Gianni Agnelli

I made inquiries at the embassy here in Paris, and I asked some colleagues and found out. I wrote to Peccei, put him in touch with Gvishiani, and I happened to say to him: "By the way, I read a copy of your speech at Buenos Aires, and I found it extremely good. Maybe you will be in Paris some time. Let's have lunch together and discuss things." A week later, the telephone rang: "This is Au-

relio Peccei. I'm in Paris, can we have lunch together?" It went very well.

About 10 days later I was in Rome, and we had dinner together. We had three or four meetings, and decided to do something about the world.

We we're thinking about it then almost entirely from a Western European standpoint. We decided to call a meeting of prominent Western Europeans, about 20 people. Peccei persuaded the Agnelli Foundation to pay for it. The meeting took place at the Accademia dei Lincei in Rome. I lent one of my consultants at OCED, Erik Jantsch, a rather well-known person who died this year. He did a background paper. We sat down and looked for a number of people to invite.

From France, for instance, we invited Bertrand de Jouvenel, Pierre Masse, and the planning commissioner at that time, Saint-Geours, was in attendance, and so was François Bloch-Laine, who then headed Crédit Lyon-

nais. It was people like that, and corresponding people from other countries.



Bertrand de Jouvenel

The meeting was held in Rome. We discussed how Europe could look at the future, prepare for future things. Economic growth was never even mentioned.

The meeting, in truth, was an abject failure. Everybody was against it. With the Vietnam War going on, people were very anti-American. The French behaved like Frenchmen. De Jouvenel,

whom I like and have known for many years, along with some of his colleagues, argued on semantics all the time. They argued that the word "systems" had no meaning in French, the way it has been used in America, so everything was nonsense. We found out that you could not have the Rand Corporation and the Vienna Opera House on the same continent.

I argued, stupidly, that one could not envision a continent in the future without the two of them. The meeting almost broke out in disorder.

That night at dinner—at Peccei's house—about six of us closed ranks and decided to carry on. A small study group, mainly for our own education, was formed and decided that the function that was most important and should be the central theme of the group was what we called global *problématique*—namely, the interconnection of problems, the very important things that were happening in this or that field and which had an impact on one another that was unnoticed; government policies represented the sum total, but did not represent an integration of sectoral policies. Given rapid change, that isn't good enough.

We took a global point of view. At this point, two of our colleagues left us at least temporarily. One of them was Saint-Geours, who thought it was far too ambitious. He thought we should study a city, Frankfurt or Florence, its environment, its totality. But to look at it from a global point of view he thought crazy. The other person who walked out was Max Kohnstamm, who was Jean Monnet's shadow; he was a good friend of all of us. Five or six years later, he wrote a very honest and touching letter, saying how wrong he had been at that meeting, and how much he regretted it.

We met for a number of times, mainly in Geneva, because it was halfway between Paris and Rome, and the people concerned were Peccei and myself, Jantsch, and a consultant of mine, Hugo Thiemann, who later left. He was head of the Battelle Institute. There were no Russians, only Western Europeans at the beginning. It was extended about a year later, in 1970, when we had an American, Hassan Osbekan, of Turkish origin. He was

extraordinarily, unusually brilliant, a genius type. He worked with us on what he called a projection of mankind. He put out a very big and very interesting project, which in the end we rejected because we did not think the methodology existed to do it. At any rate, Osbekan and Jantsch gave a seminar at the European Summer University at Alpbach in the Tyrol, and Peccei and I went to support them.

This was a very important turning point for the Club of Rome. Several Americans were there who became extremely interested. Eduard Pestel was also there. The Americans were the president of the American Association for the Advancement of Science, and also Paul Weiss, the physiologist. At dinner that night, we sat at the same table with Josef Klaus, then chancellor of Austria, from the Black Party.

We had a very interesting conversation, and he said: "The things that you are doing are raising enormous interest among my colleagues. Why don't three or four of you come down to Vienna next month and spend a day with my cabinet?" We did, and the people there were rather interested. Peccei went, along with myself, Thiemann, and also Thorkil Kristensen who had just retired from the OECD. He became an official member of the Club of Rome.

By the way, Dzhermen Gvishiani was in Austria at that time, in connection with the negotiations around the International Institute for Applied Systems Analysis. Gvishiani came to our meeting.



Pierre Trudeau

We didn't have any political people, no government office holders as members at that time. But this meeting put into our heads the idea of talking to political people. The following year, Peccei and I together or separately saw at least 26 prime ministers and presidents.

You know, the one who gave us the most support was Canada's Pierre Trudeau. We had an ex-

traordinarily interesting meeting in Ottawa.

EIR: How did Pompidou react?

King: He didn't, hardly at all. Giscard did, but only later on, and very considerably, at the 1973 Unesco sessions. Edgar Faure was interested. And after Sicco Mansholt sent them his letter, the French got very interested, but of course, for their own reasons. Mansholt had never read anything from the Club of Rome, not even *Limits to Growth*.

It was a very interesting situation. Take the *Limits to Growth* report. We were at first very unhappy that there was so much discussion of it, because the discussion was based on all the wrong ideas. We didn't have those ideas. No one was apparently able to distinguish between a

report to the Club of Rome and a report by the Club of Rome. We had actually never discussed zero-growth as a club when the report appeared. Therefore, to be labeled as proponents of zero-growth very much annoyed us.

We had a very important meeting that year [1971] in France, near Paris, and we agreed very much that the Club of Rome would never try to seek a consensus agreement. The job was catalytic, to start debates. So, many people in the Club disliked the *Limits to Growth*. I personally think it was the best that could be done at the time. It had its faults, but it would have been difficult to better them.

The report did three things: It spotlighted the interconnectedness of problems. If you look at pollution alone, or population growth alone, or economic growth alone, everything seems fine; but if you look at the interconnections, the effect one has on the others, it is different. Second, it started a debate, which echoed all over the world. Third, it started lots of new study. So, we were fully justified in issuing the report, in spite of the errors contained.

The main thing for us, and for Dennis Meadows [Limits to Growth co-author], too, was not to make prophecies. It was a Cassandra type of thing. "This is likely to happen if things continued as they are," with the idea that policies could change to prove the forecasts

Who are the members of the Club of Rome?

The Club of Rome, which describes itself as totally structureless except for an 8-man executive committee led by Aurelio Peccei and Alexander King, is limited to 100 members. Those 100 members, however, wield considerable power in major nations, both East and West, and in an assortment of multinational institutions. The iollowing are among those on the Club of Rome's current membership roster.

Bertrand de Jouvenel, president, International Association of Futuribles, Paris, France.

Umberto Colombo, president, National Committee for Nuclear Energy, Rome, Italy.

Arne Engström, director-general, National Food Administration, Sweden.

Thor Heyerdahl, anthropologist, Rome, Italy.

T. Adeoye Lambo, deputy director-general, World Health Organization, Geneva, Switzerland.

Ervin Laszlo, special fellow, United Nations Institute for Training and Research, New York, U.S.A.

M. Robert Lattès, counsel to the board of direc-

wrong. It's different from prophesying, "This is going to happen."

EIR: Was there concern with the "American model," as in Jean-Jacques Servan-Schreiber's Le Défi Américain [The American Challenge]? The book heralded the world's imminent entry into a "technetronic era."

King: Well, that actually goes back a few years. We worked on that in the OECD. We did a large series of studies which we called "The Technological Gap" between America and Europe. We knew it wasn't a technology gap, but that was the way we were introducing the idea.



Servan-Schreiber

Servan-Schreiber's *The American Challenge* was based on stolen data of ours! He never acknowledged it. All our data was in that book. He even lifted direct quotes—without quotation marks—straight from our working papers.

We had a ministerial meeting with science and economic dignitaries to discuss our work on this. A very exciting meeting occurred,

and at the end of it my work inside the OECD was nearly

killed. The Americans and British didn't like it.

This was the time of the de Gaulle veto against British entry into the Common Market. . . .

The American industrialists approached the American government and complained that our discussions were teaching their competitors, these foreigners in Europe, all about their methods, so that the discussions were against the interests of the United States. They demanded they be stopped, and they were. Two years later, however, the Americans came back. Their dollar got into trouble. So they tried to get it all started again.

Meanwhile, we had probably the best team of young people that could be had anywhere in the world working on this technetronic model. It had to be disbanded for those two years. This shows how policies of nation-states go back and forth. You can't tie something like the Club of Rome to short-term policies.

EIR: Why were no Americans involved in the Club of Rome at the beginning?

King: They joined very soon after the founding. We wanted it to be small and compact. We had no money. We all paid our own way to all the meetings. We felt it was more convenient that the Europeans should begin by having discussions among themselves. And later, by all means, it could be opened to others. . . .

tors, Paribas Bank, Paris, France.

Dr. Aklilu Lemma, principal scientific coordinator, U.N. Conference on Science and Technology for Development, New York, U.S.A.

Sol M. Linowitz, former president, Xerox Corp.; attorney, Washington, D.C.

Elizabeth Mann-Borghese, professor of political science, Dalhousie University, Halifax, Nova Scotia; founder, Aspen Institute for Humanistic Studies, Aspen, Colorado, U.S.A.

D. José Antonio Mayobre, Central Bank of Venezuela, Caracas, Venezuela.

Saburo Okita, foreign minister, Japan.

Jozef Pajestka, Planning Commission, Poland.

Clairborne Pell, Senate of the United States, Rhode Island.

Eduard Pestel, minister for arts and sciences, State of Lower Saxony, West Germany.

Edgar Pisani, European Community commissioner for relations to developing sector, France.

Ilya Prigogine, professor of science, Free University of Brussels, Belgium.

Kazimierz Secomski, vice-president of the Council of Ministers, Poland.

Dr. Soedjatmoko, National Development Planning Agency, Indonesia.

Thorvald Stoltenberg, secretary of state, Foreign Ministry, Norway.

Dan Tolkowsky, managing director, Discount Bank Investment Co., Ltd., Tel Aviv, Israel.

Victor L. Urquidi, president, College of Mexico.

Carroll L. Wilson, director, World Coal Study, Massachusetts Institute of Technology, U.S.A.

Ibrahim Helmi Abdel Rahman, adviser to the prime minister, Cairo, Egypt.

Yoshishige Ashihara, chairman, Board of Directors, Kansai Electric Power Co., Japan.

Jeremy Bray, member of parliament, House of Commons, Great Britain.

Felipe Herrera, president, Spanish Bank-Chile, Santiago, Chile.

Professor Abdus Salam, director, International Center for Theoretical Physics, Trieste, Italy.

Professor Roberto Vacca, author, *The Coming Dark Age*, Rome, Italy.

Thorkil Kristensen, former aide to the directorgeneral for scientific affairs, OECD, Brussels, Belgium.

Maurice Guernier, author, *The Last Chance for the Third World* (1968), Paris, France.

Jean Saint-Geours, vice-president, Internatioal Association of Futuribles, Paris, France.

EIR: Didn't you say that David Rockefeller was sponsoring it all?

King: Uh, well, Adela was.

EIR: In terms of ideas, Adela, Rockefeller and others shared them, didn't they?

King: The ideas were coming up here and there and everywhere. Not in a conspiratorial way, but just incidentally....

EIR: Did you and other "founding fathers" have discussions with the European Society for Culture in Venice?

King: Yes, in the sense that we had a few meetings there at odd times. They weren't Club of Rome meetings as such, though. We did have a lot to do with the European Cultural Foundation of Amsterdam. Prince Bernhard set it up. We also had discussions with Denis de Rougemont and his European Movement people in Geneva.

One other little thing that happened at that time was the creation of the institution that I am now chairman of, the International Federation of Institutes of Advanced Studies.

You see, things were just popping up spontaneously. In the same year, 1968, the Nobel Foundation in Stockholm suddenly decided that science was going all wrong. They decided that science was losing its touch with humanity, not just by way of specialization, but in terms of the whole scientific attitude. this takes us back to what we raised at the beginning.



Margaret Mead

The president of the Nobel Foundation was Arne Tiselius, who was a biochemist, and himself a 1948 prize winner [Tiselius is a close associate of Sweden's former premier, Olof Palme—ed.]. Tiselius called a Nobel symposium in Stockholm, where about 20 Nobel laureates and about 20 generalists like myself got together to discuss the problem with science. There were a couple of bankers.

Arthur Koestler was there. We even had the poet laureate W. H. Auden. He recited a poem.

Actually it was a very exciting meeting. Margaret Mead were there. A big part was played by the late Jacques Monod, who was then chairman of the Institut Pasteur in France. Harrison Brown, the American scientist, was one of the leaders, and summed things up by saying, "We have three options for the future: either the big bang, nuclear annihilation, in which case, mankind won't have any other problems; more likely, by taking a number of small, wise steps, we will gradually pull ourselves out of this mess; or even more likely, we will let things drift into a situation where everything will gradually get worse."

After this symposium, the Nobel Foundation got in touch with the Rockefeller Foundation. Together they created my International Federation of Institutes of Advanced Studies to look at long-term world problems in a multidisciplinary way. In practice, the federation is the scientific arm of the Club of Rome. In formal terms, of course, there is no connection whatsoever, but the central people—30 members who are directors of these institutes; plus 7 noninstitutional members of which I am one along with Peccei, Pestel, Okita from Japan, Victor Urquidi from Mexico—are all Club of Rome. This wasn't planned either. It just happened because they were the people who were interested. So the International Federation and everything it does is very close to the Club of Rome, but rather quietly.

EIR: What you mentioned earlier about Dzhermen Gvishiani is most interesting. Recent developments seem to indicate that he is out of favor in the Soviet Union. There is a powerful economic growth faction in the Soviet Union, especially judging by the last party congress in February. And when the head of the State Committee for Science and Technology died, Gvishiani, although second in command, was passed over. A man from Novosibirsk was approinted to head the committee. And then, the strong science stand at the party congress seemed quite unaffected by the ideas Gvishiani wanted to inject. King: Well, yes and no. Your interpretation may not be correct. The science and technology section of Brezhnev's February speech was written by Gvishiani. I know this, because I happened to be in Moscow when he was writing it.

Gvishiani was politically vulnerable because of his father-in-law, Kosygin. Kosygin was somehow out of favor in the last year or two. When he was lying in state, however, just before he was buried, Gvishiani was there as a member of the family, and as the newspapers noted [the *International Herald Tribune*] Brezhnev and the Politburo came to pay their respects, stayed there with Gvishiani and shook his hand. They spoke to him for a rather long time. This had obvious political significance. After that, he became a full member of the Academy of Sciences. He has his Institute for Systems Studies in Moscow. I think it is a lousy institute. But he is all right with the present regime.

When his boss was sacked a year ago, it was because Brezhnev and company were realizing that industrial innovation was just not occurring. In fact, there had been no major domestic industrial innovations in the Soviet Union for the last 20 years! It all came from the multinationals. It's my own judgment, and I think quite true, that Gvishiani had been, through his father-in-law, warning the Kremlin that this was the situation for some years. And he has not been listened to. When the thing finally broke, the fact that he had been doing this was

very much in his favor—I mean for his survival—when the other man, Kirillin, was sacked for various things. One was that he was a very close friend of Sakharov. Second, he had been neglecting industrial innovation, or rather, he had been accepting the situation; he had been complacent, not giving warning signals. Under the circumstances, with Kosygin slightly out of favor, Gvishiani in favor, the obvious thing to do was to keep Gvishiani in his position and put in another figurehead who would be acceptable to the scientists.

EIR: Is that also the case at policy-level? What of plasma physics, laser research, fusion research? Do not military concerns tend to be an overriding motivation for the Russian leadership?

King: It is an overriding motivation, but one thing they don't realize is that it is acting against their economy, to an extent that it endangers the military. To the extent that they concentrate on the types of technologies you mentioned, there has been far less effort on many things that are essential to the economy. That is one of the causes for the lack of innovation. They want to do both, but they are also very anxious to look at the question of the feedback of the military on industry. Unlike in the United States spinoffs have been practically nonexistent. There is practically no feedback from microelectronics. As a consequence, the Soviet Union is not in the first league in microelectronics. They are 10 to 12 years behind.

That's the reason for all this difficulty with the International Institute for Applied Systems Analysis [IIASA]. IIASA is linked to all these international data banks. The United States has its lines into all these, so it is an extremely good place for the Russians to be.

I must tell you also why I was in Moscow for this occasion. It is relevant for what we have just been talking about. At my International Federation, we had an approach from the Soviet Union about a year ago to join with them in East-West studies: why innovation takes place in some countries and not in others. This was couched in extraordinary sociological terms which no one could understand—we had our own translation made from the original Russian document—and what they were really trying to say was: what is the influence of the national environment, national political ideology, and institutional behavior on success or failure in innovation?

So we arranged a preliminary meeting in Moscow on this in February; there was no one from France there. We had Dr. Pavitt from Sussex University in England, who is a former assistant of mine at OECD. Everyone at the Social Policy Research Unit [SPRU] at Sussex is a former member of my section at OECD.

I brought in Oshima from Tokyo, who is very good, and the Russians brought in a couple of Hungarians, and

also people from Uzbekistan, and strangely enough from Estonia. One interesting thing was that the Russians who came from outside Moscow were bitterest in their criticism of Moscow. The Estonians particularly took an attitude which might have been a German attitude. And the Hungarians were unmercifully criticizing the theoretical approach of the Russians, and advocating methods that might be called American.

It is very strange because the Russians from Gvishiani's own institute, in their approach to technological innovation, make all kinds of mathematical-theoretical models which, to our mind, have absolutely no meaning whatsoever.

This meeting turned out to be very successful. It is now going to lead to a series of four or five interesting seminars on this subject, namely, what is the influence of the general national environment on successful innovation. The second of these is going to be in Tokyo and will be on what the differences are between Japanese success, less obvious American success, and Russian nonsuccess in terms of cultural background.

EIR: A lot of people have been working on this subject recently at Stanford University and at Georgetown University, especially in terms of reassessing Christianity. The Archbishop of Canterbury, Robert Runcie, was pushing such things when he was on tour in the United States last month.

King: Again, the whole question is raised by the microprocessor development I am interested in at the moment. The whole question of the work ethic comes up, and the Buddhist attitude and the Hindu attitude toward it, as well as the Protestant Puritan versus the Catholic. This is very much under discussion at the moment. There is going to be a series of events around the innovation issue in various countries. The Americans have a reason now for being interested, not just the Russians or West Europeans.

EIR: I have noticed that there is a fairly sharp differentiation between some work done in Western Europe, like the OECD's Interfutures project, and some American work like Global 2000 and its Global Future addendum. Interfutures says: "Don't worry about population growth, in any case you can't do much about it." Global 2000 and Global Future take an alarmist view of the problem, scream very loud, and say: "Act immediately." This is what the Population Crisis Committee/Draper Fund has been insisting on. Isn't this sharp differentiation fraught with dangers of divergence of strategies on the part of the two continents?

King: Yes. I think there are reasons for these differences. First of all, I know Professor Lesourne who headed Interfutures, and have seen the document. *Global 2000* was written by one person, with lots of advice—I was one

of the advisers actually. It was given a very rough treatment by many departments in the United States but nevertheless it came through uncensored pretty well. The Lesourne document was scrutinized by the ambassadors of 22 nation-states in the OECD, all of whom were pussyfooting, so it comes out relatively mild and non-alarming. The nation-states don't want to sound alarmist. That's the reason for the difference.

EIR: Let me insist that Lesourne's other documents are by and large congruent with the Interfutures perspective, in counterposition to *Global 2000*. Is the difference cosmetic, so that the same product can be sold to different audiences with different backgrounds?

King: First of all, there are a great deal of differences, transatlantic ones and within Europe. For example, when

the Limits to Growth came out, the first year it sold 26,000 in the United Kingdom, 400,000 in the Netherlands, 400,000 in Germany, and about half a million in the United States. So within the European countries, you have tremendous differences. For the French, particularly, who take a rather quiet intellectual view of the whole thing, it fits in with their whole way of thinking—but I don't think it's a transatlantic difference. America is a big country, which makes it stick out. The same things are going on in Japan.

EIR: Reading Cent Pages Pour l'Avenir [One Hundred Pages for the Future by Aurelio Peccei] and the proposals of Mr. Peccei, there is emphasis on the shift in values, particularly by the youth against material progress. But looking at the Soviet Union in military terms, this raises

The Club of Rome to hold Venezuela session

The Club of Rome is holding its annual conference this year in Caracas, Venezuela on June 16-19. Titled "Alternatives for Humankind: The Mission of Latin America," the event is being cosponsored by the government of Venezuela and has been in planning for over two years. This year's annual Club of Rome conference is the first held in a Third World country.

The 11 conference panels will cover topics ranging from "Food and Hunger" to "Microelectronics and Society."

Featured Club of Rome speakers include: the Club's president, Aurelio Peccei; Alexander King; Eduard Pestel, Lower Saxony minister for arts and sciences, West Germany; Jacques Fréymond, director of the Swiss University Institute for Higher International Studies; Ervin Laszlo of the United Nations Institute for Training and Research; Victor Urquidi, president of the Colegio de México; I. H. Abdel Rahman, adviser to the prime minister of Egypt; Jozef Bognar, president of the Institute for World Economics of the Hungarian Academy of Sciencé; Ricardo Diez-Hochleitner, director of the General Mediterranean Foundation, Spain; Eleonora Masini, secretarygeneral of the World Future Studies Federation, Italy; and others.

Major political figures have been tapped to speak at the conference, among them two presidents, and five former presidents, all of Third World countries. They are: Presidents Luis Herrera Campins of Venezuela and Rodrigo Carazo of Costa Rica; and former Presidents Rafael Caldera and Carlos Andrés Pérez of Venezuela; Luis Echeverría of Mexico: Eduardo Frei of Chile; and Leopold Senghor of Senegal. Other speakers include some of the most notorious of the world's terrorists and their controllers, such as Venezuelan congressman Teodoro Petkoff—at one time Venezuela's most wanted terrorist, who worked in the terrorist apparatus associated with Régis Debray.

Venezuela was chosen as the location for the conference for special reasons. Since Luis Herrera Campins became president of Venezuela two years ago (with the help of the Italian P-2 Freemasonic lodge), Venezuela has become a laboratory for the policies of the Club of Rome. The results, which will be reviewed during the conference, have been a major economic collapse, hyperinflation, social unrest, and the gradual destruction of the labor force. Cosponsoring the conference, in fact, is Venezuela's "Ministry for the Development of Human Intelligence," headed by Luis Alberto Machado, a close friend of Peccei, and Harvard's race theorist Richard Herrnstein. Since 1979, when Herrera created this ministry, the only one in the world, thousands of Venezuelan schoolchildren have been used as guinea pigs in the teaching of artificial intelligence. There are many institutions involved in testing their programs, such as Scotland's Edinburgh University and Tel Aviv University, but one of the most important is Aurelio Peccei's "Forum Humanum," whose exlicit purpose is the training of environmentalist shock troops. A main purpose of the conference will be to review some 18 different programs that "teach how to think" for implementation in the rest of the world.

the question: is it not absolutely indispensable to enforce converging shifts in cultural values in the Soviet youth to make sure that we don't get into trouble militarily with them?

King: You are absolutely right. And there are big shifts there. I have many ways of knowing it. My daughter has been in the Soviet Union for three-and-a-half years, and I have crowds of friends. I have talked recently with lots of the younger research people, and things are bubbling there. . . . [The shift in values] is not anti-Marxist, but it is a demand, as the Czechs did, for more freedom, freedom to talk, freedom to discuss, freedom to travel. And it's absolutely healthy, because freedom to change. . . .

EIR: In the short term, however, is there not a risk? How can we in the short term maintain some technological improvement on the military side, while lowering scientific progress generally?

King: It's all a matter of balance. I had an American colleague from Columbia University in this room last week. He is an expert on this type of thing—Seymour Melman. He has been the chief person writing about the spillover from military to the civilian economy, and he is very worried that the Reagan changes will go to such an extent that the innovative capacity of the economy will not be able to support it. There is an equilibrium between the two. The Russians have gone far too far to the military side with emphasis on technology. Perhaps in the past we have placed too much emphasis on economic growth as such, without looking at the military side. It is a matter of getting the right balance. But I don't think that it is a question of demystifying science as such, and making progress ineffective, but trying to diversify, trying to get quality-of-life aspects into it. The two things are not necessarily incompatible at all.

EIR: If we look at the Soviet scientific curriculum, as did the University of Chicago Wirszup report, the differences in science curricula ssem to pose a national security risk for the United States. There is demoralization, disaffection for science in the youth, a tendency toward the "quality of life." How do you see an educational approach compatible with both a postindustrial society and short-term military requirements?

King: The pendulum is swinging here too. The demoralization is past its maximum by a long way. The number of people enlisting in sociology in the United States is going down rapidly. This is largely due to unemployment. People realize that they have to look at subjects that have some future. Most OECD countries, including the United States, see a swing back toward science.

EIR: What kind of science?

King: Mainly science as it is conventionally taught, not

controlled, because that is not appropriate for military purposes. But this is not a policy matter, it is a matter for bad tactics and strategy. And bad educational systems. I don't think it's a purposeful thing.

EIR: You mean it's just the invisible hand motioning the pendulum?

King: Yes. I am not too worried about the place of science. There are lots of enthusiastic people. Ten years ago, the situation was very bad indeed, and now, particularly in the newer things like electronics, there is tremendous interest.

EIR: In the debate that opposed H. G. Wells to Bertrand Russell in the Coefficients, Russell claimed there was too much of everything, especially technology, where Wells insisted that you had to have great priests in control, but in control of something. Are we not witnessing a policy debate at the highest level of the same kind?

King: These things are very fundamental. This is a debate that will go on under completely different guises many, many centuries hence, if we survive.

EIR: Could one say that this debate is presently going on inside the Club of Rome?

King: Not very much. The Club of Rome's members take a very sober view of things, much less radical than what would be indicated from say, Limits to Growth and so on. We're looking for equilibrium too! But we think that many, many things should be questioned. I think very strongly that there are two major things. First, we will have to look at the interactions problem much more seriously than now, and second we have got to find mechanisms with governments, to look ahead a little bit more, because we are getting into a situation of crisisgovernment, and governments are pasting newspapers over the cracks as they appear, and hoping they won't show. Every six months, they appear again. They are not looking at more fundamental things.

I think that the Club of Rome has taken a fundamental point of view; we recently held a series of meetings in the Club in Spain, in Brazil, in South Korea, for instance, where we sent half a dozen people to spend a week debating with the local people. Very often, as it was in Rio, there is a roundtable of about 8 of us, and about 15 Brazilians. But there were about 200 Brazilian decisionmakers as an audience behind. So we had both the intimacy of the small group and influence on a larger group. We were mainly arguing, look clearly at problems and formulations; find mechanisms for looking at the interactions between them; and take longer-term approaches. I personally feel very strongly that, apart from the Russian business, the nuclear threat, that the world population problem is the biggest—even there, there is nothing one can do about it in the direct sense to alter



The May 1968 events in France, primed by the Club of Rome networks.

things before the end of the century. But there are many things you can do to make people more aware. In the International Federation we are doing something with Unesco on this.

I'm also deeply involved in the United Nations Department on Population in New York, as chairman of a panel of advisers on their long-term programs looking at the question of the "carrying capacity" of the nation-states, not in a Malthusian way, but in a dynamic way, where good policies can increase their "carrying capacity." Bad policies, as in many African countries, eating up their resource base, will limit them. In order that countries may have methods of knowing what their situation really is, there are many things one can do, but you have got to take these things seriously, to get the remedial things started.

EIR: That is what the RAPID program of the State Department Office of Population Affairs is doing, as you have been informed, I am sure.

King: Yes. You see, the ignorance on this is terrific. I remember just a couple of years ago we were having a talk with Leopold Senghor, the [former] president of Senegal, and he said, "My country is vastly underpopulated. In Belgium you have 74 persons to the square kilometer, here we have $2\frac{1}{2}$," without realizing in a distinctive way that the nature of his country is utterly different. Almost all of the country is desert, it does not support people. This kind of crude thing comes up even on the part of people who should know better. But through Unesco we are starting a number of studies on what the carrying capacity could be in many countries, like Keyna, setting an optimum at what the various

options are, where they lead to, and how much latitude you have.

In a second phase this could give data for persuading the people that it is in their own interest to have fewer children. It is in their own interest.

EIR: Do you reject the "hard-line" policy, in the sense that we apply a "let them die" policy to the Third World if we cannot give them the necessary inputs of food and so on?

King: In places like Bangladesh and Africa there will be a big crisis. But I am not a person of extremes. I think that nature will do a great deal. But the extent of the tragedies is going to be enormous. I have seen forecasts for Bangladesh from their own demographers of possibilities of as many as 12 million people dying in a year. Twelve million! Remember, in the Bangladesh war, despite all the military casualties, all the cholera casualties, all the people who died of malnutrition, and so on, the loss of population was made up in three weeks by the natural process. So the extent of this can be enormous.

Apart from that, there will be a backlash in many other ways. Take the question of the Mexicans in the United States already, how many millions we don't know. Years ago in Bangkok, I was talking with people from some ASEAN [Association of Southeast Asian Nations] countries. Attitudes were very interesting. Among other things, they were saying, "In the sixties, we flirted with the Russians; now we know the nature of the beast, and we realize it is an imperialism worse than anything we have known." But they were saying that we are just at the beginning of the new tide of great migrations, there will be millions of people on the move to the

West, a lot of them will be shot down, lots of them will die of starvation, but lots of them will get through. Now, contrast that with Herman Kahn's approach, that there is no need to be afraid of lots of little black people landing with canoes in Florida. I think that inevitably there will be terrible tragedies. We are past the time when that could be stopped. . . .

EIR: Should one then trust that the Four Horsemen will settle all of our problems, or should we supplement them with our own solutions?

King: That's my point of view: supplement them. Because when the Four Horsemen solve some problem, it generally leads to another sort of problem which you don't like either. The aftermath of this will be pretty bad. There will be all these troubles of invasions, migrations. Look at the number of foreigners already. The United Kingdom is no longer a white country! The whole of Europe is changing. And even at the present rate, the white race is finished. Uh, in a sense. But I don't agree with Michel Debré that the French should have many more children, for example.

EIR: There was an interesting statement by Prof. Luigi DeMarchi in Italy on reducing the population of his country, and of France, that the white population should shrink [see *EIR* June 2, 1981].

King: I think in many ways we are overpopulated anyway, but in the best of all possible worlds, there will be rather fewer people everywhere. It is unrealistic to expect to go back. And, of course, it is one of the big preoccupations of the people in the Kremlin at the moment. The birth rate there is one of the lowest in the world.

EIR: Concerning the energy problem, how do you see fusion power?

King: I hope it will be an alternative. It is still impractical. Scientifically it is okay, the problem still is the engineering. No one has the slightest idea of how to get energy at the temperature of the sun to a usable form at the level of superheated steam, except through nuclear methods which tend to have all the disadvantages of fission: the hybrid approaches. I hope fusion comes. I don't think it will come in time. The solution inevitably is coal. More polluting than fission, oh, yes. We can't help that. It's a rather desperate situation we will be in in the middle nineties. There will be an energy shortfall, so I personally would have more fission for the present period. While I am not at all pronuclear in the general sense, I think we have been terribly wild about it. The chance of societal breakdowns, economic breakdowns, of energy lag by the end of the century are so great that it would justify a good deal more fission for a short time, until we can get the other things going.

In coal, the situation is very bad, especially with the

carbon monoxide problem. I have gone to several meetings on this recently. I think it is a very serious problem, particularly serious for the United States, where almost all the best wheat land and corn land is endangered. It won't happen for about 40 to 50 years to a really serious extent, but to some extent before that, in some parts of the Soviet Union, it will also be very dangerous, though Siberia will be marvelously situated for improvements. . . . However, we are in this situation, until we get fusion, and/or economic methods of solar energy—plus a bit of geophysical, a bigger mix of possibilities. In the meantime, we must use as much coal as we can—then we have got to go for more fission rather than less, in spite of all the resistance to it.

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EIR: That would place you at odds with IIASA's World Energy Report, which advocates solar.

King: I and most of my colleagues don't think that there is any possibility of solar in the near future on a sufficient scale. Of course, it can be improved, but it's very capital-intensive still; I think that report is a very bad report, personally. I know the authors very well, too, of course.

EIR: Mitterrand is surrounded by advisers from "Futuribles," people highly sympthetic to the Club of Rome. In Paris over the past few days, I got the impression that he is no socialist at all, and that what he is keen on defending is the traditional, Imperial, geopolitical interests of France.

King: Yes, just as Giscard was. Mitterrand is a social democrat.

EIR: But that means things in terms of choices of technologies, industries, etc.

King: I should not be surprised at all if things settled down after a year, and we see a coalition government of the center and the Socialists, with the Gaullists and Communists out of the picture.